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Quality Assurance Report

Calendar Year 2000

The SLAMS $PM_{2.5}$ Ambient Air Monitoring Program

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Monitoring and Quality Assurance Group
Office of Air Quality Planning and Standards
U.S. Environmental Protection Agency
RTP, NC 27711

Foreword

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Abstract

This report documents the quality assurance activities that were undertaken for the SLAMS $PM_{2.5}$ environmental data operations for the calendar year January 1, 2000 to December 31, 2000 (CY00), which was the second year of implementation of the $PM_{2.5}$ monitoring program. The QA Report evaluates the adherence to the quality assurance requirements described in *40 CFR 58 App. A* and evaluates the data quality indicators of precision, accuracy, bias, and completeness.

The criteria pollutant defined as particulate matter is a general term used to describe a broad class of substances that exist as liquid or solid particles over a wide range of sizes. As part of the Ambient Air Quality Monitoring Program, EPA measures two particle size fractions: those less than or equal to [a nominal]10 micrometers, and those less than or equal to [a nominal] 2.5 micrometers, hereafter referred to as PM_{10} or $PM_{2.5}$ respectively. In general, the measurement goal of the $PM_{2.5}$ Ambient Air Quality Monitoring Program is to estimate the concentration, in units of micrograms per cubic meter ($\mu g/m^3$), of particulates less than or equal to 2.5 micrometers (μm) that have been collected on a 46.2mm polytetrafluoroethylene (PTFE) filter. For the State and Local Air Monitoring Network (SLAMS), the primary goal is to compare the $PM_{2.5}$ concentrations to the annual and 24-hour National Ambient Air Quality Standard (NAAQS). The national primary and secondary ambient air quality standards for $PM_{2.5}$ are 15.0 micrograms per cubic meter ($\mu g/m^3$) annual arithmetic mean concentration and 65 $\mu g/m^3$ 24-hour average concentration measured in ambient air. A description of the NAAQS and its calculation can be found in the July 18,1997 Federal Register Notice.

A quality system for the $PM_{2.5}$ program was developed in order to achieve the data quality objectives (DQOs) that were developed for this program. In order to meet these DQOs, measurement quality objectives were developed for the data quality indicators of precision, bias, accuracy and completeness. The report identifies the data quality indicators and how the estimates of these indicators were derived, evaluates the results, and provides conclusions and recommendations for future improvements.

The data evaluated in this report are based upon a data extraction in AIRS on 7/11/01. This date was chosen because it was after the July 1 certification date, and in the interest to report data quality results to the States and EPA in a timely manner.

In general, the results show a marked increase in completeness for routine and QA data from CY99 with CY00 completeness values averaging between 50 to 75%. Precision, accuracy and bias estimates at national levels of aggregation appear to be meeting the data quality objectives of the program.

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List of Abbreviations

AIRS	Aerometric Information Retrieval System
CFR	*Code of Federal Regulations*
CV	coefficient of variation
DQA	data quality assessment
DQOs	data quality objectives
EDO	environmental data operation
EMAD	Emissions, Monitoring, and Analysis Division
EPA	Environmental Protection Agency
ESAT	Environmental Services Assistance Team
FEM	Federal Equivalent Method
FRM	Federal Reference Method
FS	field scientist- Performance Evaluation Program
MQAG	Monitoring and Quality Assurance Group
MQOs	measurement quality objectives
NAAQS	National Ambient Air Quality Standards
NAMS	national air monitoring stations
NERL	National Exposure Research Laboratory
NIST	National Institute of Standards and Technology
OAQPS	Office of Air Quality Planning and Standards
ORD	Office of Research and Development
PE	performance evaluation
PEP	Performance Evaluation Program
$PM_{2.5}$	particulate matter $\leq$ 2.5 microns
PTFE	polytetrafluoroethylene
QA	quality assurance
QAPP	quality assurance project plan
QA/QC	quality assurance/quality control
QMP	quality management plan
R&P	Rupprecht and Patashnick
SLAMS	state and local monitoring stations
SOP	standard operating procedure
TSA	technical systems audit

Executive Summary

This report documents the quality assurance activities that were undertaken for EPA's $PM_{2.5}$ environmental data operations for the calendar year January 1, 2000 to December 31, 2000 (CY00), which was the second year of implementation of the $PM_{2.5}$ monitoring program.

In general, the measurement goal of the $PM_{2.5}$ SLAMS Ambient Air Quality Monitoring Program is to estimate the concentration, in units of micrograms per cubic meter ($\mu g/m^3$), of particulate matter less than or equal to [a nominal] 2.5 micrometers (μm) that have been collected on a 46.2mm polytetrafluoroethylene (PTFE) filter. For the State and Local Air Monitoring Network (SLAMS), the primary goal is to compare the $PM_{2.5}$ concentrations to the annual and 24-hour National Ambient Air Quality Standard (NAAQS). The national primary and secondary ambient air quality standards for $PM_{2.5}$ are 15.0 micrograms per cubic meter ($\mu g/m^3$) annual arithmetic mean concentration and 65 $\mu g/m^3$ 98th percentile 24-hour average concentration measured in ambient air. A description of the NAAQS and its calculation can be found in the July 18, 1997 Federal Register Notice.

A quality system for the $PM_{2.5}$ program was developed in order to achieve the data quality objectives (DQOs). The resulting quality assurance requirements are described in *40 CFR 58 App. A*. This QA Report evaluates the adherence to these requirements and evaluates the data quality indicators of completeness, precision, accuracy, and bias.

Table 1 summarizes data completeness and Table 2 summarizes estimates of the primary data quality indicators of precision, accuracy, and bias at a national level. Summary comments about these tables follow. In addition Table 3, at the end of this executive summary, provides QA summary information at the EPA Region, State and reporting organization level.

Table 1. National Completeness Summary for CY00 (as of 7/11/01)

Sites	**Sites Meeting overall completeness requirements for all 4 quarters**		**% Sites meeting 75% Completeness for Each Quarter**				**% States with ave. completeness >75%**
Data Type (base # sites)	**%**	**Number**	**1**	**2**	**3**	**4**	
Routine Data (1054)*	60%	631	74%	80%	85%	83%	72%
Collocation Precision (227)	51%	116	78%	76%	85%	79%	62%
Flow Rate Accuracy (906)	57%	519	68%	74%	76%	72%	62%
Performance Evaluations (227)	119%	269	>100%	>100%	>100%	>100%	
Performance Evaluation Pairs (227)	107%	243	92%	>100%	>100%	>100%	81%

* 1054 sites operated FRMs to monitor $PM_{2.5}$ in CY00. The remainder of the table is related specifically to SLAMS sites. 972 SLAMS sites operated FRMS to monitor $PM_{2.5}$ in CY00, of which 906 operated in all 4 quarters.

Table 2. National Estimates of Primary Data Quality Indicators for CY00 (as of 7/11/01)

Data Type	Acceptance Criteria	% of RO [1]* Meeting Criteria	National Estimate	Quarterly Estimate			
				1	2	3	4
Precision -Collocation	< 10% CV	80%	6.7%	7.3%	6.9%	6.2%	6.2%
Accuracy-Flow Rate	< ± 4% Std. < ± 5% Design	83%	-0.13%	-0.30%	0.0%	0.02%	-0.24%
Bias - Performance Evaluations	< ± 10%	85%[2]	-2.3	0.3%	-1.2%	-4.9%	-2.9%

[1] RO = reporting organizations
[2] - bias statistic estimated at the State level

Routine Data

Completeness - The completeness evaluation is based upon the strictest interpretation of the completeness requirement in *40 CFR 50, App N* that a site must collect 75% valid data in every quarter in order for comparison to the NAAQS. There are other techniques, such as data substitution, that can be used to allow more information to be used for the NAAQS comparison that are not evaluated in this report. Therefore, the 60% overall completeness estimate is the most conservative estimate of completeness for CY00. Since the requirement is based on 4 quarters, the overall completeness estimate cannot be higher than the lowest quarterly completeness percentage. For comparison, the CY99 completeness estimate was 24% so there has been substantial progress made in CY00.

Quality Control Data (Precision, Accuracy, Bias)

Due to low completeness values for the CY99 report, OAQPS instituted quarterly interim QA reports for CY00. Interim reports included tables on completeness as well as the achievement of the quality control criteria for each quality control sample. Graphics of precision and bias are also presented at the reporting organization level. Due to their large number, the graphics will be presented on the internet site and not in this report, which summarize this data in table format in appendices.

Precision - Collocation

Completeness- The percentage of sites that have met the 75% completeness goal for all 4 quarters is 51%, a considerable improvement over the 10% reported in CY99. As with routine data, the overall completeness value cannot be higher than the lowest quarterly value since the requirement is based on 4 quarters.

Precision Results - It must be emphasized that the precision data quality objective (DQO) is based on three years of precision data (75% complete). Therefore, any one year or any quarter may exceed the criteria and still meet the precision data quality objectives. An early analysis of precision suggests that the DQO can be achieved at a national level and in most cases, at a reporting organization level.

The national precision estimate is 6.7% CV and is based on 12,177 collocated paired values where both values are > 6 µg/m^3. Outliers (percent differences greater than 50% and not involving either paired value ≤ 6 µg/m^3), can be shown to have an effect on precision. In CY00 74 extreme pairs (0.6 % of the total collocated pairs) changed the national precision estimate from 6.7 % CV to 5.1% CV. A list of these extreme values is included in each quarterly interim report. States are encouraged to review them for validity due to their influence on the precision estimates, especially at the reporting organization level.

OAQPS investigated whether there was any significant difference in precision for the various method designations. Although this did not appear to be the case in 1999, with more data available there may be some statistically significant differences between the precision of Andersen instruments (method codes 119 and 120) and R&P instruments (method codes 117 and 118). Simple averaging of the quarterly precision estimates of the Andersen single and sequential instruments yields a precision estimate of 7.8 % CV while the aggregate estimate of the R&P yields a 6.1% CV. Removing outliers provides precision values of 6.0 % CV and 4.7% CV for Andersen and R&P respectively. Since there are operational differences between the instruments (e.g., how filter cassettes are loaded) as well as differences in the number of paired values going into these averages, it is difficult to discern exactly what might be leading to these different precision estimates.

Based upon a re-evaluation of the $PM_{2.5}$ data quality objectives, which demonstrated that precision had less effect on decision errors than originally estimated, OAQPS will suggest reducing the collocated precision requirement from 25% of routine sites to 15%. OAQPS feels that if completeness can be maintained at this lower level of data collection it can still make precision estimates at the reporting organization with an appropriate level of confidence.

Accuracy -Flow Rate

Completeness- Flow rate accuracy overall completeness was 57% in CY00 compared to 18% in CY99. A positive or negative bias in flow rate can alter the cut point of the particulate matter collected on the filter and also affects the 24 hour air volume estimate that is used to derive the $PM_{2.5}$ concentration. OAQPS will continue to make attempts to improve the capture rate of this data for future calendar years.

Accuracy Results - For the information available, the results of the accuracy audits are very good. The national average accuracy estimate is -0.13% which is well within the acceptance criteria of ±4% of the standard and ±5% of the design value (see Table 2). The percentage of audits meeting the criterion (all method designations) of ±4% of the standard was 96% and the percentage meeting the criterion of ± 5% of the 16.67 L/min design flow rate was 97%. There was some difference between the audit failure rates of the two major method designations. The Andersen sequential sampler (719 flow audits) failed the 4% criteria 9.7 % of the time and the 5% design standard 6.5% of the time; whereas the R&P sequential (2700 flow audits) failed the 4% standard 3% of the time and the 5% design standard 1.4% of the time. Additionally, it appears that the rates at which the Andersen sequential sampler fails the two criteria are increasing.

Bias - Performance Evaluation Program and Routine Data

Completeness - Completeness of the performance evaluation data involves two data points that are collected by different organizations. The bias estimate must rely on Performance Evaluation Program (PEP) data collected by the EPA Environmental Services Assistance Team (ESAT) contract. The routine $PM_{2.5}$ data is collected by the State, local and Tribal Nations. The PEP achieved its completeness requirement by collecting complete valid data at 269 sites, which was over the anticipated 227 sites (25% of the 906 SLAMS sites operating in all 4 quarters). However, when the data for these 269 sites were matched with their respective routine data in AIRS, 243 sites produced valid site/pairs that met the completeness requirement. If one looks at actual valid samples that were taken, of the1089 valid PEP values, 941 have a routine sample match in AIRS, meaning that 148 valid PEP values (14% of PEP data) are not matched with a routine sample. In 1999 there were 287 values without a match so there has been a marked improvement in pairing PEP data with routine data.

Bias results

The bias data quality objective is based on three years of bias data (75% complete). At a national level, the average bias is estimated at -2.2% and it appears that the bias data quality objective is being met. The 2000 national bias estimate is more than 3 percentage points lower than the 1999 bias estimate of 1.7%. OAQPS will continue to watch for this over CY01.

Since the data sets for the bias estimates for any quarter and in some cases annual averages for some method designations are fairly small, outliers can have an effect. An outlier for this report was defined as any paired values that had a percent difference of > $\pm$ 50% where both values were >6 $\mu g/m^3$. For the Andersen sequential method designation, the removal of 4 outliers from the annual estimate (217 pairs to 213) changed the bias estimate from 2.17% to 0.65%. Removing 5 outliers (506 pairs to 501) from the R&P sequential pairs changed the annual bias estimate from -4.1% to -4.73%.

As illustrated above there was some difference in the annual bias estimates for the Andersen sequential (2.17%) and R & P sequential (-4.1%) yet both are well within the $\pm$10% DQO. On a quarterly basis, Andersen sequential bias estimates appear more variable than the R&P sequential bias estimates.

Data Summary

In general, improvements still need to be made in achieving data completeness for routine data and precision and accuracy information. The percentage of States with average completeness of routine precision, bias, and accuracy exceeding 75% are 72%, 62%, 81% and 66% respectively (see Table 1). Incomplete data will affect the confidence one has in annual and other higher level aggregate concentration estimates.

Precision, accuracy and bias quality control requirements are being met at a national level which is a positive sign. However, uncertainty estimates at the reporting organization may require some attention. There appears to be more uncertainty associated with the Andersen method designations than the R & P method designation. The uncertainty may not be directly attributable with the instrument but might include the sampling and analytical processes as well. In addition, due to smaller sample size, Andersen data may be more affected by bias outliers. As more data become available the significance of these differences can be determined. Currently, the percentage of reporting organizations with average precision $\leq$ 10% is 80%, and with average flow rate $\leq$ 4% is 83%. States with average bias $\leq$ 10% is 85%.

Summary Table

Table 3 provides a summary of completeness, precision, bias and accuracy. This table is separated by EPA Region, State and reporting organization. Details of how the estimates were generated are explained in Attachment 1. Table 3 is based on the strictest interpretation of the CFR requirements. As an example, the "average percent completeness" column (2nd column) for routine SLAMS data was developed around the CFR criteria that requires 75% complete data for each quarter (for 3 years) for comparison to the NAAQS. For this column, the average completeness for each full quarter that a SLAMS site operated was tallied into a yearly average and this yearly average was tallied for all SLAMS sites in a State. Figure 1 provides an example of a state comprised of 11 SLAMS sites, 10 of which had their first data point reported to AIRS prior to the start of CY00. The site that had its 1st data point reported on 9/10/00 did not have the 3rd quarter data used in its average for the year, nor the 1st or 2nd quarter. Therefore, the average completeness for this example state is 81%. Since CFR requires that a site must be at least 75% complete in all quarters in order to be able make an attainment decision, the information that would be placed in the third column of Table 3 would be "2/11" meaning that out of the 11 sites that operated in CY00, 2 sites were at least 75% complete in all 4 quarters.

		----------Quarterly Completeness for CY 00----------				Annual
Site #	1st Data Point	Q1	Q2	Q3	Q4	Average
1	01/01/99	52%	87%	94%	90%	81%
2	09/10/00			(13%)	77%	77%
3	01/03/99	79%	93%	97%	80%	87%
4	01/01/99	59%	81%	90%	90%	80%
5	01/01/99	55%	80%	94%	83%	78%
6	01/01/99	38%	100%	88%	87%	78%
7	01/01/99	52%	93%	97%	87%	82%
8	01/01/99	52%	93%	97%	87%	82%
9	07/02/99	60%	80%	100%	87%	82%
10	01/01/99	45%	80%	94%	83%	76%
11	01/01/99	80%	80%	94%	83%	84%
				Statewide Ave CY00 Completeness		81%

Figure 1 Example of routine data completeness information for a State (real information in Attachment 2-2)

As mentioned the 75% completeness criteria used is the "strictest" within CFR. Another requirement includes having a minimum of 11 values in order to determine non-attainment, and there are other data substitution methods.

The estimates for the other columns in Table 3 were developed in similar fashion and are explained in Attachment 1.

The development of this table is to help focus on where improvements to the quality system can be made. Lack of data or exceeding the acceptance criteria for a data quality indicator tend to decrease the certainty one has in a mass estimate. One must also remember that the data quality indicator acceptance criteria are based on 3 years of data so estimates for any one year can be improved. One should not construe highlighted cells in Table 3 as implying that the data are invalid.. The acceptance criteria are simply goals and are not limits by which one would consider the data unusable.

Table 3. Summary of 2000 QC Results by State/Reporting Organizations - Region 1

State	Average % Completeness | Num complete sites/Num required sites								Rep Org	Prec. (% CV)	Bias (%)	Accuracy (Flow Rate)		
	Routine (SLAMS)		Precision		Bias		Flow Rate					Avg % Diff	% > 4%	% > 5% of Design Flow
CT	80%	1/10	88%	3/2	**69%**	3/2	100%	10/10	ALL	9.8	**-12.0**	0.7	2	2
MA	75%	4/21	76%	2/5	95%	5/5	82%	18/21	ALL	7.2	**11.1**	-0.1	2	1
ME	92%	5/5	77%	1/1	92%	3/1	**55%**	3/5	ALL	5.0	1.5	-0.6	7	4
NH	**63%**	0/9	**33%**	0/2	**67%**	2/2	**0%**	0/9	ALL	10.0	-4.2	**ND**	ND	ND
RI	91%	6/6	77%	0/2	88%	2/2	92%	6/6	ALL	5.5	0.2	0.1	3	3
VT	93%	3/3	**0%**	0/1	100%	2/1	100%	3/3	ALL	3.6	-3.2	0.9	4	4

Table 3. Summary of 2000 QC Results by Reporting Organizations - Region 2

State	Average % Completeness | Num compete sites/Num required sites								Rep Org	Prec. (% CV)	Bias (%)	Accuracy (Flow Rate)		
	Routine (SLAMS)		Precision		Bias		Flow Rate					Avg % Diff	% > 4%	% > 5% of Design Flow
NJ	83%	7/19	78%	0/5	100%	5/5	89%	17/19	ALL	6.7	3.0	-0.2	4	2
NY	86%	20/50	99%	8/11	94%	9/11	77%	38/50	ALL	6.5	2.7	0.8	5	3
PR	79%	1/10	**52%**	0/3	75%	2/3	**0%**	0/10	ALL	4.9	**-15.4**	**ND**	ND	ND
VI	**56%**	0/3	**0%**	0/1	**0%**	0/1	**0%**	0/3	ALL	**ND**	**ND**	**ND**	ND	ND

Table 3. Summary of 2000 QC Results by Reporting Organizations - Region 3

State	Average % Completeness | Num complete sites/Num required sites								Rep Org	Prec. (% CV)	Bias (%)	Accuracy (Flow Rate)		
	Routine (SLAMS)		Precision		Bias		Flow Rate					Avg % Diff	% > 4%	% > 5% of Design Flow
DC	78%	1/3	**49%**	0/1	88%	2/1	**0%**	0/3	ALL	**10.2**	-1.6	**ND**	ND	ND
DE	95%	7/7	98%	2/2	100%	2/2	100%	7/7	ALL	7.2	1.4	0.8	5	0
MD	**73%**	3/18	78%	0/5	75%	4/5	**0%**	0/18	ALL	3.6	-4.2	**ND**	ND	ND
PA	82%	12/37	**59%**	2/9	86%	9/9	77%	28/37	ALL	5.6	-3.3	-1.0	1	0
									001	6.1		-1.2	0	0
									002	3.0		**ND**	ND	ND
									003	3.8		-0.3	4	0
VA	88%	12/20	100%	3/5	85%	4/5	99%	20/20	ALL	4.3	-4.2	0.8	0	0
WV	94%	10/12	100%	2/3	85%	5/3	**51%**	5/12	ALL	4.0	-4.9	0.4	7	0
									001	3.8		0.4	7	0
									002	4.2		**ND**	ND	ND

Table 3. Summary of 2000 QC Results by Reporting Organizations - Region 4

State	Average % Completeness | Num complete sites/Num required sites								Rep Org	Prec. (% CV)	Bias (%)	Accuracy (Flow Rate)		
	Routine (SLAMS)		Precision		Bias		Flow Rate					Avg % Diff	% > 4%	% > 5% of Design Flow
AL	**65%**	4/16	**67%**	1/4	**71%**	3/4	**6%**	1/16	ALL	7.6	1.9	0.6	0	0
									011	9.1		**ND**	ND	ND
									012	8.2		**ND**	ND	ND
									014	1.7		0.6	0	0
FL	92%	23/29	75%	6/7	94%	8/7	91%	27/29	ALL	7.6	-5.3	0.5	6	3
									001	9.3		1	14	0
									002	**14.0**		1.1	0	0
									003	7.6		0.4	0	0
									004	3.1		0.4	0	0
									005	3.3		2.3	20	0
									006	3.9		-0.3	0	0
									011	3.7		0.6	13	0
									012	9.9		-0.1	13	13
									013	6.5		1.0	0	0
									014	**ND**		0.8	0	0
									015	3.1		1.0	0	0
									016	3.9		-3.5	38	25
									017	**15.4**		2.1	0	0
									018	**ND**		0.8	0	0
									020	3.6		1.0	0	0
									039	3.1		-3.4	0	0
									062	**ND**		-3.5	0	0

Table 3. Summary of 2000 QC Results by Reporting Organizations - Region 4

State	Average % Completeness | Num complete sites/Num required sites								Rep Org	Prec. (% CV)	Bias (%)	Accuracy (Flow Rate)		
	Routine (SLAMS)		Precision		Bias		Flow Rate					Avg % Diff	% > 4%	% > 5% of Design Flow
GA	85%	14/23	**62%**	0/6	95%	5/6	100%	23/23	ALL	5.7	8.5	-0.3	7	4
KY	88%	12/19	80%	3/5	80%	4/5	80%	17/19	ALL	5.5	-0.9	-0.5	16	12
									001	5.4		-0.7	21	16
									002	6.3		0.4	0	0
MS	95%	14/16	**63%**	0/4	94%	4/4	95%	16/16	ALL	4.7	-7.2	0.6	2	2
NC	88%	23/31	80%	6/7	100%	9/7	86%	27/31	ALL	5.3	-0.5	0.4	5	1
									001	5.3		0.4	7	1
									002	2.2		0.3	0	0
									003	1.8		0.4	0	0
									004	**10.1**		0.5	0	0
SC	93%	11/14	91%	2/3	100%	4/3	100%	14/14	ALL	3.8	-4.6	-0.1	2	1
TN	85%	12/21	93%	5/5	100%	4/5	**66%**	12/21	ALL	7.0	0.9	-0.5	1	1
									001	8.5		-1.1	0	0
									002	2.7		0.3	0	0
									003	9.5		-0.1	7	7
									004	2.6		0.4	0	0
									005	2.7		1.8	0	0

Table 3. Summary of 2000 QC Results by Reporting Organizations - Region 5

State	Average % Completeness | Num complete sites/Num required sites								Rep Org	Prec. (% CV)	Bias (%)	Accuracy (Flow Rate)		
	Routine (SLAMS)		Precision		Bias		Flow Rate					Avg % Diff	% > 4%	% > 5% of Design Flow
IL	91%	30/35	**72%**	1/9	84%	8/9	94%	35/35	ALL	7.2	7.1	0.1	18	11
									001	6.7		0.4	14	9
									003	7.9		-0.5	25	15
IN	87%	24/40	85%	6/10	92%	9/10	96%	39/40	ALL	9.4	-1.1	-0.2	0	0
									001	9.8		-0.2	0	0
									008	8.1		-0.6	0	0
MI	88%	15/24	91%	5/6	88%	6/6	77%	18/24	ALL	3.7	-1.9	0.1	3	2
MN	**69%**	0/16	**50%**	0/4	**71%**	4/4	**42%**	3/16	ALL	**16.9**	**15.0**	-0.8	0	0
OH	83%	19/45	**63%**	5/9	80%	11/9	**58%**	21/45	ALL	9.1	0.0	0.2	9	7
									001	5.6		1.3	0	0
									002	0.6		1.8	0	0
									004	4.7		**ND**	ND	ND
									006	**15.3**		1.1	13	13
									007	**13.0**		0.4	0	0
									008	4.0		1.3	4	0
									009	9.5		-0.3	7	3
									010	9.1		-0.3	9	9
									012	7.1		0.8	0	0
									013	**17.9**		3.1	25	25
									015	**16.0**		-4.6	67	67
									016	3.2		-0.4	0	0
WI	94%	21/21	92%	3/5	94%	8/5	98%	21/21	ALL	8.4	1.5	0.2	2	1

Table 3. Summary of 2000 QC Results by Reporting Organizations - Region 6

State	Average % Completeness | Num complete sites/Num required sites								Rep Org	Prec. (% CV)	Bias (%)	Accuracy (Flow Rate)		
	Routine (SLAMS)		Precision		Bias		Flow Rate					Avg % Diff	% > 4%	% > 5% of Design Flow
AR	86%	7/24	76%	1/4	85%	5/4	**70%**	14/24	ALL	5.9	**-10.9**	-0.1	1	0
LA	95%	20/21	93%	4/5	100%	5/5	100%	21/21	ALL	8.0	-8.6	0.0	1	0
NM	90%	2/3	**53%**	1/1	90%	5/1	**33%**	0/3	ALL	4.2	-7.0	-0.4	0	0
									001	3.5		0.1	0	0
									002	4.1		-0.5	0	0
									006	3.5		**ND**	ND	ND
									007	5.6		**ND**	ND	ND
OK	85%	1/4	82%	0/1	79%	6/1	100%	4/4	ALL	6.5	-9.7	-0.2	1	0
									101	4.3		-0.2	1	0
									106	9.9		**ND**	ND	ND
TX	75%	17/57	**59%**	3/13	**68%**	8/13	**0%**	0/57	ALL	6.5	**-12.2**	**ND**	ND	ND
									001	6.5		**ND**	ND	ND
									822	**ND**		**ND**	ND	ND

Table 3. Summary of 2000 QC Results by Reporting Organizations - Region 7

State	Average % Completeness | Num complete sites/Num required sites								Rep Org	Prec. (% CV)	Bias (%)	Accuracy (Flow Rate)		
	Routine (SLAMS)		Precision		Bias		Flow Rate					Avg % Diff	% > 4%	% > 5% of Design Flow
IA	95%	16/18	100%	5/4	**67%**	2/4	96%	17/18	ALL	3.5	**-12.7**	0.4	1	0
									001	4.4		0.1	0	0
									002	4.0		0.7	0	0
									003	3.1		0.4	3	0
KS	96%	12/12	93%	3/3	92%	3/3	100%	12/12	ALL	4.8	-6.5	-2.0	15	7
MO	97%	16/19	98%	7/4	100%	6/4	92%	18/19	ALL	4.7	-6.0	-0.0	0	0
									001	3.0		-0.1	0	0
									002	6.0		-0.2	0	0
									003	6.0		1.0	0	0
									004	2.1		-0.3	0	0
									005	4.1		-0.6	0	0
NE	79%	2/13	**60%**	0/3	100%	2/3	**56%**	8/13	ALL	**11.3**	**-14.3**	-0.3	1	1
									001	5.9		-0.2	2	2
									003	**15.1**		-0.4	0	0

Table 3. Summary of 2000 QC Results by Reporting Organizations - Region 8

State	Average % Completeness | Num complete sites/Num required sites								Rep Org	Prec. (% CV)	Bias (%)	Accuracy (Flow Rate)		
	Routine (SLAMS)		Precision		Bias		Flow Rate					Avg % Diff	% > 4%	% > 5% of Design Flow
CO	94%	12/13	94%	3/3	100%	5/3	98%	13/13	ALL	7.2	-0.6	-0.6	0	1
MT	89%	3/7	**48%**	0/2	83%	3/2	93%	7/7	ALL	10.0	2.1	-1.8	10	8
									001	2.8		-1.5	9	6
									033	**12.4**		-0.6	0	0
									037	**13.0**		**-6.9**	50	50
ND	97%	6/7	98%	2/2	100%	2/2	100%	7/7	ALL	4.3	-6.9	-0.3	4	0
SD	77%	0/11	**71%**	0/3	**58%**	1/3	98%	11/11	ALL	**12.1**	0.7	-0.2	0	0
UT	92%	10/16	**72%**	1/3	100%	4/3	78%	12/16	ALL	8.5	-0.3	-1.1	4	1
WY	97%	4/4	100%	1/1	**50%**	0/1	**63%**	2/4	ALL	5.2	6.3	-0.8	7	3

Table 3 Summary of 2000 QC Results by Reporting Organizations - Region 9

State	Average % Completeness | Num complete sites/Num required sites								Rep Org	Prec. (% CV)	Bias (%)	Accuracy (Flow Rate)		
	Routine (SLAMS)		Precision		Bias		Flow Rate					Avg % Diff	% > 4%	% > 5% of Design Flow
AZ	**25%**	0/5	**38%**	0/1	75%	1/1	**10%**	0/5	ALL	5.0	-8.8	-0.3	0	0
CA	83%	49/83	**71%**	7/20	83%	16/20	**66%**	52/83	ALL	6.1	-0.8	-0.9	10	8
									001	7.2		-1.4	11	10
									004	**ND**		-2.3	22	16
									014	**ND**		-0.6	0	0
									019	5.0		-0.4	2	2
									036	7.7		0.2	23	12
									061	4.6		-0.4	5	5
HI	84%	4/5	82%	0/1	100%	2/1	85%	5/5	ALL	6.3	**ND**	-0.0	5	0
NV	97%	7/8	100%	2/2	75%	2/2	**3%**	0/8	ALL	5.3	-6.1	**-7.0**	100	100
									200	1.7		**ND**	ND	ND
									300	7.3		**ND**	ND	ND
									310	5.3		**-7.0**	100	100

Table 3 Summary of 2000 QC Results by Reporting Organizations - Region 10

State	Average % Completeness | Num complete sites/Num required sites								Rep Org	Prec. (% CV)	Bias (%)	Accuracy (Flow Rate)		
	Routine (SLAMS)		Precision		Bias		Flow Rate					Avg % Diff	% > 4%	% > 5% of Design Flow
AK	92%	4/7	94%	3/2	75%	4/2	85%	6/7	ALL	7.2	-8.1	1.6	0	0
ID	97%	6/7	96%	1/2	100%	3/2	**71%**	5/7	ALL	3.1	-4.7	1.5	0	0
OR	81%	16/25	77%	3/6	79%	5/6	95%	23/25	ALL	4.7	-10.3	-1.0	0	1
WA	90%	16/20	92%	3/5	95%	5/5	90%	19/20	ALL	3.6	-3.0	-0.2	1	1
									001	3.6		-0.3	1	1
									012	**ND**		0.6	0	0

1. Introduction

This report documents the quality assurance activities that were undertaken for the SLAMS $PM_{2.5}$ environmental data operations for the calendar year January 1, 2000 to December 31, 2000 (CY00). Data used in this report was extracted from AIRS on 7/11/01.

The QA Report evaluates the adherence to the quality assurance requirements described in *40 CFR 58 Appendix A* and evaluates the data quality indicators of completeness, precision, accuracy, and bias. The QA Report should be viewed as an annual snapshot to determine whether or not the quality system, in general, is providing data of acceptable quality for its primary use. It follows a similar format to the CY99 QA Report, with additions or modifications based on comments to the CY99 Report. The report will provide evaluations at a national level, the reporting organization level and in some cases by sampler method designation and the site. However, most discussions will be at the national level of aggregation. In addition, some of the graphical representations of the data will be too large to include in the document and will be displayed at the AMTIC Web Site (http://www.epa.gov/ttn/amtic/pmqa.html). Examples of these graphics and the web site location will be included in appendices in this report.

Organization of QA Report

The report has been organized into 3 main sections:

- **Section 1**: overview of the $PM_{2.5}$ monitoring program, the CY00 implementation aspects of the quality system in relation to the quality assurance requirements described in 40 CFR 58 App A.
- **Section 2:** results of the data quality assessment.
- **Section 3**: summary and conclusions of the data quality assessment results and recommendations based upon experiences of CY00 implementation.

Program Overview

The criteria pollutant defined as "particulate matter" is a general term used to describe a broad class of substances that exist as liquid or solid particles over a wide range of sizes. As part of the Ambient Air Quality Monitoring Program, two particle size fractions are measured; those less than or equal to [a nominal]10 micrometers, and those less than or equal to [a nominal] 2.5 micrometers, hereafter referred to as PM_{10} or $PM_{2.5}$ respectively.

The background and rationale for the implementation of the $PM_{2.5}$ ambient air monitoring network can be found in the *Federal Register 40 CFR 50 July 18, 1997* . In general, the measurement goal of the $PM_{2.5}$ network is to estimate the concentration, in units of micrograms per cubic meter ($\mu g/m^3$), of particulate matter less than or equal to 2.5 micrometers (µm) aerodynamic diameter collected over a 24 hour period.

A major objective for the collection of the data is to compare daily $PM_{2.5}$ concentrations to the annual (15.0 $\mu g/m^3$ annual arithmetic mean concentration) and 24-hour (65 $\mu g/m^3$ 24-hour average

concentration) national ambient air quality standard (NAAQS). A description of the NAAQS and its calculation can be found in the July 18, 1997 *Federal Register* notice.

As described in the following section (DQOs), OAQPS designed a quality system based upon the primary objective of the network, which was the comparison of data to the NAAQS. For this comparison, State, local, and Tribal monitoring organizations are required to sample using a Federal Reference Method (FRM) or Federal Equivalent Method (FEM). The description of the $PM_{2.5}$ FRM is included in *40 CFR 50, App. L*, published as a final rule in the *Federal Register* on July 18, 1997. There are a number of designated federal reference method samplers at this time whose descriptions can be found on the AMTIC Website in **(**http://www.epa.gov/ttn/amtic/pmfrm.html **)**

The $PM_{2.5}$ federal equivalent methods (FEM) vary from this basic FRM definition and are divided into three categories, Class I, II, and III. Definitions for each of these are provided in *40 CFR 53.1*, published as a final rule in the *Federal Register* on July 18, 1997. There are no designated equivalent $PM_{2.5}$ methods at this time, nor have any manufacturers formally pursued this type of designation.

It is important to emphasize that all $PM_{2.5}$ sampling sites that provide data for comparison to either the 24-hour or the annual $PM_{2.5}$ NAAQS for the purposes of addressing attainment and nonattainment decisions must employ designated FRM/FEM sampling techniques.

Data Quality Objectives (DQOs)

DQOs are qualitative and quantitative statements derived from the DQO Process that clarify the monitoring objectives, define the appropriate type of data, and specify the tolerable levels of potential decision errors that will be used as the basis for establishing the quality and quantity of data needed to support decisions. By applying the DQO Process to the development of a quality system for $PM_{2.5}$ network, the EPA guards against committing resources to data collection efforts that do not support a defensible decision. During the months from April to July of 1997, the DQO Process was implemented for the $PM_{2.5}$ program. The DQOs were based on the desire of the decision maker(s) to estimate the annual concentration at a site within acceptable levels of error, especially when the annual concentration is near 15.0 ug/m^3. Based upon the acceptable decision error of 5%, the DQO for acceptable precision (10% CV) and bias ($\pm$ 10%) were identified. See the CY99 QA Report for additional information on the assumptions affecting the DQO.

In 2001, the $PM_{2.5}$ DQOs were evaluated to ensure that the assumptions made in 1997 continue to be appropriate. Table 1-1 provides a listing of these assumptions. As is indicated, most of the 1997 assumptions are still appropriate in 2001. An important fact is that the DQOs are generated using conservative but realistic assumptions. For example, the DQO was generated on the 1 in 6 day sampling frequency at 75% completeness since it is allowed in the Code of Federal Regulation. A 95% confidence limit around the mean at this sampling frequency would be “wider” than the 95% confidence limit for an every day sampling frequency at 90% completeness. That is, the assumptions are close to the extremes of the realistic data. A draft report on the 1997 development and 2001 evaluation of the PM2.5 DQO has been completed and will be available on the PM2.5 AMTIC Website [WEB ADDRESS] in October 2001.

Table 1-1 DQO Assumptions

1997 Assumptions	*2001 Assumptions*
Bias = ±10%	Bias = ± 10%
Precision = 10%	Precision = 10%
Annual NAAQS is controlling standard	Annual NAAQS is controlling standard
No spatial uncertainty and each monitor stands on its own (no spatial averaging)	No spatial uncertainty and each monitor stands on its own (no spatial averaging)
1 in 6 sampling with 75% completeness (137 days)	1 in 6 sampling with 75% completeness (144 days)
3-year annual average is truth, (every day sampling and 100% comp.) up to bias and measurement variability	3-year annual average is truth, (every day sampling and 100% comp.) up to bias and measurement variability
Normal distribution for population variability, 50% CV	Lognormal distribution for population variability, 80% CV
Normal distribution for measurement uncertainty	Normal distribution for measurement uncertainty
Season ratio = 5.63	Season ratio = 5.3
No auto correlation	No auto correlation
Bias/meas. variability applies to entire 3 years	Bias/meas. variability applies to entire 3 years
Decision errors 5%	Decision errors 5%

Using the 2001 assumptions, a power curve was generated. A power curve is used to display the potential of decision errors based upon the choice of various assumptions that affect data uncertainty. Figure 1.1 provides the power curve based on the 2001 assumptions. The gray zone is the range of concentrations for which the decision errors are larger than the desired rate of 5%.

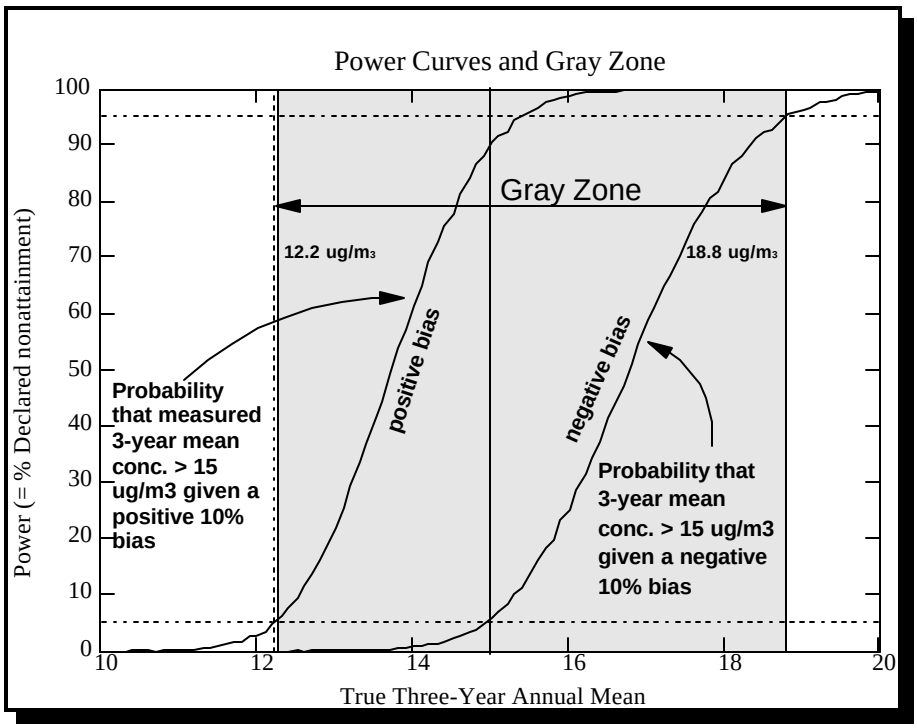


Figure 1.1 Power curve based on 2001 assumptions

Based on the 2001 assumptions, the gray zone is 12.2 to 18.8 ug/m^3 assuming bias is 10% and measurement imprecision is 10%. This means that if all the 2001 assumptions hold for a particular site, the decision maker would have a 5% chance of

observing a 3-year mean concentration that is greater than 15 ug/m^3 even though the true mean concentration is 12.2 ug/m^3. As has been mentioned, the 2001 assumptions are realistic but conservative. Any particular site will not meet all these assumptions at these extreme levels and it will be demonstrated later in this report that the precision and bias estimates at a national level are well within the DQOs. Assumptions that are "better" than those listed in Table 1-1 will tend to decrease the width of the gray zone. Figure 1.2 provides an example of the power curve/gray zone changes for a simple change in sampling frequency from 1 in 6 day (green/solid) to 1 in 3 day (blue/dots) to every day (red/dashed); all the other 2001 assumptions remain the same.

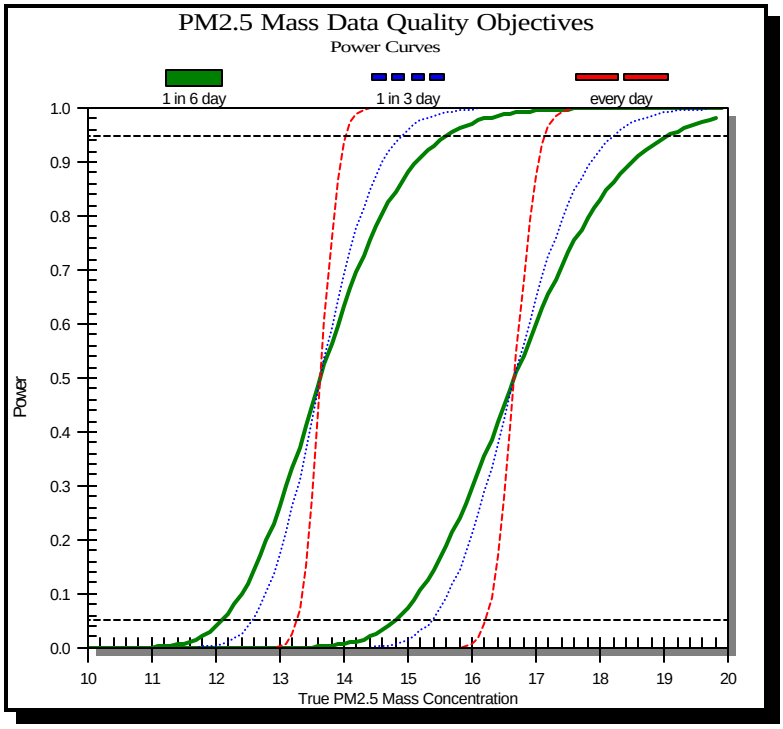


Figure 1.2. Power curve changes due to changes in sampling frequency

Because there is potential for the assumptions to change on a site by site basis, OAQPS commissioned the development of a software tool to help Headquarters and State, local and Tribal organizations determine their potential for decision errors based on their particular assumptions. Figure 1.2 is generated using this tool and allows for multiple scenarios (power curves) to be reviewed on one table. This tool is being finalized and should be available by December, 2001

The DQO evaluation showed that population uncertainty (sampling frequency, distribution of population variability), and measurement bias play a significant role in the width of the gray zone. Measurement precision did not have a significant effect on the gray zone which suggests more imprecision could be tolerated with little effect on decision errors. Based on this finding, OAQPS will suggest reducing the collocated sampling requirement from 25% to 15% as a direct final rule.

Quality System Implementation

CY00 represents the second full year of implementation of PM2.5 ambient air monitoring. The CY99 QA Report discussed issues related to the development and approval of QA project plans and additional guidance that helped explain the requirements or provided additional information. In CY00 there was not much additional guidance provided or needed for the $PM_{2.5}$ ambient air monitoring program. However, the following guidance was developed:

DOW-704 WINS impactor Oil - A number of monitoring organizations reported a gelling or crystallization of the DOW-705 WINS impactor oil, usually during cold sampling events. A joint study was conducted by the EPA National Environmental Research Laboratory (NERL) and the State of Connecticut to determine the effect of this crystallization. Although the crystallization did not appear to have an effect on the "cut point" or concentrations, NERL did provide information on the use of an oil substitute, dioctyl sebacate (DOS), that can be used in place of the DOW-704 oil.

Filter extension study - A number of State monitoring organizations volunteered to participate in a study to determine if the filter cassette retrieval time could be extended from 4 days (96 hours) to 7 days (177 hours). Sampling is planned through fall 2001 and the results from the study are expected in the December 2001 time frame.

Flagging - A memo, distributed 3/27/00 from OAQPS to the Regions, provided for the use of 6 data qualifiers for data submitted to AIRS. OAQPS is evaluating the use of flagged data to determine if the flagged data have a significant effect on annual average concentrations.

Implementation of 40 CFR 58 Appendix A Requirements.

40 CFR 58 App. A provides the quality assurance requirements for the State and local air monitoring station (SLAMS) network. The requirements for $PM_{2.5}$ include:

< **Development, submission, approval and implementation of QA project plans**. For the $PM_{2.5}$ Mass network, all State and local QAPPs have been reviewed and approved. This process is somewhat dynamic since various Tribes are also participating in $PM_{2.5}$ monitoring. Discussions with the regions show that Tribal QAPPs are also being reviewed and approved in the appropriate time frames.

< **Implementation of technical systems audits** - Technical systems audits (TSAs) are a thorough, systematic, on-site, qualitative audit of facilities, equipment, personnel, training, procedures, record keeping, data validation, data management, and reporting aspects of a system. Regions are to perform TSAs on one third of their reporting organizations each year. Table 1-2 provides a summary of the TSAs conducted during CY00.

< **Implementation of quarterly flow rate audits**- See Section 2

< **Implementation of collocated sampling**- See Section 2

< **Implementation of a Performance Evaluation Program**- See Section 2

Table 1-2. Technical System Audits Conducted in CY00

Reg.	State	TSA	TSA Date
1	CT MA ME NH RI VT	None in CY00	
2	NJ NY PR VI		 9/28/00
3	DE DC MD PA - Philadelphia County PA -Allegheny County PA VA WV	None in CY00	
4	AL DEM FL DEP GA KY DEP MS DEQ NC DEM SC DHEC TN DAPC AL -Birmingham-Jefferson County AL- Huntsville KY- Louisville-Jefferson County TN- Nashville-Davidson County TN- Chattanooga-Hamilton County TN- Knoxville-Knox County TN- Memphis-Shelby County		6/00 6/00 7/00 5/00 9/00 2/00 4/00 8/00
5	MN WI MI - MDEQ OH - Toledo Agency IL IN		 3/22/00 5/14/00
6	AR LA OK NM NM -Albuquerque Texas ITEC (Tribal) AIPC (Tribal)		12/7/00 2/11/00 8/14/00 10/27/00 10/26/00 5/5/00 9/20/00

Reg.	State	TSA	TSA Date
7	MO KS IA -Linn County IA- Polk County NE - U of Iowa		3/00
8	CO MT ND SD UT WY		12/20/00
9	AZ CA -ARB CA - Bay Area AQMD CA - South Coast AQMD San Diego APCD HI NV- Pima County NV- Washoe County NV- Clark County		10/11/00
10	AK ID OR WA		9/28/00

Data Quality Indicators

Once a DQO is established, the quality of the data must be measured and evaluated to ensure that it is maintained within the established acceptance criteria. Measurement quality objectives are designed to evaluate and control various phases (sampling, preparation, analysis) of the measurement process to ensure that total measurement uncertainty is within the range prescribed by the DQOs. The quality of data in a database can be summarized in terms of the following data quality indicators:

Completeness - a measure of the amount of valid data obtained from a measurement system compared to the amount that was expected to be obtained under correct, normal conditions. Data completeness requirements are included in the reference methods (*40 CFR 50*).

Precision - a measure of mutual agreement among individual measurements of the same property usually under prescribed similar conditions. This is the random component of error.

Bias - the systematic or persistent distortion of a measurement process which causes error in one direction. Bias will be determined by estimating the positive and negative deviation from the true value as a percentage of the true value.

Detectability- The determination of the low range critical value of a characteristic that a method specific procedure can reliably discern.

Comparability - a measure of confidence with which one data set can be compared to another.

Representativeness - a measure of the degree which data accurately and precisely represent a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition. Representativeness, which deals mainly the population variability indicators (spatial and temporal variability) will not be addressed in this document.

Accuracy has been a term frequently used to represent closeness to "truth" and includes a combination of precision and bias error components. This term has been used throughout the CFR. In this report, accuracy refers to errors in flow rate only.

Acceptance criteria have been developed for four of these data quality indicators: completeness, precision, accuracy(flow rate) and bias. The results of the assessments of these data quality indicators will be discussed in Section 2.

Section 2 Assessment of Data Quality Indicators

This section will provide an assessment of the data quality indicators of completeness, precision, accuracy and bias. ***It must be noted that all assessments were implemented on data present in AIRS on 7/11/01.***

Data Completeness

This section will evaluate the completeness statistics for routine $PM_{2.5}$ concentration data and the quality assurance data for the collocated precision, the quarterly flow rate audits, and the Performance Evaluation Program.

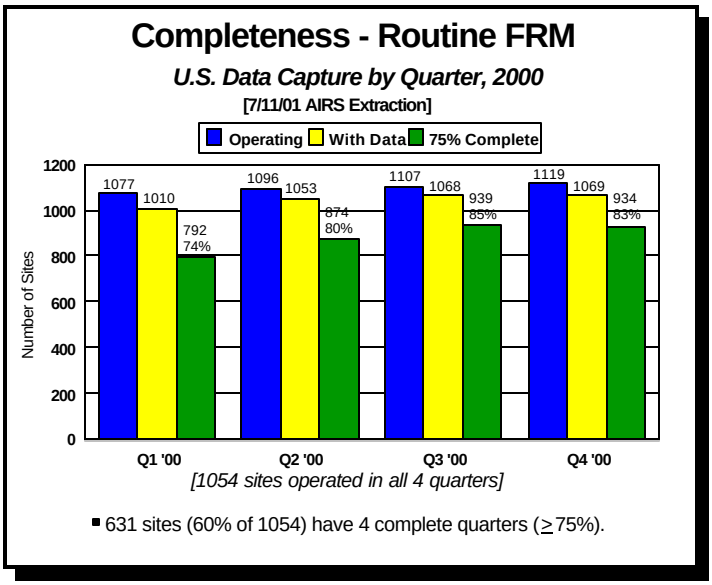


Figure 2.1 Routine $PM_{2.5}$ mass data completeness (all sites)

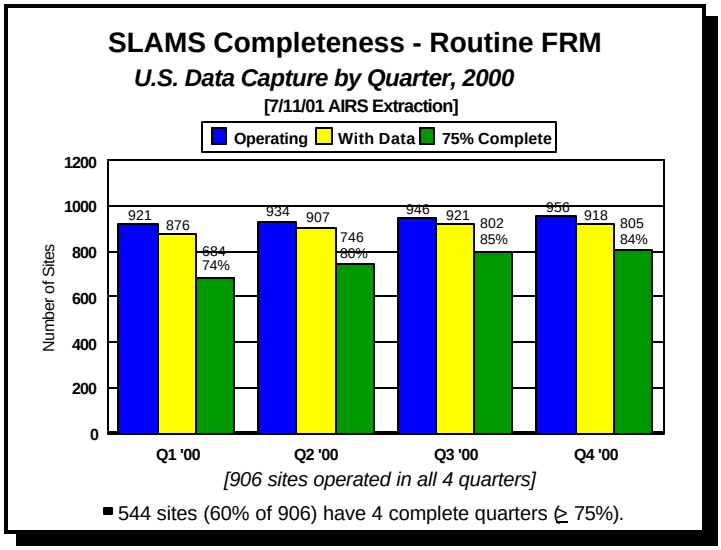


Figure 2.2 SLAMS $PM_{2.5}$ mass data completeness

Completeness - Routine Data

Figure 2.1 represents CY00 routine data completeness as of 7/11/01 based on all sites; Figure 2.2 represents the routine data completeness for the SLAMS Sites. Figures 2.3 and 2.4 show a geographic illustration of this information provided in Figure 2.1. Attachment 1 provides an explanation of the process to generate this information which is based upon the completeness requirements for comparison to the NAAQS (*40 CFR 50 App N, Sect 2*). Attachment 2-2 provides a listing of completeness at the EPA Regional level as well as for each site in 2000. For calendar year 2000, the AIRS data base identified 1143 $PM_{2.5}$ sites in AIRS as active, with 1103 reporting concentration data to AIRS as of 7/11/01. Of these sites, 1054 monitoring sites reported data in all 4 quarters and 631 sites (60%) reported 4 complete quarters of data, meaning they had greater than or equal to 75% of the anticipated data reported for each quarter. This is a marked improvement over the 26% of the sites that achieved this completeness requirement in CY99.

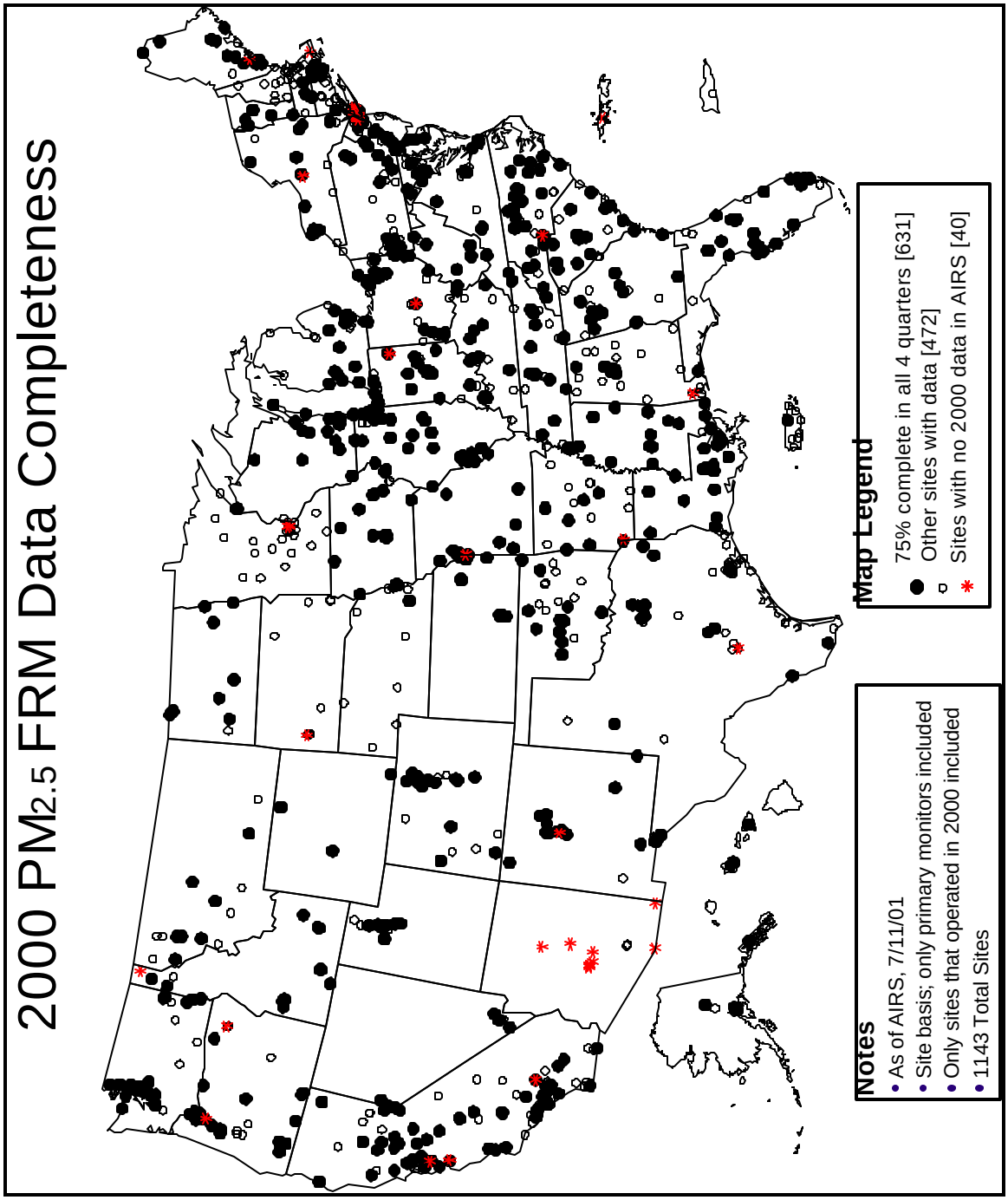


Figure 2.3 Routine data completeness as of 7/11/01

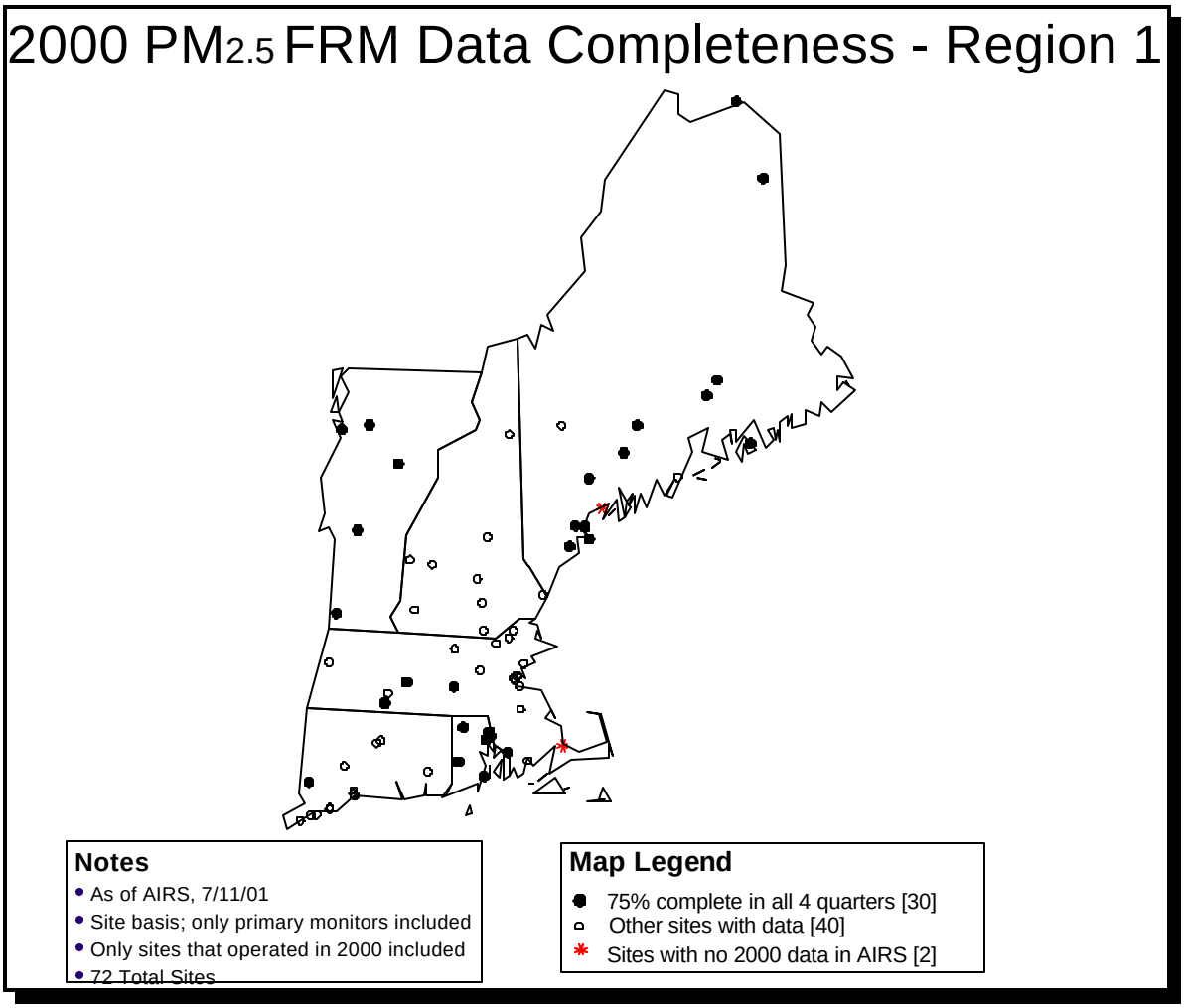


Figure 2.4 CY 2000 Routine data completeness for New England as of 07/11/01

Figure 2.1 also indicates the number of sites reporting ≥ 75% of the expected data for each quarter (792, 874, 939 and 934 respectively). Using these values, one can compare how many sites met the completeness criteria for any quarter using the sites operating in that quarter. Table 2-1 provides this information. In addition, since all the statistics related to precision, accuracy and bias are related to SLAMS sites only, Table 2-1 also presents the completeness statistics for the SLAMS sites illustrated in Figure 2.2. As can be seen, the completeness statistics are almost identical.

Table 2-1 Routine Data Completeness Statistics

Sites	Sites Meeting overall completeness requirements for all 4 quarters		% Sites meeting 75% Completeness for Each Quarter			
Data Type (base # sites)	**%**	**Number**	**1**	**2**	**3**	**4**
All Routine Sites (1054)	60%	631	74%	80%	85%	83%
SLAMS Sites (906)	60%	544	74%	80%	85%	84%

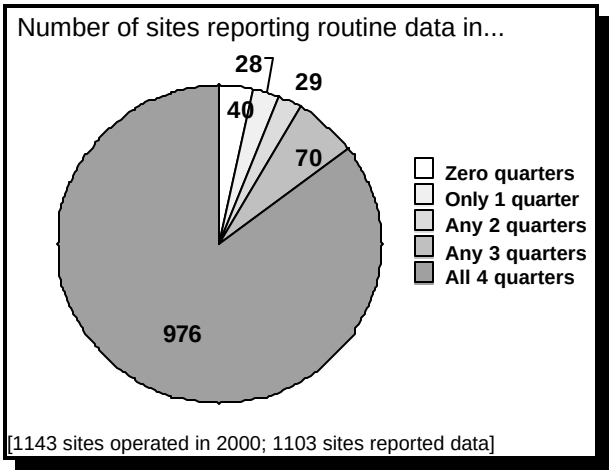
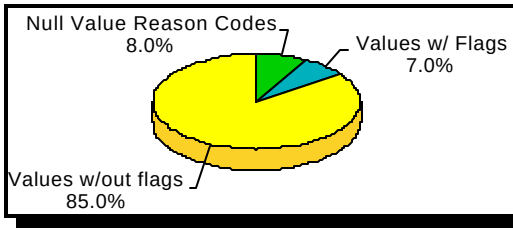


Figure 2.5 Sites reporting routine data.

It must be mentioned that non attainment decisions can be made with less information than the 75% completeness requirement based on the average concentration in the quarter, acceptable data substitution for the missing data, and Regional Administrator approval. In addition, for non-attainment purposes, the Regional Administrator may use sites that have as few as 11 values per quarter if the average quarterly concentration is above the NAAQS (*40 CFR 50 App N, Sect 2*) and less under unusual conditions. Information on completeness using these exceptions are not generated for this report. The pie chart, illustrated in Figure 2.5 indicates how many sites reported *any concentration data* (not necessarily meeting the completeness statistic) in any combination of quarters.

Flagged data were included in the completeness count; null value data were not. Flagged data values can be data qualifiers (provided in a March 27, 2000 OAQPS guidance memorandum), sampler generated flags, or exceptional events. Figure 2.6 provides a breakdown of the routine concentration data in AIRS relative to flagged, unflagged, and null value code data. Attachment 3 provides a listing of flag use and flag type by State. OAQPS and the States will be determining the quality of the flagged information over the next year.



	Count	% of Total	% of Values
Total # AIRS Data Records	163,509		
-----# of Null Codes	13,029	8.0%	
-----# of Values	150,480	92.0%	100%
----------# Values w/out flags	139,056	85.0%	92.4%
----------# Values w/ flags	11,424	7.0%	7.6%

Figure 2.6 Breakdown of flagged, unflagged and null data codes in AIRS

Completeness - Collocated Precision

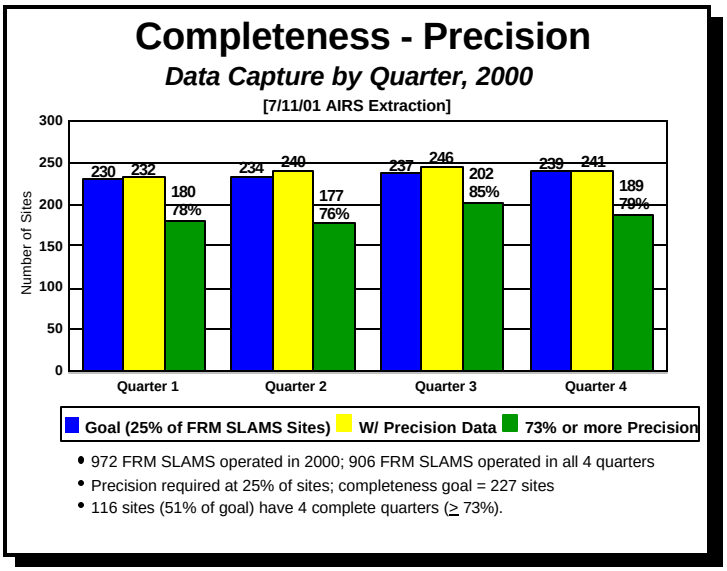


Figure 2.7 Completeness of collocated precision data.

Twenty five percent of the monitoring sites for a reporting organization are required to provide collocated data at a frequency of every 6 days (~15 values per quarter). Figure 2.7 provides completeness information for collocated data in AIRS as of 7/11/01. Attachment 4-2 provides completeness statistics by EPA Region and by site.

Of the 906 SLAMS reporting in all 4 quarters, approximately 227 sites should have reported collocated precision data for CY00. This is not an exact calculation since the actual number of required collocated sites are determined on a reporting organization/method designation basis. However, for this assessment, 227 collocated sites will be used as an estimate of 25% of the monitoring network. In CY00, 51% or 116 sites met the completeness requirement in all four quarters; a marked improvement over the CY99 value of 10%. For the quarterly estimates in Figure 2.7, a benchmark value was generated as 25% of the sites that operated in that quarter (e.g. 230 for quarter 1). The second column (Fig 2.6) for each quarter provides information on sites reporting any precision values. The last column for each quarter reports sites that have at least 73% (11 or more collocated measurements per quarter) of the expected precision data. Table 2-2 provides the completeness percentages for the year and on a quarterly basis.

Table 2-2 Yearly and Quarterly Precision Completeness Summary.

SLAMS Sites	Sites Meeting overall completeness requirements for all 4 quarters		% Sites meeting 75% Completeness for Each Quarter			
Data Type (base value)	**%**	**Number**	**1**	**2**	**3**	**4**
Collocation Precision (227)	51%	116	78%	76%	85%	79%

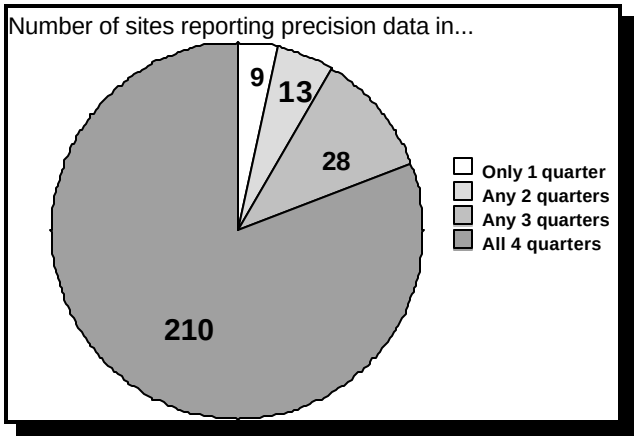


Figure 2.8 Breakdown of precision completeness

Figure 2.8 presents a breakdown of the number of sites providing *any precision data* (not necessarily meeting the completeness statistic) in various combinations of quarters.

Another goal was to establish 80% of the collocated monitors at the sites that the State, local and tribal monitoring organization felt would provide annual averages at concentrations ≥ 90% of the annual or 24-hour NAAQS (if that is affecting the area). Table 2-3 provides this information. 423 sites had CY00 mean concentrations ≥ 13.5 µg/m^3, but only 53% of the collocated precision sites had CY00 mean concentrations ≥ 13.5 µg/m^3. Since some reporting organizations may not have any or only few sites reporting average annual concentrations ≥13.5 µg/m^3 it was not expected that 80% percent of the collocated sites in the network would have average annual concentrations ≥13.5 µg/m^3. It appears that some reporting organizations can relocate collocated monitors to sites near or exceeding the NAAQS. OAQPS will attempt to reduce the collocated monitoring requirement from 25% to 15% in CY02. If this occurs, it is suggested that monitoring organizations discontinue collocated sites with mean concentrations <13.5 µg/m^3, thereby helping to achieve the 80% requirement.

Table 2-3 Total and Percentages of Precision Sites Located at Sites Around the Annual NAAQS

Of 972 routine sites where...	Total Count	% of Total	Of 260 precision data sites where..	Precision Count	% of Total
CY00 mean ≥ 13.5 µg/m^3	423	44%	CY00 mean ≥ 13.5 ug/m^3	138	53%
CY00 mean < 13.5 µg/m^3	549	56%	CY00 mean < 13.5 ug/m^3	122	47%

Completeness - Flow Rate Audits

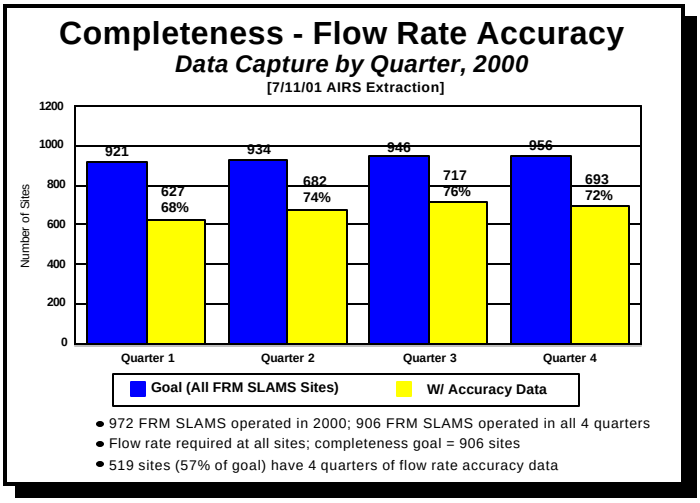


Figure 2.9 Completeness of flow rate accuracy data.

The States and local monitoring organizations are required to perform and submit flow rate accuracy audits on all their routine samplers every quarter. Figure 2.9 presents the completeness of this information. Attachment 5-2 provides listings of flow rate audit completeness by EPA Region as well as State and site. Based on active SLAMS sites operating in all 4 quarters of CY00, 906 sites should have reported flow rate audits in every quarter. 519 sites or 51% of the network

met this goal which is a substantial improvement over the 18% meeting the goal in CY99. Table 2-4 provides a summary of completeness for the annual and quarterly level. Since only one accuracy value is required for each site in a quarter, the site for any one quarter is either complete or it is not. The percentage of sites reporting flow rate audits is around 75% for each quarter

Table 2-4 Flow Rate Completeness Summary

SLAMS Sites	Sites Meeting overall completeness requirements for all 4 quarters		% Sites meeting 75% Completeness for Each Quarter			
Data Type (base value)	**%**	**Number**	**1**	**2**	**3**	**4**
Flow Rate Accuracy (906)	57%	519	68%	74%	76%	72%

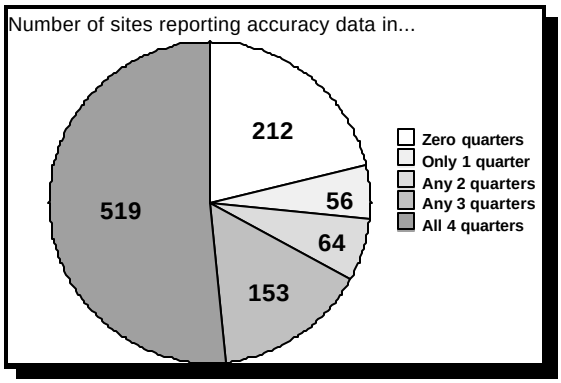


Figure 2.10 Breakdown of flow rate audit data

Figure 2.10 reports the number of sites reporting *any accuracy data* (not necessarily meeting the completeness statistic) in various combinations of quarters.

Completeness - Performance Evaluation Program (PEP) and Routine Data Bias Pairs

Similar to the collocated precision completeness goal, the completeness goal of the PEP was to collect data from 25% of each method designation in a reporting organization at a frequency of once per quarter. Using the number of SLAMS sites reporting data in all 4 quarters in CY00 (906), ~227 sites would require a performance evaluation. This is not an exact calculation since the actual number of performance evaluation sites must be determined on a reporting organization/method designation basis. However, for this assessment, an initial goal of 227 performance evaluation sites is used. The completeness for the PEP program is slightly different since completeness is based on two different organizations collecting the data, the Environmental Services Assistance Team (ESAT) contractors who collect the PEP data, and the monitoring organizations, who collect the routine data. Therefore, completeness will be discussed based upon PEP data completeness and then the completeness of the bias pairs.

PEP Data Completeness –

Figure 2.11 represents the PEP data completeness. The PEP completeness goal required that 75% of the samples (3 out of the 4 expected samples) be valid for each site. In addition, it was a goal to visit the sites in all four quarters. Table 2-5 presents the evaluation of these completeness goals. The goals

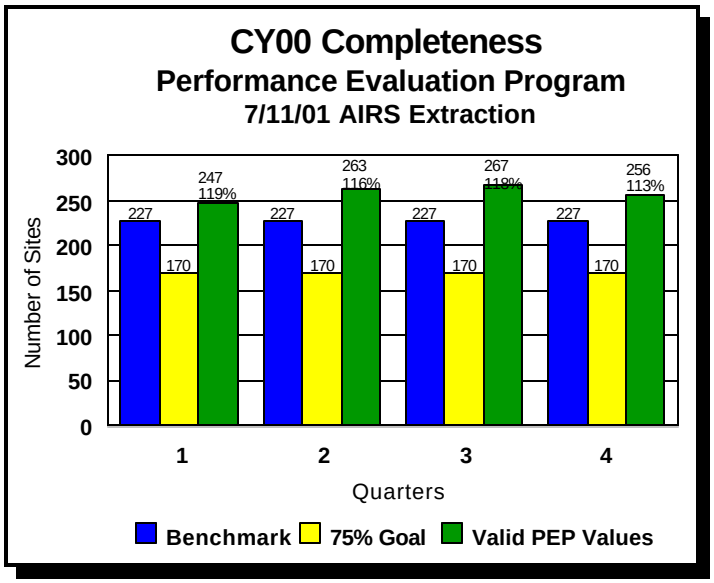


Figure 2.11 Completeness of the PEP

are based on the overall goal of 227 sites mentioned above. Table 2-5 indicates that a total of 284 sites were visited in 2000, which is greater than the goal of 227. However, 15 sites had only one or two PEP visits and therefore did not meet the goal of at least 3 visits per year. Also, 17 sites were visited in fewer than 3 quarters and therefore did not meet the goal of having each quarter represented. The shaded portion of the table indicates the sites that meet the requirement of at least 3 visits. Although 2 sites were visited in just 2 quarters, a total of 269 were visited at least 3 times in CY00. Thus the PEP completeness is 119% .

Table 2-5 CY00 PEP Site Completeness

	Number of Quarters Visits Were Made						
Frequency	**1 Quarter**	**2 Quarters**	**3 Quarters**	**4 Quarters**	**Total Sites**	**Site with ≥ 3 visits**	**Valid Samples**
1 or 2 PEP visits	7	8	NA	NA	15		27
3 PEP Visits	0	0	35	NA	35		105
4 PEP Visits	0	2	26	185	213		852
> 4 PEP Visits	0	0	1	20	21		105
Total Sites	7	10	62	205	**284**	**269**	
Total Samples	11	24	214	840			**1089**

PEP/Routine Sample Completeness –

For every PEP sample there must be a corresponding valid routine value to be able to calculate bias. Figure 2.12 illustrates that completeness of valid pairs of PEP/routine data pairs. The third column in each quarter of Figure 2.12 provides the number of paired PEP/routine sample pairs as of 7/11/01. Table 2-6 provides a breakout of these paired values. Out of the 284 sites with valid PEP data (from Table 2-5), 270 sites have data to pair with the PEP data, of which 243 sites have at least 3 pairs. This 243 sites with at least 3 pairs provides a completeness of 107% when compared to the 227 site goal (25% of routine sites operating all 4 quarters). If one looks at the last column in each table, of the 1089 valid PEP values (Table 2-5), there are 941 (Table 2-6) that have a non-null routine sample match in

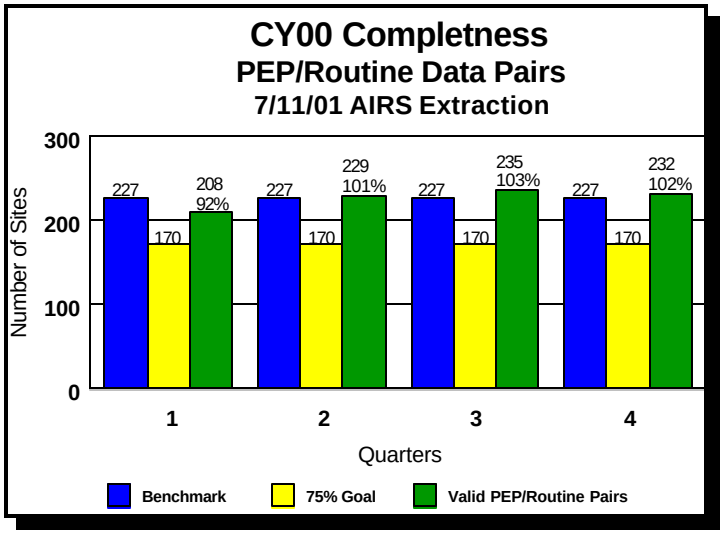


Figure 2.12 Completeness of PEP/routine pairs

AIRS, which leaves 148 PEP values without a routine value. This is close to 100% better than in CY99 where there were 287 values that did not have a routine match. Possible reasons for missing values could be due to PEP or routine samples taken on different days or data not yet entered into AIRS. The missing 145 values account for 13% of the performance evaluation information.

Table 2-6 CY00 Paired PEP/Routine Data

	Number of Quarters Visits Were Made						
Frequency	**1 Quarter**	**2 Quarters**	**3 Quarters**	**4 Quarters**	**Total Sites**	**Sites with ≥ 3 pairs**	**Valid Samples**
1 or 2 Pairs	6	21	NA	NA	27		49
3 Pairs	0	1	83	NA	84		252
4 Pairs	0	2	26	127	155		620
> 4 Pairs	0	0	1	3	4		20
Total Sites	6	24	110	130	270	243	
Total Samples	7	53	358	523			**941**

Precision - Collocated Sampling

All precision data were aggregated to provide a national estimate. Figure 2.13 provides estimates of precision for calendar years 1999 and 2000 for comparison. Figure 2.13 presents a national estimate as described in *40 CFR 58* where pairs that have one or both concentration values less than or equal to 6 µg/m^3 removed. For CY00 all quarters have met the DQO of 10% coefficient of variation. OAQPS evaluated precision by manufacturer (e.g. Andersen, R&P, and BGI). Figure 2.14 presents the precision estimates of the three manufacturers of the FRMs. Single and sequential sampler estimates are combined (weighted by number of collocated pairs).

The BGI samplers are single channel samplers and precision data only average around 50 pairs per quarter whereas the Andersens average around 3000 pairs and the R&P samplers average around

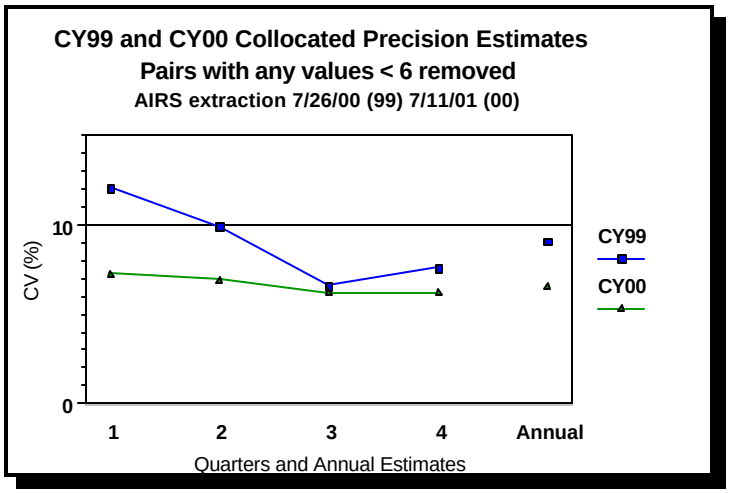


Figure 2.13 CY99 and CY00 collocated precision extimate

4000 pairs per quarter. Although all method designations are meeting the DQOs, the Andersen samplers have sightly greater imprecision.

At this point it can not be determined whether this higher imprecision can be attributed to the function of the sampler or other phases of the measurement process. For example the cassette loading processes between the R&P and the Andersens are different and one method could potentially cause more measurement uncertainty than the other. OAQPS will continue to review the precision information over the next year to see if this trend continues.

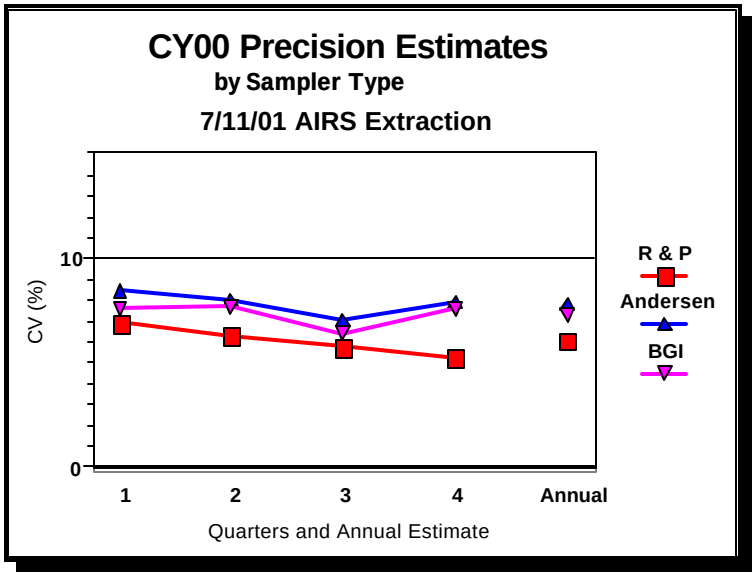


Figure 2.14 CY00 precision by sampler type.

In the CY99 QA Report precision estimates were reported using three different data bases, one excluding pairs where one or both concentrations were $\leq$ 6 µg/m^3, another where pairs with percent difference >50% were removed, and the third where pairs with large percent difference or concentrations $\leq$ 6 µg/m^3 were removed. It was seen that large percent difference can have a large impact on the precision estimate. At times these outliers can be attributed to data entry errors. Attachment 4-3 presents the quarterly and annual precision estimates of all method types with /without outliers removed. During the CY00 and 01 monitoring years, quarterly QA reports listed/will list outliers for monitoring organization to review. Between the interim report based on an April 01 AIRS extraction and the development of this final QA Report there were corrections made to the outliers in the AIRS data base. OAQPS will continue to report outliers in the quarterly QA reports for monitoring agency review.

Reporting Organization Precision

To this point, the discussion about precision has been at the national level. However, the DQO for precision was established at the reporting organization level. Attachment 4-3 presents estimates of precision for each reporting organization on a quarterly and annual basis.

Also included in the attachment is information about the precision for each of the collocated sites within the reporting organization. The site-level precision is being provided to help focus resources on sites where the data appear to be more variable, so that the cause of the increased variability can be understood and hopefully reduced. Due to the lack of data in some cases, precision at a reporting organization level, and even more so at the site level, may be based on very few values and hence the aggregate precision may not accurately reflect the true, underlying precision.

The number of pairs behind each of the precision estimates is presented in Attachment 4.3. Also included in the attachment are confidence intervals for each of the precision estimates. Preferably, the interval should be small and be entirely below 10%. If the interval is not small, there may be several reasons. These reasons include:

(a) There are few observations being used to estimate precision and its confidence interval

(b) One or both of the instruments at the site are imprecise.

(c) There is a consistent difference between the two samplers. For example, one of the samplers may consistently be 10% above the other one. Such consistent differences elevate the precision estimate. The final columns of Attachment 4-3 provide an estimate of this consistent difference. For example, an estimated relative difference of -8.6% means that the concentration measured by the collocated sampler is 8.6% lower than the concentration measured by the routine sampler, on average. Confidence intervals for the relative differences are provided in the final columns of the attachment. If a precision estimate is large, the relative difference should be checked. If the relative difference is large, then one or both of the instruments likely is biased.

(d) A combination of any of the above can be causing the large interval.

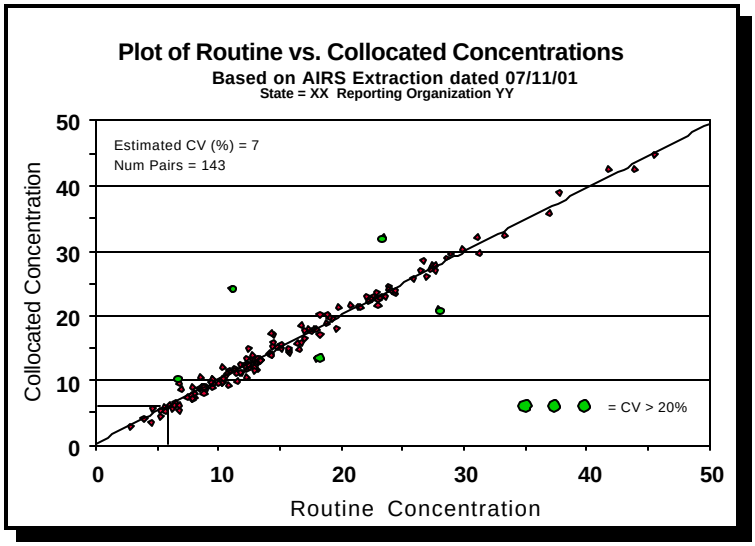


Figure 2.15 Example of a reporting organization precision graph

One of the suggestions in the CY99 QA Report was to provide a more visual representation of precision. Therefore the precision data generated by reporting organization has been graphed. Figure 2.15 provides an example of the graphs. Since there are a large number of graphs, they have been placed in a file on the $PM_{2.5}$ AMTIC bulletin board. (http://www.epa.gov/ttn/amtic)

Accuracy - Flow Rate Audits

There are two acceptance criteria for flow rate: 1) the flow rate measured by the FRM must be within 4% of the flow rate measured by an independent transfer standard, and 2) the flow rate measured by the FRM instrument must be within 5% of the 16.67 L/min design flow rate. The accuracy data from the

flow rate audits indicates that the Federal Reference Method samplers are operating within the acceptance requirements. Table 2-7 provides a summary of the instruments providing flow rate data to AIRS as of the 7/11/01 extraction date. At a national level, about 96% of the audits met the 4% and 98% met the 5% design flow rate criteria. Two method designations, the BGI single and the Andersen sequential, had a higher frequency of non-acceptance than the other method designations. Due to the low sample size for the BGI single method, this higher level of failure (4 and 3 audits by each acceptance criteria) may not be significant. The Andersen sequential audit failures have been steadily increasing since the 3rd quarter 2000 and OAQPS will be working with the monitoring organizations to understand the potential causes of this increased failure rate. Attachment 5-3 provides a listing of the sites/days where the 4% and 5% of the acceptance criteria failed. Note that failures seem to be concentrated among a few reporting organizations.

Table 2-7 CY00 Flow Rate Summary (as of 7/11/01)

FRM Instrument	Number of Audits	Number > ±4%	% > ±4%	Number > ±5% 16.67	% > ±5%	Average Accuracy
BGI Single	47	4	8.5	3	6.4	-1.52
R&P Single	327	11	3.4	8	2.4	-0.14
R&P Sequential	2700	80	3.0	37	1.4	-0.06
Andersen Single	81	3	3.7	2	2.5	-0.65
Andersen Sequential	719	70	9.7	47	6.5	-0.22
National Estimate	3874	168	4.3	97	2.5	-0.13

Bias- Performance Evaluation Program and Routine Data

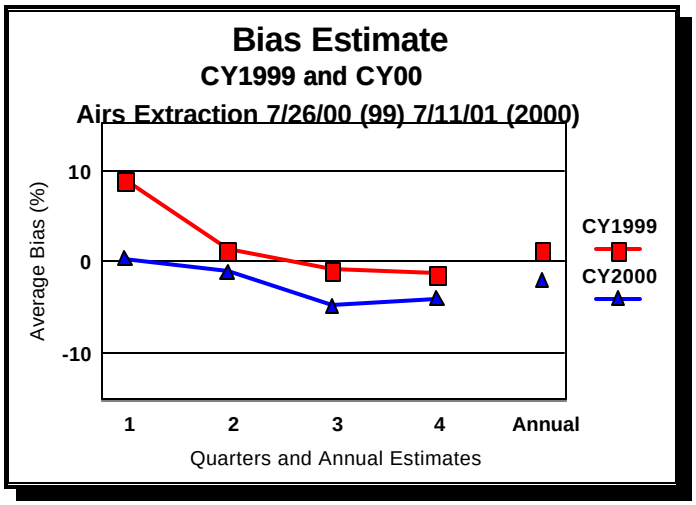


Figure 2.16 CY99 and CY00 bias estimates.

Similar to the evaluation of collocated precision, a number of estimates were used to summarize bias using the performance evaluation data and the routine data extracted from AIRS on 7/11/01. Figure 2.16 presents the national bias estimates for CY1999 and 2000 for all method designations as described in *40 CFR 58* and guidance. The estimates in Figure 2.16 are based on all available pairs, excluding pairs that had one or both sample concentrations less than or equal to 6 $\mu g/m^3$. For the data available in AIRS, it appears that the DQO, at a national level, is being achieved with an overall bias estimate of -2.26%

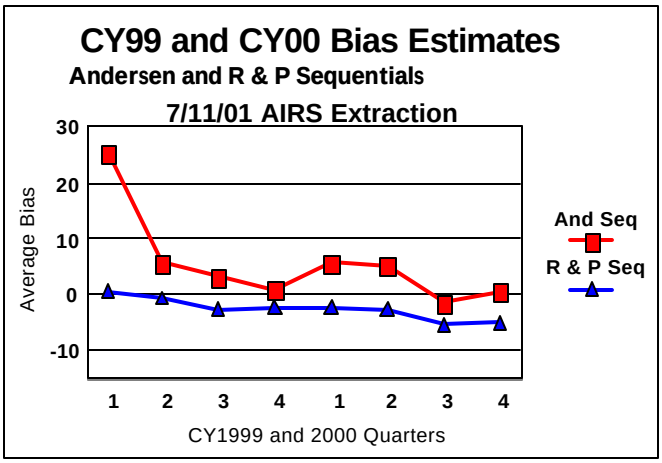


Figure 2.17 CY99 and CY00 Andersen and R&P sequential bias estimates

The 1999 QA Report provided an additional bias estimate by removing paired bias values greater than ± 50%. Attachment 6-2 reports the bias estimates based on the CY00 databases excluding and including the large percent differences, but in general, the large percent differences increase the bias estimate by 1 to 4%. Figure 2.17 provides bias estimates for the two major method designations, the Andersen sequential and the R&P sequential for CY1999 and 2000. With the exception of the first quarter in 1999 the two major method designations are within the bias DQOs at a national level of estimation. Last years report removed outliers that brought the Andersen bias estimate from ~ 25% to 12% bias. One might see a seasonal trend in the Andersen instruments with the 1st and 2nd quarters having more positive bias estimates than the 3rd or 4th quarters for both years. The R&P instruments seem to be trending toward a lower bias. OAQPS will continue to watch this trend for CY01 data.

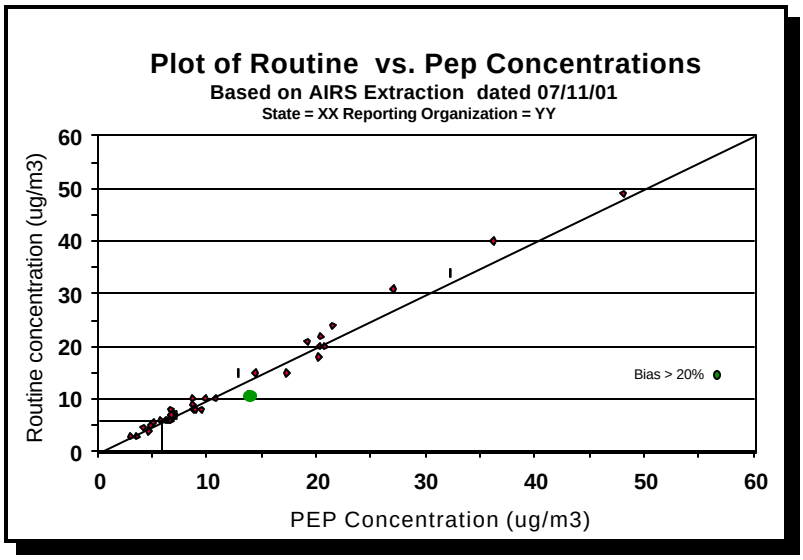


Figure 2.18 Example of bias graphs (CY99 and CY00) by reporting organization

As with the precision DQO, the bias DQO is established at the reporting organization level. Attachment 6-2 provides this information for both 1999 and 2000 data. Bias information is provided graphically on the AMTIC Website (http://www.epa.gov/ttn/amtic). Figure 2.18 presents an example of the graphic. Due to the number of reporting organizations, some reporting organizations have as few as 1 paired value. For reporting organizations with few pairs, any extreme value(s) can have a significant effect on the bias average. It must be remembered that the bias DQO is etsblished at the reporting organization and based on a 3-year bias estimate.

Section 3 Conclusions and Recommendations

This section will summarize the evaluation of the data quality indicators and make recommendations in an effort to improve the ambient air monitoring quality system and the resultant data quality.

Conclusions

Tables 3-1 and 3-2 provide a summary of data completeness and estimates of the primary data quality indicators. Summary comments about these tables follow.

Table 3-1. National Completeness Summary for CY00 (as of 7/11/01)

Sites	Sites Meeting overall completeness requirements for all 4 quarters		% Sites meeting 75% Completeness for Each Quarter				% States with ave. completeness >75%
Data Type (base # sites)	**%**	**Number**	**1**	**2**	**3**	**4**	
Routine Data (1054)*	60%	631	74%	80%	85%	83%	72%
Collocation Precision (227)	51%	116	78%	76%	85%	79%	62%
Flow Rate Accuracy (906)	57%	519	68%	74%	76%	72%	62%
Performance Evaluations (227)	119%	269	>100%	>100%	>100%	>100%	
Performance Evaluation Pairs (227)	107%	243	92%	>100%	>100%	>100%	81%

* 1054 sites operated FRMs to monitor $PM_{2.5}$ in CY00. The remainder of the table is related specifically to SLAMS sites. 972 SLAMS sites operated FRMS to monitor $PM_{2.5}$ in CY00, of which 906 operated in all 4 quarters.

Table 3.2. National Estimates of Primary Data Quality Indicators for CY00 (as of 7/11/01)

Data Type	Acceptance Criteria	% of RO [1] Meeting Criteria	National Estimate	Quarterly Estimate			
				1	2	3	4
Precision - Collocation	< 10% CV	80%	6.7%	7.3%	6.9%	6.2%	6.2%
Accuracy-Flow Rate	< ± 4% Std. < ± 5% Design	83%	-0.13%	-0.30%	0.0%	0.02%	-0.24%
Bias - Performance Evaluations	< ± 10%	85%[2]	-2.3	0.3%	-1.2%	-4.9%	-2.9%

[1] RO = reporting organizations
[2] = bias estimated at a State level

Routine Data Completeness - The completeness evaluation is based upon the strictest interpretation of the completeness requirement in *40 CFR 50, App N* that a site must collect 75% valid data in every quarter in order for comparison to the NAAQS. There are other techniques, such as data substitution, that can be used to allow more information to be used for the NAAQS comparison that are not evaluated in this report. Therefore, the 60% overall completeness estimate is the most conservative estimate of completeness for CY00. Since the requirement is based on 4 quarters, the overall completeness estimate cannot be higher than the lowest quarterly completeness percentage. For comparison, the CY99 completeness estimate was 24% so there has been substantial progress made in CY00. Figure 3.1 illustrates the change in completeness statistics for routine data as well as the data quality indicators from CY99 to CY00.

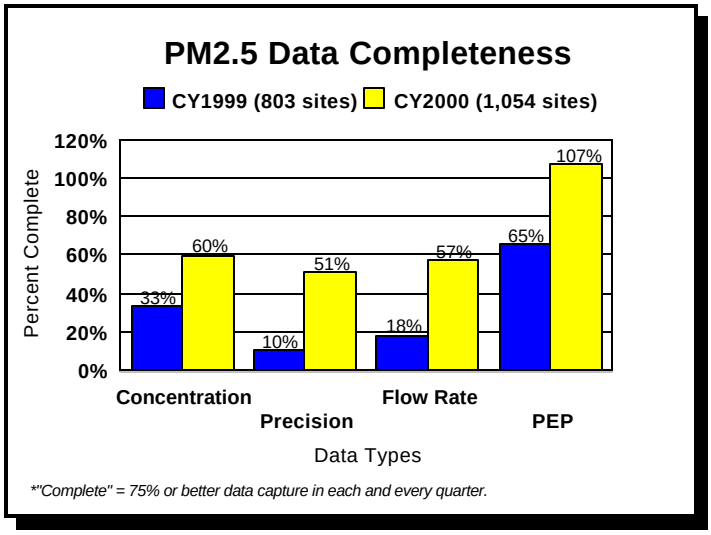


Figure 3.1 PM2.5 Completeness statistics for CY99 and CY00.

Precision - Collocation

Completeness- The percentage of sites that have met the 75% completeness goal for all 4 quarters is 51 %, a considerable improvement over the 10% reported in CY99. However, ~ 50 % of the collocated site are not meeting the completeness requirements.

Values around the NAAQS-- In order to focus quality assurance activities around the data most crucial in decision making, *40 CFR 58 App A Sect 3.5* required that 80% of the collocated monitors be placed at the sites that the State, local and tribal monitoring organization felt would provide annual averages at concentrations $\geq$ 90% of the annual or 24-hour NAAQS (if that is affecting the area). Presently, only 53% (138 sites) of the collocated sites reporting data are located at sites with annual means $\geq$ 13.5 µg/m^3 and there are 423 routine sites with an annual mean $\geq$ 13.5 ug/m^3. Since some reporting organizations may not have any or only few sites reporting average annual concentrations $\geq$13.5 µg/m^3 it was not expected that 80% percent of the collocated sites in the network would have average annual concentrations $\geq$13.5 µg/m^3. However, if reporting organizations review their routine and collocated sites (Attachments 2-1 and 2-3) it appears that some reporting organizations can relocate collocated monitors to sites where precision and bias estimates are most crucial. If OAQPS succeeds in reducing the collocated requirement from 25% to 15% OAQPS will suggest discontinuing sites that have means < 13.5 ug/m^3.

Precision Results - It must be emphasized that the precision data quality objective (DQO) is based on three years of precision data (75% complete). Therefore, any one year or any quarter may exceed the

criteria and still meet the precision data quality objectives. An early analysis of precision suggests that the DQO can be achieved at a national level and in most cases, at a reporting organization level.

The national precision estimate is 6.7% CV and is based on 12,177 collocated paired values where both values are > 6 $\mu g/m^3$. Outliers (percent differences greater than 50% and not involving either paired value $\leq$ 6 $\mu g/m^3$), can be shown to have an effect on precision. In CY00 74 extreme pairs (0.6 % of the total collocated pairs) changed the national precision estimate from 6.7 % CV to 5.1% CV.

OAQPS investigated whether there was any significant difference in precision for the various method designations. Although this did not appear to be the case in 1999, with more data available there may be some statistically significant differences between Andersen instruments (method codes 119 and 120) and R&P instruments (method codes 117 and 118). Simple averaging of the quarterly precision estimates of the Andersen single and sequential instruments yields a precision estimate of 7.8 % CV while the aggregate estimate of the R&P yields a 6.1% CV. Removing outliers provides precision values of 6.0 % CV and 4.7% CV for Andersen and R&P respectively. Since there are operational differences between the instruments (e.g., how filter cassettes are loaded) as well as difference is the number of paired values going into these averages, it is difficult to discern exactly what might be leading to these different precision estimates.

Due to suggestions made on improving the CY99 Report, OAQPS has generated precision graphs for each reporting organization. These graphs are presented on the AMTIC Website (http://www.epa.gov/ttn/amtic/pmqa.html)

Based upon a re-evaluation of the $PM_{2.5}$ data quality objectives which demonstrated that precision had less effect on decision errors than originally estimated, OAQPS will suggest reducing the collocated precision requirement from 25% of routine sites to 15%. OAQPS feels that if completeness can be maintained at this lower level of data collection it can still make precision estimates at the reporting organization with an appropriate level of confidence.

Fifteen of the 118 reporting organizations are not meeting the precision DQO of 10% and 9 are not reporting data to evaluate precision. This means that 80% of the reporting organizations are meeting the precision DQO.

Accuracy -Flow Rate

Completeness- Flow rate accuracy overall completeness was 57% in CY00 compared to 18% in CY99. A positive or negative bias in flow rate can have a direct effect on the cut point of the particulate matter collected on the filter and also affects the 24 hour air volume estimate that goes into the derivation of the concentration. OAQPS will continue to make attempts to improve the capture rate of this data for future calendar years.

Accuracy Results - For the information available, the results of the accuracy audits are very good. The national average accuracy estimate is -0.13% which is well within the acceptance criteria of ±4% of the

standard and ±5% of the design (see Table 3-2). The percentage of audits meeting the criterion (all method designations) of ±4% of the standard was 96% and the percentage meeting the criterion of ± 5% of the 16.67 L/min design flow rate was 97%. There was some difference between the audit failure rates of the two major method designations. The Andersen sequential sampler (719 flow audits) failed the 4% criteria 9.7 % of the time and the 5% design standard 6.5% of the time; whereas the R&P sequential (2700 flow audits) failed the 4% standard 3% of the time and the 5% design standard 1.4% of the time. Additionally, it appears that the rates at which the Andersen sequential sampler fails the two criteria are increasing.

Two of the 118 reporting organizations have an average flow rate that is not within 4% of the audit device and 18 reporting organizations have no accuracy data reported. This 83% of the reporting organizations are meeting the 4% standard criterion for flow rate audits.

Bias - Performance Evaluation Program and Routine Data

Completeness - Completeness of the performance evaluation data is a little more complicated because it involves two data points that are collected by different organizations. The bias estimate must rely on Performance Evaluation Program (PEP) data collected by technical support contractors provided through the EPA Environmental Services Assistance Team (ESAT) contract. The routine $PM_{2.5}$ data is collected by the State, local and Tribal Nations. The PEP achieved its completeness requirement by collecting complete valid data at 269 sites, which was over the anticipated 227 sites (25% of the 906 SLAMS sites operating in all 4 quarters). However, when the data for these 269 sites were matched with their respective routine data in AIRS, 243 sites produced valid site/pairs that met the completeness requirement. If one looks at actual valid samples that were taken, of the1089 valid PEP values, 941 have a routine sample match in AIRS, meaning that 148 valid PEP values (14% of PEP data) are not matched with a routine sample. In 1999 there were 287 values without a match so there has been a marked improvement in pairing PEP data with routine data.

Bias results

As with precision, the bias data quality objective is based on three years of bias data (75% complete). At a national level, the average bias is estimated at -2.2% and it appears that the bias data quality objective is being met. Since 2 years of data have been collected, OAQPS is gaining more confidence in the bias estimates. One trend that is noticed is the 2000 national bias estimate is more than 3 percentage points lower than the 1999 bias estimate of 1.7%. OAQPS will continue to watch for this over CY01. It appears that outliers and method designation are still influential.

Since the data sets for the bias estimates for any quarter and in some cases annual averages for some method designations are fairly small, outliers can have an effect. An outlier for this report was defined as any paired values that had a percent difference of > ± 50%. For the Andersen sequential method designation, the removal of 4 outliers from the annual estimate (217 pairs to 213) changed the bias estimate from 2.17% to 0.65%. Removing 5 outliers (506 pairs to 501) from the R&P sequential pairs changed the annual bias estimate from -4.1% to -4.73%.

As illustrated above there was some difference in the annual bias estimates for the Andersen sequential (2.17%) and R&P sequential (-4.1%) yet both are well within the ±10 DQO. On a quarterly basis, Andersen sequential bias estimates appear more variable than the R&P sequential bias estimates.

Similar to collocated precision, bias graphs were developed for each reporting organization. These graphs are placed on the AMTIC Website (http://www.epa.gov/ttn/amtic/pmqa.html)

Sixty-two percent of the reporting organizations have average biases within the DQO, that is, between -10% and +10%. Fourteen percent of the reporting organizations have estimated biases for CY00 that are not with the DQOs. In general, the reporting organizations with estimated CY00 biases larger than 10% are operating Andersen single or sequential samplers and reporting organizations with estimated CY00 biases less than -10% are operating R&P sequential samplers.

Recommendations

The following recommendations are made in order to improve the capture rate of information and improve the $PM_{2.5}$ quality system over the next year.

Completeness improvement- This QA Reports represents the second full year of sampling. Completeness statistics for routine sampling as well as precision and flow rate should be higher. OAQPS recommends a concerted effort to meet the completeness requirements for CY01.

Quarterly Assessments- OAQPS will continue to develop interim quarterly QA summaries and place these on AMTIC. Many of these assessments will be similar to those found in the attachments. OAQPS will also identify outliers either through the new AIRS critical data review reports or through this assessment in order to ensure the effect of outliers on data quality is minimized. In addition to reviewing data completeness, OAQPS will use the quarterly assessments to continue monitoring three potential trends in the estimates of data quality:

1. the higher imprecision values in Andersen samplers,
2. the increasing failure rate of the flow rate audits for Andersen sequential samplers, and
3. the downward trend in bias estimates, especially for R&P sequential samplers.

Reduction in collocated precision sampling requirement- Based upon a re-evaluation of the $PM_{2.5}$ data quality objectives, OAQPS will recommend reducing the precision collocation requirement from 25% to 15%. OAQPS would like to institute this reduction prior to the start of CY02.

Relocation of collocated monitors - It is recommended that collocated monitors at low concentration sites be moved to sites whose annual mean is $\geq$ 13.5 $\mu g/m^3$. Each reporting organization should try to locate 80% of their monitors within 90 to 110% of the NAAQS (13.5 to 16.5 $\mu g/m^3$).

Attachments

The following attachments are included:

Attachment	Title
1	Manipulation of Data for Estimation of Completeness, Precision, Bias and Accuracy
2	PM2.5 Routine Data Completeness 2-1 Quarterly Completeness Graphs by EPA Region 2-2 Data Completeness by State and Site ID
3	PM2.5 Data Flags 1) Flag Definitions 2) Data Qualifiers by State 3) Null Data Flags by State
4	PM2.5 Precision 4-1 Quarterly Completeness Graphs by EPA Region 4-2 Collocated Precision Data Completeness 4-3 Collocated Precision Estimates 1) Quarterly National Precision Estimates by Method Designation 2) Number of Pairs in National Precision Estimate by Method Designation 3) Collocated Precision Estimates Aggregated by Region/State/Reporting Organizations/Method Designation
5	PM2.5 Accuracy (Flow Rate) 5-1 Quarterly Completeness Graphs by EPA Region 5-2 Flow Rate Audit Data Completeness 5-3 Flow Rate Data Summaries 1) Annual Flow Rate Data Summary 2) Quarterly Flow Rate Summary 3) Site/Days exceeding 4% Flow Rate Check 4) Site/Days with True or Measured Flow Rate >5% of 16.67 l/m 5) Site/Days with True or Measured Flow Rate >10% of 16.67 l/m
6	PM2.5 Bias (Performance Evaluation Program) 6-1 Bias Completeness Estimates 1) Bias Completeness Estimates for CY 99 and CY2000 2) Number of pairs by Region/ State/ Year/Site 6-2 Bias Estimates 1) National Bias Estimates 2) Bias Estimates by State/Reporting Organization

Attachment 1

Manipulation of Data for Estimation of Completeness, Precision, Bias and Accuracy

Calculations for Summary Statistics in Columns of Table 3 of Executive Summary

Table 3 in the QA Reports executive summary summarizes the completeness and data quality indicators by EPA Region for CY00 data. The completeness statistics and the estimated bias are presented at the state level only. The estimated precision and accuracy are provided at the reporting organization and state levels. Data from both complete and incomplete sites are used to estimate the data quality indicators. For states that are entirely one reporting organization, only the state level information is applicable. If no data have been reported to AIRS, the completeness columns will have 0% completeness and 0 for the number of complete sites and the data quality estimates will have **ND** (no data) indicated.

For data completeness, highlighted boxes indicate that the state has an average data completeness that is less than 75%. For the data quality estimates, highlighted boxes indicate that the state and/or reporting organization has a precision estimate that is > 10%, a bias estimate that is > 10% or < -10%, or an average % difference for accuracy that is > 4% or < -4%.

Following are detailed descriptions of how each of the fields of Table 3 are computed.

<u>Average % Completeness for Routine</u>: Determine the percent complete for each site for each quarter of CY00 in which the site was operational. A site is considered to be operating in a quarter if the monitoring record shows that the site started before the quarter and ended after the quarter. The percent complete is estimated by using the data to infer the sampling frequency and then, using that data-derived sampling frequency, dividing the number of samples taken on the national sampling schedule by the number of samples that should have been taken. For each site, the annual average completeness is estimated by averaging the quarterly completeness, but only those quarters for which the site was reporting data to AIRS for the entire quarter. Finally, state-level percent completeness is estimated by averaging the site-level, annual percent completeness. Data substitution, make-up days, and unscheduled samples are included in the estimates of completeness, as described in the following completness estimation section. SLAMS only are included in the counts. Also, if multiple samplers are operating at a site, completeness for only the primary sampler (lowest POC) is included in the statistic.

<u>Number complete sites/Number operating sites for Routine</u>: The number of complete sites is the number of sites that operated in all 4 quarters and have at least 75% completeness in each quarter. The number of operating sites is the number of sites with monitoring records that indicate the site started before or during CY00 and ended during or after CY00.

<u>Average % Completeness for Precision</u>: Completeness is first calculated for each site/quarter. This is computed as the number of pairs divided by 15, the approximate number of required pairs per quarter. A pair is counted whether it occurred on the national sampling schedule or not. The site/quarter precision completeness statistics are capped at 100%. Thus, if a site had 20 pairs in a quarter, its completeness is capped to 100%. The state-level average % completeness is estimated by averaging all the site/quarter completeness statistics.

Number complete sites/Number operating sites for Precision: The first number in this column is the number of sites in the state that have complete precision data (at least 11 pairs, whether on the correct sampling date or not) in all 4 quarters. The second number is the number of sites required to have collocated samplers and is estimated by taking 25% of the number of sites that operated in all 4 quarters. The number of required precision sites is underestimated since the 25% collocation requirement is at the reporting organization / method designation level, not at the state level.

Average % Completeness for Bias: For each site, the number of PEP/routine pairs in CY00 is divided by 4 to estimate the annual percent complete. If the percent complete is > 100%, it is capped at 100%. That is, a site with 5 PEP/routine pairs is said to be 100% complete, not 125% complete. These site-specific, annual completeness statistics are averaged to estimate the state-level average percent complete.

Number of complete sites/Number of operating sites for Bias: The first number in this column is the number of sites in the state that have 3 or more pairs of PEP/routine data in the year, regardless of the number of quarters represented. The second number is the same as the second number for precision.

Average % Completeness for Flow Rate: To calculate the annual percent complete for flow rate for each site, the number of quarters with flow rate data is divided by the number of quarters the site operated. Then, these site-level annual completeness estimates are averaged to get the state-level average percent complete.

Number of complete sites/Number of operating sites for Flow Rate: The first number in this column is the number of sites in the state that reported flow rate audits in at least 75% of the quarters in which the site was operated. The second number is the same as the second number for routine.

Rep Org: Reporting organization number or "ALL" to represent the entire state. For states that are entirely one reporting organization, there is only one row of information.

Prec (% CV): This is the precision estimate for the state or reporting organization and is calculated according to 40 CFR Part 58 Appendix A. Basically, to aggregate the data, a coefficient of variation is calculated for each site/day and these are squared, then averaged, and then a square root is taken. Pairs where one or both of the concentrations is #6 : g/m^3 are not included in the precision estimate.

Bias (%): This is the bias estimate for the state and is calculated according to 40 CFR Part 58 Appendix A. Basically, to aggregate the data, a bias is calculated for each site/day and these are averaged. Pairs where one or both of the concentrations is #6 : g/m^3 are not included in the bias estimate.

Accuracy (Flow Rate) Average % Diff: This is the average percent difference in actual and indicated flow rate for the state or reporting organization. This is calculated according to 40 CFR Part 58 Appendix A. Basically, to aggregate the data, a relative percent difference is calculated for each site/day and these are averaged.

Accuracy (Flow Rate) % > 4%: This is the percentage of the flow rate audits for which the relative percent difference is > 4% or < -4%.

Accuracy (Flow Rate) % > 5% of Design Flow: This is the percentage of actual or indicated flow rates > 5% of 16.67 liters/min or < -5% of 16.67 liters/min.

Completeness Estimation - Routine and Quality Assurance Data

For this report, data completeness was computed for the routine 2000 Federal Reference Method (FRM) data, for 2000 precision information, for 2000 accuracy transactions, and for 2000 bias data extracted from AIRS on 7/11/01.

Routine Data Completeness Estimation Procedure

The following statement is made in *40 CFR Part 50 Appendix N Section 21*:

> *" For the annual $PM_{2.5}$ standard, a year meets data completeness requirements when 75 percent of the scheduled sampling days for each quarter have valid data. However, years with high concentrations and more than a minimal amount of data (a least 11 samples in each quarter) shall not be ignored just because they are comprised of quarters with less than complete data..."*

Completeness was computed as prescribed for the NAAQS per the following references: 1) CFR, 2) Guideline on Data Handling for the PM NAAQS, and 3) Use of Make-up PM Samples to Replace Scheduled PM Samples. The specific computations, caveats, and rationale employed for this report are described below. All utilized data were extracted from AIRS on 7/11/01. This date allowed several State updates beyond the official July 1 'certification' deadline. The listing that is referred to in the following information can be found as Attachment 2-1.

- Completeness was computed on an individual site basis. Only data for Primary POC's (the lowest number POC ~ generally '1') were used.
- A sample frequency was derived for each site-quarter. The quarterly frequency was computed as: mode (days between samples). If the mode was not equal to 1 (every day) or 3 (every 3rd day), a default of 6 (every 6th day ~ the least stringent frequency) was used. Some of these data-derived frequencies were 'corrected' with feedback received from Regions, States, and MQAG staff. There was no attempt to reconcile the utilized frequencies with the CFR requirements (based on MSA population).
- Null data codes were not counted as valid samples but were used to ascertain sampling frequency. Flagged data were considered valid for the purpose of data completeness.
- Completeness percentages were based on the entire calender year 2000; that is, monitors were assumed to have operated (or have been able to operate) the full year. There were no adjustments made for later start-up or for monitor closings. MQAG recognizes that some monitors did begin or end operating sometime during the year and thus, the calculated completeness percentages may not

accurately portray actual 'performance'. The full-year approach was used (as opposed to the partial-year method) so that the results would more closely coincide with NAAQS usage requirements.

- The official EPA 2000 3-day and 6-day monitoring schedules were used to ascertain scheduled sampling days
- 'Make-up' logic was incorporated as stipulated in reference 3: Missed samples on an 'every 3rd day' schedule were counted as taken if an extra ('make-up') sample was reported 1, 2, or 7 days later. Missed samples on an 'every 6th day' schedule were counted as taken if an extra sample was reported 1, 2, 3, 4, 5, or 7 days later. The number of replacement samples permitted in any quarter was limited to no more than 5. Some concessions to these 'guidelines' were granted on request.
- Limited data substitution logic was incorporated in this iteration. States will be permitted to show Annual NAAQS attainment (over a 3-year period) using quarters less than 75 % but at least 50% complete by substituting maximum quarterly values or collocated PM2.5, PM10, or TSP for their missing data. In this completeness iteration, collocated non-null FRM PM2.5 data was substituted for missing data at the primary sampler wherever possible (even in cases where the un-substituted capture percentage was less than 50%).
- Extra 'unscheduled' samples were included in the completeness computations by adding the applicable number to the numerator and denominator of the equation. For actual NAAQS usage this approach may be unacceptable, especially if the extra samples were purposely taken all near the end of the quarter, on low concentration days, etc. By adding these samples to the numerator and denominator, we are basically allowing the monitor to temporarily shift sampling frequencies to 'every day sampling'.
- The final formula used for computing completeness was:

$$Completeness_{site-quarter} = \frac{(\#\text{ of scheduled samples taken}) + (\#\text{ of make-up samples}) + (\#\text{ of } substituted_samples) + (\#\text{ of unscheduled samples taken})}{(\#\text{ of scheduled samples}) + (\#\text{ of } substituted_samples) + (\#\text{ of unscheduled samples taken})}$$

- For quarters with 15 scheduled samples on an every 3rd day schedule, a capture of 11 samples was counted as 'complete' even though the capture rate is slightly lower than 75% (11 / 15 = 73%).
- Since non-attainment of the Annual NAAQS can be determined with as few as 11 samples in a quarter (which could be as little as 12% of the number of required samples), a metric using the 11 sample cutoff was included in the listings and charts.

Collocated Precision Completeness Estimation Procedure

Information used to compute $PM_{2.5}$ precision and associated completeness were culled from 2 sources, from the AIRS precision area (polled via an AMP250 - P/A Monitor Raw Data retrieval) and from the AIRS raw data area (polled via an AMP350 - Raw Data Listing retrieval). Precision data are supposed to be submitted to AIRS with transaction type 8 and, hence, be deposited in the former area. However, since there has been some confusion with regards to this requirement, additional paired data were retrieved from the latter area and results merged. Both AIRS data extractions were performed on 7/11/01. Below are some additional details of the precision completeness analysis. The listing that is

referred to in the following information can be found as Attachment 2-3.

- Per CFR (*40, Ch. 1, Pt. 58, App. A, Sec. 3.5.2*), each $PM_{2.5}$ Reporting Organization is required to collocate 25% (but at least 1) of their FRM SLAMS monitors for the purpose of calculating measurement precision. State summary lines in the precision completeness report show the total number of FRM SLAMS sites that operated in 2000 [the number of sites where the primary FRM sampler has a Monitor Type='2'], the number of FRM SLAMS sites that operated in all 4 quarters of 2000, the number of SLAMS sites where collocation was required [25% of the total that operated in all 4 quarters], the number of SLAMS sites reporting precision information, and the number of SLAMS sites with 4 complete quarters of precision information. MQAG recognizes that States and Reporting Organizations are not totally synonymous.
- In last year's precision completeness run, sites were given credit for all 'attempts' to run collocated instruments on a particular day, even if one (or both) of the samples was invalidated. That is, null codes did not reduce data completeness. This year, however, sites were only given credit if both samples were valid.
- Completeness percentages were based on whole quarters of calender year 2001. On the listing, sites were only held accountable for quarters starting with the first one in which routine information were reported. If a site's first reported 2001 routine FRM data point occurred in the 2nd quarter, the site was not expected to produce precision information until that quarter. Blanks on the site listing are different from zeroes. Blanks indicate no precision data present but no FRM data reported either in that quarter. Zeroes indicate no precision data reported but routine FRM data <u>are</u> present that quarter. Completeness percentages for the 'initial' quarters were <u>not</u> prorated according to when in the quarter that 1st FRM point occurred; the denominator for the ratio was the whole quarter (number of every 6th days).
- CFR requires a 6-day sampling schedule for precision collocation. Some organizations / sites collocated more frequently and some used schedules different from the official EPA 2001 6-day monitoring schedule. Although adherence to that schedule (at a minimum) is preferred, this completeness evaluation only looked at the total number of valid pairs reported in the quarter, no matter what the schedule. In the attached site listing, a count is provided (by quarter) of the number of total pairs reported. This was the numerator for the capture percentage. Although some quarterly 6-day schedules yielded 16 possible precision pairs, a denominator of 15 was always used. (In cases where 16 or more pairs were actually reported, the completeness statistic was capped at 100%.)
- Totally complete sites (defined as ones that reported 73% or more [11/15=73%] in each quarter) are flagged.
- A flag is also provided on the listing to indicate if the site's corresponding 2000 annual mean is greater or equal to 13.5 ug/m^3. CFR notes that during the initial deployment of the PM2.5 network, special emphasis for collocation should be placed on sites in areas likely to exceed the NAAQS. Once areas are determined to be in violation of the NAAQS, 80% of the areas' collocated monitors are to be deployed at sites with concentration $ 90% of the NAAQS or 13.5 ug/m^3. In general (Nationwide), it appears that we are falling short of the 80% goal. States may need to consider moving some of their collocated monitors to higher concentration areas.

Flow Rate Accuracy Completeness Estimation Procedure

Information used to compute PM2.5 accuracy and associated completeness was pulled from the AIRS accuracy area with an AMP250 - P/A Monitor Raw Data retrieval on 7/11/01. Comments on the completeness analysis are shown below. The listing that is referred to in the following information can be found as Attachment 2-4.

- Per CFR (*40, Ch. 1, Pt. 58, App. A, Sec. 3.5.1.2*), each calender quarter every FRM SLAMS sampler's flow rate is to be audited *at least once* with a certified standard. State summary lines in the accuracy completeness report show the total number of FRM SLAMS sites that operated in 2000 [the number of sites where the primary FRM sampler has a Monitor Type='2'], the number of FRM SLAMS sites that operated in all 4 quarters of 2000, the number of SLAMS sites where flow rate checks were required [the number of FRM SLAMS sites that operated in all 4 quarters], the number of sites reporting accuracy transactions, and the number of sites with 4 quarters of accuracy data. Again, MQAG realizes that States and Reporting Organizations are not totally synonymous
- Since only 1 audit was required per quarter and it was either present or not, no actual completeness *percentages* were computed. An indicator is shown for each site that reported accuracy information in all 4 quarters.
- Like precision, sites were only held accountable for quarters starting with the first one containing a routine FRM data point. Blanks on the site listing are different from zeroes. Blanks indicate no accuracy data present but no FRM data reported either in that quarter. Zeroes indicate no accuracy reported but routine FRM data <u>are</u> present that quarter.
- Note that some sites reported more than 1 accuracy check per site-quarter. States are cautioned that the flow rate standard used for auditing must not be the same flow rate standard to calibrate the analyzer. Calibration results should <u>not</u> be submitted to AIRS as accuracy transactions.

Performance Evaluation Program Completeness Estimation Procedure

Information used to compute PM2.5 bias and associated completeness is predicated on the completeness of the routine network in addition to the completeness of the Performance Evaluation Program (PEP). The completeness of the routine network is described above. The completeness of the PEP is described in this section.

As per *40 CFR Pt. 58, App. A, Sec. 3.5.3*, approximately 25% of each method designation of the routine sites within each reporting organization are supposed to be visited 4 times in a year by the PEP, preferably once per quarter. Thus, the PEP is complete if approximately 25% of the PM2.5 monitoring network is evaluated at least 3 times (75% of 4) in a year. To evaluate completeness of the PEP, information was pulled from the data bases maintained by the two regional laboratories supporting the PEP (Region 4 and 10) and from the data base maintained by the RTP laboratory, which supported the PEP during the early phase. These three data bases were merged together and completeness statistics were calculated according to the following procedure.

- Any PEP data points with an invalid code (PEVALID=0) were deleted prior to completeness calculations. That is, only valid PEP data were used to calculate completeness.
- Any PEP data points associated with "parking lot studies" were deleted prior to completeness calculations, even if the study had a collocated FRM.
- For some site/day combinations, there are multiple observations in the PEP data base. This likely is due to multiple PEP samplers being run. In such cases, only the first valid observation in the data base was used.
- Since a site is supposed to be visited by the PEP 4 times within a year, if 3 (75% of 4) or more visits were made and resulted in valid data, then the site was considered complete, regardless of how the visits were spread among the quarters.

Bias Completeness Estimation Procedure

The preceding section describes the completeness of the PEP data base. To estimate completeness of bias, AIRS routine data is merged with the PEP data base since both a PEP and a routine concentration are needed to calculate bias. As per *40 CFR Pt. 58, App. A, Sec. 3.5.3*, approximately 25% of each method designation of the routine sites within each reporting organization are supposed to be visited 4 times in a year by the PEP, preferably once per quarter. Thus bias is complete if approximately 25% of the PM2.5 monitoring network has 3 (75% of 4) pairs of valid PEP and routine data.

The data used to estimate bias completeness originated from an AMP350 Raw Data Listing extraction from AIRS on 7/11/01 and from the PEP data base described above. Completeness statistics are calculated according to the following procedure.

- Only non-null routine data and valid PEP data were used in the calculation of completeness.
- Any PEP data points associated with "parking lot studies" were deleted prior to completeness calculations, even if the study had a collocated FRM.
- For some site/day combinations, there are multiple observations in the PEP data base or in the AIRS data base. For the PEP, only the first valid observation was used. For AIRS, the lowest POC with a valid observation was used.
- If a site has at least 3 (75% of 4) valid pairs of PEP and routine data, then it is considered complete, regardless of how the visits were spread among the quarters. The percent complete is calculated as then number of valid pairs divided by 4. The percent is capped at 100%.

Precision, Accuracy and Bias Estimation

Three quality control (QC) procedures, at the national level, will be used to evaluate uncertainty for the $PM_{2.5}$ network. All of the statistics can be found in *40 CFR Pt. 58, App. A, Section 5.5.1*. The equation numbers from CFR are included in the discussion for reference.

1. **Flow rate checks** - Since flow rate is checked against standards of known value, this check provides estimates of accuracy and/or bias at the instrument level. Following is a description of the statistics used to estimate accuracy based on the annual flow rate checks.

   Accuracy is estimated by using pairs of true and measured values for flow rate. The pairs are for the same site and same day. Specifically, for a given site and day, if X_i is the audit standard flow rate and Y_i is the measured flow rate, then accuracy (CFR Equation 13) is calculated as

$$d_i = \frac{Y_i - X_i}{X_i} \times 100 \quad (Equation\ 1)$$

   In this report, estimates of accuracy are presented for various levels of aggregation, sometimes aggregating over time (such as quarterly or annually), sometimes aggregating over samplers (such as all samplers of a specific method designation), and sometimes aggregating over both time and samplers (such as annually for a specific method designation). These various levels of aggregation are achieved using the same basic statistic. This statistic averages the individual accuracy values from Equation 1 to the desired level of aggregation. Specifically, if n_j is the number of flow rate checks and $d_1, d_2, ..., d_{nj}$ are the resulting accuracy values, then the average accuracy estimate (CFR Equations 14, 15, 16, 17, and 18) is

$$D = \frac{1}{n_j} \times \sum_{i=1}^{n_j} d_i \quad (Equation\ 2)$$

   For this report, average accuracy values (Equation 2) are calculated for each method designation by quarter and for the entire year. Additionally, the number of flow rate checks that are within 4% of the audit standard and the number within 5% of the design flow rate of 16.67 L/min are also calculated.

2. **Collocated measurements** - Since the true concentrations sampled from collocated samples are unknown, these checks provide an estimate of precision of the measurement system. However, the statistic developed to summarize the collocated measurements has one component attributable to precision and another component attributable to bias. For now, this document describes only the results for the combined effect for precision and bias. The individual components will be described at a later date.

   Following is a description of the statistics used to estimate precision based on the collocated instruments. Precision is estimated by using pairs of collocated PM2.5 measurements. The pairs of measurements are for the same site and same day. Specifically, for a given site and day, if X_i is the concentration produced from the primary sampler (the routine monitor) and Y_i is the concentration produced from the duplicate sampler (the monitor used for quality control), then the percent

difference (CFR Equation 19) is calculated as

$$d_i = \frac{Y_i - X_i}{(Y_i + X_i)/2} \times 100 \quad (Equation\ 3)$$

The percent difference from Equation 3 is used to calculate the coefficient of variation for a single site and day (CFR Equation 20) as follows

$$CV_i = \frac{|d_i|}{\sqrt{2}} \quad (Equation\ 4)$$

In this report, estimates of precision are presented for various levels of aggregation, sometimes aggregating over time, sometimes aggregating over samplers, and sometimes aggregating over both time and samplers. These various levels of aggregation are all achieved using the same basic statistic. This statistic pools the individual coefficients of variation described above in Equation 4 to the desired level of aggregation. Specifically, if n_j is the number of pairs and CV_1, CV_2, ..., CV_{nj} are the coefficients of variation for each of the pairs to be pooled, then the precision estimate (approximately CFR Equation 21) is

$$CV = \sqrt{\frac{\sum_{i=1}^{n_j} CV_i^2}{n_j}} \quad (Equation\ 5)$$

Confidence intervals can be constructed for these pooled estimates of precision in Equation 5 by using the following equations, one for the lower limit (CFR Equation 22) and one for the upper limit (CFR Equation 23).

$$Lower\ 90\%\ Confidence\ Limit = CV\sqrt{\frac{n_j}{c^2_{0.95,n_j}}}$$

$$Upper\ 90\%\ Confidence\ Limit = CV\sqrt{\frac{n_j}{c^2_{0.05,n_j}}}$$

In these equations, $c^2_{0.05,df}$ and $c^2_{0.95,df}$ are the 0.05 and 0.95 quantiles of the chi-square distribution with degrees of freedom (df) equal to n_j.

There are a couple of issues with calculating individual and pooled estimates of precision. (A) In the equation for the pooled estimate of precision, individual coefficients of variation are squared before being averaged. If there is a large individual coefficient of variation, it can have a very strong influence on the resulting pooled estimate. Hence, pooled estimates of precision were calculated both including all individual coefficients of variation and excluding large coefficients of variation. The impact of these large values is discussed in Section 2. (B) Comparing one pooled estimate of precision to another (such as comparing quarterly estimates or comparing one site to another) requires some care because one estimate may be based on just a few values and hence be less robust than an estimate based on more values. For comparisons of precision for different times or

different places, it is important to look at the upper and lower confidence limits to get an understanding of how robust the estimates are.

3. **Federal Reference Method (FRM) Evaluation** - This evaluation is performed by comparing a monitoring instrument against an instrument that is considered "truth" and can provide an estimate of measurement system bias. Following is a description of the statistics used to estimate bias.

Bias is estimated by using pairs of PM2.5 measurements, where one of the measurements is from a routine, State-operated monitor and the second measurement is from a monitor operated as part of the Performance Evaluation Program. The pairs of measurements are for the same site and same day. Specifically, for a given site and day, if X_i is the concentration produced from the PEP sampler and Y_i is the concentration produced from the State-operated sampler, then accuracy (CFR Equation 26) is calculated as

$$d_i = \frac{Y_i - X_i}{X_i} \times 100 \quad (Equation\ 6)$$

In this report, estimates of bias are presented for various levels of aggregation, sometimes aggregating over time, sometimes aggregating over samplers, and sometimes aggregating over both time and samplers. These various levels of aggregation are achieved using the same basic statistic. This statistic averages the individual biases described in Equation 6 to the desired level of aggregation. Specifically, if n_j is the number of pairs and $d_1, d_2, ..., d_{nj}$ are the biases for each of the pairs to be averaged, then the aggregate bias estimate (CFR Equations 27, 31 and 35) is

$$D = \frac{1}{n_j} \times \sum_{i=1}^{n_j} d_i \quad (Equation\ 7)$$

Confidence intervals can be constructed for these average bias estimates in Equation 7. Such intervals require an estimate of the variability of average bias. Since bias likely varies by site and quarter, the estimate of the variability of the average bias should be based on a pooled estimate of site/quarter variability. However, the PEP usually evaluates each site just once per quarter, which is not sufficient for estimating the site/quarter variability. Since site/quarter variability is not estimable with the current PEP design, the site variability (using all 4 bias estimates for the year) or the quarter variability (using all sites for a quarter) can be used, with the understanding that these estimates of variability are confounded with other sources of variability. Specifically, an estimate of the variability of the average bias is

$$s = \sqrt{\frac{\sum_{i=1}^{n_j} (d_i - D)^2}{n_j - 1}} \quad (Equation\ 8)$$

The 95% confidence interval for the average bias is then calculated as

$$Lower\ 95\%\ Confidence\ Limit = D - t_{0.975,df} \times s/\sqrt{n_j}$$

$$Upper\ 95\%\ Confidence\ Limit = D + t_{0.975,df} \times s/\sqrt{n_j}$$

where $t_{0.975,df}$ is the 0.975 quantile of Student's t distribution with degrees of freedom df = n_j -1 and s as defined in Equation 8.

Attachment 2

PM2.5 Routine Data Completeness

This section covers the following attachments related to routine data completeness:

2-1 Quarterly Completeness Graphs by EPA Region
2-2 Data Completeness by State and Site ID

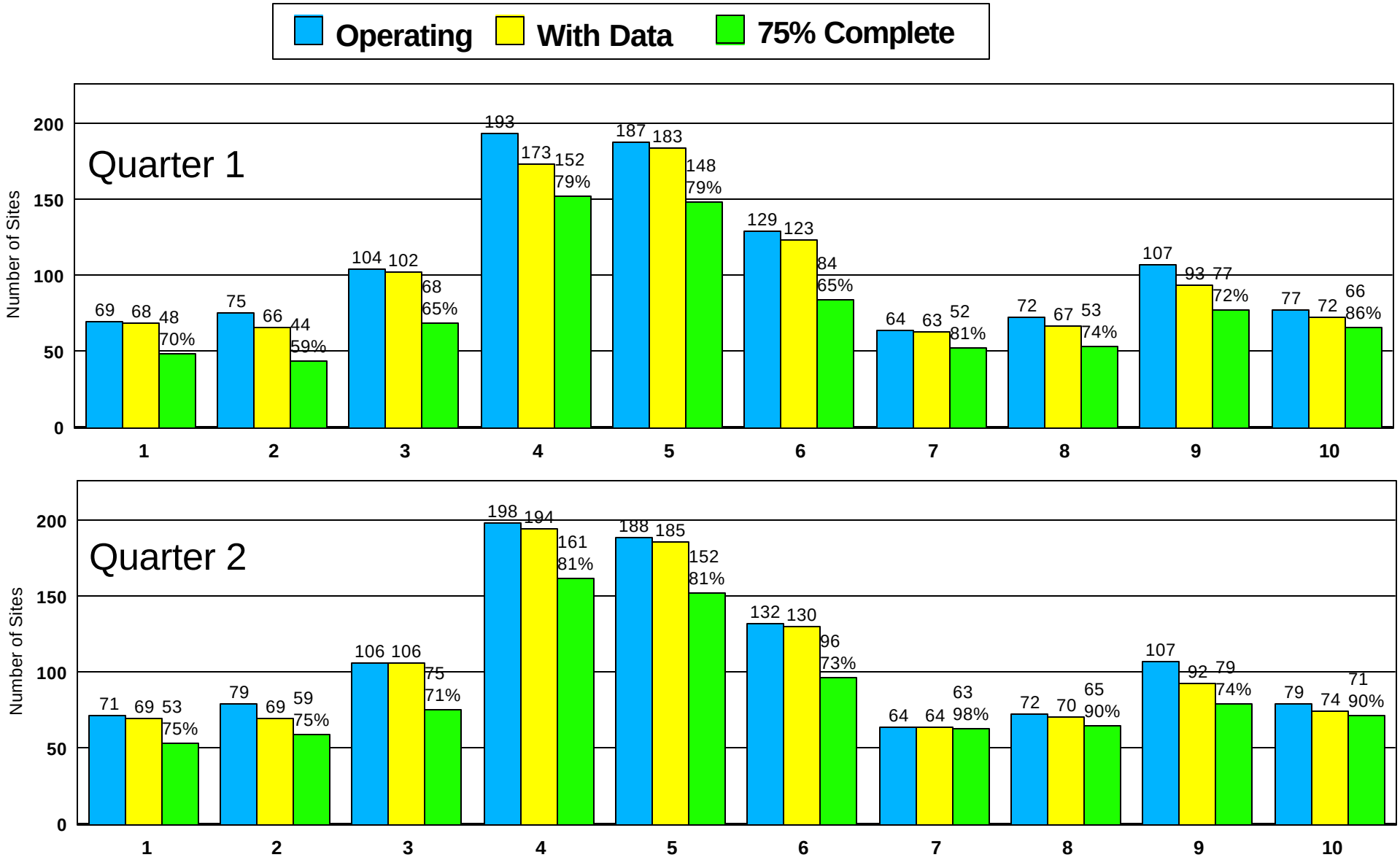
Attachment 2-1

Quarterly Completeness Graphs by EPA Region

Completeness - Routine FRM

Regional Data Capture, 2000

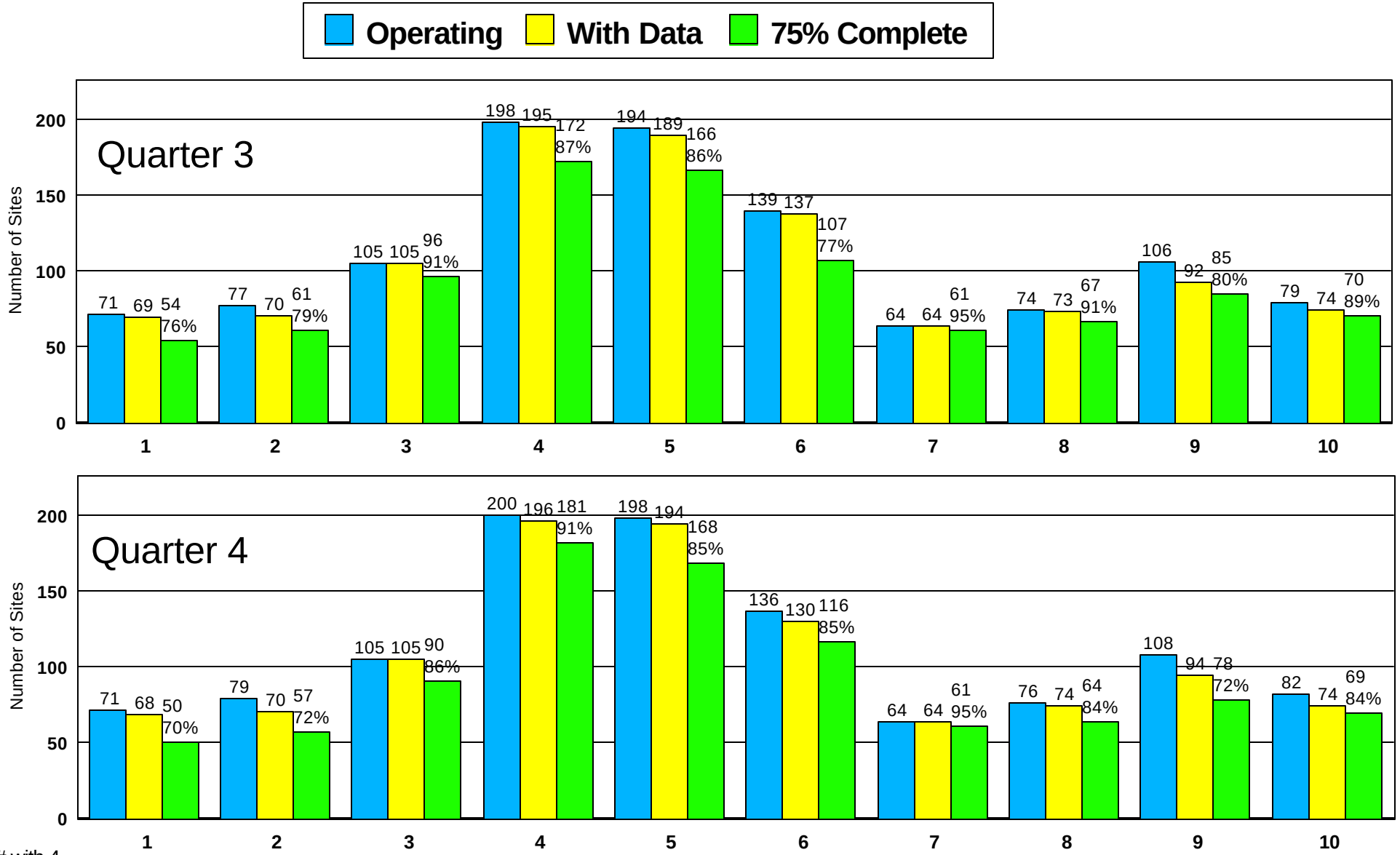
[7/11/01 AIRS Extraction]



Completeness - Routine FRM

Regional Data Capture, 2000

[7/11/01 AIRS Extraction]



# with 4 complete Quarters:	30	28	50	127	114	70	50	43	61	58

Attachment 2-2

Data Completeness by State and Site ID

Field Definitions

STATE:	All PM2.5 sites located in the State are listed after the State name
SITE:	Site Identification Code = State FIPS code (2 char.) + County FIPS code (3 char.) + AIRS Site ID (4 char.)
POC:	Parameter Occurrence Code
MT:	Monitor Type = '2' (SLAMS), '3' (Other), 'A' (Tribal), 'T' (Trends Speciation)
Data in AIRS ….	[Only data for parameter code 88101 (PM2.5 Local Conditions) was utilized in this listing]
FRM:	'1' = Interval '7' (24-hour) data in AIRS (1999, 2000, or 2001) for Federal Reference Methods (Method Codes 116, 117, 118, 119, and 120)
Non-FRM Daily:	'1' = Interval '7' data in AIRS for non-Federal Reference Methods (Method Codes other than other than 116-120)
Non-FRM Hourly:	'1' = Interval '1' (hourly) data in AIRS. [Note: All hourly 88101data are currently non-FRM]
Date Sampling Began:	AIRS Sampling Began Date
Date Sampling Ended:	AIRS Sampling Ended Date
Date of 1st FRM Data Pt.:	The date of the first FRM data point in AIRS ~ should coincide with Date Sampling Began
1999, 2000, and 2001 Information ….	
Q1-Q4 Freq.	The data-derived Sampling Frequency for each calender quarter = '1' (every day), '3' (every 3rd day), or '6' (every 6th day)
Q1-Q4%	The data capture percentage for each calender quarter
All 4 Q 75% Complete:	'1' = All 4 quarters have data capture of at least 75% [Exception: Quarters with 'every 6th day' schedule and 11 samples (73% capture) are considered complete]
All 4 Q w/ 11+ samples:	'1' = All 4 quarters have at least 11 samples

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
ALABAMA																		
010030010	1	3	1	.	.	01/01/00	.	05/03/00	.	.	3	63%	3	87%	3	90%	.	.
010270001	1	2	1	.	.	01/01/99	.	01/03/99	.	.	3	50%	3	97%	3	67%	.	.
010331002	1	2	1	.	.	01/01/99	.	01/03/99	.	.	3	67%	3	74%	3	100%	.	.
010491003	1	3	1	.	.	01/01/99	.	01/03/99	.	.	3	10%	3	87%	3	90%	.	.
010530002	1	3	1	.	.	01/01/99	.	05/03/00	.	.	3	67%	3	94%	3	97%	.	.
010550010	1	3	1	.	.	01/01/00	.	05/03/00	.	.	3	63%	3	74%	3	63%	.	.
010690002	1	2	1	.	.	01/01/99	.	01/03/99	.	.	3	33%	3	65%	3	97%	.	.
010730023	1	2	1	.	.	01/01/99	.	01/01/99	1	99%	1	96%	1	93%	1	97%	1	1
010730023	5	T	.	1	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
010731005	1	3	1	.	.	01/03/99	.	01/03/99	3	100%	3	97%	3	100%	3	100%	1	1
010732003	1	2	1	.	.	01/01/99	.	01/01/99	1	99%	1	96%	1	98%	1	96%	1	1
010732006	1	3	1	.	.	01/03/99	.	01/03/99	3	97%	3	97%	3	100%	3	97%	1	1
010735002	1	2	1	.	.	01/03/99	.	01/03/99	3	100%	3	100%	3	97%	3	93%	1	1
010890014	1	2	1	.	.	01/01/99	.	01/03/99	3	100%	3	100%	3	97%	3	97%	1	1
010970002	1	2	1	.	.	01/01/99	.	01/03/99	.	.	3	63%	3	94%	3	93%	.	.
010970002	2	3	1	.	.	01/01/99	.	01/03/99	.	.	6	67%	6	93%	6	93%	.	.
010970003	1	3	.	.	.	03/01/00	.	.	.	.	.	.	.	.	.	.	.	.
010972005	1	3	1	.	.	01/01/99	.	01/03/99	.	.	3	57%	3	97%	3	80%	.	.
011010007	1	2	1	.	.	01/01/99	.	01/03/99	.	.	3	63%	3	100%	3	97%	.	.
011010007	2	3	1	.	.	01/01/99	.	01/03/99	.	.	6	67%	6	100%	6	100%	.	.
011030010	1	2	1	.	.	01/01/99	.	01/03/99	.	.	3	63%	3	94%	3	63%	.	.
011130001	1	2	1	.	.	01/01/99	.	01/03/99	.	.	3	40%	3	94%	3	100%	.	.
011170006	1	2	1	.	.	01/01/99	.	01/03/99	.	.	3	67%	3	81%	3	93%	.	.
011190002	1	2	1	.	.	01/01/99	.	01/03/99	.	.	3	61%	3	97%	3	70%	.	.
011210002	1	2	1	.	.	01/01/99	.	01/03/99	.	.	3	57%	3	90%	3	73%	.	.
011250003	1	2	1	.	.	01/01/99	.	01/03/99	.	.	3	37%	3	94%	3	97%	.	.
011270002	1	2	1	.	.	01/01/99	.	01/03/99	.	.	3	60%	3	32%	3	0%	.	.
ALASKA																		
020200018	1	2	1	.	.	11/10/98	.	01/01/99	3	71%	3	100%	3	97%	3	93%	.	1
020200044	1	2	1	.	.	01/01/99	.	04/06/99	3	97%	3	100%	3	97%	3	100%	1	1
020900010	2	2	1	.	.	10/23/98	.	02/18/99	3	87%	3	93%	3	100%	3	100%	1	1
021100004	2	2	1	.	.	11/19/98	.	04/10/99	3	97%	3	100%	3	100%	3	100%	1	1
021100026	1	0	1	.	.	12/18/99	.	12/18/99	3	100%	3	97%	3	97%	3	90%	1	1
021300008	1	0	1	.	.	10/28/99	.	10/28/99	3	100%	.	.	.	.	3	97%	.	.
021700004	1	2	1	.	.	03/04/00	.	03/04/00	3	32%	3	93%	3	87%	3	90%	.	.
021700008	1	2	1	.	.	12/19/98	.	01/03/99	3	94%	3	100%	3	94%	3	97%	1	1
022900003	1	2	1	.	.	04/10/00	.	04/12/00	.	.	3	53%	3	58%	3	97%	.	.
ARIZONA																		
040031005	1	2	1	.	.	01/12/99	.	01/12/99	.	.	.	.	.	.	.	.	.	.
040051008	1	2	1	.	.	01/06/99	.	01/06/99	.	.	.	.	.	.	.	.	.	.
040070008	1	3	1	.	.	02/11/99	.	02/11/99	.	.	.	.	.	.	.	.	.	.
040070008	2	3	1	.	.	02/11/99	.	02/11/99	.	.	.	.	.	.	.	.	.	.
040130019	1	3	.	.	.	06/13/00	.	.	.	.	.	.	.	.	.	.	.	.
040139990	1	3	1	.	.	01/06/99	.	01/06/99	.	.	.	.	.	.	.	.	.	.
040139991	1	3	1	.	.	01/21/99	06/09/00	01/21/99	.	.	.	.	.	.	.	.	.	.
040139992	1	3	1	.	.	03/19/99	.	03/19/99	.	.	.	.	.	.	.	.	.	.
040139997	1	3	1	.	.	01/01/99	.	01/06/99	.	.	.	.	.	.	.	.	.	.
040139997	5	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
040139997	6	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
040139997	7	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
040190011	1	2	1	.	.	01/01/99	.	01/06/99	3	97%	3	77%	3	65%	.	.	.	.

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
040191028	1	2	1	.	.	01/01/99	.	01/06/99	3	97%	3	100%	3	65%	.	.	.	.
040213002	1	3	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
040230004	1	2	1	.	.	01/06/99	.	01/06/99	.	.	.	.	.	.	.	.	.	.
040230004	2	2	1	.	.	01/01/99	.	01/06/99	.	.	.	.	.	.	.	.	.	.
ARKANSAS																		
050010001	1	2	1	.	.	01/07/99	09/14/00	07/05/99	3	88%	3	90%	3	74%	.	.	.	.
050010001	2	2	1	.	.	01/07/99	09/14/00	07/05/99	6	100%	6	81%	6	60%	.	.	.	.
050010010	1	2	1	.	.	09/14/00	.	09/15/00	.	.	.	.	3	16%	3	60%	.	.
050010010	2	2	1	.	.	09/14/00	.	09/15/00	.	.	.	.	6	20%	6	53%	.	.
050030003	1	2	1	.	.	03/26/99	08/14/00	07/05/99	3	94%	3	83%	3	26%	.	.	.	.
050030004	1	2	1	.	.	08/14/00	.	08/16/00	.	.	.	.	3	29%	3	60%	.	.
050030005	1	2	.	.	.	05/07/01	.	.	.	.	.	.	.	.	.	.	.	.
050310001	1	2	1	.	.	03/12/99	.	07/05/99	6	69%	6	88%	6	93%	6	100%	.	1
050310001	2	2	1	.	.	03/12/99	.	07/05/99	6	75%	6	69%	6	93%	6	80%	1	1
050350004	1	2	1	.	.	04/01/99	.	07/02/99	3	74%	3	83%	3	87%	3	53%	.	1
050450002	1	2	1	.	.	04/28/00	.	04/30/00	.	.	6	73%	6	100%	6	93%	.	.
050450002	2	2	1	.	.	04/28/00	.	04/30/00	.	.	6	67%	6	93%	6	93%	.	.
050510002	1	2	1	.	.	03/09/99	.	07/05/99	3	68%	3	93%	3	94%	3	93%	.	1
050690005	1	2	1	.	.	02/18/99	.	07/05/99	6	81%	6	100%	6	100%	6	93%	1	1
050890001	1	2	1	.	.	04/02/99	.	07/02/99	6	81%	6	80%	6	81%	6	69%	1	1
050910001	1	2	.	.	.	05/05/99	03/09/00	.	.	.	.	.	.	.	.	.	.	.
050910004	1	2	1	.	.	05/05/99	.	07/05/99	6	81%	6	56%	6	53%	6	80%	.	.
050930007	1	2	1	.	.	08/24/00	.	08/28/00	.	.	.	.	6	40%	6	93%	.	.
051070001	1	2	1	.	.	04/05/99	.	07/11/99	3	94%	3	93%	3	84%	3	97%	1	1
051130002	1	2	1	.	.	03/30/99	.	07/05/99	3	87%	3	97%	3	97%	3	90%	1	1
051150003	1	2	1	.	.	02/26/99	.	07/05/99	3	94%	3	87%	3	94%	3	100%	1	1
051190003	1	2	1	.	.	01/06/99	09/08/00	07/05/99	3	97%	3	97%	3	71%	.	.	.	.
051190007	1	2	1	.	.	01/22/99	.	06/30/99	1	84%	1	98%	1	90%	1	97%	1	1
051190007	2	2	1	.	.	01/22/99	.	07/05/99	6	69%	6	100%	6	100%	6	80%	.	1
051191004	1	2	1	.	.	09/08/00	.	09/09/00	.	.	.	.	3	26%	3	93%	.	.
051191008	1	2	1	.	.	04/02/99	.	07/02/99	1	74%	1	100%	1	87%	1	98%	.	1
051191008	2	2	1	.	.	04/02/99	.	07/05/99	6	75%	6	67%	6	87%	6	93%	.	.
051310008	1	2	1	.	.	04/01/99	.	07/05/99	3	84%	3	100%	3	100%	3	93%	1	1
051310008	2	2	1	.	.	04/01/99	.	07/11/99	6	75%	6	93%	6	93%	6	80%	1	1
051390004	1	2	1	.	.	02/22/99	06/14/01	07/05/99	3	65%	3	80%	3	87%	3	87%	.	1
051390005	1	2	.	.	.	06/14/01	.	.	.	.	.	.	.	.	.	.	.	.
051430003	1	2	1	.	.	03/15/99	.	07/02/99	3	69%	3	80%	3	94%	3	70%	.	1
051450001	1	2	1	.	.	04/01/00	.	05/06/00	.	.	6	33%	6	93%	6	100%	.	.
CALIFORNIA																		
060010007	1	2	1	.	.	12/01/99	.	12/02/99	3	87%	6	100%	6	100%	3	97%	1	1
060011001	1	2	1	.	.	01/01/99	.	01/03/99	3	94%	6	100%	6	100%	3	100%	1	1
060011001	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060070002	1	2	1	.	.	12/19/98	.	01/06/99	6	100%	6	100%	6	100%	6	100%	1	1
060090001	1	2	1	.	.	01/06/99	.	01/06/99	6	94%	6	100%	6	94%	6	100%	1	1
060111002	1	2	1	.	.	12/16/98	.	01/06/99	3	81%	3	93%	3	94%	3	79%	1	1
060130002	1	2	1	.	.	01/01/99	.	01/08/99	1	84%	6	100%	6	100%	1	92%	1	1
060130002	2	2	.	.	.	12/31/99	.	.	.	.	.	.	.	.	.	.	.	.
060170011	1	2	1	.	.	01/06/99	.	01/12/99	6	100%	6	100%	6	100%	6	100%	1	1
060170011	2	2	1	.	.	01/06/99	.	01/12/99	6	100%	6	100%	6	100%	6	100%	1	1
060170012	1	2	1	.	.	01/01/00	.	01/01/00	3	89%	3	100%	3	100%	3	100%	1	1
060190008	1	2	1	.	.	01/03/99	.	01/03/99	1	45%	1	63%	1	93%	1	86%	.	1
060190008	2	2	1	.	.	01/06/99	.	01/06/99	6	72%	6	38%	6	100%	6	87%	.	.

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
060190008	5	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
060190008	6	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
060190008	7	2	.	1	.	09/01/98	.	.	.	.	.	.	.	.	.	.	.	.
060190008	8	2	.	1	.	09/01/98	.	.	.	.	.	.	.	.	.	.	.	.
060195001	1	2	1	.	.	01/01/99	.	01/03/99	3	77%	6	80%	6	100%	3	63%	.	1
060195025	1	2	1	.	.	01/01/00	.	01/13/00	3	84%	6	87%	6	87%	3	83%	1	1
060231002	1	2	1	.	.	01/01/99	.	01/08/99	6	81%	6	88%	6	78%	6	94%	1	1
060250003	1	2	1	.	.	01/01/99	.	01/03/99	3	61%	3	47%	3	52%	3	90%	.	1
060250005	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	100%	3	94%	3	80%	1	1
060250005	7	2	.	1	.	09/01/98	01/31/01	.	.	.	.	.	.	.	.	.	.	.
060251003	1	2	1	.	.	01/01/99	.	01/03/99	3	90%	3	67%	3	94%	3	30%	.	.
060271001	7	2	.	1	.	09/01/98	12/31/99	.	.	.	.	.	.	.	.	.	.	.
060271003	1	2	1	.	.	09/01/98	.	01/03/99	.	.	3	53%	3	97%	3	90%	.	.
060271003	2	2	1	.	.	01/01/99	.	01/06/99	.	.	6	53%	6	100%	6	87%	.	.
060271003	7	2	.	1	.	09/01/98	10/22/99	.	.	.	.	.	.	.	.	.	.	.
060290010	1	2	1	.	.	01/01/99	.	01/03/99	3	100%	6	100%	6	100%	3	100%	1	1
060290011	1	2	1	.	.	01/01/99	.	01/03/99	3	32%	3	67%	3	68%	3	77%	.	.
060290012	1	2	1	.	.	01/01/99	.	06/26/99	3	68%	3	87%	3	81%	3	63%	.	1
060290014	1	2	1	.	.	01/01/99	.	01/03/99	1	84%	1	92%	1	97%	1	92%	1	1
060290014	2	2	1	.	.	01/01/99	.	01/07/99	6	81%	6	73%	6	100%	6	93%	1	1
060290014	5	T	.	.	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
060290014	6	T	.	.	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
060290014	7	2	.	1	.	09/01/98	12/31/00	.	.	.	.	.	.	.	.	.	.	.
060290014	8	2	.	1	.	09/01/98	12/31/00	.	.	.	.	.	.	.	.	.	.	.
060290016	1	2	1	.	.	02/18/00	.	02/18/00	3	42%	3	97%	3	100%	3	97%	.	1
060292004	7	2	.	1	.	09/01/98	02/12/00	.	.	.	.	.	.	.	.	.	.	.
060310004	1	2	1	.	.	01/01/99	.	01/03/99	3	39%	6	87%	6	100%	3	90%	.	1
060310004	7	2	.	1	.	09/01/98	03/31/00	.	.	.	.	.	.	.	.	.	.	.
060333001	1	2	1	.	.	01/01/99	.	01/06/99	6	100%	.	.	.	.	6	80%	.	.
060370002	1	2	1	.	.	01/01/99	.	01/03/99	1	95%	1	97%	1	92%	1	80%	1	1
060370002	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060370002	7	2	.	1	.	09/01/98	02/29/00	.	.	.	.	.	.	.	.	.	.	.
060371002	1	2	1	.	.	01/01/99	.	01/03/99	3	10%	3	47%	3	84%	3	90%	.	.
060371002	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060371103	1	2	1	.	.	01/01/99	.	01/03/99	1	88%	1	92%	1	90%	1	95%	1	1
060371103	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060371103	3	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060371201	1	2	1	.	.	01/01/99	.	01/03/99	3	94%	3	90%	3	81%	3	90%	1	1
060371201	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060371301	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	100%	3	100%	3	100%	1	1
060371301	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060371601	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	93%	3	94%	3	97%	1	1
060371601	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060372005	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	93%	3	87%	3	83%	1	1
060372005	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060374002	1	2	1	.	.	01/01/99	.	01/03/99	1	87%	1	91%	1	85%	1	70%	.	1
060374002	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060374002	7	2	.	1	.	09/01/98	02/29/00	.	.	.	.	.	.	.	.	.	.	.
060379002	1	2	1	.	.	01/01/99	.	01/03/99	3	90%	3	90%	3	97%	3	93%	1	1
060450006	1	2	1	.	.	01/01/99	.	01/07/99	6	100%	6	100%	6	100%	6	73%	1	1
060450006	2	2	1	.	.	01/01/99	.	01/12/99	.	.	.	.	.	.	.	.	.	.
060472510	1	2	1	.	.	04/01/99	.	04/12/99	3	97%	6	100%	6	100%	3	93%	1	1

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
060490001	1	2	1	.	.	01/12/99	.	01/12/99	6	100%	6	93%	6	93%	6	93%	1	1
060510001	1	2	1	.	.	10/01/00	.	11/20/00	.	.	.	.	.	.	3	43%	.	.
060531002	1	2	1	.	.	01/01/99	.	01/15/99	.	.	.	.	.	.	.	.	.	.
060531003	1	2	1	.	.	01/01/00	.	01/04/00	3	97%	6	80%	6	100%	6	100%	1	1
060531003	2	2	.	.	.	01/01/00	.	.	.	.	.	.	.	.	.	.	.	.
060570005	1	2	1	.	.	12/30/98	.	01/03/99	6	75%	6	60%	6	94%	6	60%	.	.
060571001	1	2	1	.	.	03/31/99	.	03/31/99	3	97%	3	80%	3	94%	3	87%	1	1
060571001	2	2	1	.	.	05/12/99	.	05/12/99	6	94%	6	80%	6	88%	6	80%	1	1
060590001	1	2	1	.	.	01/01/99	.	01/03/99	1	85%	1	76%	1	53%	1	85%	.	1
060590001	2	2	1	.	.	01/01/99	.	02/11/99	.	.	.	.	.	.	.	.	.	.
060590001	3	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060592022	1	3	1	.	.	06/15/99	.	06/17/99	3	94%	3	100%	3	97%	3	100%	1	1
060592022	2	3	.	.	.	06/15/99	.	.	.	.	.	.	.	.	.	.	.	.
060610006	1	2	1	.	.	12/31/98	.	01/06/99	6	94%	6	93%	6	100%	6	100%	1	1
060631006	1	2	1	.	.	03/26/99	.	03/26/99	3	90%	3	88%	3	83%	3	63%	.	1
060631008	1	2	1	.	.	03/25/99	02/09/00	03/25/99	3	0%	.	.	.	.	.	.	.	.
060631008	7	2	.	1	.	09/01/98	02/06/00	.	.	.	.	.	.	.	.	.	.	.
060631009	1	2	1	.	.	03/21/00	.	03/21/00	1	0%	3	54%	3	88%	3	60%	.	.
060651003	1	2	1	.	.	01/01/99	.	01/03/99	3	90%	3	93%	3	84%	3	97%	1	1
060651003	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060652002	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	97%	3	87%	3	97%	1	1
060652002	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060652002	3	2	.	.	.	01/01/00	.	.	.	.	.	.	.	.	.	.	.	.
060655001	1	2	1	.	.	10/10/99	.	01/01/00	3	100%	3	93%	3	100%	3	100%	1	1
060655001	2	2	.	.	.	10/10/99	.	.	.	.	.	.	.	.	.	.	.	.
060658001	1	2	1	.	.	01/01/99	.	01/03/99	1	77%	1	85%	1	95%	1	76%	1	1
060658001	2	2	1	.	.	01/01/99	.	01/08/99	.	.	.	.	.	.	.	.	.	.
060658001	3	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060658001	5	T	.	.	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
060658001	6	T	.	.	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
060670006	1	2	1	.	.	01/03/99	.	01/03/99	1	16%	3	50%	3	26%	1	0%	.	.
060670006	2	2	1	.	.	02/17/99	.	02/17/99	6	94%	6	100%	6	53%	6	0%	.	.
060670006	5	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
060670010	1	2	1	.	.	12/13/98	.	01/03/99	1	87%	1	96%	1	89%	1	90%	1	1
060670010	7	2	.	1	.	09/01/98	01/13/01	.	.	.	.	.	.	.	.	.	.	.
060674001	1	2	1	.	.	02/02/99	.	02/02/99	1	88%	3	100%	3	39%	1	0%	.	.
060710014	1	2	1	.	.	01/01/99	.	01/03/99	.	.	.	.	.	.	.	.	.	.
060710014	7	2	.	1	.	09/01/98	01/31/00	.	.	.	.	.	.	.	.	.	.	.
060710025	1	2	1	.	.	01/01/99	.	01/03/99	3	87%	3	97%	3	81%	3	100%	1	1
060710025	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060710306	1	2	1	.	.	01/01/00	.	01/01/00	3	87%	3	97%	3	94%	3	100%	1	1
060710306	2	2	.	.	.	01/01/00	.	.	.	.	.	.	.	.	.	.	.	.
060712002	1	2	1	.	.	01/01/99	.	01/03/99	3	84%	3	90%	3	97%	3	97%	1	1
060712002	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060712002	3	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060718001	1	3	1	.	.	02/08/99	.	02/08/99	3	61%	6	73%	6	100%	6	93%	.	1
060718001	2	3	.	.	.	02/08/99	.	.	.	.	.	.	.	.	.	.	.	.
060719004	1	2	1	.	.	01/01/99	.	01/03/99	3	81%	3	87%	3	81%	3	53%	.	1
060719004	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060730001	1	2	1	.	.	01/01/99	.	01/03/99	3	84%	3	77%	3	90%	3	80%	1	1
060730003	1	2	1	.	.	01/01/99	.	01/01/99	1	66%	1	88%	1	92%	1	73%	.	1
060730003	5	T	.	.	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
060730006	1	2	1	.	.	01/01/99	.	01/03/99	3	74%	3	77%	3	87%	3	93%	.	1
060731002	1	2	1	.	.	01/01/99	.	01/01/99	1	66%	1	89%	1	91%	1	87%	.	1
060731007	1	2	1	.	.	01/01/99	.	01/01/99	1	70%	1	64%	1	79%	1	85%	.	1
060731009	1	3	.	.	1	12/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060750005	1	2	1	.	.	01/01/99	.	01/03/99	1	93%	6	67%	6	100%	1	90%	.	.
060750005	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060771002	1	2	1	.	.	01/03/99	.	01/03/99	3	91%	3	100%	3	97%	3	86%	1	1
060771002	7	2	.	1	.	09/01/98	12/31/00	.	.	.	.	.	.	.	.	.	.	.
060792002	1	2	1	.	.	01/01/99	.	01/06/99	6	94%	6	73%	6	93%	6	100%	1	1
060798001	1	2	1	.	.	01/01/99	.	01/06/99	6	100%	6	100%	6	80%	6	100%	1	1
060798001	2	2	1	.	.	01/01/99	.	01/06/99	6	100%	6	100%	6	80%	6	73%	1	1
060811001	1	2	1	.	.	01/01/99	.	01/03/99	3	100%	6	100%	6	75%	3	80%	1	1
060811001	2	2	.	.	.	12/31/99	.	.	.	.	.	.	.	.	.	.	.	.
060830010	1	2	1	.	.	01/01/99	.	01/06/99	6	94%	6	80%	6	87%	6	27%	.	.
060831007	1	2	1	.	.	08/04/99	.	08/04/99	6	100%	6	93%	6	80%	6	100%	1	1
060831007	3	2	.	.	.	08/04/99	.	.	.	.	.	.	.	.	.	.	.	.
060850004	1	2	.	.	.	09/01/98	.	.	.	.	.	.	.	.	.	.	.	.
060850004	2	2	1	.	.	01/01/99	.	01/06/99	1	84%	6	94%	6	100%	1	80%	1	1
060850004	3	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060850004	5	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
060850004	7	2	.	1	.	09/01/98	02/29/00	.	.	.	.	.	.	.	.	.	.	.
060852003	1	2	1	.	.	01/01/99	.	01/03/99	1	86%	6	94%	6	73%	1	91%	1	1
060852003	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060870007	1	2	1	.	.	01/01/99	.	01/06/99	3	90%	6	93%	6	100%	6	100%	1	1
060870007	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060890004	1	2	1	.	.	12/19/98	.	01/06/99	6	94%	6	67%	6	100%	6	100%	.	.
060950004	1	2	1	.	.	01/01/99	.	02/20/99	3	97%	6	100%	6	100%	3	100%	1	1
060950004	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060970003	1	2	1	.	.	01/01/99	.	01/24/99	3	100%	6	100%	6	100%	3	97%	1	1
060970003	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
060990005	1	2	1	.	.	01/03/99	.	01/03/99	3	100%	3	97%	3	100%	3	88%	1	1
060990005	7	2	.	1	.	09/01/98	12/31/00	.	.	.	.	.	.	.	.	.	.	.
060990005	8	3	.	1	.	09/01/98	12/31/00	.	.	.	.	.	.	.	.	.	.	.
061010003	1	2	1	.	.	12/19/98	.	01/06/99	6	94%	6	94%	6	88%	6	94%	1	1
061010003	2	2	1	.	.	12/19/98	.	01/06/99	6	94%	6	89%	6	81%	6	94%	1	1
061072002	1	2	1	.	.	01/03/99	.	01/03/99	3	90%	3	93%	3	94%	3	94%	1	1
061072002	7	2	.	1	.	09/01/98	03/01/00	.	.	.	.	.	.	.	.	.	.	.
061110007	1	2	1	.	.	01/01/99	.	01/03/99	3	87%	3	97%	3	87%	3	97%	1	1
061110007	2	2	1	.	.	01/01/99	.	01/06/99	6	94%	6	93%	6	60%	6	80%	.	.
061110009	1	2	1	.	.	11/01/00	.	11/23/00	.	.	.	.	.	.	3	43%	.	.
061112002	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	83%	3	87%	3	67%	.	1
061112002	5	T	.	.	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
061113001	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	83%	3	97%	3	70%	.	1
061131003	1	2	1	.	.	01/09/99	.	01/09/99	3	97%	3	93%	3	97%	3	93%	1	1
COLORADO																		
080010001	1	2	1	.	.	01/26/99	04/13/01	01/26/99	3	94%	3	97%	3	97%	3	100%	1	1
080010001	2	3	1	.	.	01/26/99	04/13/01	04/06/99	6	94%	6	100%	6	100%	6	100%	1	1
080010006	1	2	1	.	.	01/01/01	.	01/16/01	.	.	.	.	.	.	.	.	.	.
080010006	2	3	.	.	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
080010006	5	T	.	1	.	02/17/01	.	.	.	.	.	.	.	.	.	.	.	.
080050005	1	2	1	.	.	03/10/99	.	03/10/99	3	75%	3	93%	3	100%	3	100%	1	1
080070002	1	3	1	.	.	03/31/00	06/05/01	04/24/00	.	.	6	75%	6	94%	6	87%	.	.

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
080130003	1	2	1	.	.	01/22/99	.	01/22/99	3	100%	3	97%	3	97%	3	100%	1	1
080130012	1	2	1	.	.	01/30/99	.	01/30/99	3	100%	3	100%	3	100%	3	100%	1	1
080290004	1	3	1	.	.	03/31/00	.	04/06/00	.	.	6	100%	6	94%	6	80%	.	.
080310002	1	2	1	.	.	01/01/99	.	01/01/99	1	79%	1	90%	1	90%	1	90%	1	1
080310002	3	3	.	.	1	08/25/00	.	.	.	.	.	.	.	.	.	.	.	.
080310013	1	3	1	.	.	11/15/99	.	11/20/99	1	91%	.	.	.	.	1	64%	.	.
080310017	1	3	1	.	.	11/15/99	04/01/00	11/20/99	1	88%	.	.	.	.	.	.	.	.
080350003	1	3	1	.	.	03/31/00	.	04/24/00	.	.	6	75%	6	90%	6	100%	.	.
080390001	1	2	1	.	.	05/28/99	.	05/28/99	3	87%	3	94%	3	74%	3	83%	.	1
080410008	1	2	1	.	.	07/02/99	.	07/02/99	3	91%	3	100%	3	91%	3	94%	1	1
080410011	1	2	1	.	.	01/19/99	.	01/19/99	3	94%	3	97%	3	100%	3	97%	1	1
080410011	2	3	1	.	.	01/19/99	.	04/12/99	6	88%	6	81%	6	94%	6	100%	1	1
080510005	1	3	1	.	.	01/01/00	.	01/25/00	6	75%	6	100%	6	100%	6	88%	1	1
080670008	1	3	1	.	.	01/01/00	.	01/13/00	6	81%	6	87%	6	94%	6	73%	1	1
080690009	1	2	1	.	.	07/10/99	.	07/10/99	3	100%	3	91%	3	97%	3	88%	1	1
080770003	1	2	1	.	.	01/06/99	.	01/06/99	3	100%	3	100%	3	100%	3	100%	1	1
080770003	2	3	1	.	.	01/06/99	.	06/05/99	6	100%	6	100%	6	100%	6	100%	1	1
081010012	1	2	1	.	.	02/20/99	.	02/20/99	3	97%	3	94%	3	97%	3	84%	1	1
081070003	1	3	1	.	.	06/23/99	.	06/23/99	.	.	6	93%	6	100%	6	82%	.	.
081130004	1	3	1	.	.	01/01/00	.	06/17/00	.	.	6	20%	6	100%	6	75%	.	.
081230006	1	2	1	.	.	02/13/99	.	02/13/99	3	94%	3	91%	3	97%	3	90%	1	1
081230008	1	2	1	.	.	08/04/99	.	08/04/99	3	100%	3	88%	3	88%	3	97%	1	1
CONNECTICUT																		
090010010	1	2	1	.	.	01/01/99	.	01/03/99	3	58%	3	87%	3	94%	3	90%	.	1
090010010	2	3	1	.	.	01/01/99	.	01/03/99	3	45%	6	80%	6	100%	6	88%	.	1
090010010	9	3	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
090010113	1	2	1	.	.	09/15/00	.	09/15/00	.	.	.	.	3	13%	3	77%	.	.
090011123	1	2	1	.	.	01/01/99	.	01/03/99	3	84%	3	93%	3	97%	3	80%	1	1
090012124	1	3	1	.	.	01/01/99	.	01/03/99	3	74%	3	83%	3	97%	3	70%	.	1
090013005	1	3	1	.	.	03/16/00	.	03/16/00	3	6%	3	77%	3	97%	3	70%	.	.
090019003	1	3	1	.	.	01/01/99	.	01/06/99	6	63%	6	100%	6	93%	6	73%	.	.
090019003	2	3	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
090031003	1	2	1	.	.	01/01/99	.	01/01/99	1	59%	1	81%	1	90%	1	79%	.	1
090031018	1	2	1	.	.	01/01/99	.	01/03/99	3	55%	3	80%	3	94%	3	83%	.	1
090090018	1	2	1	.	.	01/01/99	.	01/03/99	1	38%	1	84%	1	98%	1	87%	.	1
090090018	2	3	1	.	.	01/01/99	.	01/03/99	3	42%	6	73%	6	87%	6	100%	.	1
090090018	9	3	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
090091123	1	2	1	.	.	01/01/99	.	01/03/99	3	52%	3	93%	3	97%	3	87%	.	1
090091123	2	3	1	.	.	01/01/99	.	01/03/99	3	42%	6	100%	6	100%	6	93%	.	1
090091123	9	3	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
090092123	1	2	1	.	.	01/01/99	.	01/03/99	3	52%	3	93%	3	97%	3	87%	.	1
090092123	2	3	1	.	.	01/01/99	.	01/03/99	3	39%	6	67%	6	100%	6	93%	.	.
090092123	9	3	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
090099005	1	2	1	.	.	01/01/99	.	07/02/99	3	48%	3	80%	3	100%	3	87%	.	1
090113002	1	2	1	.	.	01/01/99	.	01/03/99	3	45%	3	80%	3	94%	3	83%	.	1
DELAWARE																		
100010002	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	97%	3	100%	3	100%	1	1
100010003	1	2	1	.	.	01/01/99	.	02/11/99	3	100%	3	93%	3	97%	3	100%	1	1
100031003	1	2	1	.	.	01/01/99	.	01/03/99	3	100%	3	93%	3	97%	3	97%	1	1
100031007	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	97%	3	100%	3	91%	1	1
100031011	1	2	1	.	.	01/01/99	12/16/99	03/10/99	.	.	.	.	.	.	.	.	.	.
100031011	2	2	1	.	.	01/01/99	11/15/99	03/10/99	.	.	.	.	.	.	.	.	.	.

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
100031012	1	2	1	.	.	12/15/99	.	12/16/99	1	89%	1	85%	1	96%	1	91%	1	1
100031012	2	2	1	.	.	12/15/99	.	12/17/99	6	94%	6	82%	6	100%	1	61%	.	1
100032004	1	2	1	.	.	01/01/99	.	02/14/99	1	82%	1	93%	1	96%	1	88%	1	1
100032004	2	2	1	.	.	01/01/99	.	02/14/99	3	74%	1	35%	1	28%	6	95%	.	1
100032004	3	3	.	.	1	06/15/00	.	.	.	.	.	.	.	.	.	.	.	.
100051002	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	100%	3	100%	3	93%	1	1
DISTRICT OF COLUMBIA																		
110010041	1	2	1	.	.	01/01/99	.	02/21/99	1	74%	1	80%	1	76%	1	70%	.	1
110010041	2	2	1	.	.	01/01/99	.	03/01/99	3	70%	6	94%	6	75%	6	94%	.	1
110010042	1	2	1	.	.	01/01/99	.	03/20/99	6	81%	3	60%	3	65%	3	84%	.	1
110010043	1	2	1	.	.	01/01/99	.	01/15/99	1	82%	1	90%	1	86%	1	89%	1	1
110010043	2	2	1	.	.	01/01/99	.	02/06/99	6	47%	6	20%	6	13%	6	7%	.	.
110010043	5	T	.	1	.	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
FLORIDA																		
120010023	1	2	1	.	.	01/06/99	.	01/09/99	3	97%	3	97%	3	97%	3	97%	1	1
120010024	1	2	1	.	.	09/05/99	.	09/12/99	3	100%	3	97%	3	100%	3	100%	1	1
120090007	1	2	1	.	.	03/01/00	.	03/29/00	6	13%	3	97%	3	94%	3	93%	.	.
120111002	1	2	1	.	.	01/01/99	.	01/01/99	1	98%	1	92%	1	100%	1	99%	1	1
120112004	1	2	1	.	.	04/01/99	.	04/02/99	1	90%	1	92%	1	91%	1	100%	1	1
120113002	1	2	1	.	.	04/03/99	.	04/03/99	3	100%	3	97%	3	100%	3	100%	1	1
120170005	1	2	1	.	.	02/05/99	.	02/05/99	3	90%	3	87%	3	97%	3	100%	1	1
120251016	1	2	1	.	.	02/04/99	.	02/04/99	1	92%	1	92%	1	79%	1	98%	1	1
120251016	5	T	.	.	.	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
120256001	1	2	1	.	.	01/27/99	.	01/27/99	3	100%	3	93%	3	68%	3	90%	.	1
120310098	1	2	1	.	.	06/01/99	.	06/30/99	1	93%	1	87%	1	65%	1	97%	.	1
120310099	1	2	1	.	.	06/01/99	.	06/30/99	1	93%	1	49%	1	74%	1	85%	.	1
120330004	1	2	1	.	.	01/03/99	.	01/06/99	3	100%	3	100%	3	94%	3	90%	1	1
120330004	3	3	.	.	1	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
120330004	5	3	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
120570030	1	2	1	.	.	01/01/99	.	01/01/99	1	93%	1	92%	1	91%	1	97%	1	1
120571075	1	2	1	.	.	01/01/99	.	01/20/99	1	92%	1	96%	1	96%	1	100%	1	1
120571075	5	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
120571075	6	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
120710005	1	2	1	.	.	01/01/99	.	01/06/99	3	84%	3	83%	3	84%	3	100%	1	1
120710005	2	2	.	.	.	01/21/99	.	.	.	.	.	.	.	.	.	.	.	.
120730012	1	2	1	.	.	01/01/99	.	01/03/99	3	74%	3	93%	3	84%	3	90%	.	1
120814012	1	2	1	.	.	01/01/99	.	01/30/99	3	65%	3	83%	3	97%	3	87%	.	1
120830003	1	2	1	.	.	01/07/99	.	01/21/99	3	97%	3	90%	3	90%	3	100%	1	1
120951004	1	2	1	.	.	01/01/99	.	01/01/99	1	96%	1	97%	1	95%	1	99%	1	1
120952002	1	2	1	.	.	01/01/99	.	01/03/99	1	99%	1	90%	1	93%	1	95%	1	1
120952002	3	3	.	.	1	05/01/00	.	.	.	.	.	.	.	.	.	.	.	.
120990009	1	2	1	.	.	12/04/99	.	12/04/99	1	99%	1	85%	1	96%	1	98%	1	1
120991004	1	3	.	.	1	05/01/99	.	.	.	.	.	.	.	.	.	.	.	.
120992003	1	2	1	.	.	01/01/99	.	01/05/99	1	91%	1	82%	1	99%	1	93%	1	1
121030018	1	2	1	.	.	01/01/99	.	01/01/99	1	86%	1	92%	1	91%	1	96%	1	1
121031008	1	2	1	.	.	01/27/99	.	01/27/99	3	84%	3	87%	3	94%	3	97%	1	1
121056006	1	2	1	.	.	01/01/99	.	01/06/99	3	77%	3	87%	3	87%	3	87%	1	1
121111002	1	2	1	.	.	01/03/99	.	01/06/99	3	97%	3	90%	3	87%	3	97%	1	1
121150013	1	2	1	.	.	01/03/99	.	01/03/99	3	100%	3	83%	3	100%	3	100%	1	1
121171002	1	2	1	.	.	01/07/99	.	01/09/99	3	90%	3	100%	3	100%	3	100%	1	1
121275002	1	2	1	.	.	01/04/99	.	01/06/99	3	100%	3	97%	3	94%	3	100%	1	1
GEORGIA																		

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
130210007	1	2	1	.	.	02/02/99	.	02/02/99	3	94%	3	90%	3	90%	3	80%	1	1
130210007	2	3	.	.	.	02/02/99	.	.	.	.	.	.	.	.	.	.	.	.
130210012	1	2	1	.	.	02/11/99	.	02/11/99	3	97%	3	87%	3	74%	3	80%	.	1
130510017	1	2	1	.	.	01/21/99	.	01/21/99	3	97%	3	90%	3	77%	3	70%	.	1
130510017	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
130510091	1	2	1	.	.	01/21/99	.	01/21/99	3	90%	3	97%	3	90%	3	80%	1	1
130590001	1	2	1	.	.	01/21/99	.	01/30/99	3	94%	3	53%	3	77%	3	77%	.	1
130630091	1	2	1	.	.	01/09/99	.	01/09/99	3	87%	3	80%	3	78%	3	77%	1	1
130670003	1	2	1	.	.	02/07/99	.	02/07/99	3	90%	3	97%	3	84%	3	83%	1	1
130890002	1	2	1	.	.	01/22/99	.	01/22/99	1	77%	1	80%	1	84%	1	78%	1	1
130890002	5	T	.	1	.	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
130892001	1	2	1	.	.	01/01/99	.	01/01/99	1	85%	1	76%	1	79%	1	82%	1	1
130892001	2	2	1	.	.	01/01/99	.	07/24/99	6	6%	.	.	.	.	.	.	.	.
130950007	1	2	1	.	.	02/02/99	.	02/02/99	3	100%	3	87%	3	66%	3	94%	.	1
131150005	1	2	1	.	.	01/18/99	.	01/18/99	3	84%	3	87%	3	71%	3	80%	.	1
131210032	1	2	1	.	.	01/01/99	.	01/01/99	1	87%	1	75%	1	83%	1	78%	.	1
131210032	2	2	1	.	.	01/01/99	.	08/17/99	.	.	.	.	.	.	.	.	.	.
131210039	1	2	1	.	.	01/21/99	.	01/21/99	3	90%	3	80%	3	77%	3	83%	1	1
131211001	1	2	1	.	.	01/01/99	.	01/01/99	3	94%	3	63%	3	87%	3	87%	.	1
131270004	1	2	1	.	.	01/21/99	08/30/99	01/21/99	.	.	.	.	.	.	.	.	.	.
131270006	1	2	1	.	.	08/31/99	.	08/31/99	3	87%	3	87%	3	90%	3	83%	1	1
131350002	1	3	1	.	.	01/01/00	.	01/01/00	6	69%	6	87%	6	88%	6	100%	.	1
131390003	1	2	1	.	.	02/14/99	.	02/14/99	3	81%	3	87%	3	87%	3	80%	1	1
131530001	1	3	1	.	.	07/05/00	.	07/05/00	.	.	.	.	6	87%	6	53%	.	.
131850003	1	3	1	.	.	01/01/00	.	01/01/00	6	88%	6	87%	6	93%	6	87%	1	1
132150001	1	2	1	.	.	03/04/99	.	03/04/99	3	94%	3	87%	3	100%	3	83%	1	1
132150001	2	2	1	.	.	01/01/99	.	03/25/00	6	0%	.	.	.	.	.	.	.	.
132150011	1	2	1	.	.	01/21/99	.	01/21/99	3	97%	3	90%	3	94%	3	87%	1	1
132230003	1	2	1	.	.	01/24/99	.	01/24/99	3	97%	3	97%	3	94%	3	90%	1	1
132450005	1	2	1	.	.	01/21/99	.	01/21/99	3	74%	3	83%	3	71%	3	90%	.	1
132450005	2	2	1	.	.	01/01/99	.	03/13/00	6	0%	.	.	6	7%	.	.	.	.
132450091	1	2	1	.	.	02/08/99	.	02/08/99	3	68%	3	93%	3	84%	3	93%	.	1
132950002	1	3	1	.	.	01/01/00	.	01/01/00	6	94%	6	67%	6	69%	6	67%	.	.
133030001	1	2	1	.	.	01/30/99	.	01/30/99	6	94%	6	87%	6	94%	6	80%	1	1
133190001	1	2	1	.	.	01/01/99	.	04/12/99	3	90%	3	87%	3	94%	3	80%	1	1
HAWAII																		
150030010	1	2	1	.	.	01/01/99	.	01/03/99	3	35%	1	35%	3	94%	3	97%	.	1
150031001	1	2	1	.	.	01/01/99	.	01/01/99	1	97%	1	93%	1	95%	1	85%	1	1
150031001	2	2	1	.	.	01/01/99	.	12/02/99	.	.	6	13%	.	.	6	13%	.	.
150031004	1	2	1	.	.	10/01/99	.	10/03/99	6	81%	6	93%	6	100%	6	100%	1	1
150032004	1	2	1	.	.	01/01/99	.	01/01/99	1	85%	1	90%	1	80%	1	76%	1	1
150032004	2	2	1	.	.	01/01/99	.	10/27/99	.	.	6	7%	.	.	6	27%	.	.
150090006	1	2	1	.	.	01/28/99	.	01/30/99	3	81%	3	93%	3	90%	3	80%	1	1
IDAHO																		
160010011	1	2	1	.	.	11/01/98	06/28/01	01/03/99	3	100%	3	100%	3	100%	3	92%	1	1
160010011	2	2	.	.	.	07/20/99	07/21/99	.	.	.	.	.	.	.	.	.	.	.
160010011	3	3	.	.	1	12/20/00	.	.	.	.	.	.	.	.	.	.	.	.
160010017	1	2	1	.	.	12/13/98	.	01/06/99	3	97%	3	93%	3	100%	3	97%	1	1
160050006	1	2	1	.	.	11/01/98	.	01/06/99	3	97%	3	94%	3	91%	3	87%	1	1
160050015	1	2	1	.	.	11/01/98	06/28/01	01/03/99	3	94%	3	97%	3	97%	3	100%	1	1
160050015	2	2	.	.	.	07/17/99	07/18/99	.	.	.	.	.	.	.	.	.	.	.
160050015	3	2	1	.	.	01/01/01	.	01/01/01	.	.	.	.	.	.	.	.	.	.

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
160150001	1	3	.	.	1	12/13/00	.	.	.	.	.	.	.	.	.	.	.	.
160170001	1	3	1	.	.	11/01/98	06/28/01	01/03/99	3	94%	3	90%	3	97%	3	97%	1	1
160170001	2	3	.	.	.	07/17/99	07/18/99	.	.	.	.	.	.	.	.	.	.	.
160190006	1	3	.	1	.	12/01/98	08/01/99	.	.	.	.	.	.	.	.	.	.	.
160190010	1	3	1	.	.	08/10/99	.	08/31/99	6	88%	6	93%	6	93%	6	100%	1	1
160190011	1	3	1	.	.	02/03/01	.	02/03/01	.	.	.	.	.	.	.	.	.	.
160190012	1	3	.	.	1	01/31/01	.	.	.	.	.	.	.	.	.	.	.	.
160210001	1	2	.	.	.	05/01/99	.	.	.	.	.	.	.	.	.	.	.	.
160270004	1	3	1	.	.	11/01/98	.	01/03/99	3	100%	3	97%	3	97%	3	97%	1	1
160270004	2	2	1	.	.	07/01/00	.	08/28/00	.	.	.	.	6	40%	6	100%	.	.
160270005	1	2	1	.	.	12/07/98	.	01/06/99	3	100%	3	100%	3	100%	3	100%	1	1
160490002	1	3	.	.	1	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
160550006	1	3	.	.	1	11/01/98	.	.	.	.	.	.	.	.	.	.	.	.
160550006	2	2	1	.	.	07/23/99	.	07/23/99	3	97%	3	97%	3	94%	3	100%	1	1
160550006	3	2	1	.	.	07/01/00	.	08/28/00	.	.	.	.	6	40%	6	93%	.	.
160590004	1	3	.	.	1	09/01/00	.	.	.	.	.	.	.	.	.	.	.	.
160690009	1	3	1	.	.	10/04/99	.	10/04/99	6	100%	6	87%	6	100%	6	100%	1	1
160690009	2	3	1	.	.	07/01/00	.	09/21/00	.	.	.	.	6	13%	6	100%	.	.
160690012	1	3	.	.	1	03/16/01	.	.	.	.	.	.	.	.	.	.	.	.
160790017	1	3	1	.	.	09/03/99	.	09/03/99	6	94%	6	100%	6	87%	3	53%	.	1
160830006	1	3	1	.	.	12/13/98	.	01/06/99	6	88%	6	93%	6	81%	6	93%	1	1
160830010	1	3	1	.	.	12/08/99	.	12/08/99	6	94%	6	100%	6	93%	6	93%	1	1
160830010	2	3	1	.	.	07/01/00	01/01/01	08/28/00	.	.	.	.	6	33%	6	93%	.	.
160850001	1	3	.	.	1	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
ILLINOIS																		
170010006	1	2	1	.	.	01/01/00	.	01/01/00	6	82%	6	88%	6	100%	6	100%	1	1
170190004	1	2	1	.	.	01/01/00	.	01/01/00	6	94%	6	100%	6	93%	6	88%	1	1
170191001	1	2	1	.	.	01/01/99	.	01/28/99	6	100%	6	100%	6	87%	6	100%	1	1
170310014	1	2	1	.	.	01/01/99	.	01/06/99	3	65%	3	100%	3	84%	3	93%	.	1
170310022	1	2	1	.	.	01/01/99	.	01/06/99	3	97%	3	87%	3	94%	3	93%	1	1
170310050	1	2	1	.	.	01/01/99	.	01/06/99	1	90%	1	95%	1	98%	1	17%	.	1
170310050	5	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
170310050	6	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
170310052	1	2	1	.	.	01/01/98	.	01/06/99	1	91%	1	93%	1	98%	1	96%	1	1
170310057	1	2	1	.	.	01/01/00	.	01/13/00	3	88%	3	77%	3	100%	3	90%	1	1
170310076	1	2	1	.	.	01/01/00	.	01/01/00	3	87%	3	97%	3	97%	3	83%	1	1
170311016	1	2	1	.	.	01/01/99	.	01/06/99	3	94%	3	87%	3	84%	3	90%	1	1
170311701	1	2	1	.	.	01/01/99	12/31/99	01/06/99	.	.	.	.	.	.	.	.	.	.
170312001	1	2	1	.	.	01/01/99	.	01/06/99	3	87%	3	97%	3	100%	3	87%	1	1
170313301	1	2	1	.	.	01/01/99	.	01/06/99	3	94%	3	97%	3	100%	3	87%	1	1
170314006	1	2	1	.	.	01/01/99	12/31/00	01/18/99	3	75%	3	80%	3	87%	3	87%	1	1
170314007	1	2	1	.	.	01/01/01	.	01/01/01	.	.	.	.	.	.	.	.	.	.
170314201	1	2	1	.	.	01/01/98	.	01/08/99	1	88%	1	87%	1	93%	1	89%	1	1
170316005	1	2	1	.	.	01/01/00	.	01/01/00	3	74%	3	97%	3	94%	3	93%	.	1
170434002	1	2	1	.	.	01/01/99	.	01/24/99	3	90%	3	100%	3	97%	3	87%	1	1
170890003	1	2	1	.	.	01/01/00	.	01/01/00	3	87%	3	84%	3	79%	3	70%	.	1
170971007	1	2	1	.	.	01/01/00	.	01/01/00	3	97%	3	97%	3	97%	3	84%	1	1
170990007	1	2	1	.	.	01/01/00	.	01/01/00	3	88%	3	93%	3	84%	3	77%	1	1
171110001	1	2	1	.	.	01/01/00	.	01/01/00	3	94%	1	27%	3	100%	3	84%	.	1
171132002	1	2	1	.	.	01/01/00	.	01/07/00	6	81%	6	87%	6	100%	6	93%	1	1
171150013	1	2	1	.	.	01/01/99	.	01/08/99	3	100%	3	97%	3	97%	3	100%	1	1
171170002	1	2	1	.	.	01/01/99	12/31/99	01/06/99	.	.	.	.	.	.	.	.	.	.

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
171190023	1	2	1	.	.	01/01/99	.	01/06/99	3	94%	3	97%	3	90%	3	97%	1	1
171191007	1	2	1	.	.	01/01/99	.	01/06/99	3	100%	3	97%	3	97%	3	90%	1	1
171192009	1	2	1	.	.	01/01/00	.	01/01/00	3	97%	3	94%	3	97%	3	97%	1	1
171193007	1	2	1	.	.	01/01/99	.	01/06/99	3	90%	3	100%	3	97%	3	93%	1	1
171430037	1	2	1	.	.	01/01/99	.	01/18/99	3	94%	3	93%	3	94%	3	97%	1	1
171570001	1	2	1	.	.	01/01/99	.	01/21/99	6	100%	6	100%	6	75%	6	93%	1	1
171610003	1	2	1	.	.	01/01/99	12/31/00	01/06/99	6	94%	6	100%	6	100%	6	93%	1	1
171613002	1	2	1	.	.	01/01/01	.	01/01/01	.	.	.	.	.	.	.	.	.	.
171630010	1	2	1	.	.	01/01/99	.	01/09/99	3	87%	3	97%	3	90%	3	97%	1	1
171634001	1	2	1	.	.	01/01/00	.	01/01/00	3	77%	3	90%	3	77%	3	94%	1	1
171670012	1	2	1	.	.	01/01/99	.	01/07/99	3	91%	3	90%	3	94%	3	87%	1	1
171971002	1	2	1	.	.	01/01/99	.	01/06/99	3	84%	3	93%	3	91%	3	82%	1	1
171971011	1	2	1	.	.	01/01/99	.	01/06/99	6	100%	6	100%	6	100%	6	87%	1	1
172010010	1	2	1	.	.	02/01/99	.	02/13/99	3	94%	3	97%	3	97%	3	77%	1	1
INDIANA																		
180030004	1	2	1	.	.	01/01/99	.	01/21/99	3	90%	3	77%	3	100%	3	91%	1	1
180030004	2	2	1	.	.	01/01/99	.	01/01/00	6	100%	6	87%	6	100%	6	100%	1	1
180030014	1	2	1	.	.	02/12/00	.	02/12/00	3	48%	3	87%	3	87%	3	91%	.	1
180030015	1	2	.	.	.	02/12/00	.	.	.	.	.	.	.	.	.	.	.	.
180190005	1	2	1	.	.	01/01/99	.	01/18/99	3	94%	3	100%	3	94%	3	60%	.	1
180350006	1	2	1	.	.	10/15/99	.	10/15/99	3	97%	3	83%	3	97%	3	84%	1	1
180372001	1	2	1	.	.	01/01/00	.	01/07/00	3	84%	3	97%	3	100%	3	93%	1	1
180390003	1	2	1	.	.	05/12/99	.	05/15/99	3	77%	3	67%	3	100%	3	97%	.	1
180431004	1	2	1	.	.	01/01/99	.	01/18/99	3	77%	3	90%	3	81%	3	90%	1	1
180431004	2	2	1	.	.	01/01/99	.	01/30/99	6	88%	6	93%	6	100%	6	60%	.	.
180650003	1	2	1	.	.	09/26/00	.	11/17/00	.	.	.	.	.	.	3	43%	.	.
180670003	1	2	1	.	.	06/11/99	.	06/11/99	3	94%	3	87%	3	87%	3	100%	1	1
180830004	1	2	1	.	.	01/01/00	.	01/16/00	3	52%	3	67%	3	90%	3	83%	.	1
180890006	1	2	1	.	.	01/27/99	.	01/30/99	1	87%	1	85%	1	84%	1	80%	1	1
180890022	1	2	1	.	.	03/04/99	.	03/05/99	1	97%	1	87%	1	91%	1	74%	.	1
180890026	1	2	1	.	.	02/12/00	.	05/06/00	.	.	3	57%	3	94%	3	50%	.	.
180890027	1	2	1	.	.	02/18/00	.	02/18/00	3	48%	3	63%	3	81%	3	90%	.	1
180891003	1	2	1	.	.	01/27/99	.	02/02/99	3	84%	3	77%	3	84%	3	97%	1	1
180891016	1	2	1	.	.	01/01/99	.	01/01/99	1	96%	1	95%	1	87%	1	78%	1	1
180891016	2	2	1	.	.	03/07/99	.	03/07/99	6	100%	6	87%	6	80%	6	40%	.	.
180892004	1	2	1	.	.	02/11/99	.	02/11/99	3	87%	3	73%	3	77%	3	90%	.	1
180892010	1	2	1	.	.	01/27/99	.	01/27/99	3	16%	3	83%	3	16%	3	57%	.	.
180910011	1	2	1	.	.	12/17/99	.	12/17/99	3	90%	3	100%	3	90%	3	80%	1	1
180910012	1	2	1	.	.	02/27/00	.	03/01/00	3	35%	3	83%	3	90%	3	97%	.	1
180950009	1	2	1	.	.	03/19/99	.	03/19/99	3	94%	3	83%	3	87%	3	87%	1	1
180950009	2	2	1	.	.	03/19/99	.	03/19/99	6	81%	6	93%	6	93%	6	93%	1	1
180970042	1	2	1	.	.	09/18/99	.	09/18/99	3	97%	3	100%	3	100%	3	93%	1	1
180970043	1	2	1	.	.	01/24/99	.	01/24/99	3	91%	3	90%	3	100%	3	100%	1	1
180970066	1	2	1	.	.	01/24/99	.	01/24/99	3	32%	3	87%	3	94%	3	77%	.	.
180970078	1	2	1	.	.	03/07/99	.	03/07/99	3	97%	3	100%	3	100%	3	87%	1	1
180970078	3	2	.	.	1	07/01/00	.	.	.	.	.	.	.	.	.	.	.	.
180970078	5	T	.	1	.	12/13/00	.	.	.	.	.	.	.	.	.	.	.	.
180970079	1	2	1	.	.	09/18/99	.	09/18/99	3	87%	3	90%	3	97%	3	90%	1	1
180970081	1	2	1	.	.	01/22/99	.	01/22/99	1	90%	1	95%	1	92%	1	93%	1	1
180970081	2	2	1	.	.	02/11/99	.	02/11/99	6	81%	6	93%	6	87%	6	87%	1	1
180970083	1	2	1	.	.	01/22/99	.	01/22/99	1	93%	1	98%	1	97%	1	90%	1	1
180970083	2	2	1	.	.	01/24/99	.	01/24/99	6	94%	6	93%	6	93%	6	100%	1	1

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
181270020	1	2	1	.	.	03/04/99	.	03/04/99	3	94%	3	83%	3	87%	3	93%	1	1
181270024	1	2	1	.	.	01/27/99	.	01/27/99	3	87%	3	67%	3	90%	3	80%	.	1
181410014	1	2	1	.	.	11/20/99	.	11/20/99	3	90%	3	97%	3	90%	3	83%	1	1
181411008	1	2	1	.	.	04/01/99	.	04/15/99	3	65%	3	90%	3	100%	3	90%	.	1
181411008	2	2	1	.	.	04/01/99	.	04/18/99	6	81%	6	80%	6	93%	6	93%	1	1
181412004	1	2	1	.	.	04/01/99	.	04/15/99	3	94%	3	83%	3	90%	3	97%	1	1
181470009	1	3	1	.	.	02/01/00	.	02/06/00	6	50%	6	93%	6	87%	6	100%	.	.
181570007	1	2	1	.	.	04/01/99	.	05/15/99	3	87%	3	93%	3	97%	3	93%	1	1
181570007	2	2	1	.	.	06/05/99	.	01/01/00	6	94%	6	93%	6	93%	6	80%	1	1
181630006	1	2	1	.	.	04/15/99	.	04/15/99	3	100%	3	97%	3	90%	3	93%	1	1
181630006	2	2	1	.	.	04/15/99	.	04/18/99	6	75%	6	80%	6	93%	6	87%	1	1
181630012	1	2	1	.	.	04/15/99	.	04/15/99	3	90%	3	100%	3	87%	3	60%	.	1
181630016	1	2	1	.	.	06/05/99	.	06/11/99	3	77%	3	100%	3	81%	3	83%	1	1
181670018	1	2	1	.	.	03/19/99	.	03/19/99	3	97%	3	87%	3	94%	3	100%	1	1
181670023	1	2	1	.	.	12/06/99	.	12/08/99	3	94%	3	87%	3	100%	3	97%	1	1
181670023	2	2	1	.	.	12/06/99	.	01/01/00	6	88%	6	93%	6	73%	6	100%	1	1
IOWA																		
190130008	1	2	1	.	.	01/15/99	.	02/06/99	3	100%	3	100%	3	100%	3	100%	1	1
190330018	1	3	.	.	1	06/01/98	.	.	.	.	.	.	.	.	.	.	.	.
190330019	1	2	1	.	.	07/01/99	.	07/02/99	3	97%	3	100%	3	100%	3	100%	1	1
190450019	1	3	.	.	1	08/01/98	.	.	.	.	.	.	.	.	.	.	.	.
190450021	1	2	1	.	.	01/27/99	.	01/27/99	3	97%	3	100%	3	100%	3	100%	1	1
190630003	1	2	1	.	.	01/01/00	.	01/01/00	3	94%	3	80%	3	90%	3	97%	1	1
191032001	1	2	1	.	.	01/27/99	.	01/27/99	3	100%	3	100%	3	100%	3	100%	1	1
191130029	1	3	.	.	1	10/01/98	08/06/99	.	.	.	.	.	.	.	.	.	.	.
191130036	1	2	1	.	.	01/15/99	.	01/30/99	3	97%	3	97%	3	100%	3	93%	1	1
191130037	1	2	1	.	.	01/15/99	.	01/30/99	1	91%	1	92%	1	92%	1	82%	1	1
191130037	2	2	.	.	1	11/01/99	12/01/00	.	.	.	.	.	.	.	.	.	.	.
191130037	5	2	.	.	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
191390015	1	2	1	.	.	04/01/00	.	04/03/00	.	.	3	100%	3	97%	3	100%	.	.
191390016	1	2	1	.	.	01/27/99	03/31/00	01/27/99	3	100%	.	.	.	.	.	.	.	.
191390020	1	3	.	.	1	02/01/99	03/31/00	.	.	.	.	.	.	.	.	.	.	.
191471002	1	3	.	.	1	08/01/98	.	.	.	.	.	.	.	.	.	.	.	.
191530059	1	2	.	.	1	01/01/98	10/01/99	.	.	.	.	.	.	.	.	.	.	.
191530059	2	2	1	.	.	11/01/99	.	11/08/99	3	84%	3	87%	3	90%	3	80%	1	1
191532510	1	2	1	.	.	02/01/99	.	02/05/99	3	100%	3	80%	3	100%	3	97%	1	1
191532520	1	2	1	.	.	02/01/99	.	02/05/99	1	92%	1	98%	1	100%	1	95%	1	1
191532520	2	2	.	.	1	02/01/00	.	.	.	.	.	.	.	.	.	.	.	.
191532520	5	2	.	.	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
191550009	1	2	1	.	.	07/01/99	.	07/02/99	3	87%	3	100%	3	100%	3	93%	1	1
191630013	1	3	.	.	1	06/01/98	06/19/01	.	.	.	.	.	.	.	.	.	.	.
191630015	1	2	.	.	1	02/01/99	.	.	.	.	.	.	.	.	.	.	.	.
191630015	2	2	1	.	.	01/27/99	.	01/27/99	1	99%	1	100%	1	100%	1	96%	1	1
191630015	5	2	.	1	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
191630017	1	3	.	.	1	06/01/98	.	.	.	.	.	.	.	.	.	.	.	.
191630018	1	2	1	.	.	07/01/99	.	07/02/99	3	100%	3	100%	3	100%	3	100%	1	1
191630019	1	2	.	.	.	07/01/01	.	.	.	.	.	.	.	.	.	.	.	.
191692530	1	2	1	.	.	02/01/99	.	02/05/99	3	84%	3	87%	3	84%	3	93%	1	1
191770005	1	2	1	.	.	01/01/00	.	01/01/00	3	87%	3	91%	3	100%	3	83%	1	1
191770005	2	2	.	.	1	04/01/00	.	.	.	.	.	.	.	.	.	.	.	.
191930017	1	2	1	.	.	01/30/99	.	01/30/99	3	94%	3	97%	3	97%	3	97%	1	1
KANSAS																		

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
200910007	1	2	1	.	.	01/21/99	.	01/21/99	3	100%	3	93%	3	100%	3	97%	1	1
200910007	2	3	1	.	.	01/15/99	.	01/15/99	6	100%	6	100%	6	80%	6	100%	1	1
200910008	1	2	1	.	.	01/12/99	.	01/12/99	3	97%	3	100%	3	97%	3	90%	1	1
200910009	1	2	1	.	.	01/12/99	.	01/12/99	3	100%	3	100%	3	97%	3	93%	1	1
201070002	1	2	1	.	.	01/21/99	.	01/21/99	3	94%	3	93%	3	84%	3	100%	1	1
201070002	2	3	1	.	.	01/24/99	.	01/24/99	6	100%	6	100%	6	87%	6	100%	1	1
201070002	3	3	.	.	1	12/10/98	12/31/00	.	.	.	.	.	.	.	.	.	.	.
201730008	1	2	1	.	.	01/27/99	.	01/27/99	3	84%	3	97%	3	94%	3	97%	1	1
201730009	1	2	1	.	.	01/27/99	.	01/27/99	3	97%	3	100%	3	97%	3	97%	1	1
201730010	1	2	1	.	.	01/12/99	.	01/12/99	3	97%	3	90%	3	97%	3	97%	1	1
201730010	2	3	1	.	.	01/12/99	.	01/12/99	6	81%	6	100%	6	100%	6	100%	1	1
201770010	1	2	1	.	.	01/27/99	.	01/27/99	3	94%	3	100%	3	100%	3	90%	1	1
201770011	1	2	1	.	.	01/27/99	.	01/27/99	3	94%	3	100%	3	90%	3	90%	1	1
201770012	1	3	1	.	.	06/14/99	03/29/01	06/20/99	3	97%	3	87%	3	100%	3	97%	1	1
201770012	2	3	.	.	1	03/24/99	12/31/00	.	.	.	.	.	.	.	.	.	.	.
201910002	1	2	1	.	.	11/17/99	.	11/17/99	3	90%	3	93%	3	97%	3	93%	1	1
201950001	3	3	.	.	.	02/08/01	.	.	.	.	.	.	.	.	.	.	.	.
202090021	1	2	1	.	.	04/27/99	.	04/27/99	3	100%	3	93%	3	100%	3	100%	1	1
202090021	2	3	1	.	.	04/30/99	.	04/30/99	6	100%	6	100%	6	100%	6	93%	1	1
202090021	3	3	.	.	1	04/17/00	12/31/00	.	.	.	.	.	.	.	.	.	.	.
202090022	1	2	1	.	.	04/30/99	.	04/30/99	3	100%	3	97%	3	97%	3	100%	1	1
KENTUCKY																		
210130002	1	3	1	.	.	07/15/99	.	08/16/99	6	63%	6	93%	6	100%	6	93%	.	.
210190017	1	2	1	.	.	01/01/99	.	02/02/99	3	97%	3	87%	3	94%	3	93%	1	1
210190017	2	3	1	.	.	01/01/99	04/30/99	02/05/99	.	.	.	.	.	.	.	.	.	.
210290006	1	2	1	.	.	01/01/99	.	01/21/99	3	87%	3	77%	3	90%	3	100%	1	1
210370003	1	2	1	.	.	01/01/99	.	01/27/99	3	97%	3	100%	3	97%	3	100%	1	1
210430500	1	2	1	.	.	01/01/99	.	02/02/99	3	90%	3	97%	3	74%	3	93%	.	1
210470006	1	2	1	.	.	01/01/99	.	01/30/99	3	100%	3	93%	3	68%	3	83%	.	1
210590014	1	2	1	.	.	01/01/99	.	02/01/99	3	0%	3	65%	3	97%	3	100%	.	.
210590014	2	3	1	.	.	01/01/99	04/30/99	01/29/99	.	.	.	.	.	.	.	.	.	.
210670012	1	2	1	.	.	01/01/99	.	01/21/99	3	100%	3	87%	3	90%	3	93%	1	1
210670012	2	3	1	.	.	01/01/99	04/30/99	01/21/99	.	.	.	.	.	.	.	.	.	.
210670014	1	2	1	.	.	12/21/98	.	01/30/99	3	100%	3	93%	3	71%	3	90%	.	1
210730006	1	2	1	.	.	01/01/99	.	01/30/99	3	84%	3	100%	3	94%	3	100%	1	1
210930005	1	2	1	.	.	01/01/99	10/18/99	01/27/99	.	.	.	.	.	.	.	.	.	.
210930006	1	2	1	.	.	01/01/00	.	02/24/00	3	42%	3	93%	3	71%	3	78%	.	1
211010006	1	2	1	.	.	01/01/99	.	02/02/99	3	84%	3	87%	3	94%	3	80%	1	1
211110043	1	2	1	.	.	06/15/98	03/29/01	01/02/99	1	95%	1	96%	1	90%	1	93%	1	1
211110043	2	3	1	.	.	01/01/99	12/31/99	01/06/99	.	.	.	.	.	.	.	.	.	.
211110044	1	2	1	.	.	06/15/98	.	01/01/99	1	89%	1	98%	1	88%	1	89%	1	1
211110048	1	2	1	.	.	01/01/99	.	01/06/99	1	22%	3	97%	3	90%	3	100%	.	1
211110048	2	2	.	.	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
211110051	1	3	1	.	.	06/15/98	.	01/02/99	1	11%	6	94%	6	100%	6	93%	.	.
211111041	1	2	1	.	.	01/01/01	.	01/01/01	.	.	.	.	.	.	.	.	.	.
211170007	1	2	1	.	.	01/01/99	.	01/27/99	3	100%	3	90%	3	100%	3	97%	1	1
211451004	1	2	1	.	.	01/01/99	.	01/30/99	3	100%	3	53%	3	68%	3	83%	.	1
211510003	1	2	1	.	.	06/15/98	.	01/30/99	3	97%	3	100%	3	94%	3	93%	1	1
211930003	1	3	1	.	.	05/12/00	.	05/12/00	.	.	6	53%	6	93%	6	100%	.	.
211950002	1	2	1	.	.	01/01/99	.	02/02/99	3	84%	3	93%	3	94%	3	80%	1	1
211950002	2	3	1	.	.	01/01/99	04/30/99	02/05/99	.	.	.	.	.	.	.	.	.	.
212270007	1	2	1	.	.	01/01/99	.	01/30/99	3	100%	3	93%	3	90%	3	100%	1	1

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
212270007	2	3	1	.	.	01/01/99	04/30/99	01/30/99	.	.	.	.	.	.	.	.	.	.
LOUISIANA																		
220150008	1	2	.	.	1	01/01/00	.	.	.	.	.	.	.	.	.	.	.	.
220171002	1	2	1	.	.	01/01/99	.	01/03/99	3	100%	3	97%	3	97%	3	100%	1	1
220190008	1	2	.	.	1	01/01/00	.	.	.	.	.	.	.	.	.	.	.	.
220190009	1	2	1	.	.	01/01/99	.	01/12/99	3	81%	3	83%	3	100%	3	93%	1	1
220190010	1	2	1	.	.	01/01/99	.	01/06/99	3	94%	3	93%	3	100%	3	93%	1	1
220290002	1	2	1	.	.	01/01/99	.	01/03/99	6	100%	6	100%	6	87%	6	94%	1	1
220330002	1	2	1	.	.	01/01/99	.	01/15/99	3	87%	3	93%	3	84%	3	100%	1	1
220330009	1	2	1	.	.	01/01/99	.	01/01/99	1	97%	1	97%	1	99%	1	99%	1	1
220330009	5	T	.	.	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
220330013	1	2	.	.	1	01/01/00	.	.	.	.	.	.	.	.	.	.	.	.
220331001	1	2	1	.	.	01/01/99	.	01/06/99	6	100%	6	100%	6	100%	6	100%	1	1
220470005	1	2	1	.	.	01/01/99	.	01/12/99	6	100%	6	93%	6	93%	6	100%	1	1
220470009	1	2	1	.	.	01/01/99	.	01/06/99	6	94%	6	94%	6	93%	6	100%	1	1
220511001	1	2	1	.	.	01/01/99	.	01/06/99	1	99%	1	98%	1	96%	1	91%	1	1
220512001	1	2	1	.	.	01/01/99	.	01/06/99	6	88%	6	100%	6	100%	6	100%	1	1
220550005	1	2	1	.	.	01/01/99	.	01/03/99	3	94%	3	100%	3	90%	3	97%	1	1
220550006	1	2	1	.	.	01/01/00	.	01/01/00	6	94%	6	93%	3	81%	3	74%	.	1
220570004	1	2	.	.	1	01/01/00	.	.	.	.	.	.	.	.	.	.	.	.
220630002	1	2	.	.	1	01/01/00	.	.	.	.	.	.	.	.	.	.	.	.
220710010	1	2	1	.	.	01/01/99	.	01/06/99	3	94%	3	100%	3	94%	3	97%	1	1
220710012	1	2	1	.	.	01/01/99	.	01/06/99	1	82%	1	93%	1	95%	1	89%	1	1
220730004	1	2	1	.	.	01/01/99	.	01/06/99	3	100%	3	97%	3	100%	3	94%	1	1
220790001	1	2	1	.	.	01/01/99	.	01/06/99	3	90%	3	93%	3	97%	3	93%	1	1
220870004	1	2	1	.	.	01/01/00	.	01/13/00	3	84%	3	100%	3	100%	3	90%	1	1
221050001	1	2	1	.	.	01/01/99	.	01/06/99	3	94%	3	100%	3	94%	3	100%	1	1
221090001	1	2	1	.	.	01/01/00	.	01/13/00	3	81%	3	100%	3	100%	3	100%	1	1
221210001	1	2	1	.	.	01/01/99	.	01/01/99	1	89%	1	93%	1	98%	1	99%	1	1
MAINE																		
230010011	1	3	1	.	.	01/01/99	.	01/24/99	3	90%	3	87%	3	94%	3	80%	1	1
230010011	3	3	.	.	1	01/01/00	.	.	.	.	.	.	.	.	.	.	.	.
230030013	1	2	1	.	.	01/01/99	.	01/21/99	3	97%	3	97%	3	97%	3	100%	1	1
230031011	1	2	1	.	.	10/01/97	.	01/21/99	3	88%	3	100%	3	100%	3	90%	1	1
230031011	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
230050015	1	3	1	.	.	01/01/99	.	01/06/99	6	100%	6	87%	6	93%	6	93%	1	1
230050026	1	3	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
230050027	1	2	1	.	.	01/01/99	.	01/03/99	3	81%	3	83%	3	90%	3	100%	1	1
230050027	3	2	.	.	1	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
230050028	1	3	1	.	.	01/01/00	.	01/01/00	6	75%	6	93%	6	100%	6	80%	1	1
230052003	1	3	1	.	.	01/01/99	.	01/06/99	6	82%	3	83%	3	94%	6	100%	1	1
230090103	1	2	1	.	.	01/01/99	.	01/24/99	6	88%	3	87%	3	91%	6	80%	1	1
230110016	1	3	1	.	.	01/01/99	.	02/05/99	6	88%	6	93%	6	100%	6	100%	1	1
230112002	1	3	1	.	.	01/01/00	.	01/01/00	6	100%	6	73%	6	93%	6	93%	1	1
230132001	1	3	1	.	.	03/07/00	.	03/13/00	6	19%	6	93%	6	73%	6	93%	.	.
230172011	1	3	1	.	.	12/01/98	.	01/24/99	6	100%	6	100%	6	67%	6	73%	.	.
230190002	1	2	1	.	.	01/01/99	.	01/27/99	3	94%	3	81%	3	97%	3	93%	1	1
230190002	2	3	.	.	.	12/01/99	.	.	.	.	.	.	.	.	.	.	.	.
230190002	3	2	.	.	1	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
230194003	1	3	1	.	.	01/01/99	.	01/24/99	6	94%	6	80%	6	93%	6	100%	1	1
230310008	1	3	1	.	.	01/12/99	.	01/18/99	6	100%	6	93%	6	93%	6	93%	1	1
MARYLAND																		

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
240030014	1	2	1	.	.	01/01/99	.	08/07/99	.	.	3	77%	3	90%	3	97%	.	.
240030019	1	2	1	.	.	01/01/99	.	08/13/99	3	26%	3	33%	3	97%	3	90%	.	.
240031003	1	2	1	.	.	01/01/99	.	01/13/00	3	81%	3	70%	3	97%	3	97%	.	1
240032002	1	2	1	.	.	01/01/99	.	09/03/99	6	12%	3	73%	3	94%	3	93%	.	.
240032002	2	2	1	.	.	01/01/99	.	05/03/00	.	.	3	63%	3	97%	3	57%	.	.
240051007	1	2	1	.	.	01/01/99	.	01/13/00	3	68%	3	73%	3	94%	3	97%	.	1
240053001	1	2	1	.	.	01/01/99	.	08/04/99	1	23%	1	58%	1	83%	1	86%	.	1
240053001	5	T	.	1	.	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
240150003	1	2	1	.	.	01/01/99	.	12/11/99	3	87%	3	80%	3	100%	3	100%	1	1
240251001	1	2	1	.	.	01/01/99	.	08/04/99	3	42%	3	67%	3	97%	3	100%	.	1
240313001	1	2	1	.	.	01/01/99	.	07/26/99	3	90%	3	77%	3	100%	3	80%	1	1
240330001	1	2	1	.	.	01/01/99	.	08/01/99	3	42%	3	90%	3	100%	3	83%	.	1
240330001	2	2	1	.	.	01/01/99	.	12/29/99	.	.	3	67%	3	77%	3	93%	.	.
240338001	1	2	1	.	.	01/01/99	.	08/07/99	3	45%	3	87%	3	97%	3	73%	.	1
240430009	1	2	1	.	.	04/01/99	.	12/17/99	3	94%	3	87%	3	94%	3	97%	1	1
245100006	1	2	1	.	.	01/01/99	.	07/26/99	3	48%	3	77%	3	84%	3	43%	.	1
245100007	1	2	1	.	.	01/01/99	.	07/29/99	3	48%	3	83%	3	94%	3	97%	.	1
245100007	5	2	.	.	.	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
245100035	1	2	1	.	.	01/01/99	.	10/21/99	1	18%	1	24%	1	86%	1	85%	.	1
245100035	2	2	1	.	.	01/01/99	.	11/14/99	3	68%	1	42%	3	97%	3	97%	.	1
245100035	5	2	.	.	.	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
245100040	1	2	1	.	.	01/01/99	.	06/17/99	1	46%	1	62%	1	86%	1	83%	.	1
245100049	1	2	1	.	.	01/01/99	.	08/01/99	3	10%	3	43%	3	77%	3	83%	.	.
245100052	1	2	1	.	.	01/01/99	.	05/12/99	1	22%	3	27%	3	94%	3	83%	.	.
245100052	5	2	.	.	.	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
MASSACHUSETTS																		
250010003	1	4	.	.	.	06/01/00	.	.	.	.	.	.	.	.	.	.	.	.
250035001	1	2	1	.	.	01/03/99	.	01/03/99	3	87%	3	97%	3	97%	3	67%	.	1
250052004	1	2	1	.	.	01/03/99	.	01/03/99	3	48%	3	97%	3	100%	3	33%	.	.
250053001	1	2	1	.	.	01/03/99	.	01/03/99	3	81%	3	90%	3	94%	3	97%	1	1
250092006	1	2	1	.	.	01/03/99	.	01/03/99	3	77%	3	93%	3	87%	3	47%	.	1
250095005	1	2	1	.	.	01/03/99	.	01/03/99	3	81%	3	100%	3	71%	3	83%	.	1
250096001	1	2	1	.	.	04/03/99	.	04/03/99	3	16%	3	53%	3	87%	3	80%	.	.
250130008	1	2	1	.	.	01/01/99	.	01/01/99	1	85%	1	38%	1	60%	1	52%	.	1
250130008	5	T	.	1	.	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
250130016	1	2	1	.	.	01/03/99	.	01/03/99	3	90%	3	100%	3	97%	3	97%	1	1
250130016	2	3	1	.	.	01/03/99	.	01/03/99	3	68%	3	100%	3	87%	3	47%	.	1
250132007	1	2	1	.	.	01/03/99	12/08/00	01/03/99	3	97%	3	97%	1	90%	1	64%	.	1
250154002	1	2	1	.	.	01/03/99	.	01/03/99	3	97%	3	93%	3	97%	3	80%	1	1
250170008	1	2	1	.	.	05/15/00	.	05/15/00	.	.	3	13%	3	45%	3	53%	.	.
250171102	1	2	1	.	.	01/03/99	.	01/03/99	3	84%	3	73%	3	42%	3	40%	.	1
250210007	1	2	1	.	.	01/03/99	.	01/03/99	3	100%	3	93%	3	13%	3	0%	.	.
250210007	2	3	1	.	.	01/03/99	.	01/03/99	3	90%	3	50%	3	0%	3	0%	.	.
250230004	1	2	1	.	.	01/03/99	.	01/03/99	3	19%	3	100%	3	97%	3	100%	.	.
250230004	2	3	1	.	.	01/03/99	.	01/03/99	3	13%	3	97%	3	77%	3	93%	.	.
250230004	3	2	1	.	.	04/06/00	.	04/06/00	.	.	3	57%	3	77%	3	80%	.	.
250250002	1	2	1	.	.	01/03/99	.	01/03/99	3	100%	3	90%	3	90%	3	23%	.	.
250250027	1	2	1	.	.	01/03/99	.	01/03/99	3	58%	3	63%	1	55%	1	16%	.	1
250250027	2	3	1	.	.	01/01/99	.	01/03/99	3	19%	3	47%	3	35%	3	0%	.	.
250250042	1	2	1	.	.	03/20/99	.	03/20/99	1	65%	1	71%	1	91%	1	76%	.	1
250250042	3	3	.	.	1	04/01/99	03/28/01	.	.	.	.	.	.	.	.	.	.	.
250250042	4	3	.	.	1	05/01/00	.	.	.	.	.	.	.	.	.	.	.	.

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
250250042	5	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
250250042	6	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
250250042	7	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
250250043	1	2	1	.	.	01/01/00	.	01/01/00	3	100%	3	90%	3	55%	3	43%	.	1
250270016	1	2	1	.	.	01/22/00	.	01/22/00	3	68%	3	97%	3	87%	3	90%	.	1
250270020	1	2	1	.	.	01/03/99	.	01/03/99	3	87%	3	100%	3	100%	3	97%	1	1
250270020	2	3	1	.	.	01/03/99	.	01/03/99	3	61%	3	80%	3	71%	3	67%	.	1
250272004	1	2	1	.	.	01/03/99	.	01/03/99	3	87%	3	70%	3	55%	3	77%	.	1
MICHIGAN																		
260050003	1	2	1	.	.	10/31/98	.	01/03/99	1	100%	1	95%	1	95%	1	91%	1	1
260050003	2	2	.	.	.	10/31/98	.	.	.	.	.	.	.	.	.	.	.	.
260070005	1	2	1	.	.	03/23/00	.	03/25/00	3	10%	3	77%	3	84%	3	87%	.	.
260170014	1	2	1	.	.	08/24/00	.	08/25/00	.	.	.	.	3	42%	3	87%	.	.
260210014	1	2	1	.	.	11/07/98	.	01/03/99	3	100%	3	100%	3	100%	3	100%	1	1
260210014	2	2	.	.	.	11/07/98	.	.	.	.	.	.	.	.	.	.	.	.
260330901	1	A	1	.	.	01/31/01	.	01/31/01	.	.	.	.	.	.	.	.	.	.
260330901	2	2	1	.	.	01/31/01	.	01/31/01	.	.	.	.	.	.	.	.	.	.
260330902	1	A	1	.	.	01/31/01	.	01/31/01	.	.	.	.	.	.	.	.	.	.
260490021	1	2	1	.	.	12/16/98	.	01/03/99	3	94%	3	77%	3	94%	3	100%	1	1
260490021	2	2	.	.	.	12/16/98	.	.	.	.	.	.	.	.	.	.	.	.
260550003	1	2	1	.	.	12/14/99	.	12/14/99	3	77%	3	84%	3	77%	3	30%	.	.
260650012	1	2	1	.	.	11/07/98	.	02/06/99	3	94%	3	83%	3	84%	3	83%	1	1
260650012	2	2	1	.	.	11/07/98	.	01/15/99	3	97%	3	80%	3	94%	6	100%	1	1
260650012	5	2	.	.	1	12/01/99	.	.	.	.	.	.	.	.	.	.	.	.
260770008	1	2	1	.	.	11/19/98	.	01/03/99	3	81%	3	93%	3	97%	3	93%	1	1
260770008	2	2	1	.	.	11/19/98	.	01/27/99	3	90%	3	93%	3	97%	3	97%	1	1
260770008	3	2	.	.	1	08/17/00	.	.	.	.	.	.	.	.	.	.	.	.
260810020	1	2	1	.	.	10/23/98	.	01/02/99	1	97%	1	97%	1	97%	1	96%	1	1
260810020	2	2	1	.	.	10/23/98	.	01/03/99	6	100%	6	100%	6	87%	6	87%	1	1
260810020	3	2	.	.	1	11/04/99	.	.	.	.	.	.	.	.	.	.	.	.
260990009	1	2	1	.	.	12/22/98	.	01/03/99	3	94%	3	97%	3	97%	3	83%	1	1
260990009	2	2	.	.	.	12/22/98	.	.	.	.	.	.	.	.	.	.	.	.
261150005	1	2	1	.	.	12/17/99	.	12/17/99	3	97%	3	97%	3	91%	3	97%	1	1
261210040	1	2	1	.	.	12/18/98	.	01/08/99	3	97%	3	93%	3	94%	3	100%	1	1
261210040	2	2	1	.	.	12/18/98	.	02/14/99	6	100%	6	93%	6	100%	6	93%	1	1
261250001	1	2	1	.	.	12/25/98	.	01/03/99	3	77%	3	93%	3	58%	3	67%	.	1
261250001	2	2	.	.	.	12/25/98	.	.	.	.	.	.	.	.	.	.	.	.
261390005	1	2	1	.	.	11/07/98	.	01/03/99	3	97%	3	93%	3	100%	3	100%	1	1
261390005	2	2	.	.	.	11/07/98	.	.	.	.	.	.	.	.	.	.	.	.
261450018	1	2	1	.	.	02/23/99	.	03/04/99	3	71%	3	73%	3	94%	3	73%	.	1
261450018	2	2	1	.	.	02/23/99	.	02/23/99	3	35%	3	70%	3	97%	6	93%	.	1
261450018	3	2	.	.	1	12/01/99	.	.	.	.	.	.	.	.	.	.	.	.
261470005	1	3	1	.	.	01/03/99	.	01/03/99	3	68%	3	87%	3	94%	3	87%	.	1
261470005	2	2	1	.	.	01/03/99	.	01/13/01	.	.	.	.	.	.	.	.	.	.
261610005	1	2	1	.	.	03/28/99	.	06/26/99	3	84%	3	50%	3	84%	3	97%	.	1
261610005	2	2	.	.	.	03/28/99	.	.	.	.	.	.	.	.	.	.	.	.
261610008	1	2	1	.	.	08/04/99	.	08/07/99	3	42%	3	93%	3	100%	3	100%	.	1
261610008	2	2	1	.	.	08/04/99	.	01/07/01	.	.	.	.	.	.	.	.	.	.
261610008	3	2	.	.	1	02/24/00	.	.	.	.	.	.	.	.	.	.	.	.
261630001	1	2	1	.	.	05/12/99	.	05/12/99	1	89%	1	95%	1	95%	1	92%	1	1
261630001	2	2	1	.	.	05/12/99	.	05/12/99	6	81%	6	80%	6	93%	6	100%	1	1
261630001	5	T	.	1	.	12/01/00	.	.	.	.	.	.	.	.	.	.	.	.

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
261630015	1	2	1	.	.	02/26/99	.	02/26/99	3	97%	3	93%	3	100%	3	100%	1	1
261630015	2	2	.	.	.	02/26/99	.	.	.	.	.	.	.	.	.	.	.	.
261630016	1	2	1	.	.	05/12/99	.	05/12/99	1	91%	1	81%	1	85%	1	98%	1	1
261630016	2	2	.	.	.	05/12/99	.	.	.	.	.	.	.	.	.	.	.	.
261630019	1	2	1	.	.	04/30/00	.	04/30/00	.	.	3	57%	3	75%	3	97%	.	.
261630019	5	2	.	1	.	12/01/00	.	.	.	.	.	.	.	.	.	.	.	.
261630025	1	2	1	.	.	08/22/99	.	08/22/99	3	94%	3	90%	3	97%	3	83%	1	1
261630033	1	2	1	.	.	02/05/99	.	02/05/99	3	94%	3	77%	3	87%	3	97%	1	1
261630033	2	2	.	.	.	02/05/99	.	.	.	.	.	.	.	.	.	.	.	.
261630033	5	2	.	.	.	12/01/00	.	.	.	.	.	.	.	.	.	.	.	.
261630036	1	2	1	.	.	02/20/99	.	02/20/99	3	52%	3	93%	3	94%	3	100%	.	1
261630036	2	2	.	.	.	02/20/99	.	.	.	.	.	.	.	.	.	.	.	.
MINNESOTA																		
270353202	1	3	1	.	.	10/03/00	.	10/17/00	.	.	.	.	.	.	6	40%	.	.
270370470	1	3	1	.	.	10/03/00	.	10/06/00	.	.	.	.	.	.	3	67%	.	.
270376018	1	2	1	.	.	04/24/99	.	04/24/99	3	71%	3	80%	3	77%	3	80%	.	1
270412110	1	3	1	.	.	10/03/00	.	10/03/00	.	.	.	.	.	.	6	73%	.	.
270475401	1	3	1	.	.	10/01/99	.	11/08/99	6	94%	6	73%	6	33%	6	40%	.	.
270530960	1	2	1	.	.	04/21/99	01/02/01	04/21/99	1	48%	1	57%	1	57%	1	50%	.	1
270530960	5	T	.	1	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
270530961	1	2	1	.	.	04/12/99	.	04/12/99	3	77%	3	60%	3	87%	3	90%	.	1
270530963	1	2	1	.	.	01/07/01	.	01/10/01	.	.	.	.	.	.	.	.	.	.
270530963	5	T	.	1	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
270531007	1	2	1	.	.	04/24/99	.	04/24/99	3	29%	3	50%	3	74%	3	77%	.	.
270532006	1	2	1	.	.	04/24/99	.	04/24/99	3	84%	3	43%	3	74%	3	93%	.	1
270611105	1	3	1	.	.	10/03/00	.	10/27/00	.	.	.	.	.	.	6	67%	.	.
270674110	1	3	1	.	.	10/03/00	.	11/08/00	.	.	.	.	.	.	6	47%	.	.
270757608	1	3	1	.	.	10/01/99	09/28/00	11/08/99	6	69%	6	20%	6	40%	.	.	.	.
270854301	1	3	1	.	.	10/01/99	09/28/00	11/08/99	6	44%	6	67%	6	87%	.	.	.	.
270854301	2	3	1	.	.	03/01/00	.	03/01/00	6	25%	6	53%	6	87%	.	.	.	.
270953051	1	2	1	.	.	12/06/99	.	12/08/99	3	84%	3	47%	3	97%	3	80%	.	1
271035109	1	3	1	.	.	10/03/00	.	10/09/00	.	.	.	.	.	.	6	80%	.	.
271095008	1	2	1	.	.	01/07/00	.	01/07/00	3	77%	3	67%	3	97%	3	55%	.	1
271112012	1	3	1	.	.	11/14/99	09/28/00	11/14/99	6	94%	6	73%	6	53%	.	.	.	.
271230021	1	3	1	.	.	04/21/99	.	04/21/99	.	.	.	.	.	.	.	.	.	.
271230866	1	2	1	.	.	04/01/99	.	04/03/99	3	100%	3	70%	3	52%	3	87%	.	1
271230866	2	2	1	.	.	07/12/99	.	07/17/99	6	88%	6	67%	6	87%	6	80%	.	.
271230868	1	2	1	.	.	03/31/99	.	03/31/99	3	90%	3	60%	3	61%	3	30%	.	.
271230868	2	2	1	.	.	06/18/99	.	07/17/99	6	94%	6	47%	6	93%	3	57%	.	.
271230871	1	2	1	.	.	04/24/99	.	04/24/99	1	46%	1	38%	1	60%	1	63%	.	1
271230872	1	2	1	.	.	04/12/99	.	04/12/99	3	90%	3	50%	3	74%	3	83%	.	1
271230873	1	3	1	.	.	04/21/99	.	04/21/99	.	.	.	.	.	.	.	.	.	.
271377001	1	2	1	.	.	05/30/99	.	05/30/99	3	61%	3	57%	3	58%	3	60%	.	1
271377550	1	2	1	.	.	05/06/99	.	05/06/99	3	81%	3	53%	3	97%	3	87%	.	1
271377550	2	2	1	.	.	06/05/99	.	06/05/99	6	100%	6	73%	6	93%	6	73%	1	1
271377551	1	2	1	.	.	01/01/00	.	01/19/00	3	61%	3	57%	3	87%	3	80%	.	1
271390505	1	2	1	.	.	01/01/00	.	01/07/00	3	81%	3	63%	3	71%	3	63%	.	1
271453052	1	2	1	.	.	12/20/99	.	12/20/99	3	97%	3	33%	3	65%	3	80%	.	.
271630301	1	3	1	.	.	10/01/99	09/28/00	11/26/99	6	100%	6	60%	6	80%	.	.	.	.
271713201	1	3	1	.	.	10/01/99	09/28/00	11/26/99	6	100%	6	73%	6	73%	.	.	.	.
MISSISSIPPI																		
280010004	1	2	1	.	.	03/10/99	.	03/10/99	3	100%	3	97%	3	94%	3	97%	1	1

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
280110001	1	2	1	.	.	05/21/99	.	05/21/99	3	100%	3	100%	3	100%	3	97%	1	1
280330002	1	2	1	.	.	02/14/99	.	02/14/99	3	94%	3	100%	3	100%	3	100%	1	1
280350004	1	2	1	.	.	03/07/99	.	03/07/99	3	100%	3	100%	3	97%	3	93%	1	1
280450001	1	3	1	.	.	02/14/99	.	02/14/99	3	100%	3	100%	3	94%	3	93%	1	1
280470008	1	2	1	.	.	04/03/99	.	04/03/99	3	100%	3	100%	3	97%	3	83%	1	1
280470008	3	2	.	.	1	10/01/99	.	.	.	.	.	.	.	.	.	.	.	.
280470008	5	T	.	1	.	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
280490010	1	2	1	.	.	02/14/99	.	02/14/99	3	100%	3	97%	3	97%	3	93%	1	1
280490018	1	2	1	.	.	02/14/99	.	02/14/99	3	100%	3	100%	3	97%	3	87%	1	1
280590006	1	2	1	.	.	02/14/99	.	02/14/99	3	97%	3	100%	3	100%	3	90%	1	1
280670002	1	2	1	.	.	03/07/99	.	03/07/99	3	100%	3	100%	3	97%	3	90%	1	1
280750003	1	2	1	.	.	04/03/99	.	04/03/99	3	94%	3	100%	3	87%	3	100%	1	1
280810005	1	2	1	.	.	02/14/99	.	02/14/99	3	100%	3	97%	3	100%	3	100%	1	1
280870001	1	2	1	.	.	03/07/99	.	03/07/99	3	100%	3	90%	3	100%	3	93%	1	1
281090001	1	2	1	.	.	04/06/00	.	04/06/00	.	.	3	80%	3	97%	3	80%	.	.
281210001	1	2	1	.	.	03/07/99	.	03/07/99	3	94%	3	73%	3	74%	3	97%	.	1
281230001	1	2	1	.	.	08/22/99	.	08/22/99	3	100%	3	97%	3	97%	3	97%	1	1
281490004	1	2	1	.	.	03/07/99	.	03/07/99	3	87%	3	83%	3	94%	3	80%	1	1
MISSOURI																		
290210010	1	2	1	.	.	12/15/98	.	01/03/99	3	100%	3	100%	3	100%	3	100%	1	1
290370003	1	2	1	.	.	01/01/00	.	01/01/00	3	81%	3	93%	3	97%	3	97%	1	1
290390001	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	93%	3	97%	3	100%	1	1
290470005	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	90%	3	100%	3	93%	1	1
290470026	1	2	1	.	.	01/01/99	.	01/01/99	1	99%	1	98%	1	100%	1	98%	1	1
290470041	1	2	1	.	.	01/01/99	.	01/02/99	1	96%	1	93%	1	90%	1	93%	1	1
290770032	1	2	1	.	.	01/03/99	.	01/03/99	3	100%	3	100%	3	100%	3	100%	1	1
290910003	1	2	1	.	.	01/01/99	02/16/01	01/03/99	3	97%	3	100%	3	100%	3	100%	1	1
290950036	1	2	1	.	.	01/03/99	03/12/00	01/03/99	.	.	.	.	.	.	.	.	.	.
290950037	1	2	1	.	.	04/01/00	.	04/03/00	.	.	3	100%	3	97%	3	100%	.	.
290952002	1	2	1	.	.	01/03/99	.	01/03/99	3	100%	3	100%	3	97%	3	97%	1	1
290970003	1	3	1	.	.	01/01/99	.	01/03/99	3	100%	3	100%	3	94%	3	100%	1	1
290990012	1	2	1	.	.	01/01/99	.	01/03/99	3	100%	3	97%	3	97%	3	100%	1	1
290990012	5	2	.	1	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
291370001	1	3	1	.	.	01/01/99	.	02/05/99	3	100%	3	100%	3	100%	3	87%	1	1
291831002	1	2	1	.	.	01/01/99	.	01/06/99	3	97%	3	100%	3	100%	3	97%	1	1
291860006	1	2	1	.	.	01/01/99	.	01/08/99	3	100%	3	97%	3	100%	3	97%	1	1
291892003	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	100%	3	100%	3	93%	1	1
291895001	1	2	1	.	.	01/01/99	.	01/03/99	3	94%	3	100%	3	97%	3	100%	1	1
295100007	1	2	1	.	.	01/01/99	.	03/24/00	1	7%	1	91%	1	100%	1	96%	.	.
295100085	1	2	1	.	.	03/30/99	.	04/01/99	1	98%	1	99%	1	100%	1	97%	1	1
295100085	5	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
295100085	6	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
295100086	1	2	1	.	.	01/01/99	.	01/01/99	1	89%	1	93%	1	89%	1	97%	1	1
295100087	1	3	1	.	.	11/06/99	.	11/06/99	1	86%	1	100%	1	100%	1	95%	1	1
MONTANA																		
300131026	1	2	1	.	.	01/01/00	.	01/01/00	3	94%	3	97%	3	94%	3	80%	1	1
300290039	1	2	1	.	.	01/01/99	04/01/01	01/03/99	3	100%	3	97%	3	97%	3	70%	.	1
300290043	1	2	1	.	.	01/01/99	06/24/99	01/03/99	.	.	.	.	.	.	.	.	.	.
300290047	1	2	1	.	.	06/26/99	.	06/26/99	3	97%	3	90%	3	65%	3	100%	.	1
300310008	1	3	1	.	.	01/01/00	.	01/01/00	3	97%	3	100%	3	97%	3	73%	.	1
300470013	1	A	1	.	.	01/01/00	.	01/01/00	3	100%	3	97%	3	94%	3	93%	1	1
300470028	1	A	1	.	.	01/01/00	.	01/01/00	3	90%	3	97%	3	97%	3	97%	1	1

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
300470028	2	A	1	.	.	01/01/00	.	03/13/00	6	13%	.	.	.	.	.	.	.	.
300490018	1	3	1	.	.	01/01/99	.	01/03/99	3	100%	3	97%	3	90%	3	97%	1	1
300530018	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	80%	3	84%	3	73%	.	1
300630024	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	93%	3	97%	3	80%	1	1
300630024	5	T	.	1	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
300630031	1	3	1	.	.	01/01/99	.	01/03/99	3	100%	3	97%	3	100%	3	50%	.	1
300810001	1	2	1	.	.	01/01/00	.	01/01/00	3	65%	3	97%	3	90%	3	83%	.	1
300870307	1	A	1	.	.	01/01/00	.	01/01/00	3	81%	3	83%	3	97%	3	60%	.	1
300890007	1	3	1	.	.	01/01/00	.	01/01/00	3	100%	3	93%	3	90%	3	93%	1	1
300930005	1	3	1	.	.	02/11/99	.	02/11/99	3	84%	3	97%	3	75%	3	47%	.	1
301111065	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	100%	3	94%	3	93%	1	1
NEBRASKA																		
310250002	1	2	1	.	.	03/01/99	.	03/04/99	3	68%	3	80%	3	84%	3	80%	.	1
310270001	1	2	1	.	.	09/21/99	.	09/21/99	3	68%	3	90%	3	94%	3	90%	.	1
310310001	1	2	1	.	.	08/04/99	.	08/04/99	3	65%	3	77%	3	90%	3	93%	.	1
310490001	1	2	1	.	.	08/04/99	.	08/04/99	3	55%	3	73%	3	74%	3	73%	.	1
310550019	1	2	1	.	.	01/01/99	.	02/06/99	1	88%	1	84%	1	87%	1	79%	1	1
310550019	2	2	1	.	.	01/01/99	.	08/28/99	6	44%	6	67%	6	93%	6	73%	.	.
310550051	1	2	1	.	.	01/01/99	.	02/02/99	3	74%	3	87%	3	77%	3	93%	.	1
310550052	1	2	1	.	.	01/01/99	.	06/10/99	1	78%	1	78%	1	62%	1	64%	.	1
310550052	2	2	1	.	.	01/01/99	.	02/04/99	6	88%	6	40%	6	47%	6	40%	.	.
310790003	1	2	1	.	.	03/01/99	.	03/07/99	3	74%	3	97%	3	90%	3	93%	.	1
311090022	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	97%	3	77%	3	83%	1	1
311090022	2	2	1	.	.	01/01/99	.	01/06/99	6	75%	6	67%	6	87%	6	73%	.	.
311111002	1	2	1	.	.	03/01/99	.	03/01/99	3	61%	3	97%	3	87%	3	100%	.	1
311530007	1	2	1	.	.	03/01/99	.	03/04/99	3	32%	3	81%	3	71%	3	80%	.	.
311530007	2	2	1	.	.	03/01/99	.	03/01/99	6	25%	6	69%	6	53%	6	100%	.	.
311570003	1	2	1	.	.	03/01/99	.	03/13/99	3	71%	3	83%	3	84%	3	77%	.	1
311770002	1	2	1	.	.	04/06/99	.	04/06/99	3	61%	3	81%	3	81%	3	73%	.	1
NEVADA																		
320030022	1	2	1	.	.	01/01/99	.	01/03/99	3	90%	6	93%	6	100%	6	100%	1	1
320030298	1	2	1	.	.	01/01/00	.	10/03/00	.	.	.	.	.	.	3	100%	.	.
320030560	1	2	1	.	.	01/01/99	.	01/14/99	1	93%	1	97%	1	96%	1	98%	1	1
320030560	2	2	1	.	.	01/01/99	.	01/01/00	6	100%	6	100%	6	100%	6	100%	1	1
320031019	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	97%	3	90%	3	93%	1	1
320032002	1	2	1	.	.	01/01/99	.	01/03/99	3	100%	3	100%	3	100%	3	97%	1	1
320050008	1	2	1	.	.	12/23/99	.	12/23/99	3	97%	3	94%	3	97%	3	94%	1	1
320310016	1	2	1	.	.	01/01/99	.	01/03/99	3	100%	3	100%	3	97%	3	100%	1	1
320310016	2	2	1	.	.	01/01/99	.	01/06/99	6	100%	6	95%	6	100%	6	100%	1	1
320310016	5	T	.	.	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
320312002	1	2	1	.	.	06/05/99	.	06/05/99	3	94%	3	97%	3	100%	3	100%	1	1
NEW HAMPSHIRE																		
330012003	1	2	1	.	.	01/01/99	04/30/00	01/06/99	6	94%	6	0%	.	.	.	.	.	.
330012003	2	2	.	.	.	01/01/99	04/30/00	.	.	.	.	.	.	.	.	.	.	.
330012004	1	2	.	.	.	04/01/01	.	.	.	.	.	.	.	.	.	.	.	.
330050007	1	2	1	.	.	01/01/99	.	01/01/00	6	100%	6	67%	6	33%	6	40%	.	.
330070014	1	2	1	.	.	01/01/99	.	01/06/99	3	32%	3	53%	3	77%	3	67%	.	.
330070014	2	3	1	.	.	01/01/99	.	01/01/00	6	50%	6	40%	6	60%	6	73%	.	.
330110019	1	2	1	.	.	07/15/99	.	08/04/99	3	81%	3	53%	3	81%	.	.	.	.
330110019	2	3	1	.	.	07/15/99	.	01/01/00	6	75%	6	53%	6	40%	.	.	.	.
330111007	1	2	1	.	.	01/01/99	.	01/03/99	3	84%	3	53%	3	55%	3	50%	.	1
330130003	1	2	1	.	.	01/01/99	.	01/03/99	3	87%	3	43%	3	42%	3	83%	.	1

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
330135001	1	2	1	.	.	01/01/99	.	01/06/99	6	75%	6	33%	6	73%	6	60%	.	.
330150009	1	2	1	.	.	01/01/99	.	01/03/99	3	71%	3	40%	3	58%	3	43%	.	1
330190003	1	2	1	.	.	01/01/99	.	01/06/99	6	81%	6	33%	6	53%	6	80%	.	.
NEW JERSEY																		
340030003	1	2	1	.	.	01/01/99	.	01/03/99	3	94%	3	100%	3	100%	3	83%	1	1
340030004	3	2	.	.	1	06/12/98	.	.	.	.	.	.	.	.	.	.	.	.
340030004	4	3	.	.	1	01/01/98	.	.	.	.	.	.	.	.	.	.	.	.
340070003	1	2	1	.	.	01/01/99	.	01/03/99	3	94%	3	93%	3	94%	3	71%	.	1
340070003	2	2	1	.	.	01/01/99	.	01/06/99	6	100%	6	87%	6	93%	6	67%	.	.
340070003	3	2	.	.	1	05/30/97	.	.	.	.	.	.	.	.	.	.	.	.
340070003	4	3	.	.	1	01/01/98	.	.	.	.	.	.	.	.	.	.	.	.
340071007	1	2	1	.	.	01/01/99	.	01/03/99	3	94%	3	87%	3	84%	3	73%	.	1
340130011	1	2	1	.	.	01/01/99	.	01/03/99	.	.	.	.	.	.	.	.	.	.
340130011	3	2	.	.	1	05/30/97	11/05/99	.	.	.	.	.	.	.	.	.	.	.
340130015	1	2	1	.	.	04/21/99	.	04/21/99	3	100%	3	87%	3	74%	3	93%	.	1
340155001	1	2	1	.	.	09/03/99	.	09/03/99	3	81%	3	93%	3	97%	3	83%	1	1
340171003	1	2	1	.	.	01/01/99	.	01/03/99	3	74%	3	87%	3	90%	3	83%	.	1
340171003	2	2	1	.	.	12/08/99	.	12/08/99	6	75%	6	80%	6	81%	6	73%	1	1
340172002	1	2	1	.	.	01/01/99	.	01/03/99	3	90%	3	83%	3	87%	3	70%	.	1
340210008	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	97%	3	94%	3	80%	1	1
340218001	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	93%	3	94%	3	80%	1	1
340230006	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	97%	3	84%	3	73%	.	1
340230006	3	2	.	.	1	11/25/97	.	.	.	.	.	.	.	.	.	.	.	.
340230006	4	3	.	.	1	01/01/98	.	.	.	.	.	.	.	.	.	.	.	.
340230006	5	T	.	1	.	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
340230006	6	T	.	.	.	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
340270004	1	2	1	.	.	05/30/99	.	05/30/99	3	94%	3	83%	3	97%	3	87%	1	1
340273001	1	2	1	.	.	01/01/99	.	01/03/99	3	100%	3	90%	3	100%	3	73%	.	1
340292002	1	2	1	.	.	02/11/99	.	02/14/99	3	71%	3	70%	3	90%	3	90%	.	1
340310005	1	2	1	.	.	01/01/99	.	01/03/99	3	55%	3	87%	3	97%	3	83%	.	1
340390004	1	2	1	.	.	01/01/99	.	01/03/99	3	82%	1	82%	1	99%	1	61%	.	1
340390004	2	2	1	.	.	01/01/99	.	01/06/99	6	100%	6	100%	6	87%	6	75%	1	1
340390004	3	2	.	.	1	05/30/97	.	.	.	.	.	.	.	.	.	.	.	.
340390004	4	3	.	.	1	01/01/98	.	.	.	.	.	.	.	.	.	.	.	.
340390006	1	2	1	.	.	01/01/99	.	01/03/99	3	90%	3	93%	3	68%	3	97%	.	1
340392003	1	2	1	.	.	12/11/99	.	12/17/99	3	97%	3	100%	3	100%	3	80%	1	1
340410006	1	2	1	.	.	08/10/99	.	08/19/99	3	87%	3	87%	3	87%	3	80%	1	1
NEW MEXICO																		
350010023	1	2	1	.	.	03/03/99	.	03/03/99	1	88%	1	99%	1	89%	1	96%	1	1
350010023	2	2	1	.	.	01/05/00	.	01/05/00	1	84%	1	90%	1	80%	1	83%	1	1
350010024	1	2	1	.	.	02/03/99	.	02/03/99	1	87%	1	96%	1	80%	1	89%	1	1
350010027	1	2	.	.	.	06/01/00	.	.	.	.	.	.	.	.	.	.	.	.
350010027	3	3	.	.	1	06/02/00	.	.	.	.	.	.	.	.	.	.	.	.
350011013	3	3	.	.	1	06/02/00	.	.	.	.	.	.	.	.	.	.	.	.
350019004	1	A	1	.	.	01/01/00	.	01/01/00	6	100%	6	100%	6	93%	6	100%	1	1
350050005	1	3	1	.	.	01/01/99	.	01/15/99	3	85%	3	83%	3	92%	3	90%	1	1
350130016	1	3	.	.	1	04/29/99	.	.	.	.	.	.	.	.	.	.	.	.
350130017	1	3	1	.	.	01/01/99	.	01/09/99	3	100%	3	97%	3	89%	3	97%	1	1
350130021	1	3	.	.	1	10/01/98	.	.	.	.	.	.	.	.	.	.	.	.
350130022	1	3	.	.	1	10/01/98	.	.	.	.	.	.	.	.	.	.	.	.
350130025	1	3	1	.	.	01/01/01	.	01/01/01	.	.	.	.	.	.	.	.	.	.
350131006	1	3	1	.	.	01/01/99	12/31/00	01/15/99	3	97%	3	94%	3	95%	3	87%	1	1

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
350151005	1	3	.	.	1	01/27/00	.	.	.	.	.	.	.	.	.	.	.	.
350171002	1	3	1	.	.	01/01/99	.	01/06/99	3	90%	3	100%	3	100%	3	84%	.	1
350250007	1	3	1	.	.	01/01/99	.	01/21/99	3	91%	3	82%	3	97%	3	93%	1	1
350431003	1	3	1	.	.	01/01/99	.	01/06/99	3	95%	3	92%	3	97%	3	90%	1	1
350439001	1	A	1	.	.	01/01/00	.	01/01/00	6	100%	6	100%	6	100%	6	80%	1	1
350439001	2	A	.	.	.	09/01/99	.	.	.	.	.	.	.	.	.	.	.	.
350439003	1	A	1	.	.	01/01/00	.	01/01/00	6	81%	6	100%	6	100%	6	100%	1	1
350439003	2	A	1	.	.	01/01/00	.	01/01/00	6	94%	6	100%	6	100%	6	93%	1	1
350439004	1	A	1	.	.	01/01/00	.	01/01/00	3	100%	3	90%	3	84%	3	93%	1	1
350439004	2	A	1	.	.	01/01/00	.	01/01/00	6	100%	6	13%	3	16%	.	.	.	.
350450006	1	3	1	.	.	01/01/99	.	01/15/99	3	97%	3	97%	3	94%	3	90%	1	1
350490020	1	3	1	.	.	01/01/99	.	01/06/99	3	100%	3	98%	3	100%	3	97%	1	1
350499002	1	A	1	.	.	01/01/00	.	01/01/00	6	94%	6	93%	6	87%	6	100%	1	1
350550005	1	3	.	.	1	01/01/00	.	.	.	.	.	.	.	.	.	.	.	.
NEW YORK																		
360010005	1	2	1	.	.	01/01/99	.	07/02/99	3	90%	3	100%	3	100%	3	93%	1	1
360010005	2	2	1	.	.	01/01/99	.	07/02/99	3	65%	3	80%	3	94%	3	93%	.	1
360010012	1	2	1	.	.	01/01/99	.	07/02/99	3	61%	3	90%	3	84%	3	93%	.	1
360050013	3	2	.	.	.	03/17/00	03/18/00	.	.	.	.	.	.	.	.	.	.	.
360050073	1	2	1	.	.	01/01/99	07/15/99	07/01/99	.	.	.	.	.	.	.	.	.	.
360050073	2	2	1	.	.	01/01/99	07/15/99	07/02/99	.	.	.	.	.	.	.	.	.	.
360050080	1	2	1	.	.	01/01/99	.	07/02/99	3	81%	3	90%	3	97%	3	100%	1	1
360050080	5	2	.	1	.	12/04/00	.	.	.	.	.	.	.	.	.	.	.	.
360050083	1	2	1	.	.	01/01/99	.	07/02/99	3	68%	3	97%	3	94%	3	97%	.	1
360050083	5	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
360050083	6	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
360050083	7	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
360050110	1	2	1	.	.	09/15/99	.	09/15/99	1	77%	1	96%	1	99%	1	98%	1	1
360050110	2	2	1	.	.	09/15/99	.	09/15/99	3	81%	3	90%	3	100%	3	100%	1	1
360050110	3	2	.	.	1	09/07/99	.	.	.	.	.	.	.	.	.	.	.	.
360050110	5	2	.	1	.	12/04/00	.	.	.	.	.	.	.	.	.	.	.	.
360050112	3	2	.	.	1	02/25/00	.	.	.	.	.	.	.	.	.	.	.	.
360050113	3	2	.	.	1	03/17/00	.	.	.	.	.	.	.	.	.	.	.	.
360070009	1	2	1	.	.	02/01/00	.	02/09/00	3	55%	3	97%	3	94%	3	87%	.	1
360130011	1	2	1	.	.	01/01/99	.	07/02/99	3	77%	3	73%	3	87%	3	70%	.	1
360271004	1	2	1	.	.	07/01/99	.	07/02/99	3	90%	3	93%	3	94%	3	80%	1	1
360290002	1	2	1	.	.	01/01/99	.	07/02/99	3	81%	3	83%	3	97%	3	93%	1	1
360290005	1	2	1	.	.	01/01/99	.	07/02/99	3	74%	3	83%	3	94%	3	67%	.	1
360290005	3	2	.	.	1	03/20/00	.	.	.	.	.	.	.	.	.	.	.	.
360291007	1	2	1	.	.	12/15/99	.	12/17/99	3	94%	3	87%	3	90%	3	77%	1	1
360310003	1	2	1	.	.	07/01/99	.	07/02/99	1	88%	1	73%	1	97%	1	93%	.	1
360310003	3	2	.	.	1	11/25/99	.	.	.	.	.	.	.	.	.	.	.	.
360310003	5	2	.	.	.	12/01/00	.	.	.	.	.	.	.	.	.	.	.	.
360470011	1	2	1	.	.	01/01/99	.	07/02/99	3	55%	3	83%	3	94%	3	90%	.	1
360470011	2	2	1	.	.	01/01/99	07/31/99	07/02/99	.	.	.	.	.	.	.	.	.	.
360470052	1	2	1	.	.	12/15/99	.	04/15/00	.	.	3	80%	3	97%	3	97%	.	.
360470076	1	2	1	.	.	01/01/99	.	07/02/99	3	84%	3	90%	3	94%	3	100%	1	1
360470118	1	2	.	.	.	12/31/99	.	.	.	.	.	.	.	.	.	.	.	.
360470118	3	2	.	.	1	02/15/00	.	.	.	.	.	.	.	.	.	.	.	.
360470121	1	2	.	.	.	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
360470122	1	2	1	.	.	01/01/01	.	01/01/01	.	.	.	.	.	.	.	.	.	.
360551004	1	2	.	.	.	01/01/99	02/28/99	.	.	.	.	.	.	.	.	.	.	.

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
360552002	1	2	1	.	.	12/15/99	.	01/01/00	3	65%	3	83%	3	77%	3	90%	.	1
360556001	1	2	1	.	.	01/01/99	.	08/31/99	3	84%	3	93%	3	87%	3	80%	1	1
360556001	2	2	1	.	.	01/01/99	.	08/31/99	3	61%	3	83%	3	87%	3	70%	.	1
360556001	3	2	.	.	1	05/10/00	.	.	.	.	.	.	.	.	.	.	.	.
360556001	5	T	.	1	.	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
360590005	1	2	1	.	.	01/01/99	.	07/02/99	.	.	.	.	.	.	.	.	.	.
360590005	3	2	.	.	1	03/15/00	.	.	.	.	.	.	.	.	.	.	.	.
360590008	1	2	1	.	.	01/01/99	.	07/02/99	3	77%	3	93%	3	94%	3	100%	1	1
360590011	1	2	1	.	.	01/01/99	.	07/02/99	3	65%	.	.	.	.	.	.	.	.
360590012	1	2	1	.	.	07/01/00	.	07/20/00	.	.	.	.	3	71%	3	93%	.	.
360590013	1	2	1	.	.	12/31/99	.	02/21/00	3	32%	3	87%	3	94%	3	93%	.	.
360610010	1	2	1	.	.	01/01/99	.	07/01/99	1	74%	1	95%	1	93%	1	99%	.	1
360610010	3	2	.	.	1	02/21/98	06/15/01	.	.	.	.	.	.	.	.	.	.	.
360610010	5	2	.	.	.	12/01/00	.	.	.	.	.	.	.	.	.	.	.	.
360610056	1	2	1	.	.	01/01/99	.	07/02/99	3	94%	3	100%	3	100%	3	100%	1	1
360610056	2	2	1	.	.	01/01/99	.	07/02/99	3	90%	3	93%	3	94%	3	93%	1	1
360610062	1	2	1	.	.	01/01/99	.	07/02/99	3	87%	3	100%	3	100%	3	100%	1	1
360610062	2	2	1	.	.	08/13/99	.	08/13/99	3	81%	3	97%	3	100%	3	100%	1	1
360610079	1	2	1	.	.	01/01/00	.	01/13/00	3	71%	3	97%	3	100%	3	97%	.	1
360610115	1	2	.	.	.	12/31/99	.	.	.	.	.	.	.	.	.	.	.	.
360610115	3	2	.	.	1	04/09/00	.	.	.	.	.	.	.	.	.	.	.	.
360610117	1	2	.	.	.	12/31/99	.	.	.	.	.	.	.	.	.	.	.	.
360610117	3	2	.	.	1	02/23/00	.	.	.	.	.	.	.	.	.	.	.	.
360610119	1	2	.	.	.	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
360610119	3	2	.	.	1	11/01/00	.	.	.	.	.	.	.	.	.	.	.	.
360632008	1	2	1	.	.	01/01/99	.	07/02/99	3	94%	3	93%	3	100%	3	93%	1	1
360632008	2	2	1	.	.	01/01/99	.	07/02/99	3	87%	3	70%	3	97%	3	93%	.	1
360632008	3	2	.	.	1	04/19/00	.	.	.	.	.	.	.	.	.	.	.	.
360652001	1	2	1	.	.	01/01/99	.	07/02/99	3	87%	3	90%	3	97%	3	90%	1	1
360670019	1	2	1	.	.	08/01/99	.	08/01/99	3	61%	3	87%	3	81%	3	90%	.	1
360670020	1	2	1	.	.	05/02/00	.	05/18/00	.	.	3	43%	3	94%	3	83%	.	.
360671015	1	2	1	.	.	01/01/99	.	07/02/99	3	77%	3	90%	3	97%	3	93%	1	1
360671015	2	2	1	.	.	01/01/99	.	07/02/99	3	61%	3	73%	3	90%	3	93%	.	1
360679999	1	2	.	.	.	05/01/00	05/02/00	.	.	.	.	.	.	.	.	.	.	.
360710002	1	2	1	.	.	12/31/99	.	02/09/00	3	52%	3	93%	3	84%	3	80%	.	1
360810094	1	2	1	.	.	07/01/99	.	07/02/99	3	90%	3	97%	3	97%	3	100%	1	1
360810094	2	2	1	.	.	08/28/99	.	08/28/99	3	81%	3	97%	3	97%	3	97%	1	1
360810096	1	2	1	.	.	04/18/00	.	04/18/00	.	.	3	73%	3	97%	3	93%	.	.
360810097	1	2	1	.	.	01/01/99	.	07/02/99	3	81%	3	97%	3	94%	3	87%	1	1
360810097	5	2	.	.	.	12/01/00	.	.	.	.	.	.	.	.	.	.	.	.
360810116	1	2	.	.	.	12/31/99	.	.	.	.	.	.	.	.	.	.	.	.
360810116	3	2	.	.	1	04/12/00	.	.	.	.	.	.	.	.	.	.	.	.
360810120	3	2	.	.	1	05/20/00	.	.	.	.	.	.	.	.	.	.	.	.
360810124	1	2	1	.	.	01/01/01	.	01/01/01	.	.	.	.	.	.	.	.	.	.
360810124	3	2	.	.	1	03/15/01	.	.	.	.	.	.	.	.	.	.	.	.
360810124	6	T	.	1	.	03/24/01	.	.	.	.	.	.	.	.	.	.	.	.
360850055	1	2	1	.	.	09/01/99	.	12/11/99	3	87%	3	97%	3	97%	3	100%	1	1
360850067	1	2	1	.	.	01/01/99	.	07/02/99	3	87%	3	93%	3	97%	3	100%	1	1
360850111	3	2	.	.	1	08/01/99	.	.	.	.	.	.	.	.	.	.	.	.
360850114	3	2	.	.	1	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
360893001	1	2	1	.	.	10/01/99	.	10/12/99	3	77%	3	90%	3	97%	3	87%	1	1
360930003	1	2	1	.	.	01/01/99	.	07/02/99	3	90%	3	97%	3	100%	3	80%	1	1

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
361010003	1	2	1	.	.	08/01/99	.	08/02/99	1	70%	1	78%	1	93%	1	91%	.	1
361010003	5	2	.	1	.	12/01/00	.	.	.	.	.	.	.	.	.	.	.	.
361030001	1	2	1	.	.	01/01/99	.	07/02/99	3	68%	3	90%	3	100%	3	100%	.	1
361030005	1	2	.	.	.	12/31/99	04/01/00	.	.	.	.	.	.	.	.	.	.	.
361030009	1	3	.	.	1	01/01/00	.	.	.	.	.	.	.	.	.	.	.	.
361191002	1	2	1	.	.	02/01/00	.	02/15/00	3	48%	3	93%	3	100%	3	100%	.	1
361192004	3	2	.	.	1	04/10/01	.	.	.	.	.	.	.	.	.	.	.	.
NORTH CAROLINA																		
370010002	1	2	1	.	.	01/01/99	.	01/03/99	3	84%	3	87%	3	81%	3	90%	1	1
370210034	1	2	1	.	.	01/01/99	.	01/03/99	3	84%	3	60%	3	87%	3	100%	.	1
370210034	2	2	1	.	.	01/01/99	.	01/06/99	6	100%	3	50%	6	88%	6	87%	.	1
370250004	1	3	1	.	.	01/01/99	.	01/03/99	3	74%	3	100%	3	100%	3	100%	.	1
370330001	1	3	1	.	.	01/01/99	.	01/03/99	3	97%	3	93%	3	90%	3	97%	1	1
370350004	1	2	1	.	.	01/01/99	.	01/03/99	3	87%	3	90%	3	97%	3	100%	1	1
370350005	1	3	1	.	.	05/26/00	.	06/02/00	.	.	3	33%	3	100%	3	97%	.	.
370370004	1	2	1	.	.	01/01/99	.	01/03/99	3	94%	3	93%	3	97%	3	93%	1	1
370510009	1	2	1	.	.	01/01/99	.	01/03/99	3	84%	3	100%	3	97%	3	100%	1	1
370510009	2	2	1	.	.	01/01/99	.	10/03/99	6	94%	6	87%	6	100%	6	87%	1	1
370510009	3	3	.	.	1	02/01/01	.	.	.	.	.	.	.	.	.	.	.	.
370570002	1	3	1	.	.	01/01/99	.	01/03/99	3	87%	3	93%	3	77%	3	100%	1	1
370610002	1	2	1	.	.	01/01/99	.	01/03/99	3	90%	3	97%	3	100%	3	97%	1	1
370630001	1	2	1	.	.	01/01/99	.	01/01/99	1	93%	1	98%	1	95%	1	98%	1	1
370650003	1	2	1	.	.	03/01/99	.	03/01/99	3	87%	3	97%	3	100%	3	93%	1	1
370670022	1	2	1	.	.	01/01/99	.	01/01/99	1	96%	1	97%	1	96%	1	99%	1	1
370670022	2	3	.	.	1	06/16/99	.	.	.	.	.	.	.	.	.	.	.	.
370670022	3	3	.	.	1	06/16/99	.	.	.	.	.	.	.	.	.	.	.	.
370670024	1	2	1	.	.	01/01/99	.	01/03/99	3	94%	3	80%	3	90%	3	80%	1	1
370710016	1	2	1	.	.	01/01/99	.	01/03/99	3	94%	3	100%	3	100%	3	100%	1	1
370710016	2	2	1	.	.	01/01/99	.	10/03/99	6	81%	6	100%	6	87%	6	93%	1	1
370810009	1	2	1	.	.	01/01/99	.	01/01/99	1	85%	1	95%	1	78%	1	98%	1	1
370810009	2	2	1	.	.	01/01/99	.	10/03/99	6	69%	6	73%	6	87%	6	80%	.	1
370811005	1	2	1	.	.	01/01/99	05/31/01	01/03/99	3	84%	3	93%	3	71%	3	97%	.	1
370870010	1	2	1	.	.	01/01/99	.	01/03/99	3	94%	3	93%	3	100%	3	97%	1	1
370990006	1	A	1	.	.	04/01/00	.	04/03/00	.	.	3	97%	3	90%	3	80%	.	.
370990006	2	A	1	.	.	04/01/00	.	04/06/00	.	.	6	80%	6	80%	6	53%	.	.
371070004	1	3	1	.	.	01/01/99	.	01/03/99	3	97%	3	87%	3	94%	3	100%	1	1
371110004	1	3	1	.	.	01/01/99	.	01/03/99	3	87%	3	93%	3	100%	3	100%	1	1
371190010	1	2	1	.	.	01/01/99	.	01/01/99	1	95%	1	98%	1	93%	1	98%	1	1
371190034	1	2	1	.	.	01/01/99	.	01/01/99	.	.	.	.	.	.	.	.	.	.
371190040	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	93%	3	74%	.	.	.	.
371190041	1	2	1	.	.	07/30/99	.	07/30/99	1	99%	1	95%	1	96%	1	95%	1	1
371190041	3	3	.	.	1	11/01/99	.	.	.	.	.	.	.	.	.	.	.	.
371190041	5	T	.	1	.	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
371190042	1	2	1	.	.	09/12/00	.	09/21/00	.	.	.	.	3	13%	3	97%	.	.
371210001	1	2	1	.	.	01/01/99	.	01/03/99	3	84%	3	100%	3	100%	3	100%	1	1
371210001	2	2	1	.	.	01/01/99	.	10/03/99	6	94%	6	100%	6	100%	6	100%	1	1
371230001	1	3	1	.	.	07/16/99	.	07/17/99	3	65%	3	93%	3	87%	3	87%	.	1
371290009	1	2	1	.	.	01/01/99	.	01/03/99	3	94%	3	97%	3	94%	3	90%	1	1
371290009	2	2	1	.	.	01/01/99	.	10/03/99	6	69%	6	75%	6	93%	6	93%	.	1
371330005	1	2	1	.	.	01/01/99	.	01/03/99	3	87%	3	100%	3	97%	3	100%	1	1
371350007	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	97%	3	97%	3	93%	1	1
371390002	1	2	1	.	.	04/28/99	.	04/30/99	3	74%	3	80%	3	94%	3	93%	.	1

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
371470005	1	2	1	.	.	03/01/99	.	03/01/99	3	97%	3	97%	3	97%	3	97%	1	1
371470005	2	2	1	.	.	03/01/99	.	10/03/99	6	94%	6	93%	6	100%	6	80%	1	1
371550004	1	2	1	.	.	03/10/99	04/20/00	03/10/99	3	84%	3	10%	.	.	.	.	.	.
371550005	1	2	1	.	.	11/23/00	.	11/23/00	.	.	.	.	.	.	3	40%	.	.
371730002	1	2	1	.	.	01/01/99	.	01/03/99	3	77%	3	87%	3	94%	3	93%	1	1
371830014	1	2	1	.	.	01/01/99	.	01/01/99	1	95%	1	99%	1	95%	1	93%	1	1
371830014	2	3	.	.	1	11/01/99	.	.	.	.	.	.	.	.	.	.	.	.
371830014	3	3	1	.	.	01/01/99	.	01/01/00	6	81%	6	93%	6	100%	6	93%	1	1
371830015	1	2	1	.	.	01/01/99	.	01/03/99	3	77%	3	93%	3	77%	3	100%	1	1
371910005	1	2	1	.	.	01/01/99	.	01/03/99	3	94%	3	87%	3	97%	3	97%	1	1
NORTH DAKOTA																		
380070002	1	2	1	.	.	07/01/00	.	07/12/00	.	.	.	.	6	80%	6	100%	.	.
380130002	1	3	1	.	.	04/01/99	.	04/06/99	6	94%	6	100%	6	100%	6	100%	1	1
380130002	3	3	.	.	1	08/23/00	.	.	.	.	.	.	.	.	.	.	.	.
380130003	1	3	1	.	.	09/03/99	.	09/03/99	6	94%	6	94%	6	100%	6	93%	1	1
380130003	2	3	1	.	.	01/01/00	.	01/01/00	6	82%	6	100%	6	93%	6	93%	1	1
380150003	1	2	1	.	.	01/01/99	.	01/03/99	3	100%	3	97%	3	100%	3	100%	1	1
380150003	5	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
380150003	6	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
380171004	1	2	1	.	.	01/01/99	.	01/03/99	3	100%	3	97%	3	100%	3	93%	1	1
380171004	2	2	1	.	.	01/01/00	.	01/01/00	3	94%	3	97%	3	100%	3	93%	1	1
380171004	3	2	.	.	1	06/08/00	.	.	.	.	.	.	.	.	.	.	.	.
380171004	5	T	.	.	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
380350004	1	2	1	.	.	01/01/99	.	01/03/99	3	90%	3	97%	3	97%	3	87%	1	1
380570004	1	2	1	.	.	01/01/99	.	01/05/99	6	100%	6	100%	6	100%	6	100%	1	1
380570004	2	2	1	.	.	01/01/99	.	01/01/00	6	100%	6	100%	6	93%	6	100%	1	1
380570004	3	2	.	.	1	10/11/00	.	.	.	.	.	.	.	.	.	.	.	.
380890002	1	2	1	.	.	01/01/00	.	01/01/00	6	100%	6	93%	6	93%	6	100%	1	1
380910001	1	2	1	.	.	01/01/99	.	01/06/99	6	88%	6	93%	6	100%	6	93%	1	1
OHIO																		
390090003	1	2	1	.	.	01/03/99	.	01/03/99	3	55%	3	30%	3	90%	3	97%	.	.
390170003	1	2	1	.	.	01/01/99	.	01/01/99	1	79%	1	95%	1	85%	1	83%	1	1
390170016	1	2	1	.	.	10/03/00	.	10/03/00	.	.	.	.	.	.	3	100%	.	.
390170017	1	2	1	.	.	10/03/00	.	10/03/00	.	.	.	.	.	.	3	100%	.	.
390230005	1	2	1	.	.	07/26/00	.	07/26/00	.	.	.	.	3	74%	3	100%	.	.
390350013	1	2	1	.	.	01/29/99	.	01/29/99	3	94%	3	97%	3	97%	3	93%	1	1
390350027	1	2	1	.	.	01/08/99	.	01/08/99	1	77%	1	97%	1	14%	1	80%	.	1
390350034	1	2	1	.	.	07/11/00	.	07/11/00	.	.	.	.	3	90%	3	90%	.	.
390350038	1	2	1	.	.	01/08/99	.	01/08/99	1	65%	1	86%	1	91%	1	91%	.	1
390350045	1	2	1	.	.	12/14/99	.	12/14/99	3	100%	3	100%	3	90%	3	100%	1	1
390350060	1	2	1	.	.	01/08/99	.	01/08/99	3	100%	3	80%	3	94%	3	97%	1	1
390350060	5	T	.	1	.	12/13/00	.	.	.	.	.	.	.	.	.	.	.	.
390350065	1	2	1	.	.	01/29/99	.	01/29/99	3	88%	3	100%	3	100%	3	83%	1	1
390350066	1	2	1	.	.	01/08/99	.	01/08/99	3	81%	3	97%	3	100%	3	80%	1	1
390351002	1	2	1	.	.	01/08/99	.	01/08/99	3	94%	3	97%	3	100%	3	87%	1	1
390490024	1	2	1	.	.	01/01/99	.	01/01/99	1	54%	1	84%	1	95%	1	82%	.	1
390490024	2	2	.	.	.	08/10/00	.	.	.	.	.	.	.	.	.	.	.	.
390490025	1	2	1	.	.	01/01/99	.	01/01/99	1	88%	1	81%	1	92%	1	78%	1	1
390490025	2	2	1	.	.	08/01/00	.	08/10/00	.	.	.	.	6	7%	6	20%	.	.
390490028	1	2	.	.	.	09/01/00	.	.	.	.	.	.	.	.	.	.	.	.
390490029	1	2	.	.	1	09/01/00	.	.	.	.	.	.	.	.	.	.	.	.
390490081	1	2	1	.	.	01/01/99	.	01/03/99	3	84%	3	90%	3	94%	3	70%	.	1

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
390610014	1	2	1	.	.	01/01/99	.	01/01/99	1	81%	1	96%	1	90%	1	86%	1	1
390610014	2	2	1	.	.	01/01/01	.	01/01/01	.	.	.	.	.	.	.	.	.	.
390610040	1	2	1	.	.	04/01/99	.	04/03/99	3	94%	3	90%	3	94%	3	100%	1	1
390610041	1	2	1	.	.	03/25/99	.	03/25/99	3	45%	3	80%	3	77%	3	33%	.	.
390610041	2	2	1	.	.	02/06/00	.	02/06/00	6	25%	.	.	.	.	6	67%	.	.
390610042	1	2	1	.	.	10/03/00	.	10/03/00	.	.	.	.	.	.	3	83%	.	.
390610043	1	2	1	.	.	10/03/00	.	10/03/00	.	.	.	.	.	.	3	100%	.	.
390617001	1	2	1	.	.	01/30/99	.	01/30/99	1	22%	1	95%	1	83%	1	92%	.	1
390618001	1	2	1	.	.	03/25/99	.	03/25/99	3	84%	3	83%	3	74%	3	97%	.	1
390810016	1	2	1	.	.	01/21/99	.	01/21/99	3	84%	3	97%	3	94%	3	87%	1	1
390811001	1	2	1	.	.	02/11/99	.	02/11/99	1	57%	1	81%	1	85%	1	78%	.	1
390851001	1	2	1	.	.	01/03/99	.	01/03/99	3	94%	3	87%	3	97%	3	93%	1	1
390870010	1	2	1	.	.	01/24/99	.	01/24/99	3	81%	3	83%	3	68%	3	87%	.	1
390930016	1	2	1	.	.	09/03/00	.	09/03/00	.	.	.	.	3	32%	3	47%	.	.
390932003	1	2	1	.	.	01/01/99	.	01/03/99	3	94%	3	100%	3	48%	3	63%	.	1
390950024	1	2	1	.	.	02/11/99	.	02/11/99	1	1%	1	54%	1	91%	1	92%	.	.
390950025	1	2	1	.	.	03/01/99	.	03/01/99	3	97%	3	97%	3	84%	3	93%	1	1
390950026	1	2	1	.	.	05/29/99	.	05/29/99	1	8%	1	62%	1	82%	1	79%	.	.
390990005	1	2	1	.	.	01/01/99	.	01/01/99	1	88%	1	96%	1	92%	1	87%	1	1
390990005	2	2	1	.	.	02/01/01	.	02/01/01	.	.	.	.	.	.	.	.	.	.
391130014	1	2	1	.	.	01/15/99	.	01/15/99	1	90%	1	88%	1	95%	1	79%	1	1
391130031	1	2	1	.	.	01/14/99	.	01/14/99	1	75%	1	92%	1	87%	1	95%	.	1
391130031	3	2	.	.	.	11/11/00	.	.	.	.	.	.	.	.	.	.	.	.
391330002	1	2	1	.	.	01/30/99	.	01/30/99	3	90%	3	100%	3	100%	3	100%	1	1
391351001	1	2	1	.	.	01/21/99	.	01/21/99	3	6%	3	97%	3	97%	3	100%	.	.
391450013	1	2	1	.	.	01/15/99	.	01/15/99	3	74%	3	80%	3	65%	3	80%	.	1
391510017	1	2	1	.	.	01/03/99	.	01/03/99	3	94%	3	93%	3	97%	3	90%	1	1
391510020	1	2	1	.	.	01/03/99	.	01/03/99	3	90%	3	100%	3	94%	3	97%	1	1
391530017	1	2	1	.	.	01/01/99	.	01/01/99	1	66%	1	79%	1	93%	1	80%	.	1
391530017	2	2	1	.	.	03/13/00	.	03/13/00	1	16%	1	7%	.	.	.	.	.	.
391530023	1	2	1	.	.	01/01/99	.	01/01/99	1	80%	1	96%	1	92%	1	84%	1	1
391550007	1	2	1	.	.	01/01/99	.	01/01/99	1	91%	1	75%	1	93%	1	91%	.	1
OKLAHOMA																		
400159008	1	A	1	.	.	11/01/99	.	04/24/00	.	.	6	73%	6	100%	6	93%	.	.
400179001	1	A	1	.	.	07/01/99	.	08/16/99	6	88%	6	80%	6	100%	6	100%	1	1
400190294	1	3	1	.	.	02/04/99	11/05/99	04/24/99	.	.	.	.	.	.	.	.	.	.
400190295	1	2	1	.	.	12/13/99	.	12/20/99	3	84%	3	100%	3	84%	3	97%	1	1
400219002	1	A	1	.	.	07/01/99	.	08/22/99	6	63%	6	53%	6	40%	6	87%	.	.
400219002	2	A	1	.	.	07/01/99	.	10/15/99	6	38%	6	47%	6	53%	6	13%	.	.
400270049	3	5	.	.	.	05/01/01	.	.	.	.	.	.	.	.	.	.	.	.
400310647	3	5	.	.	.	05/01/01	.	.	.	.	.	.	.	.	.	.	.	.
400310648	1	3	1	.	.	02/04/99	.	04/06/99	3	97%	3	100%	3	84%	3	93%	1	1
400310648	2	3	1	.	.	04/06/99	.	04/06/99	6	94%	6	100%	6	80%	6	87%	1	1
400390852	1	3	1	.	.	01/01/99	.	04/06/99	6	94%	6	100%	6	87%	6	100%	1	1
400470554	1	3	1	.	.	01/26/99	.	04/06/99	3	84%	3	100%	3	84%	3	93%	1	1
400470554	2	3	1	.	.	04/06/99	.	04/06/99	6	69%	6	93%	6	80%	6	87%	.	1
400710602	1	3	1	.	.	03/01/99	.	05/06/99	3	87%	3	97%	3	81%	3	97%	1	1
400719003	1	A	1	.	.	11/01/99	.	02/18/00	6	38%	6	100%	6	100%	6	87%	.	.
400719003	2	A	1	.	.	11/01/99	.	03/01/00	6	6%	.	.	.	.	.	.	.	.
400819005	1	A	1	.	.	11/01/99	.	02/18/00	6	44%	6	93%	6	100%	6	93%	.	.
400970186	1	3	1	.	.	02/28/99	.	04/12/99	3	94%	3	97%	3	84%	3	87%	1	1
401010169	1	3	1	.	.	01/25/99	.	04/06/99	3	61%	3	87%	3	90%	3	57%	.	1

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
401090035	1	3	1	.	.	01/01/99	.	04/01/99	1	90%	1	91%	1	89%	1	80%	1	1
401090035	2	3	1	.	.	04/06/99	.	04/06/99	6	94%	6	94%	6	87%	6	93%	1	1
401090038	1	3	1	.	.	01/20/99	.	04/06/99	1	86%	1	92%	1	93%	1	84%	1	1
401091037	1	3	1	.	.	01/01/99	.	04/06/99	3	81%	3	97%	3	100%	3	93%	1	1
401159004	1	A	1	.	.	07/01/99	.	08/16/99	6	100%	6	73%	6	87%	6	100%	1	1
401179007	1	A	1	.	.	11/01/99	.	04/06/00	.	.	6	80%	6	87%	6	100%	.	.
401190614	1	3	1	.	.	01/29/99	.	04/06/99	6	88%	6	100%	6	60%	6	100%	.	.
401210415	1	2	1	.	.	04/01/99	.	04/06/99	3	74%	3	91%	3	79%	3	80%	.	1
401250054	1	3	1	.	.	01/23/99	12/09/00	04/06/99	6	75%	6	93%	6	87%	6	80%	1	1
401339006	1	A	1	.	.	11/01/99	.	02/18/00	6	44%	6	87%	6	100%	6	93%	.	.
401430110	1	2	1	.	.	01/01/99	.	04/02/99	1	90%	1	69%	1	92%	1	88%	.	1
401430110	2	3	1	.	.	04/12/99	.	04/12/99	6	100%	6	93%	6	87%	6	100%	1	1
401430131	1	2	1	.	.	01/01/99	.	04/03/99	1	75%	1	86%	1	80%	1	93%	.	1
401431127	1	2	1	.	.	01/13/01	.	01/13/01	.	.	.	.	.	.	.	.	.	.
401431127	3	5	.	.	.	05/01/01	.	.	.	.	.	.	.	.	.	.	.	.
401431127	5	T	.	1	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
OREGON																		
410030013	1	2	1	.	.	01/01/99	.	01/03/99	3	94%	3	100%	3	100%	3	100%	1	1
410090004	1	3	1	.	.	01/01/99	.	01/01/99	3	97%	3	97%	3	94%	3	100%	1	1
410170113	1	2	1	.	.	01/01/99	.	01/06/99	1	100%	1	97%	1	89%	1	98%	1	1
410170120	1	2	1	.	.	03/01/01	.	03/02/01	.	.	.	.	.	.	.	.	.	.
410250002	1	2	1	.	.	10/03/99	.	01/01/00	6	81%	6	87%	6	53%	6	67%	.	.
410290133	1	2	1	.	.	01/01/99	.	01/01/99	1	95%	1	100%	1	96%	1	93%	1	1
410291001	1	3	1	.	.	01/01/99	.	01/01/99	3	97%	3	100%	3	100%	3	97%	1	1
410292129	1	3	1	.	.	09/15/99	.	09/15/99	1	89%	1	86%	1	91%	1	96%	1	1
410330107	1	2	1	.	.	01/01/99	.	08/31/99	3	97%	3	97%	3	100%	3	93%	1	1
410350004	1	2	1	.	.	01/01/99	.	01/06/99	1	100%	1	95%	1	92%	1	91%	1	1
410370001	1	2	1	.	.	01/01/99	.	01/06/99	1	88%	1	86%	1	85%	1	96%	1	1
410370003	1	3	1	.	.	09/09/99	.	09/09/99	6	100%	6	100%	6	73%	6	93%	1	1
410390060	1	2	1	.	.	01/01/99	.	01/01/99	1	93%	1	97%	1	92%	.	.	.	.
410391007	1	2	1	.	.	01/01/99	.	01/03/99	3	100%	3	97%	3	81%	.	.	.	.
410391061	1	2	1	.	.	11/19/99	.	04/01/00	.	.	1	99%	1	91%	.	.	.	.
410392013	1	2	1	.	.	01/01/99	.	01/01/99	.	.	1	99%	1	99%	.	.	.	.
410430009	1	2	1	.	.	10/27/99	.	10/27/99	3	100%	3	100%	3	97%	3	80%	1	1
410470040	1	2	1	.	.	01/01/99	.	01/09/99	3	97%	3	100%	3	100%	3	100%	1	1
410470109	1	2	1	.	.	01/01/99	.	01/01/99	.	.	.	.	.	.	.	.	.	.
410470110	1	2	1	.	.	06/17/99	.	07/29/99	3	97%	3	100%	3	94%	3	100%	1	1
410510080	1	2	1	.	.	01/01/99	.	01/01/99	1	96%	1	98%	1	95%	1	97%	1	1
410510080	5	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
410510080	6	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
410510244	1	2	1	.	.	12/17/98	.	01/01/99	1	88%	1	91%	1	90%	1	98%	1	1
410510246	1	2	1	.	.	08/27/99	.	08/27/99	1	95%	1	100%	1	93%	1	98%	1	1
410590121	1	2	1	.	.	01/01/99	.	01/06/99	1	91%	1	86%	1	90%	1	90%	1	1
410610006	1	2	1	.	.	01/01/99	.	01/06/99	.	.	.	.	.	.	.	.	.	.
410610117	1	2	1	.	.	07/01/99	.	09/15/99	1	95%	1	99%	1	71%	1	93%	.	1
410619103	1	2	1	.	.	07/01/99	.	09/15/99	6	94%	6	47%	6	73%	6	93%	.	.
410650007	1	2	1	.	.	08/06/99	.	12/14/99	6	94%	6	93%	6	100%	6	100%	1	1
410670111	1	2	1	.	.	01/01/99	.	01/01/99	3	100%	3	97%	3	87%	3	100%	1	1
410671003	1	2	1	.	.	08/20/99	.	09/15/99	3	97%	3	97%	3	100%	3	83%	1	1
PENNSYLVANIA																		
420010001	1	2	1	.	.	01/01/99	.	01/01/99	1	86%	1	88%	1	74%	1	98%	.	1
420010001	3	2	.	.	1	10/13/00	.	.	.	.	.	.	.	.	.	.	.	.

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
420030008	1	2	1	.	.	02/23/99	.	02/23/99	1	57%	1	24%	1	91%	1	84%	.	1
420030008	2	3	1	.	.	09/02/99	.	09/02/99	6	83%	.	.	.	.	.	.	.	.
420030008	5	3	.	.	1	05/24/00	.	.	.	.	.	.	.	.	.	.	.	.
420030021	1	2	1	.	.	02/14/99	.	02/14/99	3	79%	3	75%	3	88%	3	66%	.	1
420030064	1	2	1	.	.	01/23/99	.	01/23/99	1	97%	1	78%	1	93%	1	90%	1	1
420030064	2	3	1	.	.	01/24/99	.	01/24/99	6	89%	.	.	.	.	.	.	.	.
420030064	5	3	.	.	1	11/19/99	.	.	.	.	.	.	.	.	.	.	.	.
420030067	1	2	1	.	.	04/12/99	.	04/12/99	3	58%	3	72%	3	85%	3	43%	.	1
420030093	1	3	1	.	.	03/25/99	.	03/25/99	6	75%	6	67%	6	87%	6	53%	.	.
420030095	1	3	1	.	.	01/30/99	.	01/30/99	6	56%	6	75%	6	53%	6	47%	.	.
420030097	1	3	1	.	.	01/31/99	12/31/00	01/31/99	6	75%	6	67%	6	53%	6	53%	.	.
420030116	1	2	1	.	.	01/30/99	.	01/31/99	3	81%	3	75%	6	83%	3	77%	1	1
420030131	1	2	1	.	.	02/05/99	.	02/05/99	6	94%	6	67%	6	93%	6	60%	.	.
420031008	1	2	1	.	.	02/13/99	.	02/13/99	3	78%	3	68%	3	91%	3	76%	.	1
420031301	1	2	1	.	.	01/30/99	.	01/30/99	3	78%	3	48%	3	84%	3	68%	.	1
420031301	2	3	1	.	.	04/18/99	.	04/18/99	6	81%	.	.	.	.	.	.	.	.
420033007	1	3	.	.	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
420039002	1	3	1	.	.	01/24/99	.	01/24/99	6	75%	6	81%	6	93%	6	80%	1	1
420050001	3	2	.	.	1	01/01/00	.	.	.	.	.	.	.	.	.	.	.	.
420050001	5	3	.	.	1	11/09/99	.	.	.	.	.	.	.	.	.	.	.	.
420070014	1	2	1	.	.	12/01/99	.	01/01/00	3	77%	3	97%	3	52%	3	97%	.	1
420070014	2	3	1	.	.	12/01/99	.	01/19/00	6	19%	.	.	6	20%	.	.	.	.
420110009	1	2	1	.	.	01/01/99	.	01/30/99	3	90%	3	90%	3	97%	3	93%	1	1
420170012	1	2	1	.	.	01/01/99	.	02/11/99	3	68%	3	97%	3	79%	3	87%	.	1
420210011	1	2	1	.	.	01/01/99	.	02/14/99	3	55%	3	90%	3	100%	3	87%	.	1
420270100	1	2	1	.	.	02/01/00	.	02/18/00	3	45%	3	90%	3	31%	3	63%	.	.
420410100	1	2	1	.	.	02/01/00	.	02/15/00	1	46%	1	98%	1	97%	1	85%	.	1
420430401	1	2	1	.	.	01/01/99	.	01/01/99	1	90%	1	62%	1	79%	1	100%	.	1
420450002	1	2	1	.	.	01/01/99	.	01/06/99	3	87%	3	93%	3	97%	3	93%	1	1
420450002	2	3	1	.	.	01/01/99	.	03/19/00	6	6%	6	13%	6	7%	6	13%	.	.
420490003	1	2	1	.	.	01/01/99	.	01/30/99	3	52%	1	13%	3	35%	3	72%	.	1
420692006	1	2	1	.	.	01/01/99	.	01/30/99	1	95%	1	90%	1	96%	1	100%	1	1
420692006	2	3	1	.	.	01/01/99	.	05/18/00	.	.	6	20%	6	7%	6	33%	.	.
420710007	1	2	1	.	.	01/01/99	.	01/09/99	3	87%	3	77%	3	90%	3	77%	1	1
420710007	2	3	1	.	.	01/01/99	.	01/07/00	6	13%	6	20%	6	7%	6	27%	.	.
420770004	1	2	1	.	.	01/01/99	.	01/30/99	1	86%	1	82%	1	97%	1	96%	1	1
420791101	1	2	1	.	.	01/01/99	.	01/05/99	1	96%	1	93%	1	93%	1	99%	1	1
420850100	1	2	1	.	.	02/01/00	.	04/09/00	.	.	3	43%	6	85%	3	82%	.	.
420910013	1	2	1	.	.	01/01/99	.	02/14/99	3	71%	3	90%	3	90%	3	100%	.	1
420950025	1	2	1	.	.	01/01/99	.	01/05/99	1	69%	1	81%	1	95%	1	87%	.	1
420958000	3	2	.	.	1	01/01/00	.	.	.	.	.	.	.	.	.	.	.	.
420958000	5	3	.	.	1	10/20/99	.	.	.	.	.	.	.	.	.	.	.	.
420990301	1	2	1	.	.	12/01/99	.	01/01/00	3	77%	3	97%	3	94%	3	93%	1	1
421010004	1	2	1	.	.	01/01/99	.	02/04/99	1	70%	1	53%	1	95%	1	93%	.	1
421010004	2	2	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
421010004	5	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
421010004	6	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
421010004	7	T	.	1	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
421010020	1	2	1	.	.	01/01/99	.	02/11/99	3	87%	3	33%	3	94%	3	83%	.	.
421010024	1	2	1	.	.	01/01/99	.	02/17/99	3	87%	3	40%	3	100%	3	83%	.	1
421010027	1	2	1	.	.	04/01/00	10/12/00	04/03/00	.	.	3	50%	3	100%	3	3%	.	.
421010047	1	2	1	.	.	01/01/99	.	02/20/99	3	87%	3	23%	3	97%	3	90%	.	.

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
421010136	1	2	1	.	.	01/01/99	.	02/04/99	1	66%	1	56%	1	93%	1	92%	.	1
421250005	1	2	1	.	.	01/01/99	.	01/15/99	3	71%	3	100%	3	94%	3	100%	.	1
421250005	2	3	1	.	.	01/01/99	.	01/19/00	6	13%	.	.	6	7%	.	.	.	.
421250200	1	2	1	.	.	01/01/99	.	01/18/99	3	77%	3	100%	3	100%	3	97%	1	1
421255001	1	2	1	.	.	01/01/99	.	01/08/99	1	97%	1	95%	1	97%	1	91%	1	1
421290008	1	2	1	.	.	01/01/99	.	02/11/99	3	81%	3	93%	3	74%	3	77%	.	1
421330008	1	2	1	.	.	01/01/99	.	01/09/99	3	94%	3	93%	3	100%	3	100%	1	1
421330008	2	3	1	.	.	01/01/99	.	01/19/00	6	6%	6	7%	.	.	.	.	.	.
PUERTO RICO																		
720170003	1	2	.	.	1	04/10/00	.	.	.	.	.	.	.	.	.	.	.	.
720210009	1	2	1	.	.	02/02/99	.	02/02/99	3	84%	3	87%	3	94%	3	80%	1	1
720330007	1	2	.	.	1	11/29/00	.	.	.	.	.	.	.	.	.	.	.	.
720530003	1	2	1	.	.	04/20/99	.	04/21/99	1	69%	1	77%	1	83%	1	89%	.	1
720570008	1	2	1	.	.	01/15/99	.	01/24/99	3	77%	3	70%	3	74%	3	50%	.	1
720590016	1	2	1	.	.	01/15/99	.	01/24/99	3	90%	3	80%	3	61%	3	83%	.	1
720610005	1	2	1	.	.	01/15/99	.	01/23/99	1	86%	1	81%	1	70%	1	72%	.	1
720610005	5	T	.	1	.	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
720690001	1	2	1	.	.	02/12/00	.	02/12/00	3	45%	3	70%	3	87%	3	70%	.	1
720810001	1	2	1	.	.	01/15/99	.	01/21/99	3	42%	3	93%	3	78%	3	87%	.	1
720970003	1	2	1	.	.	01/24/99	.	01/24/99	3	94%	3	73%	3	74%	3	83%	.	1
721130004	1	2	1	.	.	01/15/99	.	01/24/99	3	74%	3	93%	3	84%	3	97%	.	1
721270003	1	2	1	.	.	03/21/99	.	03/21/99	1	78%	1	80%	1	73%	1	88%	.	1
RHODE ISLAND																		
440030002	1	2	1	.	.	01/06/99	.	01/06/99	3	87%	3	97%	3	100%	3	87%	1	1
440070020	1	3	1	.	.	01/06/99	.	01/06/99	6	94%	6	100%	6	87%	6	87%	1	1
440070022	1	2	1	.	.	01/01/99	.	01/06/99	1	85%	1	91%	1	92%	1	87%	1	1
440070022	2	3	1	.	.	01/01/99	.	01/06/99	6	81%	6	100%	6	100%	6	93%	1	1
440070022	5	2	.	.	.	12/01/00	.	.	.	.	.	.	.	.	.	.	.	.
440070023	1	2	1	.	.	12/01/99	.	12/11/99	3	94%	3	100%	3	100%	3	87%	1	1
440071005	1	2	1	.	.	01/06/99	.	01/06/99	3	90%	3	97%	3	94%	3	77%	1	1
440071010	1	2	1	.	.	01/06/99	.	01/06/99	1	85%	1	91%	1	96%	1	83%	1	1
440071010	2	3	1	.	.	01/06/99	.	01/06/99	6	88%	6	100%	6	100%	6	100%	1	1
440071010	5	T	.	.	.	12/01/00	.	.	.	.	.	.	.	.	.	.	.	.
440090007	1	2	1	.	.	01/01/99	.	01/06/99	3	90%	3	93%	3	97%	3	93%	1	1
SOUTH CAROLINA																		
450070003	1	3	.	.	1	07/19/00	.	.	.	.	.	.	.	.	.	.	.	.
450130007	1	2	1	.	.	03/25/99	.	03/25/99	3	90%	3	100%	3	87%	3	93%	1	1
450190046	1	2	1	.	.	01/15/99	.	01/15/99	3	74%	3	73%	3	87%	3	93%	.	1
450190048	1	2	1	.	.	04/15/99	.	04/15/99	1	98%	1	99%	1	100%	1	96%	1	1
450190048	2	3	1	.	.	04/24/99	.	04/24/99	6	88%	6	93%	6	100%	6	93%	1	1
450190049	1	2	1	.	.	11/26/98	.	01/01/99	1	99%	1	99%	1	99%	1	100%	1	1
450190049	5	T	.	1	.	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
450250001	1	3	1	.	.	01/07/00	.	01/07/00	3	58%	3	97%	3	84%	3	100%	.	1
450290002	1	3	1	.	.	04/15/99	.	04/15/99	3	48%	.	.	.	.	.	.	.	.
450290002	2	3	.	.	1	06/24/99	.	.	.	.	.	.	.	.	.	.	.	.
450370001	1	2	1	.	.	04/30/99	.	04/30/99	3	87%	3	97%	3	97%	3	83%	1	1
450370001	2	3	.	.	1	06/03/99	.	.	.	.	.	.	.	.	.	.	.	.
450410002	1	2	1	.	.	02/23/99	.	02/23/99	3	97%	3	100%	3	87%	3	90%	1	1
450430009	1	3	1	.	.	01/15/99	.	01/15/99	3	90%	3	100%	3	100%	3	90%	1	1
450430009	2	3	1	.	.	01/21/99	.	01/21/99	3	90%	3	93%	3	87%	3	67%	.	1
450450009	1	2	1	.	.	05/30/99	.	05/30/99	1	95%	1	98%	1	89%	1	89%	1	1
450450009	2	3	1	.	.	05/30/99	.	05/30/99	6	100%	6	100%	6	73%	6	67%	.	.

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
450470003	1	2	1	.	.	12/04/98	.	01/03/99	3	90%	3	100%	3	100%	3	93%	1	1
450510002	1	2	1	.	.	11/01/00	.	12/20/00	.	.	.	.	.	.	3	13%	.	.
450510002	2	3	1	.	.	11/01/00	.	12/17/00	.	.	.	.	.	.	3	17%	.	.
450630005	1	3	1	.	.	11/19/98	.	01/03/99	3	97%	3	100%	3	94%	3	100%	1	1
450630008	1	2	1	.	.	12/01/98	.	01/03/99	3	94%	3	97%	3	100%	3	97%	1	1
450630009	1	3	.	.	1	06/25/97	08/17/99	.	.	.	.	.	.	.	.	.	.	.
450730001	1	2	1	.	.	12/31/98	.	01/03/99	3	97%	3	87%	3	71%	3	90%	.	1
450790007	1	2	1	.	.	11/01/98	.	01/03/99	3	94%	3	93%	3	100%	3	100%	1	1
450790018	1	3	.	.	1	08/17/99	.	.	.	.	.	.	.	.	.	.	.	.
450790019	1	2	1	.	.	11/26/98	.	01/03/99	3	97%	3	97%	3	97%	3	100%	1	1
450790019	2	3	1	.	.	11/26/98	.	01/03/99	3	90%	3	93%	3	84%	3	83%	1	1
450830008	1	3	.	.	1	11/16/99	06/20/00	.	.	.	.	.	.	.	.	.	.	.
450830009	1	3	.	.	1	04/22/97	06/05/99	.	.	.	.	.	.	.	.	.	.	.
450830010	1	2	1	.	.	11/13/98	.	01/01/99	1	100%	1	93%	1	90%	1	83%	1	1
450910006	1	3	1	.	.	12/10/98	.	01/03/99	3	100%	3	93%	3	81%	3	87%	1	1
SOUTH DAKOTA																		
460110002	1	2	1	.	.	01/01/99	.	04/03/99	3	58%	3	97%	3	94%	3	100%	.	1
460130003	1	2	1	.	.	12/20/99	.	01/01/00	3	32%	3	90%	3	97%	3	97%	.	.
460710001	1	2	1	.	.	12/31/99	.	01/01/00	6	50%	6	93%	6	100%	6	100%	.	.
460930001	1	2	1	.	.	11/29/00	.	01/01/01	.	.	.	.	.	.	.	.	.	.
460990006	1	2	1	.	.	01/01/99	.	04/03/99	3	55%	3	100%	3	100%	3	100%	.	1
460990007	1	2	1	.	.	01/01/99	.	01/03/99	3	55%	3	93%	3	68%	3	90%	.	1
461030013	1	3	1	.	.	06/01/00	.	06/11/00	.	.	6	27%	6	93%	6	93%	.	.
461030014	1	2	1	.	.	12/31/98	12/31/99	01/03/99	.	.	.	.	.	.	.	.	.	.
461030015	1	2	1	.	.	01/01/99	10/01/00	01/03/99	3	29%	3	73%	3	87%	.	.	.	.
461030016	1	2	1	.	.	01/01/99	.	01/03/99	3	45%	3	70%	3	90%	3	93%	.	1
461030016	3	3	.	.	.	04/01/01	.	.	.	.	.	.	.	.	.	.	.	.
461030017	1	2	1	.	.	01/01/99	.	04/03/99	3	39%	3	80%	3	58%	3	100%	.	1
461030019	1	2	1	.	.	01/01/00	.	01/01/00	3	39%	3	93%	3	87%	3	57%	.	1
461031001	1	2	1	.	.	01/01/99	.	04/03/99	3	52%	3	57%	3	100%	3	97%	.	1
TENNESSEE																		
470090005	1	2	1	.	.	10/01/98	05/05/00	01/03/99	3	85%	3	33%	.	.	.	.	.	.
470090011	1	2	1	.	.	05/01/00	.	05/06/00	.	.	3	57%	3	94%	3	97%	.	.
470370023	1	2	1	.	.	01/01/99	.	01/01/99	1	90%	1	88%	1	89%	1	95%	1	1
470370023	2	3	1	.	.	01/01/99	.	01/06/99	6	56%	6	100%	6	73%	6	100%	.	.
470370025	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	93%	3	97%	3	87%	1	1
470370036	1	2	1	.	.	01/01/99	.	01/01/99	1	74%	1	84%	1	86%	1	96%	.	1
470450004	1	3	1	.	.	08/22/99	.	08/25/99	3	90%	3	77%	3	84%	3	97%	1	1
470650031	1	2	1	.	.	05/06/99	.	05/06/99	6	100%	6	100%	6	100%	6	89%	1	1
470650032	1	2	1	.	.	06/05/99	.	06/05/99	6	0%	6	60%	6	100%	6	100%	.	.
470654002	1	2	1	.	.	01/01/99	.	01/01/99	3	91%	3	90%	3	97%	3	97%	1	1
470654002	2	2	1	.	.	01/01/99	.	12/08/99	6	12%	6	13%	.	.	6	7%	.	.
470930028	1	2	1	.	.	01/01/99	.	01/03/99	3	81%	3	100%	3	90%	3	80%	1	1
470931017	1	2	1	.	.	01/01/99	.	01/01/99	1	76%	1	76%	1	91%	1	74%	.	1
470931017	2	3	1	.	.	01/01/99	.	01/06/99	6	88%	6	93%	6	87%	6	100%	1	1
470931020	1	2	1	.	.	01/01/99	.	01/01/99	1	88%	1	87%	1	78%	1	76%	1	1
470990002	1	2	1	.	.	10/01/98	.	01/03/99	3	97%	3	93%	3	94%	3	97%	1	1
471071002	1	3	1	.	.	02/03/00	.	02/03/00	3	65%	3	90%	3	87%	3	77%	.	1
471130004	1	2	1	.	.	10/01/98	.	01/03/99	3	81%	3	93%	3	87%	3	97%	1	1
471130004	2	3	1	.	.	01/01/99	.	08/25/99	3	58%	3	93%	3	74%	3	97%	.	1
471192007	1	3	1	.	.	12/25/98	.	01/03/99	3	90%	3	93%	3	84%	3	93%	1	1
471251009	1	2	1	.	.	10/01/98	.	01/03/99	3	100%	3	97%	3	81%	3	67%	.	1

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
471410001	1	3	1	.	.	12/25/98	.	09/15/99	3	77%	3	90%	3	87%	3	83%	1	1
471450004	1	2	1	.	.	10/01/98	.	01/03/99	3	90%	3	97%	3	87%	3	87%	1	1
471570014	1	2	1	.	.	12/01/98	.	01/18/99	3	84%	3	83%	3	77%	3	67%	.	1
471570038	1	2	1	.	.	12/01/98	.	01/16/99	1	75%	1	97%	1	15%	1	80%	.	1
471570047	1	2	1	.	.	12/01/98	.	01/16/99	1	99%	1	87%	1	86%	1	89%	1	1
471570047	2	3	.	.	.	01/01/99	.	.	.	.	.	.	.	.	.	.	.	.
471570047	5	T	.	.	.	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
471571004	1	2	1	.	.	12/01/98	.	08/31/00	.	.	.	.	3	13%	3	40%	.	.
471631007	1	2	1	.	.	10/01/98	.	01/03/99	3	84%	3	87%	3	94%	3	97%	1	1
471631007	2	3	1	.	.	01/01/99	.	12/23/99	3	72%	3	83%	3	90%	3	97%	.	1
471650007	1	2	1	.	.	10/01/98	.	01/03/99	3	100%	3	100%	3	94%	3	100%	1	1
471650007	2	3	1	.	.	10/01/98	.	01/03/99	3	94%	3	100%	3	90%	3	97%	1	1
TEXAS																		
480290034	1	2	1	.	.	01/01/99	10/07/99	04/01/99	.	.	.	.	.	.	.	.	.	.
480290034	2	2	1	.	.	03/31/99	.	03/31/99	.	.	.	.	.	.	.	.	.	.
480290052	1	2	1	.	.	01/01/99	.	03/31/99	1	47%	1	65%	1	62%	1	63%	.	1
480290053	1	2	1	.	.	10/06/99	.	10/06/99	3	52%	3	80%	3	81%	3	63%	.	1
480290053	3	3	.	.	1	02/15/00	.	.	.	.	.	.	.	.	.	.	.	.
480290059	3	3	.	.	1	02/01/00	.	.	.	.	.	.	.	.	.	.	.	.
480290060	1	2	1	.	.	06/03/00	.	06/05/00	.	.	1	26%	1	82%	1	66%	.	.
480290060	2	2	1	.	.	06/05/00	.	06/05/00	.	.	6	13%	6	60%	1	8%	.	.
480370004	1	2	1	.	.	01/06/99	.	02/17/99	3	97%	3	100%	3	94%	3	97%	1	1
480391003	1	2	1	.	.	01/06/99	.	11/26/99	3	58%	3	60%	3	45%	3	75%	.	1
480550062	1	2	1	.	.	01/03/99	.	03/31/99	3	55%	3	87%	3	81%	3	63%	.	1
480610006	3	3	.	.	1	02/01/00	.	.	.	.	.	.	.	.	.	.	.	.
480612002	1	2	1	.	.	01/03/99	.	01/07/00	3	77%	3	73%	3	87%	3	100%	.	1
480850005	1	2	1	.	.	01/06/99	.	03/13/99	3	87%	3	84%	3	94%	3	94%	1	1
481130020	1	2	1	.	.	01/01/99	.	03/11/99	1	88%	1	85%	1	91%	1	96%	1	1
481130035	1	2	1	.	.	01/03/99	.	01/06/99	3	84%	3	63%	3	100%	3	97%	.	1
481130050	1	2	1	.	.	01/01/99	.	01/01/99	1	29%	1	86%	1	98%	1	97%	.	1
481130050	2	2	1	.	.	03/25/99	.	03/25/99	6	31%	6	73%	6	93%	6	87%	.	.
481130057	1	2	1	.	.	01/06/99	.	01/06/99	3	71%	3	74%	3	74%	3	97%	.	1
481130069	1	2	1	.	.	01/01/99	.	03/11/99	1	92%	1	96%	1	98%	1	96%	1	1
481130069	2	2	1	.	.	03/31/99	.	03/31/99	6	94%	6	93%	6	100%	6	93%	1	1
481130069	3	3	.	.	1	07/28/00	.	.	.	.	.	.	.	.	.	.	.	.
481130069	5	T	.	1	.	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
481130087	1	2	1	.	.	01/03/99	.	01/03/99	3	67%	3	71%	3	71%	3	97%	.	1
481133003	3	3	.	.	1	11/16/00	.	.	.	.	.	.	.	.	.	.	.	.
481210034	3	3	.	.	1	02/01/00	.	.	.	.	.	.	.	.	.	.	.	.
481350003	1	2	1	.	.	01/03/99	.	03/28/99	3	16%	3	57%	3	45%	3	61%	.	.
481350003	3	3	.	.	1	02/01/00	.	.	.	.	.	.	.	.	.	.	.	.
481350004	3	3	.	.	1	08/16/00	.	.	.	.	.	.	.	.	.	.	.	.
481390015	3	3	.	.	1	02/01/00	.	.	.	.	.	.	.	.	.	.	.	.
481390017	3	3	.	.	1	08/25/00	.	.	.	.	.	.	.	.	.	.	.	.
481410002	1	2	1	.	.	01/01/99	.	04/02/99	1	38%	1	32%	1	76%	1	93%	.	1
481410010	1	2	1	.	.	01/06/99	.	12/02/99	3	52%	3	63%	3	65%	3	43%	.	1
481410010	2	2	1	.	.	12/02/99	.	12/02/99	6	44%	6	80%	6	20%	6	69%	.	.
481410037	1	2	1	.	.	01/01/99	.	01/30/99	1	53%	1	62%	1	83%	1	97%	.	1
481410037	3	3	.	.	1	02/01/00	.	.	.	.	.	.	.	.	.	.	.	.
481410038	1	2	1	.	.	01/06/99	.	12/14/99	3	26%	3	77%	3	81%	3	67%	.	.
481410043	1	2	1	.	.	01/03/99	12/14/99	01/30/99	.	.	.	.	.	.	.	.	.	.
481410044	1	2	1	.	.	01/01/99	.	01/30/99	1	98%	1	96%	1	99%	1	95%	1	1

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
481410044	2	2	1	.	.	02/17/99	.	02/17/99	6	50%	6	93%	6	100%	6	100%	.	.
481410044	5	T	.	1	.	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
481410045	1	2	1	.	.	01/06/99	.	02/05/99	3	90%	3	100%	3	100%	3	100%	1	1
481410053	3	3	.	.	1	02/01/00	.	.	.	.	.	.	.	.	.	.	.	.
481410053	5	2	1	.	.	10/01/00	.	12/14/00	.	.	.	.	.	.	6	20%	.	.
481410057	1	2	1	.	.	01/13/00	.	01/16/00	3	84%	3	97%	3	97%	3	100%	1	1
481670014	3	3	.	.	1	03/03/00	.	.	.	.	.	.	.	.	.	.	.	.
481670014	5	2	1	.	.	08/14/00	.	08/15/00	.	.	.	.	1	37%	3	88%	.	.
481670053	1	2	1	.	.	01/06/99	.	06/05/99	3	71%	3	67%	3	84%	3	94%	.	1
481671005	1	2	1	.	.	01/03/99	.	10/15/99	3	68%	3	67%	3	90%	3	97%	.	1
481671005	2	2	1	.	.	10/15/99	.	10/15/99	.	.	.	.	6	27%	6	73%	.	.
481830001	1	2	1	.	.	01/13/00	.	01/13/00	3	84%	3	97%	3	94%	3	97%	1	1
482010024	1	2	1	.	.	01/01/99	.	05/15/00	.	.	1	31%	1	29%	.	.	.	.
482010024	2	2	1	.	.	08/16/99	.	08/16/99	6	38%	6	47%	6	20%	.	.	.	.
482010024	5	2	1	.	.	08/14/00	.	08/15/00	.	.	.	.	1	45%	3	87%	.	.
482010026	1	2	1	.	.	01/01/99	.	10/26/99	1	74%	1	70%	1	39%	.	.	.	.
482010026	3	3	.	.	1	02/05/00	.	.	.	.	.	.	.	.	.	.	.	.
482010026	5	2	1	.	.	08/14/00	.	08/15/00	.	.	.	.	1	49%	3	90%	.	.
482010051	1	2	1	.	.	01/06/99	.	08/16/99	3	84%	3	73%	3	81%	3	81%	.	1
482010055	5	2	1	.	.	08/14/00	.	08/15/00	.	.	.	.	1	48%	3	87%	.	.
482010058	1	2	1	.	.	01/06/99	.	08/16/99	3	55%	3	63%	3	71%	3	77%	.	1
482010062	1	2	1	.	.	01/06/99	.	04/06/99	3	84%	3	70%	3	84%	3	82%	.	1
482010803	5	2	1	.	.	08/14/00	.	08/15/00	.	.	.	.	1	48%	3	80%	.	.
482011034	3	3	.	.	1	02/05/00	.	.	.	.	.	.	.	.	.	.	.	.
482011035	1	2	1	.	.	01/01/99	.	04/01/99	1	77%	1	63%	1	92%	1	91%	.	1
482011035	2	2	1	.	.	04/06/99	.	04/06/99	6	56%	6	47%	6	73%	6	80%	.	.
482011037	1	2	1	.	.	01/03/99	.	08/28/99	3	82%	3	77%	3	91%	3	79%	1	1
482011039	1	2	1	.	.	01/03/99	36750	07/05/99	3	68%	3	93%	3	42%	.	.	.	.
482011039	3	3	.	.	1	03/01/00	.	.	.	.	.	.	.	.	.	.	.	.
482011039	5	T	1	1	.	36565	.	36753	.	.	.	.	1	48%	.	.	.	.
482011039	6	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
482011039	7	T	.	1	.	10/01/00	.	.	.	.	.	.	.	.	.	.	.	.
482150042	1	2	1	.	.	01/03/99	.	01/07/00	3	77%	3	83%	3	90%	3	80%	1	1
482150043	1	2	1	.	.	01/03/99	.	01/13/00	3	42%	3	70%	3	94%	3	100%	.	1
482150043	3	3	.	.	.	04/26/01	.	.	.	.	.	.	.	.	.	.	.	.
482450020	3	3	.	.	1	01/11/01	.	.	.	.	.	.	.	.	.	.	.	.
482450021	1	2	1	.	.	03/06/00	.	36596	1	22%	1	15%	1	72%	1	86%	.	1
482450021	2	2	1	.	.	03/13/00	.	03/13/00	6	13%	6	40%	6	80%	6	53%	.	.
482450022	1	2	1	.	.	02/24/00	.	03/13/00	3	16%	3	33%	3	16%	.	.	.	.
482450022	3	3	.	.	1	02/24/00	.	.	.	.	.	.	.	.	.	.	.	.
482450022	5	2	1	.	.	08/14/00	.	08/15/00	.	.	.	.	1	26%	3	94%	.	.
482570005	3	3	.	.	1	10/04/00	.	.	.	.	.	.	.	.	.	.	.	.
483030001	1	2	1	.	.	01/03/99	.	01/09/99	3	90%	3	80%	3	100%	3	97%	1	1
483030001	3	3	.	.	1	03/16/01	.	.	.	.	.	.	.	.	.	.	.	.
483091002	1	2	1	.	.	01/04/00	.	01/13/00	6	47%	6	68%	3	70%	3	76%	.	.
483150050	1	2	1	.	.	01/03/99	.	02/14/99	3	97%	3	100%	3	97%	3	97%	1	1
483390089	1	2	1	.	.	11/05/99	.	11/26/99	3	45%	3	60%	3	42%	.	.	.	.
483390089	3	3	.	.	1	02/16/00	.	.	.	.	.	.	.	.	.	.	.	.
483390089	5	2	1	.	.	08/14/00	.	08/15/00	.	.	.	.	1	48%	3	77%	.	.
483550020	1	2	1	.	.	01/03/99	.	01/07/00	3	39%	3	63%	3	97%	3	87%	.	1
483550025	3	3	.	.	1	02/01/00	.	.	.	.	.	.	.	.	.	.	.	.
483550032	1	2	1	.	.	01/06/99	.	01/07/00	6	50%	3	53%	3	69%	3	90%	.	.

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
483550032	2	2	1	.	.	01/19/00	.	01/19/00	6	19%	6	56%	6	93%	6	87%	.	.
483550034	5	T	1	.	.	01/31/01	.	01/31/01	.	.	.	.	.	.	.	.	.	.
483611001	1	2	1	.	.	03/13/00	.	03/13/00	3	23%	3	30%	3	26%	3	77%	.	.
483750005	1	2	1	.	.	01/03/99	.	05/12/00	.	.	3	20%	3	84%	3	83%	.	.
483750005	3	3	.	.	1	03/02/01	.	.	.	.	.	.	.	.	.	.	.	.
484390063	1	2	1	.	.	01/03/99	.	01/30/99	3	68%	3	97%	3	97%	3	97%	.	1
484391002	1	2	1	.	.	01/01/99	.	03/11/99	1	91%	1	98%	1	95%	1	85%	1	1
484391002	2	2	1	.	.	12/08/99	.	12/08/99	6	88%	6	80%	6	80%	6	100%	1	1
484391003	1	2	1	.	.	01/01/99	.	08/14/99	1	92%	1	73%	1	82%	1	93%	.	1
484391006	3	3	.	.	.	04/11/01	.	.	.	.	.	.	.	.	.	.	.	.
484393006	1	2	1	.	.	01/01/99	.	02/03/99	1	95%	1	84%	1	92%	1	100%	1	1
484393006	2	2	1	.	.	01/06/99	.	01/06/99	6	94%	6	100%	6	100%	6	100%	1	1
484393008	3	3	.	.	1	03/14/01	.	.	.	.	.	.	.	.	.	.	.	.
484393009	3	3	.	.	1	09/01/00	.	.	.	.	.	.	.	.	.	.	.	.
484530020	1	2	1	.	.	01/01/99	.	03/12/99	1	97%	1	87%	1	96%	1	91%	1	1
484530020	2	2	1	.	.	03/13/99	.	03/13/99	6	69%	6	80%	6	100%	6	93%	.	1
484530021	1	2	1	.	.	09/29/99	.	10/30/99	1	87%	1	93%	1	96%	1	99%	1	1
484790016	1	2	1	.	.	01/06/99	.	08/10/99	3	81%	3	83%	3	90%	3	93%	1	1
484790017	3	3	.	.	1	02/04/00	.	.	.	.	.	.	.	.	.	.	.	.
UTAH																		
490030003	1	2	1	.	.	08/19/00	.	08/19/00	.	.	.	.	3	48%	3	93%	.	.
490050004	1	2	1	.	.	02/18/00	.	02/18/00	3	45%	3	97%	3	87%	3	83%	.	1
490110001	1	2	1	.	.	01/01/99	.	01/04/99	3	97%	3	100%	3	97%	3	100%	1	1
490350003	1	2	1	.	.	01/01/98	.	01/03/99	3	87%	3	97%	3	90%	3	93%	1	1
490350012	1	2	1	.	.	01/01/99	.	01/03/99	3	94%	3	90%	3	90%	3	97%	1	1
490353003	1	2	1	.	.	09/09/00	.	09/09/00	.	.	.	.	3	23%	3	73%	.	.
490353006	1	2	1	.	.	01/01/98	.	01/01/99	1	97%	1	89%	1	78%	1	96%	1	1
490353006	5	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
490353006	6	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
490353007	1	2	1	.	.	01/21/99	.	01/24/99	3	94%	3	87%	3	100%	3	100%	1	1
490450002	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	87%	3	84%	3	100%	1	1
490490002	1	2	1	.	.	01/01/98	.	01/03/99	3	87%	3	100%	3	90%	3	93%	1	1
490494001	1	2	1	.	.	01/01/98	.	01/01/99	1	91%	1	100%	1	90%	1	99%	1	1
490495008	1	2	1	.	.	03/22/00	.	03/22/00	3	13%	3	97%	3	100%	3	90%	.	.
490495010	1	2	1	.	.	01/01/99	.	01/03/99	3	94%	3	100%	3	84%	3	97%	1	1
490570001	1	2	1	.	.	01/01/98	36572	01/03/99	3	48%	.	.	.	.	.	.	.	.
490570007	1	2	1	.	.	01/01/99	.	01/03/99	3	81%	3	93%	3	97%	3	93%	1	1
490571003	1	2	1	.	.	11/05/00	.	11/05/00	.	.	.	.	.	.	3	57%	.	.
VERMONT																		
500030005	1	2	1	.	.	01/03/99	.	01/03/99	3	100%	3	100%	3	94%	3	90%	1	1
500070007	1	2	1	.	.	01/03/99	.	01/03/99	3	81%	3	87%	3	94%	3	93%	1	1
500070012	1	3	1	.	.	07/29/99	.	07/29/99	3	90%	3	97%	3	100%	3	97%	1	1
500070012	2	3	1	.	.	01/07/00	.	01/07/00	3	84%	3	93%	3	68%	3	73%	.	1
500070012	5	T	.	1	.	12/13/00	.	.	.	.	.	.	.	.	.	.	.	.
500210002	1	2	1	.	.	01/03/99	.	01/03/99	3	94%	3	100%	3	84%	3	97%	1	1
500230005	1	3	1	.	.	01/12/99	.	01/12/99	3	91%	3	93%	3	87%	3	93%	1	1
500230005	2	3	1	.	.	01/12/99	36525	01/12/99	.	.	.	.	.	.	.	.	.	.
VIRGIN ISLANDS																		
780010012	1	2	1	.	.	01/12/99	.	01/12/99	6	88%	6	67%	6	67%	6	67%	.	.
780050008	1	2	.	.	.	01/01/00	36706	.	.	.	.	.	.	.	.	.	.	.
780050009	1	2	1	.	.	04/06/00	.	04/06/00	.	.	6	53%	6	73%	6	7%	.	.
VIRGINIA																		

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
510130020	1	2	1	.	.	01/01/99	.	01/29/99	3	100%	3	97%	3	100%	3	97%	1	1
510360002	1	2	1	.	.	01/01/99	.	01/30/99	3	74%	3	77%	3	94%	3	97%	.	1
510410003	1	2	1	.	.	01/01/99	.	02/02/99	3	87%	3	97%	3	81%	3	97%	1	1
510590030	1	2	1	.	.	01/01/99	.	01/29/99	1	82%	1	85%	1	93%	1	87%	1	1
510591004	1	2	1	.	.	01/01/99	.	01/30/99	3	58%	3	87%	3	81%	3	73%	.	1
510591004	3	2	.	.	.	11/02/99	.	.	.	.	.	.	.	.	.	.	.	.
510595001	1	2	1	.	.	01/01/99	.	01/30/99	3	90%	3	93%	3	71%	3	87%	.	1
510870014	1	2	1	.	.	01/01/99	.	01/28/99	3	84%	3	97%	3	97%	3	100%	1	1
510870014	3	2	.	.	.	02/17/00	.	.	.	.	.	.	.	.	.	.	.	.
510870015	1	2	1	.	.	01/01/99	.	01/28/99	3	71%	3	100%	3	90%	3	87%	.	1
511071005	1	2	1	.	.	01/01/99	.	02/05/99	3	97%	3	93%	3	100%	3	87%	1	1
511390004	1	2	1	.	.	10/01/99	.	11/23/99	3	78%	3	83%	3	90%	3	88%	1	1
515200006	1	2	1	.	.	01/01/99	.	01/30/99	3	84%	3	93%	3	84%	3	97%	1	1
515500012	1	2	1	.	.	01/01/99	.	01/31/99	1	74%	1	63%	1	89%	1	85%	.	1
516500004	1	2	1	.	.	01/01/99	.	01/30/99	3	94%	3	100%	3	77%	3	70%	.	1
516500004	3	2	.	.	.	04/12/00	.	.	.	.	.	.	.	.	.	.	.	.
516800014	1	2	1	.	.	01/01/99	.	01/28/99	3	13%	3	47%	3	100%	3	93%	.	.
517000013	1	2	1	.	.	01/01/99	.	02/08/99	3	94%	3	97%	3	97%	3	83%	1	1
517100024	1	2	1	.	.	01/01/99	.	01/30/99	3	90%	3	100%	3	97%	3	97%	1	1
517600020	1	2	1	.	.	01/01/99	.	01/27/99	1	66%	1	98%	1	97%	1	97%	.	1
517600020	5	T	.	1	.	12/01/00	.	.	.	.	.	.	.	.	.	.	.	.
517700014	1	2	1	.	.	01/01/99	.	02/02/99	3	94%	3	87%	3	100%	3	100%	1	1
517750010	1	2	1	.	.	01/01/99	.	01/30/99	3	90%	3	100%	3	100%	3	93%	1	1
518100008	1	2	1	.	.	01/01/99	.	02/02/99	3	94%	3	100%	3	94%	3	93%	1	1
WASHINGTON																		
530010003	1	3	1	.	.	10/21/00	.	10/21/00	.	.	.	.	.	.	6	73%	.	.
530050002	1	2	1	.	.	12/16/98	.	02/28/99	3	74%	3	87%	3	74%	3	97%	.	1
530050002	3	3	.	.	.	01/01/00	.	.	.	.	.	.	.	.	.	.	.	.
530090009	1	3	1	.	.	10/03/99	36979	10/03/99	6	100%	6	94%	6	93%	6	88%	1	1
530110013	1	2	1	.	.	11/19/98	.	01/09/99	3	97%	3	90%	3	97%	3	90%	1	1
530110013	3	3	.	.	1	08/14/00	.	.	.	.	.	.	.	.	.	.	.	.
530310003	1	3	1	.	.	01/13/00	36977	01/13/00	6	82%	6	88%	6	93%	6	94%	1	1
530330004	1	2	1	.	.	12/07/98	36436	01/03/99	.	.	.	.	.	.	.	.	.	.
530330017	1	2	1	.	.	12/28/98	.	01/03/99	3	87%	3	90%	3	97%	3	80%	1	1
530330017	3	3	.	.	1	03/07/00	.	.	.	.	.	.	.	.	.	.	.	.
530330021	1	2	1	.	.	12/23/98	.	01/01/99	1	90%	1	100%	1	96%	1	98%	1	1
530330024	1	2	1	.	.	03/10/99	.	03/10/99	3	94%	3	100%	3	100%	3	83%	1	1
530330024	3	3	.	.	1	01/01/00	.	.	.	.	.	.	.	.	.	.	.	.
530330027	1	2	1	.	.	08/04/99	.	08/04/99	3	90%	3	93%	3	91%	3	97%	1	1
530330032	5	T	.	1	.	04/30/00	.	.	.	.	.	.	.	.	.	.	.	.
530330033	1	3	1	.	.	02/09/00	36929	02/09/00	3	63%	3	97%	3	97%	3	94%	.	1
530330033	3	3	.	.	1	02/07/00	36929	.	.	.	.	.	.	.	.	.	.	.
530330037	1	2	1	.	.	11/02/00	.	11/02/00	.	.	.	.	.	.	3	53%	.	.
530330057	1	2	1	.	.	10/17/98	.	01/01/99	1	100%	1	100%	1	88%	1	100%	1	1
530330057	3	3	.	.	1	01/01/00	.	.	.	.	.	.	.	.	.	.	.	.
530330080	1	2	1	.	.	11/01/98	.	01/03/99	1	98%	1	91%	1	88%	1	95%	1	1
530330080	5	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
530330080	6	T	.	1	.	02/09/00	.	.	.	.	.	.	.	.	.	.	.	.
530332004	1	2	1	.	.	10/28/98	.	01/03/99	3	29%	.	.	.	.	.	.	.	.
530332004	3	3	.	.	1	01/01/00	.	.	.	.	.	.	.	.	.	.	.	.
530410006	1	3	1	.	.	01/07/00	.	01/07/00	6	69%	6	88%	6	83%	6	81%	.	1
530530029	1	2	1	.	.	10/03/99	.	10/03/99	1	96%	1	99%	1	93%	1	93%	1	1

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
530530029	3	3	.	.	1	11/02/00	.	.	.	.	.	.	.	.	.	.	.	.
530530031	1	2	1	.	.	10/28/98	.	01/01/99	1	100%	1	100%	1	98%	1	98%	1	1
530530031	3	3	.	.	1	08/25/00	.	.	.	.	.	.	.	.	.	.	.	.
530531018	1	2	1	.	.	10/28/98	.	01/01/99	3	97%	3	87%	3	94%	3	83%	1	1
530570014	1	3	1	.	.	12/03/99	.	12/14/99	6	88%	6	100%	6	87%	6	93%	1	1
530610005	1	2	1	.	.	10/03/99	.	10/03/99	3	100%	3	100%	3	100%	3	90%	1	1
530610005	3	3	.	.	1	07/03/00	.	.	.	.	.	.	.	.	.	.	.	.
530611007	1	2	1	.	.	10/28/98	.	01/03/99	3	97%	3	100%	3	90%	3	100%	1	1
530611007	3	3	.	.	1	01/01/00	.	.	.	.	.	.	.	.	.	.	.	.
530630001	1	3	1	.	.	10/03/00	36863	10/03/00	.	.	.	.	.	.	6	67%	.	.
530630016	1	2	1	.	.	12/19/98	.	01/01/99	1	98%	1	88%	1	97%	1	90%	1	1
530630016	3	3	.	.	1	01/01/00	.	.	.	.	.	.	.	.	.	.	.	.
530630047	1	2	1	.	.	12/04/98	.	01/03/99	3	97%	3	100%	3	100%	3	97%	1	1
530630047	3	3	.	.	1	01/01/01	.	.	.	.	.	.	.	.	.	.	.	.
530639000	1	3	1	.	.	11/07/98	.	01/06/99	6	94%	6	100%	6	100%	3	50%	.	1
530650004	1	3	.	.	.	04/01/01	.	.	.	.	.	.	.	.	.	.	.	.
530670013	1	2	1	.	.	10/31/98	.	01/03/99	3	100%	3	100%	3	97%	3	100%	1	1
530670013	3	3	.	.	1	08/29/00	.	.	.	.	.	.	.	.	.	.	.	.
530710005	1	3	.	.	.	01/13/01	.	.	.	.	.	.	.	.	.	.	.	.
530730015	1	2	1	.	.	02/05/99	.	02/05/99	3	90%	3	87%	3	87%	3	94%	1	1
530750003	1	3	1	.	.	01/19/00	.	01/19/00	6	75%	6	94%	6	93%	6	100%	1	1
530750004	1	3	1	.	.	01/07/00	36922	01/07/00	6	94%	6	93%	6	93%	6	93%	1	1
530770009	1	2	1	.	.	05/06/00	.	05/06/00	.	.	3	63%	3	100%	3	100%	.	.
530770012	1	2	1	.	.	01/09/99	36403	01/09/99	.	.	.	.	.	.	.	.	.	.
WEST VIRGINIA																		
540030003	1	2	1	.	.	02/14/99	.	02/14/99	3	97%	3	100%	3	90%	3	80%	1	1
540090005	1	2	1	.	.	01/03/99	.	01/03/99	3	97%	3	93%	3	90%	3	87%	1	1
540110006	1	2	1	.	.	01/03/99	.	01/03/99	3	94%	3	100%	3	87%	3	97%	1	1
540290011	1	2	1	.	.	01/03/99	.	01/03/99	3	100%	3	93%	3	97%	3	100%	1	1
540290011	2	2	1	.	.	01/03/99	.	01/03/99	3	94%	3	80%	3	97%	3	100%	1	1
540291004	1	2	1	.	.	01/03/99	.	01/03/99	3	94%	3	97%	3	90%	3	100%	1	1
540330003	1	3	1	.	.	01/03/99	.	01/03/99	3	97%	3	97%	3	87%	3	93%	1	1
540390009	1	2	1	.	.	01/03/99	36655	01/03/99	3	90%	3	43%	.	.	.	.	.	.
540390010	1	2	1	.	.	05/12/00	.	05/12/00	.	.	3	37%	3	97%	3	87%	.	.
540391005	1	2	1	.	.	01/03/99	.	01/03/99	3	100%	3	100%	3	97%	3	100%	1	1
540391005	2	2	1	.	.	01/03/99	.	01/03/99	3	97%	3	100%	3	97%	3	80%	1	1
540490006	1	3	1	.	.	01/01/00	.	01/01/00	3	71%	3	97%	3	81%	3	97%	.	1
540511002	1	2	1	.	.	01/03/99	.	01/03/99	3	90%	3	87%	3	97%	3	93%	1	1
540550002	1	3	1	.	.	01/01/00	.	01/01/00	3	97%	3	100%	3	94%	3	77%	1	1
540610003	1	2	1	.	.	01/03/99	.	01/03/99	3	97%	3	97%	3	94%	3	90%	1	1
540690008	1	2	1	.	.	01/03/99	.	01/03/99	3	94%	3	93%	3	97%	3	93%	1	1
540810002	1	3	1	.	.	01/03/99	.	01/03/99	3	97%	3	97%	3	94%	3	100%	1	1
540890001	1	3	1	.	.	01/03/99	.	01/03/99	3	97%	3	97%	3	90%	3	90%	1	1
541071002	1	2	1	.	.	01/03/99	.	01/03/99	3	90%	3	90%	3	90%	3	100%	1	1
WISCONSIN																		
550090005	1	2	1	.	.	01/01/99	.	01/21/99	3	78%	3	97%	3	97%	3	93%	1	1
550090025	1	3	1	.	.	01/01/99	36799	01/03/99	3	94%	3	80%	3	94%	.	.	.	.
550090026	1	2	1	.	.	01/01/99	.	01/03/99	3	91%	3	97%	3	97%	3	100%	1	1
550090028	1	2	1	.	.	02/12/01	.	03/02/01	.	.	.	.	.	.	.	.	.	.
550250025	1	2	1	.	.	01/03/99	.	01/03/99	3	94%	3	97%	3	90%	3	97%	1	1
550250047	1	3	1	.	.	01/03/99	.	01/16/99	3	100%	3	94%	3	100%	3	93%	1	1
550270007	1	3	1	.	.	01/06/99	.	01/06/99	3	90%	3	93%	3	100%	3	100%	1	1

			Data in AIRS?						2000 Information									
STATE / SITE	POC	MT	FRM	Non-FRM Daily	Non-FRM Hourly	Date Sampling Began	Date Sampling Ended	Date of 1st FRM Data Pt	Q1 Freq	Q1%	Q2 Freq	Q2%	Q3 Freq	Q3%	Q4 Freq	Q4%	All 4 Q 75% complete	All 4 Q w/ 11 + samples
550290004	1	2	1	.	.	01/01/99	.	01/03/99	3	100%	3	93%	3	97%	3	100%	1	1
550310025	1	2	1	.	.	01/01/99	.	01/03/99	3	87%	3	97%	3	100%	3	100%	1	1
550430009	1	3	1	.	.	01/06/99	.	01/06/99	6	75%	6	87%	6	75%	6	83%	1	1
550550008	1	3	1	.	.	01/01/99	.	01/03/99	3	94%	3	94%	3	97%	3	97%	1	1
550590019	3	2	1	.	.	12/25/98	.	01/03/99	3	100%	3	87%	3	94%	3	100%	1	1
550710007	1	2	1	.	.	01/01/99	.	01/03/99	3	97%	3	97%	3	100%	3	93%	1	1
550790010	2	2	1	.	.	01/01/99	.	01/05/99	1	96%	1	95%	1	100%	1	92%	1	1
550790026	1	2	1	.	.	01/01/99	.	01/01/99	1	90%	1	98%	1	97%	1	85%	1	1
550790026	5	T	.	1	.	12/13/00	.	.	.	.	.	.	.	.	.	.	.	.
550790043	1	2	1	.	.	01/12/99	.	01/21/99	3	90%	3	91%	3	75%	3	91%	1	1
550790050	1	2	1	.	.	03/13/99	.	03/13/99	3	94%	3	97%	3	97%	3	83%	1	1
550790051	1	2	1	.	.	02/05/99	.	02/05/99	3	87%	3	90%	3	84%	3	93%	1	1
550790059	2	2	1	.	.	12/25/98	.	01/03/99	3	90%	3	91%	3	90%	3	80%	1	1
550790099	1	2	1	.	.	02/05/99	.	02/05/99	3	100%	3	100%	3	97%	3	100%	1	1
550870009	1	2	1	.	.	01/01/99	.	01/03/99	3	94%	3	97%	3	90%	3	100%	1	1
550890008	1	2	1	.	.	03/19/99	.	03/25/99	3	81%	3	88%	3	97%	3	90%	1	1
551050002	1	2	1	.	.	01/03/99	.	01/03/99	3	97%	3	91%	3	91%	3	94%	1	1
551091002	1	3	1	.	.	01/01/99	.	01/09/99	6	75%	6	47%	6	80%	6	100%	.	.
551250001	1	3	1	.	.	01/01/99	.	01/06/99	6	94%	6	100%	6	93%	6	100%	1	1
551330027	2	2	1	.	.	01/01/99	.	01/03/99	1	96%	1	98%	1	98%	1	95%	1	1
551330034	1	2	1	.	.	01/21/99	.	01/21/99	3	100%	3	100%	3	100%	3	97%	1	1
551390011	1	2	1	.	.	01/01/99	.	01/03/99	3	94%	3	93%	3	97%	3	100%	1	1
551410016	1	2	1	.	.	01/03/99	.	01/03/99	3	97%	3	97%	3	94%	3	79%	1	1
WYOMING																		
560131004	1	2	1	.	.	01/01/00	.	01/01/00	3	94%	3	90%	3	100%	3	100%	1	1
560210001	1	2	1	.	.	10/15/98	.	01/03/99	3	90%	3	90%	3	94%	3	93%	1	1
560330001	1	2	1	.	.	10/01/98	.	01/03/99	3	100%	3	100%	3	97%	3	100%	1	1
560330002	1	2	1	.	.	10/01/98	.	01/03/99	3	100%	3	100%	3	100%	3	97%	1	1

Attachment 3

PM2.5 Data Flags

1) Flag Definitions

2) Data Qualifiers by State

3) Null Data Flags by State

The following attachments list the four types of data qualifiers used in the $PM_{2.5}$ Program. Definitions of the data qualifiers are provided below.

Null value codes- Code that replaces the actual routine value			
Code	**Explanation**	**Code**	**Explanation**
9967	Sample Pressure Out of Limits	9982	Vandalism
9968	Technician Unavailable	9983	Collection Error
9969	Construction/Repairs in Area	9984	Lab Error
9970	Shelter Storm Damage	9985	Poor Quality Assurance Results
9971	Shelter Temperature Outside Limits	9986	Calibration
9972	Scheduled But Not Collected	9987	Monitoring Waived
9973	Sample Time Out of Limits	9988	Power Failure (POWR)
9974	Sample Flow Rate Out of Limits	9989	Wildlife Damage
9975	Insufficient Data (Can't Calculate)	9991	Quality Control (QC) Control Points (zero/span)
9976	Filter Damage	9992	QC Audit
9977	Filter Leak	9993	Maintenance/Routine Repairs
9978	Voided by Operator	9994	Unable to Reach Site
9979	Miscellaneous Void	9995	Multi-point Calibration
9980	Machine Malfunction	9997	Building/Site Repair
9981	Bad Weather	9998	Precision/Zero/Span
Exceptional Events			
A	High Winds	L	Highway Construction
E	Forest Fire	P	Roofing Operation
J	Construction/Demolition	Q	Prescribed Burning
I	Unusual Traffic Congestion	U	Sahara Dust
Sampler Generated flags			
T	Multiple PM2.5 Validity Flags (W or X flag)	X	Filter Temperature difference out of spec
W	Flow rate average out of spec.	Y	Elapsed sample time out of Spec.
Data Qualifiers			
1	**Deviation from a CFR method requirement-**	4	**Lab Issue-** possible lab contamination
2	**Operational Deviations-** Out of some pre-defined threshold value.	5	**Outlier -**outside the normal/expected range of concentrations or fails various statistical or comparison tests
3	**Field Issue-** possible field contamination	6	**QAPP -** Data collection prior to QAPP approval

Summary of AIRS PM2.5 Data Flags by State

STATE	Mon. with Data	Total # Values	not Flagged	Total # Flags	Flag % of Values	a	e	f	j	l	n	q	t	u	w	x	y	1	2	3	4	5	6
ALABAMA	25	2401	1974	427	17.8%											43	1	169	214				
ALASKA	9	929	808	121	13.0%		4									6	6	60	35	7	3		
ARIZONA	2	153	153	0	0.0%																		
ARKANSAS	30	2403	2402	1	0.0%																	1	
CALIFORNIA	92	10192	9027	1165	11.4%	7	15		3		2		21		6	1082	22	7					
COLORADO	25	2458	2458	0	0.0%																		
CONNECTICUT	17	1698	1395	303	17.8%								26		1	44	16	125	58	18	4	11	
DELAWARE	9	1408	1297	111	7.9%											60		36	1	13		1	
DISTRICT OF COLUMBIA	5	778	772	6	0.8%								2			3	1						
FLORIDA	29	5919	5919	0	0.0%																		
GEORGIA	30	3096	2729	367	11.9%								16						350			1	
HAWAII	7	914	789	125	13.7%								14			108	1		2				
IDAHO	17	1326	1292	34	2.6%													31	3				
ILLINOIS	35	4152	4152	0	0.0%																		
INDIANA	50	5596	5032	564	10.1%								19			22		433	82	1		7	
IOWA	18	2669	2623	46	1.7%								1			11	7	14	7	1	3	2	
KANSAS	17	1743	1641	102	5.9%										6	95	1						
KENTUCKY	22	2645	1650	995	37.6%		19		1	4			19			51	8	890	3				
LOUISIANA	21	3044	3044	0	0.0%																		
MAINE	15	1164	1164	0	0.0%																		
MARYLAND	21	2324	2324	0	0.0%																		
MASSACHUSETTS	27	2750	2551	199	7.2%								2		1	196							
MICHIGAN	31	3941	3941	0	0.0%																		
MINNESOTA	32	2028	1770	258	12.7%											249	1			5	1	2	
MISSISSIPPI	17	1942	1242	700	36.0%													700					
MISSOURI	21	3773	3579	194	5.1%								10			9	3	115	55			2	
MONTANA	16	1639	1576	63	3.8%		53								1	9							
NEBRASKA	17	1784	1684	100	5.6%												2	98					
NEVADA	10	1184	1061	123	10.4%								15			107	1						
NEW HAMPSHIRE	11	529	2	527	99.6%													497					30
NEW JERSEY	21	2227	2227	0	0.0%																		
NEW MEXICO	18	2401	2387	14	0.6%											13	1						
NEW YORK	49	5805	5739	66	1.1%										1	11					54		
NORTH CAROLINA	47	5737	5647	90	1.6%		33									31	6	20					
NORTH DAKOTA	12	903	886	17	1.9%											17							
OHIO	47	7164	6754	410	5.7%								42		2	341	25						
OKLAHOMA	29	2909	2848	61	2.1%								8			5	48						
OREGON	27	5366	5366	0	0.0%																		
PENNSYLVANIA	50	6290	5834	456	7.2%								23			67	66	248	35	8	2	7	
PUERTO RICO	10	1529	1230	299	19.6%				6	292				1									
RHODE ISLAND	9	1251	1251	0	0.0%																		
SOUTH CAROLINA	24	3190	3114	76	2.4%		13						50			9				4			
SOUTH DAKOTA	11	897	223	674	75.1%								112			85		459	18				
TENNESSEE	31	3951	1694	2257	57.1%								301			150	2	1759	44			1	
TEXAS	74	8676	8350	326	3.8%							1	12		1	235			47			30	
UTAH	16	1880	1871	9	0.5%												9						
VERMONT	6	665	665	0	0.0%																		
VIRGIN ISLANDS	2	64	58	6	9.4%									6									
VIRGINIA	20	2771	2732	39	1.4%		39																
WASHINGTON	30	3988	3980	8	0.2%											8							
WEST VIRGINIA	19	2037	1983	54	2.7%			1					12			38	3						
WISCONSIN	28	3725	3722	3	0.1%											3							
WYOMING	4	472	444	28	5.9%											27	1						
	1262	150480	139056	11424	7.6%	7	176	1	10	296	2	1	705	7	19	3135	231	5661	954	57	67	65	30
				% of Flagged Values		0.1%	1.5%	0.0%	0.1%	2.6%	0.0%	0.0%	6.2%	0.1%	0.2%	27.4%	2.0%	49.6%	8.4%	0.5%	0.6%	0.6%	0.3%
				% of Total Values		0.5%	0.1%	0.0%	0.0%	0.2%	0.0%	0.0%	0.5%	0.0%	0.0%	2.1%	0.2%	3.8%	0.6%	0.0%	0.0%	0.0%	0.0%

Summary of AIRS PM2.5 Null Value Reason Codes By State

STATE	Total # Mon. with Data	Total # of AIRS Data Rcrds.	# of Null Data Pts.	Null % of Rcrds.	9964	9965	9968	9969	9970	9971	9972	9973	9974	9975	9976	9977	9978	9979	9980	9981	9982	9983	9984	9985	9986	9987	9988	9989	9990	9992	9993	9994	9995	9996	9997	9998
ALABAMA	25	2694	293	10.9%				2			48	16			3		6	12	116			16	6	1			36				27	4				
ALASKA	9	929	0	0.0%																																
ARIZONA	2	153	0	0.0%																																
ARKANSAS	30	2403	0	0.0%																																
CALIFORNIA	92	11761	1569	13.3%			5	1		1	248	123	74	4	19	27	10	51	413			173	12	363	4		8		1	10	18	2	1		1	
COLORADO	25	2656	198	7.5%							86						14	2	72								7								17	
CONNECTICUT	17	2110	412	19.5%							10	35	6					8	72	272		4					5									
DELAWARE	9	1599	191	11.9%								21			3		1	15	115			5	11	2			9				9					
DISTRICT OF COLUMBIA	5	792	14	1.8%															4								10									
FLORIDA	29	6060	141	2.3%														141																		
GEORGIA	30	3699	603	16.3%			7				45	41		1	166		17	104	151			40	1		2		14				11				3	
HAWAII	7	1000	86	8.6%							3	1					1	2	74				2		3											
IDAHO	17	1359	33	2.4%							8	2			2		5		13			1					1				1					
ILLINOIS	35	4152	0	0.0%																																
INDIANA	50	6426	830	12.9%			1				120	51	2	4	33	12	2	1	249	5	1	185	14	14			104			1	2	7			22	
IOWA	18	2820	151	5.4%							4			4	1			5	100			23	5	1			8									
KANSAS	17	1832	89	4.9%							4	9		10	1		11	10	35			6					3									
KENTUCKY	22	2989	344	11.5%					41			31		6	11		22	82	68			24	37			1	10				2				9	
LOUISIANA	21	3044	0	0.0%																																
MAINE	15	1299	135	10.4%								9	5		11		10		62	2		17	1				8				1	4			5	
MARYLAND	21	2324	0	0.0%																																
MASSACHUSETTS	27	3909	1159	29.6%								29	102		3			19	737	12		129	63	1			27					34			3	
MICHIGAN	31	3941	0	0.0%																																
MINNESOTA	32	2468	440	17.8%								53	4		1		1	186	3			27	158	6			1									
MISSISSIPPI	17	2040	98	4.8%								2		1	3			19	50	1			20				1					1				
MISSOURI	21	3862	89	2.3%							4	3			24		12	2	29			2			4		3				1				5	
MONTANA	16	1836	197	10.7%							20	34	2	1	2		1	25	21		2	19		70												
NEBRASKA	17	2084	300	14.4%		14					38			19	31			45	75			56	21				1									
NEVADA	10	1228	44	3.6%							1	1			3			29	8			2														
NEW HAMPSHIRE	11	752	223	29.7%								4	3	48			23	60	78	1		1					4					1				
NEW JERSEY	21	2227	0	0.0%																																
NEW MEXICO	18	2513	112	4.5%							1	7			24		3	2	1			46	10	1							4	10	2	1		
NEW YORK	49	6609	804	12.2%							2	44	24	16	187	2	10	104	100			132	143				31				2	2			5	
NORTH CAROLINA	47	6255	518	8.3%							4	49			16		61	58	197	11	6	41		3	1		60		1		8		2			
NORTH DAKOTA	12	941	38	4.0%							7	9			1		8	1	11			1														
OHIO	47	8726	1562	17.9%							15	14	45		17		22	7	1153	12		35	54	14	10	1	46				18	13	5		80	1
OKLAHOMA	29	2909	0	0.0%																																
OREGON	27	5366	0	0.0%																																
PENNSYLVANIA	50	6575	285	4.3%								7	1		4			27	41			48	145				6	1			5					
PUERTO RICO	10	1529	0	0.0%																																
RHODE ISLAND	9	1395	144	10.3%								49			2			27	57								7				2					
SOUTH CAROLINA	24	3434	244	7.1%								1	5		9			4	97	1	7	57	33				28	2								
SOUTH DAKOTA	11	1163	266	22.9%								11					9		113			1	132													
TENNESSEE	31	4646	695	15.0%			9				5	7	3	3	9		11	138	363			18	34		6		67				15		7			
TEXAS	74	8913	237	2.7%	2						40	156			4			10				17	3				5									
UTAH	16	2011	131	6.5%								1		11	2		25	39	38								10			1	1		3			
VERMONT	6	718	53	7.4%															29			16					8									
VIRGIN ISLANDS	2	105	41	39.0%			8				3	4		2				1	16	3		1									1	2				
VIRGINIA	20	2771	0	0.0%																																
WASHINGTON	30	3998	10	0.3%															10																	
WEST VIRGINIA	19	2196	159	7.2%								35			3			11	57			18	19				15			1						
WISCONSIN	28	3801	76	2.0%							39	6			10		4					15					2									
WYOMING	4	487	15	3.1%							2	7		1				3	2																	
	1262	163509	13029	8.0%	2	14	30	3	41	1	757	872	276	131	605	41	289	1250	4830	320	16	1176	924	476	30	2	545	3	2	13	128	80	20	1	150	1
			% of Flagged Values		0.0%	0.1%	0.2%	0.0%	0.3%	0.0%	5.8%	6.7%	2.1%	1.0%	4.6%	0.3%	2.2%	9.6%	37.1%	2.5%	0.1%	9.0%	7.1%	3.7%	3.2%	0.0%	4.2%	0.0%	0.0%	0.1%	1.0%	0.6%	0.2%	0.0%	1.2%	0.0%
			% of Total Values		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%	0.2%	0.1%	0.4%	0.0%	0.2%	0.8%	3.0%	0.2%	0.0%	0.7%	0.6%	0.3%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%

Attachment 4

PM2.5 Precision

This section covers the following attachments related to precision:

4-1 Quarterly Completeness Graphs by EPA Region
4-2 Collocated Precision Data Completeness
4-3 Collocated Precision Estimates

1) Quarterly National Precision Estimates by Method Designation
2) Number of Pairs in National Precision Estimate by Method Designation
3) Collocated Precision Estimates Aggregated by Region/State/Reporting Organizations/Method Designation

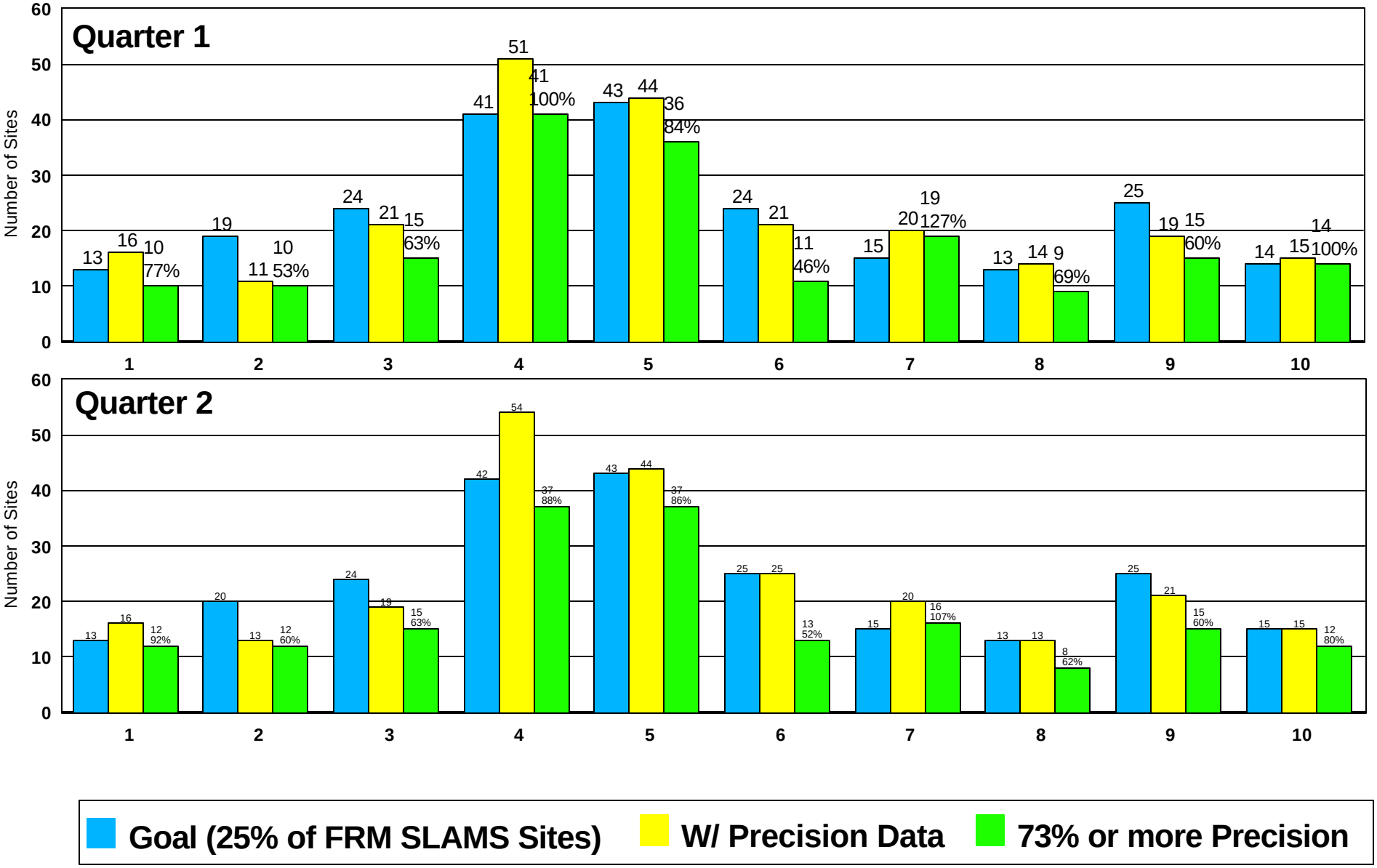
Attachment 4-1

Quarterly Completeness Graphs by EPA Region

Completeness - Precision

Data Capture by Region, 2000 Qtr1-Qtr4

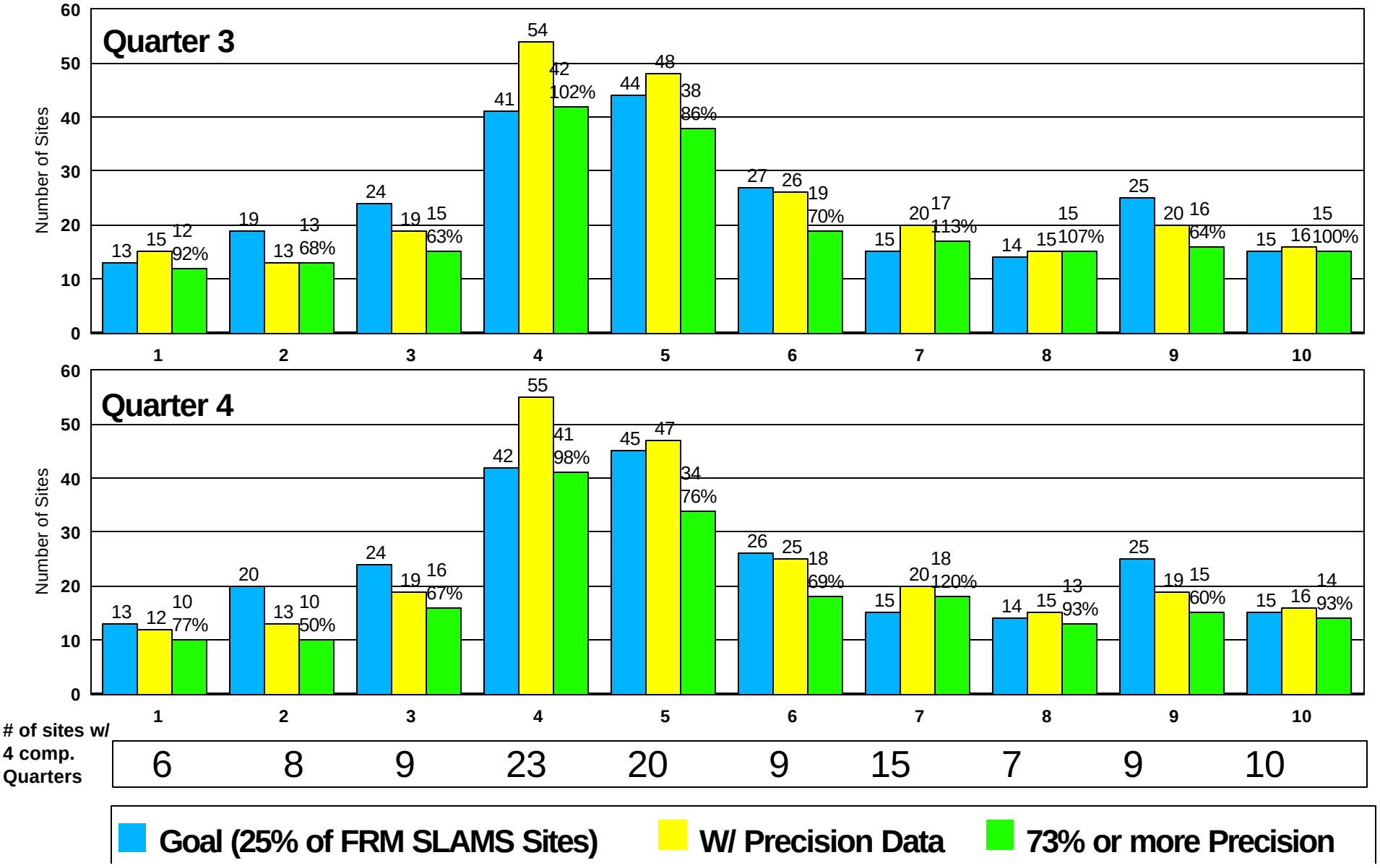
[7/11/01 AIRS Extraction]



Completeness - Precision

Data Capture by Region, 2000 Qtr1-Qtr4

[7/11/01 AIRS Extraction]



Attachment 4-2

Collocated Precision Data Completeness National and by State/Site

Field Definitions

STATE:	U.S. and State total rows show the total number of FRM SLAMS sites that operated in 2000 [the number of sites where the primary FRM sampler has a Monitor Type='2'], the number of FRM SLAMS sites that operated in all 4 quarters of 2000, the number of SLAMS sites where flow rate checks were required [the number of FRM SLAMS sites that operated in all 4 quarters], the number of sites reporting accuracy transactions, and the number of sites with 4 quarters of accuracy data. After each State name, all FRM SLAMS sites located in that State are listed.
SITE:	Site Identification Code = State FIPS code (2 char.) + County FIPS code (3 char.) + AIRS Site ID (4 char.)
POC:	Parameter Occurrence Code. POC is left blank for Sites that didn't report flow rate information in year 2000.
# of Accuracy Records, Q1-Q4:	The number of flow rate audits reported in each calender quarter of 2000
Number of Q w/ Accuracy:	The number of quarters where 'accuracy' information are reported
Accuracy in All 4 Q's:	'1' = Flow rate audits reported in each quarter of 2000

STATE	SITE	POC	1st Quarter # Precision*	1st Quarter Percent	2nd Quarter # Precision*	2nd Quarter Percent	3rd Quarter # Precision*	3rd Quarter Percent	4th Quarter # Precision*	4th Quarter Percent	Number of Q w/ P data	All 4 Q's Complete
U.S.	**# SLAMS operated in 2000=972; # SLAMS operated all 4 Q=906; # where Prec. required (25%)=227; # w/ Prec. Data =260; # w/ 4 Comp. Q Prec. Data =116**											
ALABAMA	**# SLAMS operated in 2000=16; # SLAMS operated all 4 Q=16; # where Prec. required (25%)= 4; # w/ Prec. Data = 6; # w/ 4 Comp. Q Prec. Data = 1**											
	010730023	1	9	60%	11	73%	13	87%	12	80%	4	.
	010732003	1	12	80%	13	87%	10	67%	14	93%	4	.
	010735002	1	5	33%	3	20%	5	33%	4	27%	4	.
	010890014	1	16	100%	13	87%	14	93%	15	100%	4	1
	010970002	1	0	0%	9	60%	13	87%	14	93%	3	.
	011010007	1	0	0%	9	60%	15	100%	14	93%	3	.
ALASKA	**# SLAMS operated in 2000= 7; # SLAMS operated all 4 Q= 6; # where Prec. required (25%)= 2; # w/ Prec. Data = 3; # w/ 4 Comp. Q Prec. Data = 3**											
	020200018	1	11	73%	15	100%	15	100%	15	100%	4	1
	020900010	2	11	73%	14	93%	14	93%	15	100%	4	1
	021100004	2	19	100%	17	100%	14	93%	15	100%	4	1
ARIZONA	**# SLAMS operated in 2000= 5; # SLAMS operated all 4 Q= 5; # where Prec. required (25%)= 1; # w/ Prec. Data = 1; # w/ 4 Comp. Q Prec. Data = 0**											
	040191028	1	3	20%	11	73%	9	60%	0	0%	3	.
ARKANSAS	**# SLAMS operated in 2000=24; # SLAMS operated all 4 Q=14; # where Prec. required (25%)= 4; # w/ Prec. Data = 7; # w/ 4 Comp. Q Prec. Data = 1**											
	050010001	1	16	100%	13	87%	10	67%	0	0%	3	.
	050010010	1	.	.	.	.	3	20%	8	53%	2	.
	050310001	1	10	67%	10	67%	14	93%	12	80%	4	.
	050450002	1	.	.	10	67%	14	93%	14	93%	3	.
	051190007	1	8	53%	15	100%	14	93%	12	80%	4	.
	051191008	1	10	67%	10	67%	13	87%	14	93%	4	.
	051310008	1	13	87%	14	93%	14	93%	12	80%	4	1
CALIFORNIA	**# SLAMS operated in 2000=83; # SLAMS operated all 4 Q=80; # where Prec. required (25%)=20; # w/ Prec. Data =17; # w/ 4 Comp. Q Prec. Data = 7**											
	060170011	1	16	100%	13	87%	15	100%	15	100%	4	1
	060190008	1	11	73%	13	87%	17	100%	10	67%	4	.
	060250005	1	11	73%	14	93%	11	73%	11	73%	4	1
	060271003	1	0	0%	8	53%	15	100%	12	80%	3	.
	060290014	1	12	80%	10	67%	14	93%	12	80%	4	.
	060370002	1	0	0%	0	0%	0	0%	1	7%	1	.
	060371103	1	14	93%	14	93%	14	93%	15	100%	4	1
	060571001	1	15	100%	12	80%	14	93%	12	80%	4	1
	060652002	1	0	0%	9	60%	14	93%	14	93%	3	.
	060658001	1	10	67%	7	47%	15	100%	10	67%	4	.
	060670006	1	13	87%	14	93%	7	47%	0	0%	3	.
	060710014	1	7	47%	11	73%	0	0%	0	0%	2	.
	060712002	1	13	87%	12	80%	11	73%	15	100%	4	1
	060730006	1	11	73%	10	67%	10	67%	13	87%	4	.
	060798001	1	16	100%	15	100%	12	80%	11	73%	4	1
	061010003	1	15	100%	15	100%	13	87%	16	100%	4	1
	061110007	1	10	67%	13	87%	6	40%	12	80%	4	.
COLORADO	**# SLAMS operated in 2000=13; # SLAMS operated all 4 Q=13; # where Prec. required (25%)= 3; # w/ Prec. Data = 3; # w/ 4 Comp. Q Prec. Data = 3**											
	080010001	1	16	100%	13	87%	16	100%	14	93%	4	1
	080410011	1	13	87%	11	73%	16	100%	15	100%	4	1
	080770003	1	16	100%	15	100%	14	93%	15	100%	4	1
CONNECTICUT	**# SLAMS operated in 2000=10; # SLAMS operated all 4 Q= 9; # where Prec. required (25%)= 2; # w/ Prec. Data = 4; # w/ 4 Comp. Q Prec. Data = 3**											
	090010010	1	22	100%	13	87%	13	87%	13	87%	4	1
	090090018	1	24	100%	9	60%	13	87%	13	87%	4	.
	090091123	1	24	100%	12	80%	15	100%	12	80%	4	1
	090092123	1	22	100%	12	80%	15	100%	11	73%	4	1
DELAWARE	**# SLAMS operated in 2000= 7; # SLAMS operated all 4 Q= 7; # where Prec. required (25%)= 2; # w/ Prec. Data = 2; # w/ 4 Comp. Q Prec. Data = 2**											
	100031012	1	15	100%	16	100%	15	100%	30	100%	4	1
	100032004	1	17	100%	33	100%	13	87%	15	100%	4	1
DISTRICT OF COLUMBIA	**# SLAMS operated in 2000= 3; # SLAMS operated all 4 Q= 3; # where Prec. required (25%)= 1; # w/ Prec. Data = 2; # w/ 4 Comp. Q Prec. Data = 0**											
	110010041	1	18	100%	10	67%	9	60%	11	73%	4	.
	110010043	1	8	53%	3	20%	2	13%	1	7%	4	.
FLORIDA	**# SLAMS operated in 2000=29; # SLAMS operated all 4 Q=29; # where Prec. required (25%)= 7; # w/ Prec. Data =14; # w/ 4 Comp. Q Prec. Data = 6**											
	120010023	1	15	100%	13	87%	15	100%	0	0%	3	.
	120111002	1	14	93%	14	93%	15	100%	14	93%	4	1
	120170005	1	0	0%	0	0%	0	0%	24	100%	1	.
	120310099	1	12	80%	6	40%	0	0%	12	80%	3	.
	120330004	1	14	93%	13	87%	0	0%	0	0%	2	.
	120570030	1	14	93%	13	87%	14	93%	14	93%	4	1
	120710005	1	11	73%	18	100%	20	100%	28	100%	4	1
	120952002	1	16	100%	14	93%	15	100%	14	93%	4	1
	120992003	1	13	87%	0	0%	11	73%	15	100%	3	.
	121030018	1	13	87%	13	87%	14	93%	13	87%	4	1
	121056006	1	11	73%	11	73%	10	67%	13	87%	4	.
	121111002	1	10	67%	13	87%	11	73%	11	73%	4	.
	121150013	1	16	100%	10	67%	12	80%	15	100%	4	.
	121171002	1	14	93%	14	93%	15	100%	15	100%	4	1
GEORGIA	**# SLAMS operated in 2000=23; # SLAMS operated all 4 Q=23; # where Prec. required (25%)= 6; # w/ Prec. Data = 6; # w/ 4 Comp. Q Prec. Data = 0**											
	130210007	1	13	87%	10	67%	8	53%	8	53%	4	.
	130510017	1	14	93%	8	53%	6	40%	9	60%	4	.
	130892001	1	11	73%	13	87%	4	27%	11	73%	4	.
	131210032	1	10	67%	9	60%	7	47%	9	60%	4	.
	132150001	1	12	80%	10	67%	13	87%	9	60%	4	.
	132450005	1	4	27%	8	53%	7	47%	9	60%	4	.

STATE	SITE	POC	1st Quarter # Precision*	1st Quarter Percent	2nd Quarter # Precision*	2nd Quarter Percent	3rd Quarter # Precision*	3rd Quarter Percent	4th Quarter # Precision*	4th Quarter Percent	Number of Q w/ P data	All 4 Q's Complete
HAWAII	**# SLAMS operated in 2000= 5; # SLAMS operated all 4 Q= 5; # where Prec. required (25%)= 1; # w/ Prec. Data = 2; # w/ 4 Comp. Q Prec. Data = 0**											
	150031001	1	13	87%	10	67%	15	100%	12	80%	4	.
	150032004	1	14	93%	11	73%	13	87%	10	67%	4	.
IDAHO	**# SLAMS operated in 2000= 7; # SLAMS operated all 4 Q= 7; # where Prec. required (25%)= 2; # w/ Prec. Data = 2; # w/ 4 Comp. Q Prec. Data = 1**											
	160270004	2	.	.	.	.	6	40%	15	100%	2	.
	160550006	2	13	87%	14	93%	14	93%	14	93%	4	1
ILLINOIS	**# SLAMS operated in 2000=35; # SLAMS operated all 4 Q=35; # where Prec. required (25%)= 9; # w/ Prec. Data = 9; # w/ 4 Comp. Q Prec. Data = 1**											
	170310050	1	11	73%	13	87%	13	87%	2	13%	4	.
	170310052	1	11	73%	12	80%	13	87%	11	73%	4	1
	170313301	1	11	73%	9	60%	12	80%	12	80%	4	.
	170314201	1	11	73%	9	60%	11	73%	11	73%	4	.
	171150013	1	13	87%	13	87%	9	60%	12	80%	4	.
	171191007	1	11	73%	14	93%	9	60%	12	80%	4	.
	171193007	1	14	93%	14	93%	12	80%	10	67%	4	.
	171430037	1	13	87%	1	7%	6	40%	11	73%	4	.
	171610003	1	10	67%	11	73%	14	93%	7	47%	4	.
INDIANA	**# SLAMS operated in 2000=40; # SLAMS operated all 4 Q=39; # where Prec. required (25%)=10; # w/ Prec. Data =10; # w/ 4 Comp. Q Prec. Data = 6**											
	180030004	1	14	93%	12	80%	15	100%	13	87%	4	1
	180431004	1	10	67%	11	73%	10	67%	14	93%	4	.
	180891016	1	16	100%	13	87%	12	80%	10	67%	4	.
	180950009	1	13	87%	12	80%	14	93%	13	87%	4	1
	180970081	1	12	80%	14	93%	13	87%	10	67%	4	.
	180970083	1	14	93%	13	87%	12	80%	16	100%	4	1
	181411008	1	7	47%	13	87%	13	87%	14	93%	4	.
	181570007	1	14	93%	13	87%	14	93%	11	73%	4	1
	181630006	1	13	87%	14	93%	12	80%	12	80%	4	1
	181670023	1	13	87%	14	93%	15	100%	15	100%	4	1
IOWA	**# SLAMS operated in 2000=18; # SLAMS operated all 4 Q=16; # where Prec. required (25%)= 4; # w/ Prec. Data = 5; # w/ 4 Comp. Q Prec. Data = 5**											
	190450021	1	25	100%	30	100%	27	100%	30	100%	4	1
	191130037	1	15	100%	16	100%	22	100%	16	100%	4	1
	191532520	1	21	100%	21	100%	20	100%	20	100%	4	1
	191550009	1	22	100%	29	100%	26	100%	23	100%	4	1
	191630015	2	22	100%	21	100%	23	100%	19	100%	4	1
KANSAS	**# SLAMS operated in 2000=12; # SLAMS operated all 4 Q=12; # where Prec. required (25%)= 3; # w/ Prec. Data = 4; # w/ 4 Comp. Q Prec. Data = 3**											
	200910007	1	16	100%	14	93%	12	80%	15	100%	4	1
	201070002	1	15	100%	12	80%	10	67%	15	100%	4	.
	201730010	1	13	87%	14	93%	15	100%	14	93%	4	1
	202090021	1	16	100%	15	100%	15	100%	14	93%	4	1
KENTUCKY	**# SLAMS operated in 2000=19; # SLAMS operated all 4 Q=19; # where Prec. required (25%)= 5; # w/ Prec. Data = 6; # w/ 4 Comp. Q Prec. Data = 3**											
	210190017	1	12	80%	8	53%	14	93%	14	93%	4	.
	210590014	1	0	0%	10	67%	14	93%	14	93%	3	.
	210670012	1	14	93%	12	80%	13	87%	14	93%	4	1
	211110043	1	11	73%	14	93%	12	80%	11	73%	4	1
	211950002	1	9	60%	12	80%	15	100%	12	80%	4	.
	212270007	1	15	100%	13	87%	12	80%	14	93%	4	1
LOUISIANA	**# SLAMS operated in 2000=21; # SLAMS operated all 4 Q=21; # where Prec. required (25%)= 5; # w/ Prec. Data = 4; # w/ 4 Comp. Q Prec. Data = 4**											
	220171002	1	16	100%	14	93%	11	73%	15	100%	4	1
	220330009	1	16	100%	15	100%	13	87%	15	100%	4	1
	220550005	1	15	100%	11	73%	14	93%	15	100%	4	1
	220710012	1	14	93%	15	100%	12	80%	14	93%	4	1
MAINE	**# SLAMS operated in 2000= 5; # SLAMS operated all 4 Q= 5; # where Prec. required (25%)= 1; # w/ Prec. Data = 3; # w/ 4 Comp. Q Prec. Data = 1**											
	230030013	1	14	93%	13	87%	14	93%	0	0%	3	.
	230050027	1	14	93%	14	93%	14	93%	11	73%	4	1
	230190002	1	15	100%	9	60%	9	60%	12	80%	4	.
MARYLAND	**# SLAMS operated in 2000=18; # SLAMS operated all 4 Q=18; # where Prec. required (25%)= 5; # w/ Prec. Data = 3; # w/ 4 Comp. Q Prec. Data = 0**											
	240032002	1	0	0%	18	100%	28	100%	22	100%	3	.
	240330001	1	2	13%	18	100%	24	100%	23	100%	4	.
	245100035	1	7	47%	11	73%	36	100%	30	100%	4	.
MASSACHUSETTS	**# SLAMS operated in 2000=21; # SLAMS operated all 4 Q=20; # where Prec. required (25%)= 5; # w/ Prec. Data = 5; # w/ 4 Comp. Q Prec. Data = 2**											
	250130016	1	22	100%	30	100%	26	100%	14	93%	4	1
	250210007	1	28	100%	15	100%	0	0%	0	0%	2	.
	250230004	1	4	27%	29	100%	28	100%	28	100%	4	.
	250250027	1	6	40%	14	93%	11	73%	0	0%	3	.
	250270020	1	17	100%	24	100%	22	100%	19	100%	4	1
MICHIGAN	**# SLAMS operated in 2000=24; # SLAMS operated all 4 Q=22; # where Prec. required (25%)= 6; # w/ Prec. Data = 6; # w/ 4 Comp. Q Prec. Data = 5**											
	260650012	1	29	100%	22	100%	25	100%	15	100%	4	1
	260770008	1	24	100%	27	100%	30	100%	28	100%	4	1
	260810020	1	15	100%	14	93%	12	80%	13	87%	4	1
	261210040	1	16	100%	14	93%	13	87%	14	93%	4	1
	261450018	1	7	47%	18	100%	28	100%	11	73%	4	.
	261630001	1	12	80%	11	73%	14	93%	14	93%	4	1
MINNESOTA	**# SLAMS operated in 2000=16; # SLAMS operated all 4 Q=16; # where Prec. required (25%)= 4; # w/ Prec. Data = 4; # w/ 4 Comp. Q Prec. Data = 0**											
	270530960	1	1	7%	0	0%	0	0%	0	0%	1	.
	271230866	1	15	100%	8	53%	6	40%	10	67%	4	.
	271230868	1	15	100%	6	40%	9	60%	0	0%	3	.
	271377550	1	14	93%	10	67%	14	93%	11	73%	4	.
MISSISSIPPI	**# SLAMS operated in 2000=16; # SLAMS operated all 4 Q=15; # where Prec. required (25%)= 4; # w/ Prec. Data = 4; # w/ 4 Comp. Q Prec. Data = 0**											

STATE	SITE	POC	1st Quarter # Precision*	1st Quarter Percent	2nd Quarter # Precision*	2nd Quarter Percent	3rd Quarter # Precision*	3rd Quarter Percent	4th Quarter # Precision*	4th Quarter Percent	Number of Q w/ P data	All 4 Q's Complete
	280330002	1	12	80%	13	87%	15	100%	5	33%	4	.
	280350004	1	14	93%	15	100%	14	93%	4	27%	4	.
	280670002	1	0	0%	7	47%	15	100%	4	27%	3	.
	281210001	1	9	60%	8	53%	11	73%	5	33%	4	.
MISSOURI	**# SLAMS operated in 2000=19; # SLAMS operated all 4 Q=17; # where Prec. required (25%)= 4; # w/ Prec. Data = 7; # w/ 4 Comp. Q Prec. Data = 7**											
	290210010	1	30	100%	28	100%	30	100%	29	100%	4	1
	290470026	1	15	100%	15	100%	14	93%	14	93%	4	1
	290770032	1	14	93%	14	93%	15	100%	15	100%	4	1
	290952002	1	16	100%	15	100%	15	100%	15	100%	4	1
	291831002	1	26	100%	27	100%	31	100%	29	100%	4	1
	291892003	1	15	100%	12	80%	15	100%	13	87%	4	1
	295100085	1	88	100%	84	100%	91	100%	74	100%	4	1
MONTANA	**# SLAMS operated in 2000= 7; # SLAMS operated all 4 Q= 7; # where Prec. required (25%)= 2; # w/ Prec. Data = 2; # w/ 4 Comp. Q Prec. Data = 0**											
	300530018	1	12	80%	0	0%	11	73%	7	47%	3	.
	300630024	1	12	80%	0	0%	14	93%	2	13%	3	.
NEBRASKA	**# SLAMS operated in 2000=13; # SLAMS operated all 4 Q=13; # where Prec. required (25%)= 3; # w/ Prec. Data = 4; # w/ 4 Comp. Q Prec. Data = 0**											
	310550019	1	11	73%	9	60%	13	87%	9	60%	4	.
	310550052	1	11	73%	5	33%	7	47%	2	13%	4	.
	311090022	1	11	73%	9	60%	11	73%	11	73%	4	.
	311530007	1	6	40%	10	67%	7	47%	13	87%	4	.
NEVADA	**# SLAMS operated in 2000= 8; # SLAMS operated all 4 Q= 8; # where Prec. required (25%)= 2; # w/ Prec. Data = 2; # w/ 4 Comp. Q Prec. Data = 2**											
	320030560	1	16	100%	15	100%	15	100%	15	100%	4	1
	320310016	1	18	100%	18	100%	19	100%	18	100%	4	1
NEW HAMPSHIRE	**# SLAMS operated in 2000= 9; # SLAMS operated all 4 Q= 8; # where Prec. required (25%)= 2; # w/ Prec. Data = 2; # w/ 4 Comp. Q Prec. Data = 0**											
	330070014	1	1	7%	5	33%	8	53%	4	27%	4	.
	330110019	1	10	67%	7	47%	5	33%	0	0%	3	.
NEW JERSEY	**# SLAMS operated in 2000=19; # SLAMS operated all 4 Q=19; # where Prec. required (25%)= 5; # w/ Prec. Data = 3; # w/ 4 Comp. Q Prec. Data = 0**											
	340070003	1	14	93%	11	73%	13	87%	7	47%	4	.
	340171003	1	9	60%	11	73%	13	87%	11	73%	4	.
	340390004	1	13	87%	15	100%	13	87%	10	67%	4	.
NEW MEXICO	**# SLAMS operated in 2000= 3; # SLAMS operated all 4 Q= 2; # where Prec. required (25%)= 1; # w/ Prec. Data = 2; # w/ 4 Comp. Q Prec. Data = 1**											
	350010023	1	74	100%	66	100%	72	100%	65	100%	4	1
	350010024	1	0	0%	1	7%	0	0%	2	13%	2	.
NEW YORK	**# SLAMS operated in 2000=50; # SLAMS operated all 4 Q=43; # where Prec. required (25%)=11; # w/ Prec. Data = 8; # w/ 4 Comp. Q Prec. Data = 8**											
	360010005	1	18	100%	23	100%	28	100%	26	100%	4	1
	360050110	1	21	100%	21	100%	30	100%	27	100%	4	1
	360556001	1	18	100%	23	100%	24	100%	21	100%	4	1
	360610056	1	27	100%	28	100%	28	100%	27	100%	4	1
	360610062	1	23	100%	27	100%	30	100%	30	100%	4	1
	360632008	1	12	80%	20	100%	30	100%	26	100%	4	1
	360671015	1	14	93%	21	100%	24	100%	26	100%	4	1
	360810094	1	23	100%	24	100%	27	100%	29	100%	4	1
NORTH CAROLINA	**# SLAMS operated in 2000=31; # SLAMS operated all 4 Q=28; # where Prec. required (25%)= 7; # w/ Prec. Data =11; # w/ 4 Comp. Q Prec. Data = 6**											
	370210034	1	10	67%	4	27%	14	93%	12	80%	4	.
	370510009	1	14	93%	13	87%	15	100%	13	87%	4	1
	370670024	1	14	93%	10	67%	12	80%	10	67%	4	.
	370710016	1	13	87%	15	100%	13	87%	14	93%	4	1
	370810009	1	10	67%	10	67%	11	73%	12	80%	4	.
	371190040	1	13	87%	12	80%	12	80%	0	0%	3	.
	371190042	1	.	.	.	.	2	13%	14	93%	2	.
	371210001	1	12	80%	14	93%	15	100%	15	100%	4	1
	371290009	1	11	73%	11	73%	13	87%	13	87%	4	1
	371470005	1	14	93%	14	93%	14	93%	11	73%	4	1
	371830014	1	12	80%	14	93%	15	100%	14	93%	4	1
NORTH DAKOTA	**# SLAMS operated in 2000= 7; # SLAMS operated all 4 Q= 6; # where Prec. required (25%)= 2; # w/ Prec. Data = 2; # w/ 4 Comp. Q Prec. Data = 2**											
	380171004	1	28	100%	29	100%	31	100%	27	100%	4	1
	380570004	1	14	93%	15	100%	14	93%	15	100%	4	1
OHIO	**# SLAMS operated in 2000=45; # SLAMS operated all 4 Q=37; # where Prec. required (25%)= 9; # w/ Prec. Data =15; # w/ 4 Comp. Q Prec. Data = 5**											
	390170003	1	16	100%	15	100%	15	100%	15	100%	4	1
	390350038	1	0	0%	0	0%	11	73%	12	80%	2	.
	390350060	1	14	93%	11	73%	14	93%	11	73%	4	1
	390490025	1	10	67%	12	80%	14	93%	11	73%	4	.
	390610014	1	16	100%	14	93%	15	100%	15	100%	4	1
	390610041	1	16	100%	15	100%	15	100%	0	0%	3	.
	390811001	1	5	33%	11	73%	8	53%	9	60%	4	.
	390851001	1	0	0%	0	0%	7	47%	14	93%	2	.
	390932003	1	0	0%	0	0%	0	0%	3	20%	1	.
	390950024	1	0	0%	0	0%	10	67%	5	33%	2	.
	390990005	1	12	80%	14	93%	15	100%	11	73%	4	1
	391130014	1	0	0%	15	100%	13	87%	12	80%	3	.
	391450013	1	0	0%	0	0%	4	27%	10	67%	2	.
	391510017	1	14	93%	14	93%	14	93%	15	100%	4	1
	391530017	1	9	60%	10	67%	14	93%	11	73%	4	.
OKLAHOMA	**# SLAMS operated in 2000= 4; # SLAMS operated all 4 Q= 4; # where Prec. required (25%)= 1; # w/ Prec. Data = 1; # w/ 4 Comp. Q Prec. Data = 0**											
	401430110	1	14	93%	8	53%	13	87%	14	93%	4	.
OREGON	**# SLAMS operated in 2000=25; # SLAMS operated all 4 Q=25; # where Prec. required (25%)= 6; # w/ Prec. Data = 7; # w/ 4 Comp. Q Prec. Data = 3**											
	410290133	1	12	80%	12	80%	14	93%	11	73%	4	1

STATE	SITE	POC	1st Quarter # Precision*	1st Quarter Percent	2nd Quarter # Precision*	2nd Quarter Percent	3rd Quarter # Precision*	3rd Quarter Percent	4th Quarter # Precision*	4th Quarter Percent	Number of Q w/ P data	All 4 Q's Complete
	410330107	1	12	80%	10	67%	14	93%	12	80%	4	.
	410370001	1	12	80%	14	93%	12	80%	14	93%	4	1
	410390060	1	27	100%	0	0%	0	0%	0	0%	1	.
	410510080	1	15	100%	15	100%	14	93%	15	100%	4	1
	410650007	1	14	93%	10	67%	13	87%	14	93%	4	.
	410671003	1	14	93%	11	73%	14	93%	10	67%	4	.
PENNSYLVANIA	**# SLAMS operated in 2000=37; # SLAMS operated all 4 Q=36; # where Prec. required (25%)= 9; # w/ Prec. Data =10; # w/ 4 Comp. Q Prec. Data = 2**											
	420030008	1	8	53%	0	0%	0	0%	0	0%	1	.
	420030064	1	13	87%	0	0%	0	0%	0	0%	1	.
	420031301	1	12	80%	0	0%	0	0%	0	0%	1	.
	420070014	1	12	80%	13	87%	6	40%	8	53%	4	.
	420450002	1	15	100%	11	73%	10	67%	12	80%	4	.
	420692006	1	15	100%	12	80%	14	93%	12	80%	4	1
	420710007	1	14	93%	9	60%	12	80%	11	73%	4	.
	421010004	1	10	67%	4	27%	11	73%	11	73%	4	.
	421250005	1	10	67%	14	93%	14	93%	10	67%	4	.
	421330008	1	14	93%	12	80%	15	100%	14	93%	4	1
PUERTO RICO	**# SLAMS operated in 2000=10; # SLAMS operated all 4 Q=10; # where Prec. required (25%)= 3; # w/ Prec. Data = 2; # w/ 4 Comp. Q Prec. Data = 0**											
	720610005	1	0	0%	6	40%	11	73%	10	67%	3	.
	721270003	1	0	0%	12	80%	11	73%	12	80%	3	.
RHODE ISLAND	**# SLAMS operated in 2000= 6; # SLAMS operated all 4 Q= 6; # where Prec. required (25%)= 2; # w/ Prec. Data = 2; # w/ 4 Comp. Q Prec. Data = 0**											
	440070022	1	8	53%	12	80%	14	93%	9	60%	4	.
	440071010	1	10	67%	14	93%	14	93%	12	80%	4	.
SOUTH CAROLINA	**# SLAMS operated in 2000=14; # SLAMS operated all 4 Q=13; # where Prec. required (25%)= 3; # w/ Prec. Data = 4; # w/ 4 Comp. Q Prec. Data = 2**											
	450190048	1	13	87%	14	93%	15	100%	14	93%	4	1
	450450009	1	14	93%	14	93%	10	67%	9	60%	4	.
	450510002	1	.	.	.	.	.	.	4	27%	1	.
	450790019	1	28	100%	26	100%	25	100%	24	100%	4	1
SOUTH DAKOTA	**# SLAMS operated in 2000=11; # SLAMS operated all 4 Q=10; # where Prec. required (25%)= 3; # w/ Prec. Data = 3; # w/ 4 Comp. Q Prec. Data = 0**											
	460130003	1	3	20%	7	47%	14	93%	14	93%	4	.
	460990006	1	9	60%	9	60%	14	93%	12	80%	4	.
	461031001	1	5	33%	5	33%	14	93%	13	87%	4	.
TENNESSEE	**# SLAMS operated in 2000=21; # SLAMS operated all 4 Q=19; # where Prec. required (25%)= 5; # w/ Prec. Data = 7; # w/ 4 Comp. Q Prec. Data = 5**											
	470370023	1	9	60%	13	87%	9	60%	15	100%	4	.
	470654002	1	29	100%	24	100%	30	100%	28	100%	4	1
	470931017	1	12	80%	11	73%	10	67%	10	67%	4	.
	471130004	1	15	100%	27	100%	24	100%	26	100%	4	1
	471570047	1	15	100%	15	100%	23	100%	16	100%	4	1
	471631007	1	19	100%	23	100%	27	100%	28	100%	4	1
	471650007	1	30	100%	29	100%	24	100%	27	100%	4	1
TEXAS	**# SLAMS operated in 2000=57; # SLAMS operated all 4 Q=51; # where Prec. required (25%)=13; # w/ Prec. Data =13; # w/ 4 Comp. Q Prec. Data = 3**											
	480290060	1	.	.	2	13%	8	53%	5	33%	3	.
	481130050	1	5	33%	11	73%	14	93%	12	80%	4	.
	481130069	1	14	93%	12	80%	15	100%	14	93%	4	1
	481410010	1	6	40%	7	47%	2	13%	6	40%	4	.
	481410044	1	8	53%	14	93%	14	93%	15	100%	4	.
	481671005	1	0	0%	0	0%	4	27%	10	67%	2	.
	482010024	1	.	.	1	7%	2	13%	0	0%	2	.
	482011035	1	7	47%	5	33%	11	73%	10	67%	4	.
	482450021	1	2	13%	3	20%	11	73%	7	47%	4	.
	483550032	1	1	7%	5	33%	7	47%	11	73%	4	.
	484391002	1	13	87%	12	80%	12	80%	14	93%	4	1
	484393006	1	14	93%	13	87%	14	93%	15	100%	4	1
	484530020	1	10	67%	10	67%	15	100%	12	80%	4	.
UTAH	**# SLAMS operated in 2000=16; # SLAMS operated all 4 Q=12; # where Prec. required (25%)= 3; # w/ Prec. Data = 4; # w/ 4 Comp. Q Prec. Data = 1**											
	490110001	1	0	0%	10	67%	14	93%	14	93%	3	.
	490353007	1	2	13%	9	60%	12	80%	15	100%	4	.
	490494001	1	14	93%	14	93%	11	73%	15	100%	4	1
	490570007	1	4	27%	12	80%	12	80%	14	93%	4	.
VERMONT	**# SLAMS operated in 2000= 3; # SLAMS operated all 4 Q= 3; # where Prec. required (25%)= 1; # w/ Prec. Data = 0; # w/ 4 Comp. Q Prec. Data = 0**											
VIRGIN ISLANDS	**# SLAMS operated in 2000= 3; # SLAMS operated all 4 Q= 1; # where Prec. required (25%)= 1; # w/ Prec. Data = 0; # w/ 4 Comp. Q Prec. Data = 0**											
VIRGINIA	**# SLAMS operated in 2000=20; # SLAMS operated all 4 Q=20; # where Prec. required (25%)= 5; # w/ Prec. Data = 3; # w/ 4 Comp. Q Prec. Data = 3**											
	510130020	1	29	100%	29	100%	30	100%	28	100%	4	1
	517100024	1	25	100%	30	100%	28	100%	26	100%	4	1
	517600020	1	41	100%	28	100%	31	100%	25	100%	4	1
WASHINGTON	**# SLAMS operated in 2000=20; # SLAMS operated all 4 Q=18; # where Prec. required (25%)= 5; # w/ Prec. Data = 5; # w/ 4 Comp. Q Prec. Data = 3**											
	530330057	1	16	100%	15	100%	14	93%	15	100%	4	1
	530530031	1	15	100%	14	93%	15	100%	13	87%	4	1
	530630016	1	16	100%	12	80%	18	100%	15	100%	4	1
	530730015	1	10	67%	12	80%	13	87%	8	53%	4	.
	530770009	1	.	.	8	53%	15	100%	16	100%	3	.
WEST VIRGINIA	**# SLAMS operated in 2000=12; # SLAMS operated all 4 Q=10; # where Prec. required (25%)= 3; # w/ Prec. Data = 2; # w/ 4 Comp. Q Prec. Data = 2**											
	540290011	1	29	100%	22	100%	30	100%	27	100%	4	1
	540391005	1	27	100%	29	100%	28	100%	24	100%	4	1
WISCONSIN	**# SLAMS operated in 2000=21; # SLAMS operated all 4 Q=21; # where Prec. required (25%)= 5; # w/ Prec. Data = 6; # w/ 4 Comp. Q Prec. Data = 3**											
	550090005	1	20	100%	29	100%	29	100%	11	73%	4	1
	550250025	1	12	80%	26	100%	25	100%	21	100%	4	1

STATE	SITE	POC	1st Quarter # Precision*	1st Quarter Percent	2nd Quarter # Precision*	2nd Quarter Percent	3rd Quarter # Precision*	3rd Quarter Percent	4th Quarter # Precision*	4th Quarter Percent	Number of Q w/ P data	All 4 Q's Complete
	550310025	1	27	100%	26	100%	31	100%	10	67%	4	.
	550790026	1	15	100%	15	100%	15	100%	9	60%	4	.
	550790059	2	15	100%	14	93%	13	87%	10	67%	4	.
	551330027	2	16	100%	15	100%	13	87%	13	87%	4	1
WYOMING	**# SLAMS operated in 2000= 4; # SLAMS operated all 4 Q= 4; # where Prec. required (25%)= 1; # w/ Prec. Data = 1; # w/ 4 Comp. Q Prec. Data = 1**											
	560330002	1	16	100%	15	100%	15	100%	15	100%	4	1

Attachment 4-3

1) Quarterly National Precision Estimates by Method Designation

2) Number of Pairs in National Precision Estimate by Method Designation

3) Collocated Precision Estimates Aggregated by Region/State/Reporting Organizations/Method Designation

Field Definitions for Collocated Precision Estimates Aggregated by Region/State/Reporting Organizations/Method Designation

This attachment provides precision estimates for each reporting organization and for each site that comprises the reporting organization. Estimates are provided at quarterly levels for individual sites and at quarterly and annual levels for reporting organizations. The attachment is sorted by EPA Region, State, Reporting Organization, Method Designation, Quarter, and Site. Only pairs for which both values were greater than 6 ：g/m^3 are included in the estimates.

The columns of the table are:

AIRS ID: 9-digit AIRS ID for the sites or "A" to indicate a reporting organization-wide summary.

Quarter: Indicates the quarter for CY00. "A" means annual.

Est. Rel. RMSE: This is the estimate of precision, in %. Following the estimate are two numbers within parentheses. These numbers are the lower and upper 90% confidence limits for the precision estimate. If an asterisk follows the interval, it indicates that the upper bound of the confidence limit exceeds 10%, the DQO for precision. Some conficence intervals can be very wide because they are based on few observations.

No. of Observations: The number of pairs greater than 6 ：g/m^3 used to estimate precision. Sites/Reporting Organizations with precision confidence intervals exceeding 10% and for which there are several observations (say 7 or more) should be investigated for potential causes of the large imprecision.

No. of Sampler Quarters: The number of site/quarters in precision estimate.

Est. Rel. Bias: Collocated samplers can give an estimate of bias relative to each other. For example, it is possible to determine if one of the collocated samplers is consistently reading higher than the other. The estimated relative bias column is such an estimate. The numbers within the parentheses provide a 90% confidence limit for the relative bias estimate. The interval should straddle 0%. If it does not, then one of the samplers is consistently reading higher than the other.

An Example: The first line in the attachment is for the Connecticut Reporting Organization 001 running R&P sequential samplers. Site 090010010 had 22 paired collocated values greater than 6 ：g/m^3 in the first quarter of CY00. These 22 pairs produced a precision estimate of 24.0% CV. The associated 90% confidence interval is 19.4 to 32.1, which is both wide and entirely greater than 10%, the DQO for precision. The 22 pairs also produced a relative bias estimate of 9.8% and a 90% confidence interval that does not include 0%. This indicates that the collocated sampler is reading consistently higher than the primary sampler, by about 10%. This consitent relative bias is contributing to the large precision estimate.

Precision Results for CY 2000 Data

Quarterly National Precision Estimates for CY 2000
(based on AIRS Extraction 071101)

Method	Quarter / Annual	Includes All Pairs	Excludes Pairs < 6 ug/m3	Excludes Pairs w/ % Diff >50%	Excludes Pairs < 6 ug/m3 OR w/ % Diff > 50%
116	1	7.7823	7.6082	7.7823	7.6082
	2	7.7199	7.7199	7.7199	7.7199
	3	6.3747	6.4209	6.3747	6.4209
	4	7.8335	7.6514	7.8335	7.6514
	Ann	7.3848	7.3138	7.3848	7.3138
117	1	14.9137	6.1430	6.7833	5.2425
	2	14.4367	5.6073	7.5770	5.6073
	3	12.3688	5.1405	6.8332	5.1405
	4	9.7811	3.9468	5.6038	3.9468
	Ann	13.0085	5.2160	6.7306	4.9198
118	1	10.6178	7.0534	5.7513	5.1671
	2	8.0645	6.3995	5.8241	4.8229
	3	8.1901	5.8546	5.1573	4.4355
	4	8.2741	5.4432	5.1229	4.4174
	Ann	8.8455	6.2171	5.4682	4.7188
118 and 120	1	11.1279	7.3274	5.9809	5.4325
	2	9.6821	6.9083	6.2475	5.2316
	3	9.8382	6.0272	5.3860	4.6027
	4	10.4541	5.9014	5.4121	4.7708
	Ann	10.2819	6.5582	5.7613	5.0125
119	1	17.2536	11.1824	10.5375	8.1920
	2	16.1858	6.0555	9.4317	6.0555
	3	15.0197	11.2796	9.2131	7.1743
	4	22.3169	18.6876	10.3704	10.8470
	Ann	17.4462	12.0525	9.7316	7.9186
120	1	12.8033	8.2281	6.7479	6.2880
	2	13.6883	8.2716	7.4804	6.3207
	3	13.9901	6.5540	6.0973	5.1064
	4	15.6115	7.1674	6.2802	5.7532
	Ann	14.0813	7.5621	6.6642	5.8680
All Methods	1	11.5135	7.3362	6.1622	5.5145
	2	10.3120	6.8573	6.4695	5.3053
	3	10.1763	6.1988	5.6552	4.7552
	4	10.7297	6.2344	5.5867	4.9261
	Ann	10.6828	6.6648	5.9729	5.1258

Number of Pairs in National Precision Estimates for CY 2000

(based on AIRS Extraction 071101)

Method	Quarter / Annual	Includes All Pairs	Excludes Pairs < 6 ug/m3	Excludes Pairs w/ % Diff >50%	Excludes Pairs < 6 ug/m3 OR w/ % Diff > 50%
116	1	58	52	58	52
	2	35	35	35	35
	3	61	55	61	55
	4	47	46	47	46
	Ann	201	188	201	188
117	1	265	190	260	189
	2	269	101	263	101
	3	281	161	275	161
	4	273	198	270	198
	Ann	1088	650	1068	649
118	1	2577	2186	2537	2167
	2	2534	1959	2513	1947
	3	2737	2230	2713	2221
	4	2542	2107	2515	2098
	Ann	10390	8482	10278	8433
118 and 120	1	3290	2801	3237	2775
	2	3311	2600	3272	2583
	3	3559	2920	3514	2907
	4	3314	2769	3270	2757
	Ann	13474	11090	13293	11022
119	1	55	45	51	44
	2	102	67	96	67
	3	115	89	111	87
	4	71	48	63	46
	Ann	343	249	321	244
120	1	713	615	700	608
	2	777	641	759	636
	3	822	690	801	686
	4	772	662	755	659
	Ann	3084	2608	3015	2589
All Methods	1	3668	3088	3606	3060
	2	3717	2803	3666	2786
	3	4016	3225	3961	3210
	4	3705	3061	3650	3047
	Ann	15106	12177	14883	12103

ESTIMATES OF RELATIVE PRECISION (REL. RMSE) BASED ON CALCULATION OPTION 3

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=1 STATE=CT REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
090010010	1	24.0 (19.4, 32.1)*	22	1	9.8 (1.6, 18.0)
090013005	1	0.4 (0.2, 6.7)	1	1	-0.4
090019003	1	0.4 (0.2, 6.8)	1	1	0.4
090090018	1	3.2 (2.6, 4.2)	24	1	-1.0 (-2.1, 0.0)
090091123	1	9.7 (7.9, 12.9)*	23	1	-1.6 (-5.1, 1.9)
090092123	1	6.0 (4.8, 8.1)	21	1	-1.1 (-3.4, 1.2)
090010010	2	14.1 (10.7, 21.4)*	12	1	-4.8 (-12.0, 2.3)
090013005	2	0.8 (0.5, 3.7)	2	1	0.0 (-5.3, 5.4)
090019003	2	1.7 (0.9, 27.3)*	1	1	1.7
090090018	2	5.5 (4.0, 9.1)	9	1	2.8 (-0.3, 5.9)
090091123	2	3.3 (2.5, 5.1)	11	1	2.0 (0.5, 3.5)
090092123	2	3.2 (2.4, 5.0)	11	1	-0.7 (-2.5, 1.0)
090010010	3	3.8 (2.9, 5.8)	12	1	1.1 (-0.8, 3.1)
090090018	3	4.5 (3.5, 6.7)	13	1	3.3 (1.7, 4.9)
090091123	3	4.2 (3.2, 6.1)	14	1	3.1 (1.7, 4.5)
090092123	3	5.6 (4.3, 8.0)	15	1	-0.3 (-3.0, 2.3)
090010010	4	5.5 (4.0, 8.7)	10	1	3.9 (1.6, 6.2)
090090018	4	3.2 (2.5, 4.8)	13	1	1.3 (-0.2, 2.8)
090091123	4	13.2 (9.6, 21.8)*	9	1	7.9 (0.9, 14.9)
090092123	4	4.0 (2.9, 6.8)	8	1	1.3 (-1.4, 4.0)
A	1	13.1 (11.7, 15.0)*	92	6	
A	2	7.9 (6.8, 9.6)	46	6	
A	3	4.6 (4.0, 5.5)	54	4	
A	4	7.3 (6.2, 9.0)	40	4	
A	A	9.8 (9.1, 10.6)*	232	20	

---------- REGION=1 STATE=MA REPORTING ORGANIZATION=001 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
250130016	1	4.3 (3.5, 5.9)	20	1	-0.6 (-2.3, 1.1)
250210007	1	4.0 (3.2, 5.3)	22	1	-2.0 (-3.3, -0.7)
250230004	1	19.8 (12.9, 47.0)*	4	1	-9.0 (-32.9, 15.0)
250250027	1	5.7 (3.9, 10.9)*	6	1	-2.1 (-6.8, 2.7)
250270020	1	6.8 (5.2, 9.9)	14	1	-1.7 (-4.9, 1.5)
250130016	2	5.9 (4.8, 7.7)	25	1	-0.7 (-2.7, 1.3)
250210007	2	9.9 (7.4, 15.4)*	11	1	-1.2 (-6.9, 4.4)
250230004	2	8.4 (6.6, 11.6)*	18	1	-3.7 (-6.8, -0.5)
250250027	2	8.7 (6.6, 13.2)*	12	1	1.1 (-3.5, 5.8)
250270020	2	6.9 (5.6, 9.2)	22	1	1.0 (-1.6, 3.6)
250130016	3	4.8 (3.8, 6.4)	21	1	0.7 (-1.1, 2.5)
250230004	3	7.6 (5.9, 10.9)*	15	1	-3.6 (-6.7, -0.5)
250250027	3	9.0 (6.5, 14.8)*	9	1	1.5 (-4.3, 7.4)
250270020	3	9.2 (7.3, 12.7)*	18	1	1.6 (-2.2, 5.4)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=1 STATE=MA REPORTING ORGANIZATION=001 METHOD=120 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
250130016	4	7.7 (5.8, 12.0)*	11	1	1.6 (-2.7, 6.0)
250230004	4	4.4 (3.5, 6.2)	17	1	-1.2 (-3.1, 0.7)
250270020	4	6.5 (5.1, 9.2)	16	1	2.3 (-0.4, 5.1)
A	1	6.9 (6.0, 8.0)	66	5	
A	2	7.7 (6.8, 8.7)	88	5	
A	3	7.5 (6.6, 8.8)	63	4	
A	4	6.2 (5.3, 7.5)	44	3	
A	A	7.2 (6.7, 7.8)	261	17	

---------- REGION=1 STATE=ME REPORTING ORGANIZATION=001 METHOD=117 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
230110016	1	1.9 (1.4, 3.1)	10	1	-0.4 (-1.5, 0.8)
A	1	1.9 (1.4, 3.1)	10	1	

---------- REGION=1 STATE=ME REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
230030013	1	4.7 (3.6, 7.0)	13	1	-2.8 (-4.8, -0.9)
230050027	1	3.8 (2.9, 5.8)	12	1	1.1 (-0.8, 3.1)
230190002	1	7.5 (5.7, 10.9)*	14	1	3.9 (0.8, 7.0)
230030013	2	7.7 (5.3, 14.8)*	6	1	-5.3 (-10.3, -0.2)
230050027	2	6.0 (4.4, 9.9)	9	1	-3.3 (-6.6, 0.1)
230190002	2	7.5 (4.9, 17.8)*	4	1	6.7 (2.2, 11.3)
230030013	3	4.3 (3.0, 8.3)	6	1	-2.4 (-5.7, 0.8)
230050027	3	3.1 (2.3, 4.8)	11	1	-0.4 (-2.2, 1.4)
230190002	3	4.4 (3.0, 8.4)	6	1	3.4 (0.8, 5.9)
230050027	4	2.9 (2.1, 4.9)	8	1	1.2 (-0.6, 3.1)
230190002	4	2.8 (2.1, 4.7)	9	1	-1.5 (-3.1, 0.0)
A	1	5.6 (4.8, 7.0)	39	3	
A	2	6.9 (5.5, 9.5)	19	3	
A	3	3.8 (3.1, 5.1)	23	3	
A	4	2.8 (2.2, 4.0)	17	2	
A	A	5.2 (4.6, 5.9)	98	11	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=1 STATE=NH REPORTING ORGANIZATION=001 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
330070014	1	5.0 (2.6, 80.4)*	1	1	5.0
330110019	1	14.9 (10.7, 25.5)*	8	1	-3.0 (-13.4, 7.5)
330070014	2	5.0 (3.1, 14.5)*	3	1	4.4 (-0.2, 9.1)
330110019	2	2.1 (1.4, 4.4)	5	1	0.1 (-2.1, 2.3)
330070014	3	11.9 (8.2, 22.8)*	6	1	7.6 (-0.6, 15.9)
330110019	3	6.8 (4.6, 14.3)*	5	1	0.9 (-6.3, 8.1)
330070014	4	3.1 (1.8, 13.7)*	2	1	2.8 (-5.8, 11.4)
A	1	14.2 (10.3, 23.3)*	9	2	
A	2	3.5 (2.5, 5.9)	8	2	
A	3	9.9 (7.4, 15.4)*	11	2	
A	4	3.1 (1.8, 13.7)*	2	1	
A	A	10.0 (8.3, 12.7)*	30	7	

---------- REGION=1 STATE=RI REPORTING ORGANIZATION=001 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
440070022	1	4.7 (3.3, 8.4)	7	1	0.7 (-2.9, 4.4)
440071010	1	5.0 (3.6, 8.6)	8	1	-0.5 (-4.0, 3.1)
440070022	2	3.7 (2.8, 5.8)	11	1	2.6 (1.1, 4.1)
440071010	2	5.8 (4.2, 9.5)	9	1	-4.9 (-6.9, -2.8)
440070022	3	4.6 (3.5, 7.0)	12	1	3.7 (2.3, 5.2)
440071010	3	9.1 (7.0, 13.6)*	13	1	-2.8 (-7.3, 1.7)
440070022	4	1.3 (0.9, 2.4)	7	1	0.5 (-0.4, 1.5)
440071010	4	4.1 (2.9, 7.0)	8	1	1.2 (-1.7, 4.0)
A	1	4.9 (3.8, 7.0)	15	2	
A	2	4.8 (3.8, 6.5)	20	2	
A	3	7.3 (6.0, 9.6)	25	2	
A	4	3.1 (2.4, 4.5)	15	2	
A	A	5.5 (4.9, 6.4)	75	8	

---------- REGION=1 STATE=VT REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
500070012	1	4.2 (3.3, 6.0)	16	1	-1.9 (-3.6, -0.2)
500070012	2	3.1 (2.4, 4.6)	13	1	-1.5 (-2.9, -0.1)
500070012	3	3.6 (2.6, 6.0)	9	1	-1.5 (-3.7, 0.6)
500070012	4	3.4 (2.6, 5.1)	12	1	-2.8 (-3.8, -1.8)
A	1	4.2 (3.3, 6.0)	16	1	
A	2	3.1 (2.4, 4.6)	13	1	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=1 STATE=VT REPORTING ORGANIZATION=001 METHOD=118 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
A	3	3.6 (2.6, 6.0)	9	1	
A	4	3.4 (2.6, 5.1)	12	1	
A	A	3.6 (3.1, 4.4)	50	4	

---------- REGION=2 STATE=NJ REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
340070003	1	4.9 (3.7, 7.3)	13	1	-2.1 (-4.4, 0.2)
340171003	1	7.5 (5.4, 12.9)*	8	1	2.2 (-2.9, 7.4)
340390004	1	3.1 (2.3, 4.6)	13	1	1.3 (-0.2, 2.7)
340070003	2	5.1 (3.7, 8.4)	9	1	-1.5 (-4.7, 1.7)
340171003	2	6.8 (5.0, 10.9)*	10	1	-2.9 (-6.7, 0.9)
340390004	2	4.7 (3.6, 6.9)	14	1	-1.5 (-3.7, 0.7)
340070003	3	3.1 (2.4, 4.6)	13	1	0.4 (-1.2, 2.0)
340171003	3	6.2 (4.7, 9.3)	12	1	-0.1 (-3.5, 3.2)
340390004	3	5.5 (4.2, 8.1)	13	1	-0.3 (-3.1, 2.5)
340070003	4	12.0 (8.1, 25.1)*	5	1	-5.6 (-17.0, 5.7)
340171003	4	8.9 (6.6, 14.1)*	10	1	4.3 (-0.4, 9.0)
340390004	4	12.5 (9.1, 20.6)*	9	1	6.9 (-0.0, 13.7)
A	1	5.1 (4.3, 6.4)	34	3	
A	2	5.5 (4.6, 7.0)	33	3	
A	3	5.1 (4.3, 6.2)	38	3	
A	4	11.0 (9.0, 14.5)*	24	3	
A	A	6.7 (6.1, 7.5)	129	12	

---------- REGION=2 STATE=NY REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
360010005	1	2.8 (2.2, 4.0)	17	1	1.4 (0.3, 2.5)
360050110	1	4.5 (3.6, 6.1)	19	1	-0.6 (-2.4, 1.2)
360556001	1	3.1 (2.4, 4.4)	16	1	-0.8 (-2.1, 0.6)
360610056	1	2.0 (1.7, 2.6)	27	1	0.0 (-0.6, 0.7)
360610062	1	5.5 (4.4, 7.3)	22	1	-1.6 (-3.5, 0.4)
360632008	1	4.3 (3.2, 6.8)	10	1	-3.9 (-5.0, -2.8)
360671015	1	7.2 (5.5, 10.4)*	14	1	-4.1 (-7.0, -1.2)
360810094	1	4.6 (3.7, 6.3)	20	1	2.6 (1.0, 4.1)
360010005	2	13.8 (10.8, 19.3)*	17	1	-3.4 (-9.3, 2.4)
360050110	2	2.7 (2.1, 3.7)	18	1	0.7 (-0.4, 1.8)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=2 STATE=NY REPORTING ORGANIZATION=001 METHOD=118 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
360556001	2	2.8 (2.3, 3.9)	20	1	0.9 (-0.2, 2.0)
360610056	2	3.1 (2.5, 4.0)	27	1	-1.0 (-1.9, 0.0)
360610062	2	12.3 (10.1, 16.1)*	26	1	-2.1 (-6.3, 2.0)
360632008	2	3.2 (2.5, 4.5)	17	1	-1.5 (-2.8, -0.3)
360671015	2	3.3 (2.5, 5.1)	12	1	2.2 (0.9, 3.6)
360810094	2	2.4 (1.9, 3.2)	22	1	0.4 (-0.5, 1.3)
360010005	3	2.4 (1.9, 3.3)	20	1	0.2 (-0.7, 1.2)
360050110	3	2.8 (2.3, 3.6)	27	1	0.6 (-0.3, 1.5)
360556001	3	2.7 (2.1, 3.7)	18	1	0.1 (-1.0, 1.2)
360610056	3	1.6 (1.3, 2.0)	28	1	0.1 (-0.4, 0.6)
360610062	3	1.7 (1.4, 2.1)	29	1	-0.3 (-0.8, 0.3)
360632008	3	10.1 (8.3, 12.9)*	28	1	-0.7 (-3.9, 2.6)
360671015	3	3.6 (2.8, 5.0)	17	1	-0.1 (-1.6, 1.5)
360810094	3	23.5 (18.9, 31.4)*	22	1	-1.9 (-10.7, 6.9)
360010005	4	2.2 (1.8, 3.0)	20	1	0.7 (-0.2, 1.5)
360050110	4	4.0 (3.2, 5.2)	24	1	-1.1 (-2.4, 0.3)
360556001	4	2.5 (1.9, 3.6)	15	1	-1.3 (-2.3, -0.3)
360610056	4	1.8 (1.5, 2.3)	26	1	0.2 (-0.5, 0.8)
360610062	4	1.8 (1.5, 2.3)	27	1	0.4 (-0.2, 1.0)
360632008	4	2.3 (1.9, 3.2)	20	1	0.0 (-0.9, 0.9)
360671015	4	1.8 (1.4, 2.5)	19	1	-0.2 (-1.0, 0.5)
360810094	4	2.5 (2.0, 3.3)	22	1	-0.5 (-1.4, 0.4)
A	1	4.4 (4.0, 4.8)	145	8	
A	2	7.2 (6.6, 7.9)	159	8	
A	3	9.1 (8.4, 10.0)	189	8	
A	4	2.5 (2.3, 2.7)	173	8	
A	A	6.5 (6.2, 6.8)	666	32	

---------- REGION=2 STATE=PR REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
720610005	2	4.3 (3.0, 8.3)	6	1	2.0 (-1.5, 5.5)
721270003	2	2.0 (1.5, 3.1)	11	1	0.9 (-0.1, 1.9)
720610005	3	3.7 (2.8, 5.8)	11	1	-0.5 (-2.6, 1.6)
721270003	3	2.1 (1.6, 3.4)	10	1	-0.4 (-1.7, 0.8)
720610005	4	9.8 (7.2, 16.2)*	9	1	2.5 (-3.8, 8.8)
721270003	4	3.7 (2.7, 5.7)	11	1	-1.0 (-3.0, 1.1)
A	2	3.0 (2.4, 4.2)	17	2	
A	3	3.1 (2.5, 4.1)	21	2	
A	4	7.1 (5.7, 9.7)	20	2	
A	A	4.9 (4.2, 5.8)	58	6	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=3 STATE=DC REPORTING ORGANIZATION=001 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
110010041	1	1.9 (1.5, 2.7)	17	1	0.0 (-0.8, 0.8)
110010043	1	3.3 (2.3, 6.0)	7	1	0.6 (-2.0, 3.2)
110010041	2	21.0 (15.5, 33.5)*	10	1	-8.4 (-20.2, 3.3)
110010043	2	11.9 (6.8, 52.3)*	2	1	-9.8 (-51.8, 32.2)
110010041	3	3.1 (2.3, 5.1)	9	1	-2.8 (-3.7, -1.9)
110010043	3	2.4 (1.4, 10.7)*	2	1	-2.4 (-4.4, -0.4)
110010041	4	10.6 (7.9, 16.9)*	10	1	-2.7 (-9.0, 3.6)
110010043	4	2.0 (1.0, 32.5)*	1	1	-2.0
A	1	2.4 (2.0, 3.2)	24	2	
A	2	19.8 (15.0, 30.0)*	12	2	
A	3	3.0 (2.2, 4.6)	11	2	
A	4	10.2 (7.6, 15.8)*	11	2	
A	A	10.2 (8.9, 12.1)*	58	8	

---------- REGION=3 STATE=DE REPORTING ORGANIZATION=001 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
100031012	1	4.0 (3.1, 5.8)	14	1	1.2 (-0.7, 3.0)
100032004	1	13.5 (10.6, 18.9)*	17	1	2.7 (-3.0, 8.5)
100031012	2	8.9 (6.8, 13.0)*	14	1	-0.3 (-4.6, 4.1)
100032004	2	3.5 (2.9, 4.4)	30	1	0.4 (-0.7, 1.5)
100031012	3	6.2 (4.8, 8.9)	15	1	1.4 (-1.4, 4.3)
100032004	3	5.1 (3.9, 7.6)	13	1	-0.7 (-3.3, 1.9)
100031012	4	8.2 (6.7, 10.7)*	25	1	0.2 (-2.6, 3.1)
100032004	4	2.9 (2.3, 4.2)	15	1	-1.7 (-2.8, -0.5)
A	1	10.4 (8.6, 13.1)*	31	2	
A	2	5.8 (4.9, 7.0)	44	2	
A	3	5.7 (4.7, 7.3)	28	2	
A	4	6.7 (5.7, 8.3)	40	2	
A	A	7.2 (6.6, 8.0)	143	8	

---------- REGION=3 STATE=MD REPORTING ORGANIZATION=001 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
240330001	1	4.4 (2.6, 19.5)*	2	1	3.1 (-16.6, 22.9)
245100035	1	2.5 (1.7, 4.4)	7	1	-1.5 (-3.1, 0.1)
240032002	2	2.9 (2.2, 4.0)	17	1	-0.1 (-1.3, 1.1)
240330001	2	4.1 (3.2, 5.7)	17	1	3.2 (2.0, 4.3)
245100035	2	3.3 (2.4, 5.5)	9	1	1.9 (0.2, 3.7)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=3 STATE=MD REPORTING ORGANIZATION=001 METHOD=120 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
240032002	3	1.3 (1.0, 1.6)	27	1	0.3 (-0.1, 0.7)
240330001	3	2.3 (1.9, 3.1)	23	1	-0.3 (-1.1, 0.6)
245100035	3	1.7 (1.4, 2.2)	33	1	0.5 (-0.0, 1.0)
240032002	4	3.1 (2.4, 4.2)	20	1	-1.3 (-2.4, -0.2)
240330001	4	4.8 (3.9, 6.4)	22	1	-0.5 (-2.3, 1.3)
245100035	4	6.4 (5.3, 8.3)	27	1	-1.2 (-3.3, 0.9)
A	1	3.0 (2.2, 5.0)	9	2	
A	2	3.5 (3.0, 4.2)	43	3	
A	3	1.8 (1.6, 2.1)	83	3	
A	4	5.1 (4.5, 5.9)	69	3	
A	A	3.6 (3.3, 3.9)	204	11	

---------- REGION=3 STATE=PA REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
420070014	1	8.6 (6.5, 13.1)*	12	1	0.4 (-4.3, 5.1)
420450002	1	9.4 (7.3, 13.5)*	15	1	0.7 (-3.7, 5.1)
420692006	1	10.8 (8.2, 16.0)*	13	1	2.8 (-2.5, 8.2)
420710007	1	6.4 (4.9, 9.3)	14	1	-2.3 (-5.2, 0.6)
421250005	1	7.1 (5.2, 11.3)*	10	1	-0.7 (-5.0, 3.6)
421330008	1	6.7 (5.1, 10.0)	13	1	-0.2 (-3.7, 3.2)
420070014	2	5.4 (4.1, 8.0)	13	1	0.9 (-1.8, 3.6)
420450002	2	4.0 (3.0, 6.2)	11	1	2.3 (0.5, 4.2)
420692006	2	3.1 (2.3, 5.4)	8	1	0.7 (-1.5, 2.9)
420710007	2	12.4 (8.8, 22.4)*	7	1	-4.4 (-13.6, 4.8)
421250005	2	1.6 (1.2, 2.4)	13	1	0.6 (-0.2, 1.4)
421330008	2	5.5 (4.0, 8.7)	10	1	2.1 (-1.0, 5.2)
420070014	3	3.2 (2.2, 6.1)	6	1	-1.2 (-3.9, 1.5)
420450002	3	1.9 (1.4, 3.1)	10	1	0.3 (-0.9, 1.4)
420692006	3	5.2 (3.9, 7.9)	12	1	2.7 (0.3, 5.1)
420710007	3	9.0 (6.8, 13.7)*	12	1	-2.3 (-7.0, 2.4)
421250005	3	2.9 (2.2, 4.4)	12	1	1.5 (0.2, 2.9)
421330008	3	2.7 (2.1, 3.8)	15	1	1.1 (-0.0, 2.3)
420070014	4	1.2 (0.9, 2.2)	7	1	-0.7 (-1.5, 0.1)
420450002	4	3.7 (2.7, 5.8)	10	1	0.5 (-1.7, 2.7)
420692006	4	7.1 (5.1, 12.2)*	8	1	-0.9 (-6.0, 4.1)
420710007	4	1.5 (1.1, 2.3)	11	1	-0.3 (-1.2, 0.5)
421250005	4	0.7 (0.5, 1.2)	8	1	-0.1 (-0.6, 0.4)
421330008	4	2.4 (1.8, 3.5)	13	1	1.8 (1.0, 2.6)
A	1	8.4 (7.4, 9.7)	77	6	
A	2	5.7 (5.0, 6.8)	62	6	
A	3	4.9 (4.3, 5.7)	67	6	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=3 STATE=PA REPORTING ORGANIZATION=001 METHOD=118 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
A	4	3.4 (2.9, 4.0)	57	6	
A	A	6.1 (5.7, 6.5)	263	24	

---------- REGION=3 STATE=PA REPORTING ORGANIZATION=002 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
420030008	1	3.2 (2.3, 5.4)	8	1	2.4 (1.0, 3.9)
420030064	1	3.1 (2.4, 4.7)	12	1	0.1 (-1.6, 1.8)
420031301	1	2.6 (2.0, 4.0)	12	1	0.6 (-0.8, 2.0)
A	1	3.0 (2.5, 3.7)	32	3	
A	A	3.0 (2.5, 3.7)	32	3	

---------- REGION=3 STATE=PA REPORTING ORGANIZATION=003 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
421010004	1	3.8 (2.8, 6.1)	10	1	0.2 (-2.2, 2.5)
421010004	2	6.4 (4.0, 18.7)*	3	1	4.0 (-6.3, 14.3)
421010004	3	3.9 (3.0, 6.1)	11	1	-1.2 (-3.3, 1.0)
421010004	4	1.7 (1.2, 2.7)	9	1	0.1 (-1.0, 1.2)
A	1	3.8 (2.8, 6.1)	10	1	
A	2	6.4 (4.0, 18.7)*	3	1	
A	3	3.9 (3.0, 6.1)	11	1	
A	4	1.7 (1.2, 2.7)	9	1	
A	A	3.8 (3.1, 4.7)	33	4	

---------- REGION=3 STATE=VA REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
510130020	1	5.8 (4.8, 7.5)	27	1	-0.0 (-2.0, 1.9)
517100024	1	3.0 (2.4, 4.0)	21	1	-0.1 (-1.3, 1.0)
517600020	1	2.4 (2.0, 3.0)	37	1	-0.2 (-0.9, 0.4)
510130020	2	7.6 (6.2, 9.8)	26	1	1.1 (-1.5, 3.6)
517100024	2	3.1 (2.5, 4.1)	25	1	-1.8 (-2.7, -0.9)
517600020	2	4.7 (3.8, 6.1)	24	1	1.5 (-0.1, 3.1)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=3 STATE=VA REPORTING ORGANIZATION=001 METHOD=118 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
510130020	3	4.3 (3.5, 5.5)	29	1	-1.0 (-2.3, 0.4)
517100024	3	5.5 (4.5, 7.2)	26	1	-1.7 (-3.5, 0.1)
517600020	3	2.3 (1.9, 2.9)	30	1	-0.9 (-1.6, -0.3)
510130020	4	4.2 (3.4, 5.5)	25	1	-0.7 (-2.2, 0.7)
517100024	4	3.3 (2.7, 4.4)	24	1	-0.4 (-1.6, 0.8)
517600020	4	2.8 (2.2, 3.6)	24	1	-0.9 (-1.9, -0.0)
A	1	3.9 (3.5, 4.5)	85	3	
A	2	5.5 (4.8, 6.3)	75	3	
A	3	4.2 (3.7, 4.8)	85	3	
A	4	3.5 (3.1, 4.0)	73	3	
A	A	4.3 (4.1, 4.6)	318	12	

---------- REGION=3 STATE=WV REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
540391005	1	6.2 (5.0, 8.0)	27	1	-1.5 (-3.5, 0.5)
540391005	2	2.3 (1.9, 3.0)	27	1	-1.2 (-1.8, -0.5)
540391005	3	2.6 (2.1, 3.4)	26	1	-1.0 (-1.8, -0.2)
540391005	4	2.7 (2.2, 3.6)	23	1	-0.6 (-1.6, 0.3)
A	1	6.2 (5.0, 8.0)	27	1	
A	2	2.3 (1.9, 3.0)	27	1	
A	3	2.6 (2.1, 3.4)	26	1	
A	4	2.7 (2.2, 3.6)	23	1	
A	A	3.8 (3.4, 4.3)	103	4	

---------- REGION=3 STATE=WV REPORTING ORGANIZATION=002 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
540290011	1	3.9 (3.2, 5.0)	28	1	-0.7 (-2.0, 0.5)
540290011	2	3.5 (2.8, 4.7)	20	1	-0.4 (-1.7, 1.0)
540290011	3	5.6 (4.6, 7.2)	27	1	-1.5 (-3.3, 0.3)
540290011	4	3.3 (2.6, 4.3)	23	1	-1.6 (-2.6, -0.6)
A	1	3.9 (3.2, 5.0)	28	1	
A	2	3.5 (2.8, 4.7)	20	1	
A	3	5.6 (4.6, 7.2)	27	1	
A	4	3.3 (2.6, 4.3)	23	1	
A	A	4.2 (3.8, 4.8)	98	4	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=4 STATE=AL REPORTING ORGANIZATION=011 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
010970002	2	21.7 (15.6, 37.1)*	8	1	-6.6 (-21.4, 8.1)
011010007	2	10.4 (7.6, 17.1)*	9	1	3.0 (-3.5, 9.5)
010970002	3	3.6 (2.7, 5.7)	10	1	2.2 (0.5, 3.9)
011010007	3	5.2 (4.1, 7.5)	15	1	-0.9 (-3.3, 1.6)
010970002	4	2.8 (2.1, 4.2)	12	1	0.7 (-0.7, 2.2)
011010007	4	4.8 (3.7, 7.0)	14	1	1.3 (-1.0, 3.6)
A	2	16.7 (13.1, 23.4)*	17	2	
A	3	4.7 (3.8, 6.1)	25	2	
A	4	4.0 (3.3, 5.2)	26	2	
A	A	9.1 (8.0, 10.7)*	68	6	

---------- REGION=4 STATE=AL REPORTING ORGANIZATION=012 METHOD=116 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
010730023	1	10.7 (7.8, 17.7)*	9	1	-1.5 (-8.5, 5.5)
010731005	1	6.0 (4.0, 12.5)*	5	1	-2.7 (-8.4, 2.9)
010732003	1	8.6 (6.5, 13.0)*	12	1	0.4 (-4.3, 5.0)
010732006	1	12.1 (7.5, 35.4)*	3	1	-3.9 (-27.6, 19.9)
010735002	1	7.8 (5.2, 16.2)*	5	1	5.9 (0.5, 11.3)
010730023	2	9.4 (7.0, 14.6)*	11	1	-0.0 (-5.4, 5.3)
010731005	2	9.3 (6.1, 22.1)*	4	1	8.5 (3.5, 13.6)
010732003	2	6.1 (4.6, 9.0)	13	1	1.0 (-2.1, 4.1)
010732006	2	5.3 (3.4, 12.6)*	4	1	-4.1 (-8.6, 0.3)
010735002	2	7.5 (4.7, 22.0)*	3	1	4.5 (-7.9, 17.0)
010730023	3	6.8 (5.2, 10.1)*	13	1	-1.2 (-4.6, 2.3)
010731005	3	8.5 (5.7, 17.8)*	5	1	3.1 (-5.4, 11.6)
010732003	3	7.2 (5.3, 11.5)*	10	1	-1.0 (-5.3, 3.4)
010732006	3	10.8 (7.0, 25.5)*	4	1	-1.6 (-16.1, 12.8)
010735002	3	6.7 (4.5, 14.1)*	5	1	3.8 (-2.1, 9.7)
010730023	4	8.2 (6.1, 12.7)*	11	1	-1.9 (-6.5, 2.7)
010731005	4	13.1 (8.5, 31.0)*	4	1	2.3 (-15.2, 19.8)
010732003	4	6.2 (4.8, 9.1)	14	1	-0.7 (-3.8, 2.3)
010732006	4	8.9 (5.8, 21.1)*	4	1	-4.4 (-14.9, 6.0)
010735002	4	9.0 (5.9, 21.4)*	4	1	5.3 (-4.6, 15.2)
A	1	9.1 (7.6, 11.5)*	34	5	
A	2	7.7 (6.5, 9.6)	35	5	
A	3	7.7 (6.5, 9.5)	37	5	
A	4	8.4 (7.1, 10.4)*	37	5	
A	A	8.2 (7.5, 9.1)	143	20	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=4 STATE=AL REPORTING ORGANIZATION=014 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
010890014	1	1.4 (1.1, 1.9)	16	1	0.3 (-0.3, 0.9)
010890014	2	2.0 (1.5, 3.0)	13	1	1.4 (0.7, 2.2)
010890014	3	1.1 (0.9, 1.6)	14	1	-0.0 (-0.6, 0.5)
010890014	4	2.3 (1.8, 3.3)	15	1	0.1 (-0.9, 1.2)
A	1	1.4 (1.1, 1.9)	16	1	
A	2	2.0 (1.5, 3.0)	13	1	
A	3	1.1 (0.9, 1.6)	14	1	
A	4	2.3 (1.8, 3.3)	15	1	
A	A	1.7 (1.5, 2.1)	58	4	

---------- REGION=4 STATE=FL REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
120330004	1	9.3 (7.2, 13.6)*	14	1	-0.7 (-5.2, 3.9)
A	1	9.3 (7.2, 13.6)*	14	1	

---------- REGION=4 STATE=FL REPORTING ORGANIZATION=002 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
120010023	1	7.6 (5.8, 11.1)*	14	1	-0.9 (-4.6, 2.8)
120010023	2	21.1 (15.6, 33.6)*	10	1	-4.2 (-16.8, 8.4)
120010023	3	12.1 (9.2, 18.4)*	12	1	-1.7 (-8.2, 4.8)
A	1	7.6 (5.8, 11.1)*	14	1	
A	2	21.1 (15.6, 33.6)*	10	1	
A	3	12.1 (9.2, 18.4)*	12	1	
A	A	14.0 (11.7, 17.4)*	36	3	

---------- REGION=4 STATE=FL REPORTING ORGANIZATION=003 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
121171002	1	13.5 (10.2, 20.5)*	12	1	0.3 (-7.0, 7.6)
121171002	2	3.3 (2.5, 4.9)	12	1	1.7 (0.2, 3.2)
121171002	3	6.1 (4.6, 9.3)	12	1	2.7 (-0.3, 5.7)
121171002	4	2.0 (1.5, 2.9)	13	1	0.1 (-1.0, 1.1)
A	1	13.5 (10.2, 20.5)*	12	1	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=4 STATE=FL REPORTING ORGANIZATION=003 METHOD=118 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
A	2	3.3 (2.5, 4.9)	12	1	
A	3	6.1 (4.6, 9.3)	12	1	
A	4	2.0 (1.5, 2.9)	13	1	
A	A	7.6 (6.5, 9.1)	49	4	

---------- REGION=4 STATE=FL REPORTING ORGANIZATION=004 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
121056006	1	1.8 (1.3, 2.8)	10	1	0.1 (-1.0, 1.2)
121056006	2	3.7 (2.8, 5.8)	11	1	-0.4 (-2.6, 1.7)
121056006	3	3.4 (2.5, 5.5)	10	1	1.1 (-0.8, 3.1)
121056006	4	3.1 (2.3, 4.7)	11	1	0.4 (-1.3, 2.2)
A	1	1.8 (1.3, 2.8)	10	1	
A	2	3.7 (2.8, 5.8)	11	1	
A	3	3.4 (2.5, 5.5)	10	1	
A	4	3.1 (2.3, 4.7)	11	1	
A	A	3.1 (2.6, 3.8)	42	4	

---------- REGION=4 STATE=FL REPORTING ORGANIZATION=005 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
120710005	1	2.0 (1.4, 3.7)	6	1	1.1 (-0.3, 2.6)
120710005	2	2.3 (1.7, 3.2)	15	1	-0.0 (-1.1, 1.1)
120710005	3	3.4 (2.7, 4.7)	17	1	1.5 (0.1, 2.8)
120710005	4	4.1 (3.3, 5.3)	24	1	3.3 (2.5, 4.2)
A	1	2.0 (1.4, 3.7)	6	1	
A	2	2.3 (1.7, 3.2)	15	1	
A	3	3.4 (2.7, 4.7)	17	1	
A	4	4.1 (3.3, 5.3)	24	1	
A	A	3.3 (2.9, 3.9)	62	4	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=4 STATE=FL REPORTING ORGANIZATION=006 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
121111002	1	3.4 (2.4, 6.2)	7	1	2.2 (0.1, 4.3)
121111002	2	4.1 (3.1, 6.4)	11	1	-0.6 (-2.9, 1.7)
121111002	3	5.5 (3.9, 9.9)	7	1	1.2 (-3.0, 5.5)
121111002	4	2.3 (1.7, 3.8)	9	1	-0.1 (-1.7, 1.4)
A	1	3.4 (2.4, 6.2)	7	1	
A	2	4.1 (3.1, 6.4)	11	1	
A	3	5.5 (3.9, 9.9)	7	1	
A	4	2.3 (1.7, 3.8)	9	1	
A	A	3.9 (3.3, 4.9)	34	4	

---------- REGION=4 STATE=FL REPORTING ORGANIZATION=011 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
120310099	1	4.9 (3.6, 7.5)	11	1	3.3 (1.3, 5.3)
120310099	2	3.7 (2.6, 7.2)	6	1	1.6 (-1.4, 4.6)
120310099	4	1.7 (1.3, 2.6)	11	1	-0.2 (-1.2, 0.7)
A	1	4.9 (3.6, 7.5)	11	1	
A	2	3.7 (2.6, 7.2)	6	1	
A	4	1.7 (1.3, 2.6)	11	1	
A	A	3.7 (3.0, 4.7)	28	3	

---------- REGION=4 STATE=FL REPORTING ORGANIZATION=012 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
120570030	1	2.3 (1.8, 3.5)	13	1	-0.4 (-1.6, 0.7)
120570030	2	14.3 (10.9, 21.2)*	13	1	6.1 (-0.6, 12.7)
120570030	3	4.8 (3.7, 6.9)	14	1	0.4 (-2.0, 2.7)
120570030	4	12.9 (9.8, 19.2)*	13	1	-1.7 (-8.2, 4.9)
A	1	2.3 (1.8, 3.5)	13	1	
A	2	14.3 (10.9, 21.2)*	13	1	
A	3	4.8 (3.7, 6.9)	14	1	
A	4	12.9 (9.8, 19.2)*	13	1	
A	A	9.9 (8.6, 11.8)*	53	4	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=4 STATE=FL REPORTING ORGANIZATION=013 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
121030018	1	11.4 (8.6, 17.2)*	12	1	4.1 (-1.7, 9.8)
121030018	2	2.8 (2.1, 4.1)	13	1	0.8 (-0.6, 2.2)
121030018	3	4.7 (3.6, 6.9)	14	1	0.4 (-1.9, 2.7)
121030018	4	3.9 (2.9, 6.1)	11	1	1.0 (-1.2, 3.2)
A	1	11.4 (8.6, 17.2)*	12	1	
A	2	2.8 (2.1, 4.1)	13	1	
A	3	4.7 (3.6, 6.9)	14	1	
A	4	3.9 (2.9, 6.1)	11	1	
A	A	6.5 (5.6, 7.8)	50	4	

---------- REGION=4 STATE=FL REPORTING ORGANIZATION=015 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
121150013	1	2.2 (1.7, 3.2)	15	1	0.0 (-1.0, 1.1)
121150013	2	3.4 (2.5, 5.6)	9	1	-0.9 (-3.1, 1.3)
121150013	3	4.0 (3.0, 6.1)	11	1	0.1 (-2.2, 2.3)
121150013	4	2.9 (2.2, 4.5)	12	1	-1.5 (-2.9, -0.1)
A	1	2.2 (1.7, 3.2)	15	1	
A	2	3.4 (2.5, 5.6)	9	1	
A	3	4.0 (3.0, 6.1)	11	1	
A	4	2.9 (2.2, 4.5)	12	1	
A	A	3.1 (2.7, 3.8)	47	4	

---------- REGION=4 STATE=FL REPORTING ORGANIZATION=016 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
120992003	1	2.0 (1.4, 3.4)	8	1	1.5 (0.7, 2.4)
120992003	3	5.5 (3.7, 11.5)*	5	1	0.1 (-5.8, 5.9)
120992003	4	4.0 (3.0, 6.0)	12	1	-1.0 (-3.1, 1.0)
A	1	2.0 (1.4, 3.4)	8	1	
A	3	5.5 (3.7, 11.5)*	5	1	
A	4	4.0 (3.0, 6.0)	12	1	
A	A	3.9 (3.1, 5.0)	25	3	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=4 STATE=FL REPORTING ORGANIZATION=017 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
120111002	1	3.2 (2.4, 5.1)	10	1	0.2 (-1.8, 2.1)
120111002	2	27.7 (21.0, 42.0)*	12	1	-6.9 (-21.4, 7.7)
120111002	3	6.8 (5.1, 10.5)*	11	1	-1.7 (-5.5, 2.0)
120111002	4	5.4 (4.0, 8.6)	10	1	-1.9 (-5.0, 1.2)
A	1	3.2 (2.4, 5.1)	10	1	
A	2	27.7 (21.0, 42.0)*	12	1	
A	3	6.8 (5.1, 10.5)*	11	1	
A	4	5.4 (4.0, 8.6)	10	1	
A	A	15.4 (13.1, 18.7)*	43	4	

---------- REGION=4 STATE=FL REPORTING ORGANIZATION=020 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
120952002	1	2.4 (1.8, 3.5)	13	1	-0.7 (-1.8, 0.5)
120952002	2	3.5 (2.6, 5.1)	13	1	-1.8 (-3.3, -0.2)
120952002	3	4.8 (3.6, 7.1)	13	1	-1.1 (-3.5, 1.3)
120952002	4	3.3 (2.5, 5.0)	13	1	-0.2 (-1.9, 1.5)
A	1	2.4 (1.8, 3.5)	13	1	
A	2	3.5 (2.6, 5.1)	13	1	
A	3	4.8 (3.6, 7.1)	13	1	
A	4	3.3 (2.5, 5.0)	13	1	
A	A	3.6 (3.1, 4.3)	52	4	

---------- REGION=4 STATE=FL REPORTING ORGANIZATION=039 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
120170005	4	3.1 (2.5, 4.3)	20	1	-0.2 (-1.4, 1.1)
A	4	3.1 (2.5, 4.3)	20	1	

---------- REGION=4 STATE=GA REPORTING ORGANIZATION=010 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
130210007	1	6.9 (5.3, 10.3)*	13	1	-4.1 (-7.0, -1.2)
130510017	1	6.9 (5.3, 10.1)*	14	1	3.6 (0.8, 6.5)
130892001	1	5.8 (4.3, 9.0)	11	1	2.0 (-1.1, 5.1)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=4 STATE=GA REPORTING ORGANIZATION=010 METHOD=120 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
131210032	1	3.4 (2.5, 5.5)	10	1	1.3 (-0.6, 3.2)
132150001	1	3.6 (2.8, 5.5)	12	1	-0.6 (-2.5, 1.3)
132450005	1	4.9 (3.2, 11.6)*	4	1	1.7 (-4.6, 7.9)
130210007	2	2.8 (2.1, 4.5)	10	1	0.5 (-1.1, 2.2)
130510017	2	7.8 (5.6, 13.3)*	8	1	4.9 (0.5, 9.2)
130892001	2	6.3 (4.8, 9.3)	13	1	1.1 (-2.1, 4.3)
131210032	2	5.8 (4.2, 9.5)	9	1	1.0 (-2.8, 4.7)
132150001	2	2.8 (2.1, 4.4)	10	1	-1.4 (-2.8, 0.1)
132450005	2	6.4 (4.6, 11.0)*	8	1	4.1 (0.7, 7.6)
130210007	3	2.1 (1.5, 3.5)	8	1	1.8 (1.0, 2.5)
130510017	3	3.0 (2.1, 5.8)	6	1	1.3 (-1.1, 3.8)
130892001	3	2.2 (1.5, 5.3)	4	1	0.5 (-2.4, 3.5)
131210032	3	4.0 (2.8, 7.1)	7	1	3.5 (2.1, 4.9)
132150001	3	3.2 (2.4, 4.7)	13	1	-1.4 (-2.8, 0.1)
132450005	3	2.7 (1.9, 4.9)	7	1	-0.9 (-2.9, 1.2)
130210007	4	7.1 (5.1, 12.2)*	8	1	6.1 (3.4, 8.8)
130510017	4	4.1 (3.0, 6.8)	9	1	0.7 (-2.0, 3.3)
130892001	4	5.7 (4.3, 8.9)	11	1	1.5 (-1.7, 4.7)
131210032	4	12.9 (9.4, 21.2)*	9	1	6.2 (-1.3, 13.6)
132150001	4	5.1 (3.7, 8.4)	9	1	0.3 (-3.1, 3.6)
132450005	4	6.7 (4.9, 11.0)*	9	1	-3.7 (-7.4, -0.0)
A	1	5.6 (4.9, 6.6)	64	6	
A	2	5.5 (4.8, 6.5)	58	6	
A	3	3.0 (2.5, 3.6)	45	6	
A	4	7.5 (6.5, 8.9)	55	6	
A	A	5.7 (5.3, 6.2)	222	24	

---------- REGION=4 STATE=KY REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
210190017	1	3.3 (2.5, 5.0)	12	1	-1.6 (-3.2, -0.1)
210670012	1	5.0 (3.8, 7.3)	14	1	1.5 (-0.8, 3.9)
211950002	1	7.0 (5.1, 11.5)*	9	1	-1.0 (-5.6, 3.5)
212270007	1	1.7 (1.3, 2.4)	15	1	-0.1 (-0.9, 0.7)
210190017	2	2.8 (2.0, 5.0)	7	1	0.5 (-1.7, 2.7)
210590014	2	11.7 (8.7, 18.7)*	10	1	-1.4 (-8.6, 5.7)
210670012	2	3.0 (2.3, 4.6)	12	1	2.4 (1.4, 3.4)
211950002	2	2.1 (1.6, 3.2)	12	1	0.5 (-0.6, 1.6)
212270007	2	6.3 (4.8, 9.4)	13	1	-2.4 (-5.4, 0.6)
210190017	3	3.8 (2.9, 5.6)	14	1	-0.5 (-2.4, 1.4)
210590014	3	5.4 (4.1, 7.9)	14	1	-0.5 (-3.1, 2.1)
210670012	3	7.3 (5.5, 10.8)*	13	1	3.2 (-0.1, 6.6)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=4 STATE=KY REPORTING ORGANIZATION=001 METHOD=118 ----------
(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
211950002	3	5.0 (3.8, 7.3)	14	1	2.3 (0.1, 4.4)
212270007	3	4.6 (3.5, 6.9)	12	1	-1.0 (-3.4, 1.5)
210190017	4	4.8 (3.7, 7.3)	12	1	-2.3 (-4.6, 0.1)
210590014	4	5.0 (3.8, 7.5)	13	1	-1.8 (-4.2, 0.7)
210670012	4	8.3 (6.4, 12.1)*	14	1	2.3 (-1.6, 6.2)
211950002	4	3.0 (2.2, 4.7)	10	1	-0.2 (-2.0, 1.6)
212270007	4	2.7 (2.1, 4.1)	13	1	-0.8 (-2.2, 0.5)
A	1	4.4 (3.8, 5.2)	50	4	
A	2	6.3 (5.4, 7.5)	54	5	
A	3	5.3 (4.7, 6.2)	67	5	
A	4	5.3 (4.6, 6.3)	62	5	
A	A	5.4 (5.0, 5.8)	233	19	

---------- REGION=4 STATE=KY REPORTING ORGANIZATION=002 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
211110043	1	2.8 (2.1, 4.4)	11	1	-1.2 (-2.7, 0.3)
211110043	2	5.8 (4.5, 8.5)	14	1	2.3 (-0.4, 4.9)
211110043	3	10.0 (7.6, 15.2)*	12	1	4.2 (-0.7, 9.1)
211110043	4	2.9 (2.1, 4.8)	9	1	1.2 (-0.6, 2.9)
A	1	2.8 (2.1, 4.4)	11	1	
A	2	5.8 (4.5, 8.5)	14	1	
A	3	10.0 (7.6, 15.2)*	12	1	
A	4	2.9 (2.1, 4.8)	9	1	
A	A	6.3 (5.4, 7.7)	46	4	

---------- REGION=4 STATE=MS REPORTING ORGANIZATION=100 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
280330002	1	3.6 (2.8, 5.5)	12	1	1.4 (-0.4, 3.2)
280350004	1	3.2 (2.5, 4.7)	14	1	0.5 (-1.0, 2.1)
281210001	1	4.4 (3.2, 7.2)	9	1	-1.2 (-4.0, 1.5)
280330002	2	2.3 (1.7, 3.4)	13	1	1.9 (1.2, 2.5)
280350004	2	3.1 (2.4, 4.6)	14	1	0.5 (-1.0, 2.1)
280670002	2	3.3 (2.3, 5.9)	7	1	-1.7 (-3.9, 0.6)
281210001	2	11.4 (8.2, 19.5)*	8	1	-3.0 (-10.9, 4.9)
280330002	3	5.2 (4.0, 7.5)	15	1	1.7 (-0.6, 4.0)
280350004	3	3.1 (2.4, 4.6)	14	1	-1.0 (-2.5, 0.4)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=4 STATE=MS REPORTING ORGANIZATION=100 METHOD=118 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
280670002	3	2.6 (2.0, 3.8)	15	1	-1.9 (-2.7, -1.0)
281210001	3	3.9 (2.9, 6.1)	11	1	0.9 (-1.3, 3.1)
280330002	4	9.0 (6.1, 18.8)*	5	1	7.5 (2.2, 12.8)
280350004	4	3.3 (2.2, 7.9)	4	1	1.9 (-1.9, 5.6)
280670002	4	4.0 (2.6, 9.4)	4	1	1.6 (-3.4, 6.5)
281210001	4	6.5 (4.4, 13.6)*	5	1	4.8 (0.0, 9.5)
A	1	3.7 (3.1, 4.6)	35	3	
A	2	5.6 (4.8, 6.9)	42	4	
A	3	3.9 (3.3, 4.6)	55	4	
A	4	6.3 (5.0, 8.8)	18	4	
A	A	4.7 (4.3, 5.2)	150	15	

---------- REGION=4 STATE=NC REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
370510009	1	11.2 (8.6, 16.3)*	14	1	2.1 (-3.3, 7.5)
370710016	1	6.6 (5.0, 9.8)	13	1	-0.0 (-3.4, 3.4)
370810009	1	1.9 (1.4, 3.0)	10	1	0.0 (-1.1, 1.2)
371210001	1	3.0 (2.3, 4.6)	12	1	1.4 (-0.0, 2.9)
371290009	1	1.6 (1.2, 2.6)	9	1	0.4 (-0.7, 1.4)
371470005	1	3.4 (2.6, 5.0)	13	1	-1.2 (-2.8, 0.4)
371830014	1	13.7 (10.3, 20.7)*	12	1	2.4 (-4.8, 9.7)
370510009	2	1.9 (1.4, 2.9)	12	1	0.7 (-0.2, 1.7)
370710016	2	2.4 (1.9, 3.5)	15	1	0.2 (-0.9, 1.4)
370810009	2	5.7 (4.2, 9.4)	9	1	2.8 (-0.4, 6.1)
371210001	2	2.6 (2.0, 3.9)	13	1	0.4 (-0.9, 1.7)
371290009	2	2.7 (1.9, 4.8)	7	1	0.6 (-1.5, 2.6)
371470005	2	5.2 (4.0, 7.7)	13	1	-1.0 (-3.6, 1.6)
371830014	2	3.9 (3.0, 5.8)	13	1	-2.5 (-4.0, -1.0)
370510009	3	4.5 (3.5, 6.5)	15	1	2.0 (0.1, 3.9)
370710016	3	1.8 (1.4, 2.7)	12	1	-0.2 (-1.2, 0.7)
370810009	3	3.4 (2.5, 5.2)	11	1	-0.2 (-2.1, 1.8)
371210001	3	3.2 (2.5, 4.6)	15	1	2.0 (0.8, 3.2)
371290009	3	2.7 (2.0, 4.2)	11	1	-0.1 (-1.6, 1.5)
371470005	3	4.1 (3.1, 6.0)	13	1	2.3 (0.6, 4.0)
371830014	3	4.3 (3.3, 6.2)	15	1	-3.5 (-4.7, -2.4)
370510009	4	1.3 (1.0, 2.0)	12	1	1.1 (0.7, 1.5)
370710016	4	2.4 (1.8, 3.5)	13	1	0.6 (-0.6, 1.8)
370810009	4	2.6 (2.0, 3.9)	12	1	1.7 (0.6, 2.8)
371210001	4	1.7 (1.3, 2.5)	14	1	-0.5 (-1.3, 0.4)
371290009	4	2.5 (1.9, 3.8)	12	1	-1.3 (-2.5, -0.1)
371470005	4	1.7 (1.3, 2.7)	11	1	0.1 (-0.9, 1.1)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=4 STATE=NC REPORTING ORGANIZATION=001 METHOD=118 ----------
(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
371830014	4	12.2 (9.4, 17.8)*	14	1	-3.1 (-8.9, 2.7)
A	1	7.7 (6.8, 8.8)	83	7	
A	2	3.7 (3.3, 4.2)	82	7	
A	3	3.6 (3.2, 4.1)	92	7	
A	4	5.2 (4.7, 6.0)	88	7	
A	A	5.3 (5.0, 5.6)	345	28	

---------- REGION=4 STATE=NC REPORTING ORGANIZATION=002 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
370670024	1	1.9 (1.5, 2.8)	14	1	-0.1 (-1.0, 0.8)
370670024	2	1.8 (1.3, 2.8)	10	1	1.3 (0.5, 2.0)
370670024	3	3.1 (2.3, 4.7)	12	1	0.5 (-1.2, 2.1)
370670024	4	1.4 (1.1, 2.3)	10	1	-0.1 (-1.0, 0.7)
A	1	1.9 (1.5, 2.8)	14	1	
A	2	1.8 (1.3, 2.8)	10	1	
A	3	3.1 (2.3, 4.7)	12	1	
A	4	1.4 (1.1, 2.3)	10	1	
A	A	2.2 (1.9, 2.6)	46	4	

---------- REGION=4 STATE=NC REPORTING ORGANIZATION=003 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
371190040	1	1.5 (1.1, 2.2)	13	1	-0.1 (-0.9, 0.7)
371190040	2	2.0 (1.5, 3.1)	12	1	0.5 (-0.6, 1.5)
371190040	3	2.1 (1.6, 3.1)	12	1	1.4 (0.5, 2.2)
371190042	3	2.0 (1.1, 8.7)	2	1	0.8 (-10.7, 12.2)
371190042	4	1.8 (1.4, 2.6)	14	1	1.2 (0.5, 1.8)
A	1	1.5 (1.1, 2.2)	13	1	
A	2	2.0 (1.5, 3.1)	12	1	
A	3	2.0 (1.6, 3.0)	14	2	
A	4	1.8 (1.4, 2.6)	14	1	
A	A	1.8 (1.6, 2.2)	53	5	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=4 STATE=NC REPORTING ORGANIZATION=004 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
370210034	1	19.0 (14.1, 30.3)*	10	1	-0.9 (-12.5, 10.7)
370210034	2	5.4 (3.5, 12.9)*	4	1	-3.8 (-9.0, 1.4)
370210034	3	2.6 (2.0, 3.8)	14	1	-2.2 (-2.9, -1.5)
370210034	4	2.5 (1.8, 4.0)	10	1	0.5 (-0.9, 2.0)
A	1	19.0 (14.1, 30.3)*	10	1	
A	2	5.4 (3.5, 12.9)*	4	1	
A	3	2.6 (2.0, 3.8)	14	1	
A	4	2.5 (1.8, 4.0)	10	1	
A	A	10.1 (8.5, 12.5)*	38	4	

---------- REGION=4 STATE=NC REPORTING ORGANIZATION=030 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
370990006	2	2.0 (1.5, 3.3)	10	1	1.2 (0.1, 2.2)
370990006	3	1.7 (1.2, 2.6)	11	1	0.3 (-0.6, 1.2)
370990006	4	9.2 (6.5, 16.6)*	7	1	-2.4 (-9.5, 4.6)
A	2	2.0 (1.5, 3.3)	10	1	
A	3	1.7 (1.2, 2.6)	11	1	
A	4	9.2 (6.5, 16.6)*	7	1	
A	A	4.9 (4.0, 6.3)	28	3	

---------- REGION=4 STATE=SC REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
450190048	1	2.5 (1.9, 3.7)	13	1	0.8 (-0.4, 2.0)
450430009	1	7.3 (5.9, 9.6)	24	1	-3.1 (-5.4, -0.7)
450450009	1	3.5 (2.7, 5.1)	14	1	-2.8 (-3.8, -1.9)
450790019	1	3.5 (2.9, 4.5)	28	1	-2.0 (-2.9, -1.1)
450190048	2	3.3 (2.5, 5.2)	11	1	0.9 (-1.0, 2.7)
450430009	2	4.2 (3.4, 5.5)	25	1	-1.3 (-2.7, 0.1)
450450009	2	4.3 (3.3, 6.3)	14	1	1.8 (-0.1, 3.8)
450790019	2	3.0 (2.5, 3.9)	25	1	0.7 (-0.4, 1.7)
450190048	3	3.5 (2.7, 5.1)	14	1	2.1 (0.8, 3.5)
450430009	3	4.8 (3.9, 6.4)	23	1	-2.8 (-4.3, -1.4)
450450009	3	3.5 (2.6, 5.6)	10	1	1.3 (-0.7, 3.3)
450790019	3	2.7 (2.2, 3.5)	25	1	1.6 (0.8, 2.3)
450190048	4	2.6 (2.0, 3.8)	14	1	-0.4 (-1.7, 0.8)
450430009	4	2.5 (2.0, 3.4)	20	1	-1.0 (-1.9, -0.1)
450450009	4	2.5 (1.8, 4.3)	8	1	1.5 (-0.0, 2.9)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=4 STATE=SC REPORTING ORGANIZATION=001 METHOD=118 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
450510002	4	3.3 (2.1, 7.9)	4	1	0.9 (-3.5, 5.2)
450790019	4	1.5 (1.2, 2.0)	23	1	-0.5 (-1.0, 0.0)
A	1	4.8 (4.3, 5.6)	79	4	
A	2	3.7 (3.3, 4.3)	75	4	
A	3	3.7 (3.3, 4.3)	72	4	
A	4	2.3 (2.0, 2.7)	69	5	
A	A	3.8 (3.6, 4.1)	295	17	

---------- REGION=4 STATE=TN REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
471130004	1	3.6 (2.7, 5.3)	13	1	-2.9 (-4.0, -1.8)
471631007	1	3.7 (2.9, 5.1)	19	1	-0.3 (-1.8, 1.2)
471650007	1	3.4 (2.8, 4.4)	27	1	0.5 (-0.6, 1.6)
471130004	2	10.0 (8.2, 12.9)*	27	1	-1.9 (-5.2, 1.4)
471631007	2	2.9 (2.4, 3.9)	22	1	0.7 (-0.4, 1.7)
471650007	2	6.0 (4.9, 7.8)	27	1	0.5 (-1.5, 2.5)
471130004	3	1.8 (1.5, 2.4)	23	1	-1.3 (-1.8, -0.9)
471631007	3	12.8 (10.4, 16.7)*	25	1	-2.8 (-7.2, 1.5)
471650007	3	1.8 (1.5, 2.4)	23	1	-0.4 (-1.1, 0.2)
471130004	4	2.7 (2.2, 3.5)	26	1	-1.9 (-2.6, -1.3)
471631007	4	8.0 (6.6, 10.3)*	27	1	-0.6 (-3.2, 2.1)
471650007	4	19.9 (16.2, 26.0)*	25	1	-0.6 (-7.6, 6.3)
A	1	3.5 (3.1, 4.2)	59	3	
A	2	7.1 (6.3, 8.2)	76	3	
A	3	7.7 (6.8, 9.0)	71	3	
A	4	12.3 (10.9, 14.2)*	78	3	
A	A	8.5 (8.0, 9.2)	284	12	

---------- REGION=4 STATE=TN REPORTING ORGANIZATION=002 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
471570047	1	4.5 (3.4, 6.5)	14	1	-0.1 (-2.3, 2.1)
471570047	2	2.0 (1.5, 2.9)	15	1	1.1 (0.3, 1.9)
471570047	3	1.7 (1.4, 2.3)	22	1	-0.1 (-0.7, 0.6)
471570047	4	2.2 (1.7, 3.2)	15	1	0.7 (-0.3, 1.7)
A	1	4.5 (3.4, 6.5)	14	1	
A	2	2.0 (1.5, 2.9)	15	1	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=4 STATE=TN REPORTING ORGANIZATION=002 METHOD=118 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
A	3	1.7 (1.4, 2.3)	22	1	
A	4	2.2 (1.7, 3.2)	15	1	
A	A	2.7 (2.4, 3.1)	66	4	

---------- REGION=4 STATE=TN REPORTING ORGANIZATION=003 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
470370023	1	3.0 (2.2, 5.0)	9	1	-0.0 (-2.0, 2.0)
470370023	2	6.5 (5.0, 9.7)	13	1	-4.1 (-6.7, -1.5)
470370023	3	17.0 (12.4, 27.9)*	9	1	-6.0 (-16.4, 4.4)
470370023	4	7.8 (6.1, 11.3)*	15	1	2.9 (-0.6, 6.3)
A	1	3.0 (2.2, 5.0)	9	1	
A	2	6.5 (5.0, 9.7)	13	1	
A	3	17.0 (12.4, 27.9)*	9	1	
A	4	7.8 (6.1, 11.3)*	15	1	
A	A	9.5 (8.1, 11.5)*	46	4	

---------- REGION=4 STATE=TN REPORTING ORGANIZATION=004 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
470931017	1	1.7 (1.3, 2.6)	12	1	-0.1 (-1.0, 0.8)
470931017	2	4.2 (3.2, 6.5)	11	1	1.1 (-1.3, 3.4)
470931017	3	1.6 (1.1, 2.5)	10	1	0.6 (-0.3, 1.4)
470931017	4	2.1 (1.6, 3.4)	10	1	1.8 (1.0, 2.5)
A	1	1.7 (1.3, 2.6)	12	1	
A	2	4.2 (3.2, 6.5)	11	1	
A	3	1.6 (1.1, 2.5)	10	1	
A	4	2.1 (1.6, 3.4)	10	1	
A	A	2.6 (2.3, 3.2)	43	4	

---------- REGION=4 STATE=TN REPORTING ORGANIZATION=005 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
470654002	1	3.1 (2.6, 4.1)	26	1	0.3 (-0.8, 1.3)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=4 STATE=TN REPORTING ORGANIZATION=005 METHOD=118 ----------
(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
470654002	2	2.7 (2.2, 3.6)	22	1	-1.1 (-2.0, -0.2)
470654002	3	1.6 (1.3, 2.1)	30	1	-0.0 (-0.5, 0.5)
470654002	4	3.0 (2.5, 3.9)	27	1	0.1 (-0.9, 1.1)
A	1	3.1 (2.6, 4.1)	26	1	
A	2	2.7 (2.2, 3.6)	22	1	
A	3	1.6 (1.3, 2.1)	30	1	
A	4	3.0 (2.5, 3.9)	27	1	
A	A	2.7 (2.4, 3.0)	105	4	

---------- REGION=5 STATE=IL REPORTING ORGANIZATION=001 METHOD=117 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
171610003	1	5.5 (4.0, 9.1)	9	1	1.3 (-2.2, 4.8)
171610003	2	5.8 (4.3, 9.2)	10	1	0.8 (-2.7, 4.3)
171610003	3	2.6 (2.0, 4.0)	12	1	-1.6 (-2.7, -0.5)
171610003	4	3.7 (2.5, 7.6)	5	1	-2.4 (-5.3, 0.6)
A	1	5.5 (4.0, 9.1)	9	1	
A	2	5.8 (4.3, 9.2)	10	1	
A	3	2.6 (2.0, 4.0)	12	1	
A	4	3.7 (2.5, 7.6)	5	1	
A	A	4.6 (3.9, 5.7)	36	4	

---------- REGION=5 STATE=IL REPORTING ORGANIZATION=001 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
170314201	1	4.4 (3.3, 6.8)	11	1	-0.8 (-3.3, 1.6)
171150013	1	9.2 (7.0, 14.0)*	12	1	-0.9 (-5.9, 4.0)
171191007	1	9.8 (7.3, 15.1)*	11	1	7.2 (3.4, 11.0)
171193007	1	4.2 (3.2, 6.1)	14	1	1.7 (-0.2, 3.6)
171430037	1	8.1 (6.1, 12.0)*	13	1	3.3 (-0.4, 7.1)
170314201	2	9.2 (6.7, 15.1)*	9	1	-4.0 (-9.4, 1.5)
171150013	2	5.2 (3.9, 7.7)	13	1	-1.5 (-4.0, 1.0)
171191007	2	5.4 (4.1, 7.8)	14	1	3.1 (1.0, 5.3)
171193007	2	4.8 (3.7, 7.0)	14	1	0.6 (-1.7, 3.0)
171430037	2	6.1 (3.1, 98.1)*	1	1	6.1
170314201	3	3.0 (2.1, 5.1)	8	1	-0.4 (-2.5, 1.7)
171150013	3	14.2 (10.0, 25.5)*	7	1	5.2 (-5.3, 15.7)
171191007	3	7.8 (5.6, 13.4)*	8	1	-1.5 (-7.0, 4.0)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=5 STATE=IL REPORTING ORGANIZATION=001 METHOD=120 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
171193007	3	2.2 (1.6, 3.4)	11	1	0.9 (-0.2, 2.1)
171430037	3	10.9 (7.1, 25.9)*	4	1	-9.3 (-17.1, -1.6)
170314201	4	3.4 (2.5, 5.4)	10	1	-1.8 (-3.5, -0.1)
171150013	4	7.0 (5.2, 11.1)*	10	1	-3.3 (-7.1, 0.5)
171191007	4	7.8 (5.9, 12.1)*	11	1	0.7 (-3.8, 5.1)
171193007	4	6.1 (4.4, 10.0)	9	1	1.0 (-3.0, 4.9)
171430037	4	8.1 (6.0, 13.0)*	10	1	-1.3 (-6.3, 3.6)
A	1	7.4 (6.5, 8.7)	61	5	
A	2	6.1 (5.2, 7.3)	51	5	
A	3	8.1 (6.8, 10.0)*	38	5	
A	4	6.7 (5.8, 8.1)	50	5	
A	A	7.1 (6.5, 7.7)	200	20	

---------- REGION=5 STATE=IL REPORTING ORGANIZATION=003 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
170310050	1	14.0 (10.5, 21.7)*	11	1	-0.4 (-8.4, 7.7)
170310052	1	5.5 (4.1, 8.6)	11	1	-1.5 (-4.5, 1.6)
170313301	1	12.8 (9.6, 19.9)*	11	1	-1.7 (-8.9, 5.6)
170310050	2	6.8 (5.1, 10.3)*	12	1	2.4 (-1.1, 5.8)
170310052	2	7.1 (5.3, 11.0)*	11	1	-1.1 (-5.1, 2.9)
170313301	2	3.1 (2.2, 5.0)	9	1	-0.1 (-2.1, 1.9)
170310050	3	3.8 (2.8, 6.1)	10	1	2.1 (0.2, 4.1)
170310052	3	6.5 (4.8, 10.0)*	11	1	0.7 (-3.0, 4.4)
170313301	3	4.1 (3.1, 6.4)	11	1	-1.7 (-3.8, 0.5)
170310050	4	2.5 (1.4, 10.8)*	2	1	1.4 (-11.6, 14.3)
170310052	4	8.4 (6.2, 13.4)*	10	1	2.4 (-2.6, 7.3)
170313301	4	6.8 (5.1, 10.3)*	12	1	3.5 (0.4, 6.7)
A	1	11.4 (9.5, 14.4)*	33	3	
A	2	6.1 (5.1, 7.7)	32	3	
A	3	5.0 (4.1, 6.3)	32	3	
A	4	7.3 (5.9, 9.6)	24	3	
A	A	7.9 (7.2, 8.8)	121	12	

---------- REGION=5 STATE=IN REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
180030004	1	2.6 (2.0, 3.8)	14	1	-0.6 (-1.9, 0.6)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=5 STATE=IN REPORTING ORGANIZATION=001 METHOD=118 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
180431004	1	5.1 (3.7, 8.1)	10	1	-3.4 (-5.7, -1.1)
180891016	1	2.9 (2.2, 4.1)	15	1	1.9 (0.9, 2.9)
180950009	1	17.4 (13.1, 26.4)*	12	1	8.0 (-0.4, 16.4)
181411008	1	3.7 (2.6, 7.1)	6	1	2.6 (0.2, 5.0)
181570007	1	8.4 (6.4, 12.2)*	14	1	-1.1 (-5.2, 3.0)
181630006	1	1.8 (1.3, 2.8)	11	1	0.7 (-0.3, 1.6)
180030004	2	2.8 (2.1, 4.2)	12	1	0.3 (-1.2, 1.8)
180431004	2	3.1 (2.4, 4.9)	11	1	-2.6 (-3.6, -1.7)
180891016	2	6.6 (5.0, 9.7)	13	1	-0.4 (-3.8, 2.9)
180950009	2	4.7 (3.5, 7.1)	12	1	3.2 (1.4, 5.1)
181411008	2	4.4 (3.3, 6.6)	12	1	3.2 (1.6, 4.8)
181570007	2	7.6 (5.7, 11.5)*	12	1	-1.9 (-5.9, 2.1)
181630006	2	12.2 (9.3, 18.0)*	13	1	3.8 (-2.1, 9.7)
180030004	3	1.6 (1.2, 2.4)	13	1	-0.4 (-1.2, 0.4)
180431004	3	2.2 (1.6, 3.7)	8	1	-1.4 (-2.6, -0.3)
180891016	3	7.9 (5.7, 13.5)*	8	1	-1.2 (-6.8, 4.4)
180950009	3	26.4 (20.0, 40.1)*	12	1	-5.6 (-19.6, 8.4)
181411008	3	2.3 (1.7, 3.8)	9	1	1.6 (0.6, 2.7)
181570007	3	12.6 (9.5, 19.0)*	12	1	-0.2 (-7.0, 6.6)
181630006	3	3.0 (2.2, 4.6)	11	1	-0.7 (-2.4, 0.9)
180030004	4	6.3 (4.7, 9.7)	11	1	-1.3 (-4.8, 2.3)
180431004	4	4.8 (3.6, 7.1)	13	1	-0.2 (-2.7, 2.2)
180891016	4	2.3 (1.7, 3.7)	10	1	0.4 (-1.0, 1.8)
180950009	4	2.3 (1.7, 3.6)	11	1	0.6 (-0.7, 1.8)
181411008	4	10.1 (7.7, 15.0)*	13	1	-2.3 (-7.4, 2.8)
181570007	4	10.5 (7.8, 16.7)*	10	1	-3.5 (-9.5, 2.6)
181630006	4	14.6 (11.0, 22.1)*	12	1	5.4 (-1.9, 12.7)
A	1	8.0 (7.1, 9.1)	82	7	
A	2	6.7 (6.0, 7.7)	85	7	
A	3	12.3 (10.8, 14.2)*	73	7	
A	4	8.5 (7.6, 9.8)	80	7	
A	A	9.0 (8.4, 9.6)	320	28	

---------- REGION=5 STATE=IN REPORTING ORGANIZATION=001 METHOD=119 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
181670023	1	3.6 (2.7, 5.3)	13	1	0.7 (-1.1, 2.5)
181670023	2	3.8 (2.9, 5.6)	13	1	1.7 (-0.0, 3.4)
181670023	3	2.6 (2.0, 3.9)	13	1	0.7 (-0.6, 2.0)
181670023	4	25.8 (19.9, 37.7)*	14	1	8.6 (-3.3, 20.6)
A	1	3.6 (2.7, 5.3)	13	1	
A	2	3.8 (2.9, 5.6)	13	1	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=5 STATE=IN REPORTING ORGANIZATION=001 METHOD=119 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
A	3	2.6 (2.0, 3.9)	13	1	
A	4	25.8 (19.9, 37.7)*	14	1	
A	A	13.6 (11.7, 16.2)*	53	4	

---------- REGION=5 STATE=IN REPORTING ORGANIZATION=008 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
180970081	1	17.2 (13.0, 26.0)*	12	1	-0.8 (-10.1, 8.5)
180970083	1	4.1 (3.1, 6.0)	14	1	1.1 (-0.8, 3.1)
180970081	2	4.0 (3.0, 5.8)	14	1	-0.3 (-2.2, 1.7)
180970083	2	4.9 (3.7, 7.3)	13	1	0.3 (-2.2, 2.8)
180970081	3	7.7 (5.9, 11.4)*	13	1	5.7 (3.1, 8.4)
180970083	3	3.5 (2.6, 5.3)	12	1	0.3 (-1.6, 2.1)
180970081	4	3.9 (2.8, 6.4)	9	1	1.6 (-0.8, 3.9)
180970083	4	9.6 (7.4, 13.7)*	15	1	2.7 (-1.6, 7.0)
A	1	12.0 (9.8, 15.6)*	26	2	
A	2	4.4 (3.6, 5.7)	27	2	
A	3	6.1 (4.9, 7.9)	25	2	
A	4	7.9 (6.4, 10.4)*	24	2	
A	A	8.1 (7.3, 9.2)	102	8	

---------- REGION=5 STATE=MI REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
260650012	1	2.3 (1.8, 3.0)	25	1	0.3 (-0.5, 1.1)
260770008	1	2.1 (1.7, 2.9)	21	1	-0.3 (-1.1, 0.5)
260810020	1	2.6 (2.0, 3.8)	14	1	0.4 (-0.9, 1.6)
261210040	1	2.0 (1.5, 2.9)	14	1	-0.4 (-1.4, 0.5)
261450018	1	4.5 (3.0, 9.3)	5	1	3.7 (1.2, 6.3)
261630001	1	8.3 (6.3, 12.5)*	12	1	1.7 (-2.7, 6.1)
260650012	2	3.8 (3.0, 5.1)	20	1	-0.9 (-2.3, 0.6)
260770008	2	3.3 (2.7, 4.4)	24	1	-1.4 (-2.5, -0.4)
260810020	2	4.6 (3.5, 6.8)	13	1	1.0 (-1.2, 3.3)
261210040	2	3.4 (2.5, 5.6)	9	1	-0.3 (-2.5, 1.9)
261450018	2	3.2 (2.4, 4.8)	12	1	-0.2 (-2.0, 1.5)
261630001	2	5.5 (4.1, 8.5)	11	1	2.1 (-0.8, 5.0)
260650012	3	2.3 (1.8, 3.2)	18	1	-1.4 (-2.2, -0.7)
260770008	3	2.4 (1.9, 3.1)	23	1	-0.0 (-0.9, 0.8)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=5 STATE=MI REPORTING ORGANIZATION=001 METHOD=118 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
260810020	3	3.2 (2.3, 5.6)	8	1	0.7 (-1.5, 3.0)
261210040	3	1.8 (1.3, 3.1)	8	1	1.1 (0.1, 2.2)
261450018	3	5.1 (4.0, 7.1)	17	1	2.0 (0.0, 4.1)
261630001	3	3.4 (2.5, 5.1)	12	1	1.2 (-0.5, 2.9)
260650012	4	4.1 (3.1, 6.0)	14	1	2.5 (1.0, 4.1)
260770008	4	3.1 (2.5, 4.1)	23	1	1.9 (1.0, 2.8)
260810020	4	3.2 (2.4, 4.8)	12	1	-2.7 (-3.6, -1.8)
261210040	4	2.8 (2.0, 4.7)	8	1	1.5 (-0.1, 3.2)
261450018	4	2.8 (2.0, 5.1)	7	1	1.7 (-0.1, 3.5)
261630001	4	5.1 (3.9, 7.8)	12	1	1.7 (-0.9, 4.3)
A	1	3.8 (3.4, 4.3)	91	6	
A	2	3.9 (3.5, 4.5)	89	6	
A	3	3.3 (2.9, 3.7)	86	6	
A	4	3.6 (3.2, 4.2)	76	6	
A	A	3.7 (3.4, 3.9)	342	24	

---------- REGION=5 STATE=MN REPORTING ORGANIZATION=001 METHOD=119 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
270854301	1	1.7 (1.0, 7.4)	2	1	-0.7 (-10.2, 8.8)
270854301	2	1.1 (0.7, 5.0)	2	1	-1.1 (-2.3, 0.0)
270854301	3	15.7 (10.8, 30.0)*	6	1	0.8 (-13.3, 14.9)
271377550	3	9.1 (6.1, 19.1)*	5	1	-3.9 (-12.7, 4.8)
271230866	4	20.2 (10.3, 322.2)*	1	1	20.2
271377550	4	10.0 (5.8, 44.2)*	2	1	10.0 (7.8, 12.2)
A	1	1.7 (1.0, 7.4)	2	1	
A	2	1.1 (0.7, 5.0)	2	1	
A	3	13.1 (9.8, 20.3)*	11	2	
A	4	14.2 (8.8, 41.6)*	3	2	
A	A	11.8 (9.3, 16.3)*	18	6	

---------- REGION=5 STATE=MN REPORTING ORGANIZATION=001 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
270530960	1	0.4 (0.2, 6.7)	1	1	-0.4
271230866	1	11.7 (8.8, 17.7)*	12	1	10.0 (6.7, 13.3)
271230868	1	12.2 (9.3, 18.1)*	13	1	3.8 (-2.1, 9.8)
271377550	1	7.7 (5.3, 14.7)*	6	1	3.3 (-3.0, 9.5)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=5 STATE=MN REPORTING ORGANIZATION=001 METHOD=120 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
271230866	2	19.7 (12.8, 46.7)*	4	1	8.8 (-15.2, 32.7)
271230868	2	61.8 (35.7, 272.8)*	2	1	43.7 (-232, 319.6)
271377550	2	32.8 (20.3, 95.7)*	3	1	-14.0 (-75.2, 47.3)
271230866	3	1.1 (0.7, 3.2)	3	1	-0.1 (-2.4, 2.2)
271230868	3	8.1 (5.6, 15.6)*	6	1	4.7 (-1.3, 10.7)
271377550	3	7.6 (3.9, 120.5)*	1	1	7.6
271230866	4	20.8 (12.0, 92.0)*	2	1	-9.1 (-127, 109.2)
A	1	11.1 (9.2, 14.0)*	32	4	
A	2	37.1 (27.1, 61.1)*	9	3	
A	3	6.8 (5.0, 10.8)*	10	3	
A	4	20.8 (12.0, 92.0)*	2	1	
A	A	18.3 (15.8, 21.8)*	53	11	

---------- REGION=5 STATE=OH REPORTING ORGANIZATION=001 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
390490025	1	3.9 (2.9, 6.2)	10	1	2.3 (0.4, 4.2)
390490025	2	3.9 (3.0, 6.0)	12	1	1.5 (-0.4, 3.5)
390490025	3	1.9 (1.4, 2.9)	12	1	-0.3 (-1.4, 0.7)
390490025	4	9.6 (7.2, 14.9)*	11	1	2.9 (-2.4, 8.1)
A	1	3.9 (2.9, 6.2)	10	1	
A	2	3.9 (3.0, 6.0)	12	1	
A	3	1.9 (1.4, 2.9)	12	1	
A	4	9.6 (7.2, 14.9)*	11	1	
A	A	5.6 (4.8, 6.8)	45	4	

---------- REGION=5 STATE=OH REPORTING ORGANIZATION=002 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
390932003	4	0.6 (0.3, 1.6)	3	1	-0.4 (-1.2, 0.3)
A	4	0.6 (0.3, 1.6)	3	1	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=5 STATE=OH REPORTING ORGANIZATION=004 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
390811001	1	7.1 (4.8, 14.9)*	5	1	-6.4 (-9.7, -3.0)
390811001	2	4.3 (3.2, 6.7)	11	1	0.1 (-2.4, 2.5)
390811001	3	3.9 (2.8, 6.7)	8	1	-0.2 (-3.0, 2.6)
390811001	4	4.2 (3.0, 6.8)	9	1	-2.7 (-4.8, -0.6)
A	1	7.1 (4.8, 14.9)*	5	1	
A	2	4.3 (3.2, 6.7)	11	1	
A	3	3.9 (2.8, 6.7)	8	1	
A	4	4.2 (3.0, 6.8)	9	1	
A	A	4.7 (3.9, 5.9)	33	4	

---------- REGION=5 STATE=OH REPORTING ORGANIZATION=006 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
391530017	1	3.4 (2.5, 5.6)	9	1	1.9 (0.1, 3.8)
391530017	2	4.1 (3.0, 6.5)	10	1	-0.3 (-2.8, 2.2)
391530017	3	3.9 (2.9, 5.9)	12	1	2.3 (0.5, 4.0)
391530017	4	31.5 (23.0, 51.8)*	9	1	5.0 (-15.4, 25.5)
A	1	3.4 (2.5, 5.6)	9	1	
A	2	4.1 (3.0, 6.5)	10	1	
A	3	3.9 (2.9, 5.9)	12	1	
A	4	31.5 (23.0, 51.8)*	9	1	
A	A	15.3 (13.0, 18.8)*	40	4	

---------- REGION=5 STATE=OH REPORTING ORGANIZATION=007 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
391510017	1	24.8 (19.1, 36.2)*	14	1	-3.6 (-15.7, 8.4)
391510017	2	2.5 (1.9, 3.6)	14	1	1.5 (0.6, 2.5)
391510017	3	3.7 (2.8, 5.6)	12	1	1.4 (-0.5, 3.3)
391510017	4	1.3 (1.0, 2.0)	13	1	1.0 (0.5, 1.5)
A	1	24.8 (19.1, 36.2)*	14	1	
A	2	2.5 (1.9, 3.6)	14	1	
A	3	3.7 (2.8, 5.6)	12	1	
A	4	1.3 (1.0, 2.0)	13	1	
A	A	13.0 (11.2, 15.4)*	53	4	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=5 STATE=OH REPORTING ORGANIZATION=008 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
390170003	1	5.8 (4.5, 8.7)	13	1	-3.6 (-6.0, -1.3)
390610014	1	4.5 (3.5, 6.7)	13	1	-1.3 (-3.5, 1.0)
390610041	1	8.0 (5.4, 16.8)*	5	1	-2.1 (-10.4, 6.1)
390170003	2	3.5 (2.7, 5.1)	14	1	2.0 (0.6, 3.4)
390610014	2	2.5 (1.9, 3.8)	12	1	1.0 (-0.2, 2.2)
390610041	2	1.5 (1.1, 2.4)	9	1	0.7 (-0.2, 1.5)
390170003	3	5.0 (3.7, 7.7)	11	1	-0.9 (-3.7, 1.8)
390610014	3	2.9 (2.2, 4.4)	12	1	0.1 (-1.5, 1.6)
390610041	3	1.7 (1.3, 2.9)	9	1	0.9 (-0.0, 1.9)
390170003	4	1.7 (1.2, 2.9)	8	1	0.6 (-0.6, 1.7)
390610014	4	3.3 (2.5, 4.9)	13	1	-0.8 (-2.4, 0.9)
A	1	5.8 (4.8, 7.3)	31	3	
A	2	2.8 (2.3, 3.5)	35	3	
A	3	3.5 (2.9, 4.4)	32	3	
A	4	2.8 (2.2, 3.8)	21	2	
A	A	4.0 (3.6, 4.4)	119	11	

---------- REGION=5 STATE=OH REPORTING ORGANIZATION=009 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
390350060	1	5.5 (4.3, 8.1)	14	1	3.0 (0.7, 5.3)
390350060	2	2.2 (1.6, 3.4)	11	1	-0.9 (-2.0, 0.3)
390350038	3	3.1 (2.3, 5.1)	9	1	1.3 (-0.6, 3.1)
390350060	3	20.0 (15.3, 29.7)*	13	1	7.5 (-2.0, 17.1)
390350038	4	5.0 (3.7, 8.0)	10	1	1.4 (-1.6, 4.3)
390350060	4	2.0 (1.5, 3.2)	10	1	1.4 (0.5, 2.3)
A	1	5.5 (4.3, 8.1)	14	1	
A	2	2.2 (1.6, 3.4)	11	1	
A	3	15.5 (12.5, 20.7)*	22	2	
A	4	3.8 (3.1, 5.2)	20	2	
A	A	9.5 (8.3, 11.1)*	67	6	

---------- REGION=5 STATE=OH REPORTING ORGANIZATION=010 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
391130014	2	14.0 (10.9, 20.2)*	15	1	-2.8 (-9.3, 3.6)
391130014	3	1.5 (1.1, 2.3)	12	1	-0.3 (-1.1, 0.4)
391130014	4	3.0 (2.2, 4.7)	10	1	-1.6 (-3.1, -0.1)
A	2	14.0 (10.9, 20.2)*	15	1	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=5 STATE=OH REPORTING ORGANIZATION=010 METHOD=120 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
A	3	1.5 (1.1, 2.3)	12	1	
A	4	3.0 (2.2, 4.7)	10	1	
A	A	9.1 (7.7, 11.3)*	37	3	

---------- REGION=5 STATE=OH REPORTING ORGANIZATION=012 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
390851001	3	10.7 (7.2, 22.4)*	5	1	3.0 (-8.0, 14.0)
390851001	4	4.8 (3.7, 7.3)	12	1	0.7 (-1.9, 3.3)
A	3	10.7 (7.2, 22.4)*	5	1	
A	4	4.8 (3.7, 7.3)	12	1	
A	A	7.1 (5.6, 9.9)	17	2	

---------- REGION=5 STATE=OH REPORTING ORGANIZATION=013 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
391450013	3	10.4 (6.8, 24.7)*	4	1	4.1 (-8.9, 17.1)
391450013	4	20.3 (14.8, 33.4)*	9	1	-8.3 (-20.5, 3.9)
A	3	10.4 (6.8, 24.7)*	4	1	
A	4	20.3 (14.8, 33.4)*	9	1	
A	A	17.9 (13.6, 26.6)*	13	2	

---------- REGION=5 STATE=OH REPORTING ORGANIZATION=015 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
390950024	3	19.7 (14.4, 32.4)*	9	1	4.9 (-7.7, 17.4)
390950024	4	4.5 (3.0, 9.5)	5	1	-1.0 (-5.7, 3.7)
A	3	19.7 (14.4, 32.4)*	9	1	
A	4	4.5 (3.0, 9.5)	5	1	
A	A	16.0 (12.3, 23.4)*	14	2	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=5 STATE=OH REPORTING ORGANIZATION=016 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
390990005	1	2.0 (1.5, 3.0)	12	1	0.4 (-0.6, 1.4)
390990005	2	3.1 (2.4, 4.5)	14	1	0.3 (-1.2, 1.8)
390990005	3	2.7 (2.1, 4.0)	13	1	1.6 (0.5, 2.8)
390990005	4	4.8 (3.6, 7.4)	11	1	2.1 (-0.4, 4.5)
A	1	2.0 (1.5, 3.0)	12	1	
A	2	3.1 (2.4, 4.5)	14	1	
A	3	2.7 (2.1, 4.0)	13	1	
A	4	4.8 (3.6, 7.4)	11	1	
A	A	3.2 (2.8, 3.9)	50	4	

---------- REGION=5 STATE=WI REPORTING ORGANIZATION=001 METHOD=117 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
551091002	1	4.2 (3.0, 7.1)	8	1	2.0 (-0.7, 4.6)
551091002	2	6.2 (3.6, 27.4)*	2	1	-3.7 (-35.1, 27.7)
551091002	3	7.2 (5.1, 13.0)*	7	1	-0.0 (-5.8, 5.7)
551091002	4	9.4 (6.8, 16.1)*	8	1	-1.1 (-7.8, 5.6)
A	1	4.2 (3.0, 7.1)	8	1	
A	2	6.2 (3.6, 27.4)*	2	1	
A	3	7.2 (5.1, 13.0)*	7	1	
A	4	9.4 (6.8, 16.1)*	8	1	
A	A	7.2 (5.9, 9.4)	25	4	

---------- REGION=5 STATE=WI REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
550090005	1	6.3 (4.8, 9.3)	13	1	-2.5 (-5.4, 0.5)
550250025	1	14.5 (10.6, 23.9)*	9	1	4.7 (-4.3, 13.7)
550310025	1	6.0 (4.8, 8.0)	22	1	-1.4 (-3.6, 0.8)
550790026	1	18.3 (14.0, 27.2)*	13	1	5.4 (-3.6, 14.4)
550790059	1	7.8 (6.0, 11.4)*	14	1	6.1 (3.6, 8.5)
551330027	1	3.6 (2.8, 5.2)	15	1	-1.0 (-2.6, 0.7)
550090005	2	18.4 (14.0, 27.4)*	13	1	-2.5 (-11.9, 6.9)
550250025	2	11.1 (8.7, 15.8)*	16	1	-4.4 (-9.0, 0.3)
550310025	2	5.0 (3.5, 9.0)	7	1	0.1 (-3.9, 4.1)
550790026	2	9.4 (7.2, 14.0)*	13	1	5.7 (1.8, 9.5)
550790059	2	8.9 (6.8, 13.3)*	13	1	4.9 (1.0, 8.7)
551330027	2	4.4 (3.4, 6.6)	13	1	-0.4 (-2.7, 1.9)
550090005	3	2.3 (1.8, 3.2)	17	1	0.4 (-0.6, 1.4)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=5 STATE=WI REPORTING ORGANIZATION=001 METHOD=118 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
550250025	3	4.2 (3.3, 5.7)	20	1	0.5 (-1.1, 2.1)
550310025	3	3.7 (2.9, 5.1)	18	1	-0.4 (-1.9, 1.1)
550790026	3	4.3 (3.2, 6.9)	10	1	0.7 (-1.9, 3.3)
550790059	3	2.3 (1.7, 3.8)	9	1	-0.0 (-1.6, 1.5)
551330027	3	3.4 (2.5, 5.5)	9	1	1.2 (-0.9, 3.3)
550090005	4	13.8 (10.3, 21.4)*	11	1	6.6 (-0.3, 13.6)
550250025	4	5.0 (4.0, 6.8)	19	1	-0.8 (-2.8, 1.2)
550310025	4	7.2 (5.2, 11.8)*	9	1	2.2 (-2.3, 6.7)
550790026	4	5.1 (3.7, 8.7)	8	1	4.0 (1.7, 6.3)
550790059	4	5.3 (3.9, 8.7)	9	1	2.3 (-0.8, 5.4)
551330027	4	5.4 (4.2, 8.1)	13	1	0.5 (-2.3, 3.3)
A	1	10.0 (8.9, 11.5)*	86	6	
A	2	11.0 (9.7, 12.7)*	75	6	
A	3	3.5 (3.1, 4.0)	83	6	
A	4	7.5 (6.6, 8.7)	69	6	
A	A	8.5 (8.0, 9.1)	313	24	

---------- REGION=6 STATE=AR REPORTING ORGANIZATION=001 METHOD=117 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
050010001	1	5.8 (4.6, 8.3)	16	1	-2.2 (-4.7, 0.2)
050310001	1	4.6 (3.4, 7.3)	10	1	-0.8 (-3.6, 2.0)
050010001	2	6.3 (4.8, 9.3)	13	1	-1.4 (-4.5, 1.7)
050310001	2	7.3 (5.3, 12.0)*	9	1	0.6 (-4.2, 5.4)
050450002	2	7.8 (5.8, 12.4)*	10	1	-0.4 (-5.2, 4.4)
050010001	3	1.8 (1.3, 2.9)	10	1	1.2 (0.4, 2.0)
050310001	3	1.6 (1.2, 2.3)	14	1	-0.8 (-1.5, -0.2)
050450002	3	8.7 (6.7, 12.7)*	14	1	3.0 (-1.0, 7.0)
050310001	4	4.4 (3.3, 6.7)	12	1	1.9 (-0.3, 4.0)
050450002	4	4.5 (3.4, 6.7)	12	1	-0.4 (-2.8, 2.0)
A	1	5.4 (4.4, 7.0)	26	2	
A	2	7.1 (5.9, 8.9)	32	3	
A	3	5.4 (4.6, 6.7)	38	3	
A	4	4.4 (3.6, 5.8)	24	2	
A	A	5.7 (5.2, 6.4)	120	10	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=6 STATE=AR REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
051190007	1	2.2 (1.5, 4.3)	6	1	-1.1 (-2.8, 0.7)
051191008	1	6.4 (4.7, 10.5)*	9	1	1.0 (-3.2, 5.1)
051310008	1	4.6 (3.5, 6.8)	13	1	1.0 (-1.3, 3.3)
051190007	2	6.5 (5.0, 9.3)	15	1	3.8 (1.3, 6.3)
051191008	2	5.7 (4.2, 9.2)	10	1	0.6 (-2.9, 4.1)
051310008	2	6.6 (5.0, 10.0)	12	1	-2.4 (-5.7, 0.9)
050010010	3	5.2 (3.2, 15.2)*	3	1	4.7 (-0.1, 9.5)
051190007	3	1.6 (1.2, 2.3)	14	1	0.2 (-0.6, 0.9)
051191008	3	6.1 (4.7, 9.1)	13	1	-2.8 (-5.6, 0.0)
051310008	3	11.7 (9.0, 17.1)*	14	1	0.0 (-5.8, 5.8)
050010010	4	6.7 (4.7, 12.0)*	7	1	-2.1 (-7.1, 3.0)
051190007	4	2.8 (2.1, 4.3)	11	1	-0.8 (-2.3, 0.8)
051191008	4	3.6 (2.7, 5.5)	12	1	0.2 (-1.7, 2.2)
051310008	4	3.3 (2.4, 5.2)	10	1	1.4 (-0.4, 3.2)
A	1	4.9 (4.0, 6.3)	28	3	
A	2	6.3 (5.3, 7.8)	37	3	
A	3	7.6 (6.5, 9.2)	44	4	
A	4	4.1 (3.4, 5.0)	40	4	
A	A	6.0 (5.5, 6.6)	149	14	

---------- REGION=6 STATE=LA REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
220171002	1	3.5 (2.7, 5.0)	15	1	0.3 (-1.3, 1.9)
220330009	1	14.0 (10.9, 20.2)*	15	1	0.5 (-6.1, 7.1)
220550005	1	5.4 (4.1, 8.0)	13	1	-1.9 (-4.5, 0.6)
220710012	1	4.9 (3.7, 7.6)	11	1	3.6 (1.6, 5.5)
220171002	2	13.4 (10.3, 20.0)*	13	1	-2.2 (-9.0, 4.7)
220330009	2	2.6 (2.0, 3.7)	15	1	0.7 (-0.4, 1.9)
220550005	2	3.1 (2.2, 5.0)	9	1	0.9 (-1.0, 2.8)
220710012	2	19.2 (14.9, 27.6)*	15	1	9.5 (1.6, 17.4)
220171002	3	3.2 (2.4, 5.0)	11	1	1.2 (-0.5, 2.9)
220330009	3	5.3 (4.0, 8.0)	12	1	2.6 (0.1, 5.1)
220550005	3	3.6 (2.7, 5.4)	12	1	0.1 (-1.8, 2.1)
220710012	3	4.2 (3.2, 6.3)	12	1	3.3 (1.9, 4.7)
220171002	4	3.7 (2.9, 5.5)	14	1	0.2 (-1.6, 2.1)
220330009	4	1.9 (1.5, 2.8)	15	1	0.2 (-0.7, 1.1)
220550005	4	3.5 (2.7, 5.1)	14	1	-1.3 (-2.9, 0.3)
220710012	4	4.4 (3.3, 6.5)	13	1	2.7 (1.0, 4.5)
A	1	8.4 (7.2, 10.0)	54	4	
A	2	12.5 (10.8, 14.9)*	52	4	
A	3	4.2 (3.6, 5.0)	47	4	
A	4	3.5 (3.0, 4.1)	56	4	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=6 STATE=LA REPORTING ORGANIZATION=001 METHOD=118 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
A	A	8.0 (7.4, 8.7)	209	16	

---------- REGION=6 STATE=NM REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
350450006	1	2.8 (2.1, 4.2)	13	1	1.4 (0.1, 2.6)
350490020	1	3.8 (2.3, 11.0)*	3	1	-3.3 (-6.9, 0.2)
350450006	2	3.2 (2.2, 5.7)	7	1	-1.2 (-3.5, 1.1)
350490020	2	0.4 (0.2, 1.8)	2	1	0.0 (-2.5, 2.6)
350450006	3	2.6 (1.6, 7.6)	3	1	2.3 (-0.1, 4.8)
350490020	3	3.6 (2.6, 5.9)	9	1	-0.4 (-2.7, 2.0)
350450006	4	4.5 (3.4, 6.6)	13	1	-3.0 (-4.7, -1.2)
350490020	4	3.4 (2.5, 5.1)	12	1	0.4 (-1.4, 2.2)
A	1	3.0 (2.3, 4.3)	16	2	
A	2	2.8 (2.0, 4.6)	9	2	
A	3	3.4 (2.6, 5.1)	12	2	
A	4	4.0 (3.2, 5.2)	25	2	
A	A	3.5 (3.0, 4.1)	62	8	

---------- REGION=6 STATE=NM REPORTING ORGANIZATION=002 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
350010023	1	2.3 (1.9, 3.0)	26	1	1.2 (0.5, 1.8)
350010023	2	4.1 (3.1, 6.0)	14	1	-1.1 (-3.0, 0.9)
350010023	3	7.3 (5.6, 10.8)*	13	1	-2.0 (-5.6, 1.6)
350010023	4	3.5 (3.0, 4.4)	35	1	0.8 (-0.2, 1.8)
350010024	4	3.6 (2.1, 15.7)*	2	1	-3.6 (-4.8, -2.3)
A	1	2.3 (1.9, 3.0)	26	1	
A	2	4.1 (3.1, 6.0)	14	1	
A	3	7.3 (5.6, 10.8)*	13	1	
A	4	3.5 (3.0, 4.4)	37	2	
A	A	4.1 (3.7, 4.7)	90	5	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=6 STATE=NM REPORTING ORGANIZATION=006 METHOD=117 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
350439003	1	5.4 (3.7, 10.3)*	6	1	-3.7 (-7.2, -0.1)
350439003	2	0.8 (0.5, 3.5)	2	1	0.6 (-3.0, 4.1)
350439003	3	2.0 (1.3, 4.8)	4	1	0.9 (-1.6, 3.3)
350439003	4	2.9 (2.2, 4.7)	10	1	-1.7 (-3.2, -0.2)
A	1	5.4 (3.7, 10.3)*	6	1	
A	2	0.8 (0.5, 3.5)	2	1	
A	3	2.0 (1.3, 4.8)	4	1	
A	4	2.9 (2.2, 4.7)	10	1	
A	A	3.5 (2.9, 4.7)	22	4	

---------- REGION=6 STATE=NM REPORTING ORGANIZATION=007 METHOD=117 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
350439004	1	4.4 (3.4, 6.4)	14	1	0.2 (-2.0, 2.3)
350439004	2	6.5 (4.6, 11.7)*	7	1	2.8 (-1.8, 7.5)
350439004	3	6.8 (4.7, 13.0)*	6	1	2.4 (-3.4, 8.1)
350439004	4	5.8 (4.4, 9.1)	11	1	0.8 (-2.5, 4.1)
A	1	4.4 (3.4, 6.4)	14	1	
A	2	6.5 (4.6, 11.7)*	7	1	
A	3	6.8 (4.7, 13.0)*	6	1	
A	4	5.8 (4.4, 9.1)	11	1	
A	A	5.7 (4.8, 7.0)	38	4	

---------- REGION=6 STATE=OK REPORTING ORGANIZATION=101 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
400310648	1	4.7 (3.5, 7.3)	11	1	2.2 (-0.1, 4.6)
400470554	1	1.9 (1.4, 3.5)	7	1	1.1 (-0.1, 2.4)
401090035	1	4.2 (3.1, 6.3)	12	1	0.0 (-2.2, 2.3)
401430110	1	1.8 (1.4, 2.7)	13	1	1.1 (0.4, 1.9)
400310648	2	2.0 (1.5, 3.1)	11	1	0.8 (-0.2, 1.9)
400470554	2	4.9 (3.6, 7.5)	11	1	-0.3 (-3.1, 2.4)
401090035	2	3.8 (2.8, 6.3)	9	1	2.1 (0.0, 4.2)
401430110	2	5.3 (3.7, 10.2)*	6	1	-0.3 (-5.1, 4.5)
400310648	3	3.9 (2.9, 6.2)	10	1	1.6 (-0.6, 3.7)
400470554	3	4.8 (3.5, 7.8)	9	1	-0.8 (-3.8, 2.3)
401090035	3	3.6 (2.7, 5.8)	10	1	2.2 (0.4, 3.9)
401430110	3	6.0 (4.5, 9.4)	11	1	-1.4 (-4.8, 1.9)
400310648	4	2.4 (1.7, 4.3)	7	1	-0.2 (-2.1, 1.7)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=6 STATE=OK REPORTING ORGANIZATION=101 METHOD=118 ----------
(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
400470554	4	3.9 (2.8, 6.4)	9	1	-0.4 (-3.0, 2.1)
401090035	4	7.3 (5.4, 11.7)*	10	1	2.5 (-1.8, 6.7)
401430110	4	4.5 (3.4, 7.0)	11	1	-1.5 (-3.9, 0.9)
A	1	3.5 (3.0, 4.2)	43	4	
A	2	4.1 (3.4, 5.0)	37	4	
A	3	4.7 (4.0, 5.8)	40	4	
A	4	5.0 (4.2, 6.2)	37	4	
A	A	4.3 (4.0, 4.8)	157	16	

---------- REGION=6 STATE=OK REPORTING ORGANIZATION=106 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
400219002	1	3.7 (2.6, 6.3)	8	1	0.3 (-2.3, 3.0)
400719003	1	31.5 (21.8, 60.4)*	6	1	-6.4 (-34.2, 21.4)
400219002	2	2.3 (1.6, 4.5)	6	1	-0.0 (-2.1, 2.1)
400719003	2	3.9 (3.0, 6.0)	12	1	-2.4 (-4.1, -0.7)
400219002	3	1.8 (1.2, 3.9)	5	1	-1.2 (-2.7, 0.3)
400719003	3	2.5 (1.9, 3.6)	14	1	-0.1 (-1.4, 1.1)
400219002	4	1.3 (1.0, 2.1)	10	1	-1.0 (-1.5, -0.5)
400719003	4	4.8 (3.3, 9.2)	6	1	-2.4 (-6.2, 1.3)
A	1	20.8 (16.0, 30.4)*	14	2	
A	2	3.5 (2.8, 4.8)	18	2	
A	3	2.3 (1.8, 3.2)	19	2	
A	4	3.1 (2.4, 4.4)	16	2	
A	A	9.9 (8.7, 11.5)*	67	8	

---------- REGION=6 STATE=TX REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
481130050	1	2.3 (1.5, 5.5)	4	1	-1.6 (-3.9, 0.7)
481130069	1	1.7 (1.3, 2.7)	11	1	-0.0 (-1.0, 1.0)
481410010	1	1.1 (0.6, 18.3)*	1	1	1.1
481410044	1	11.9 (8.4, 21.5)*	7	1	-0.1 (-9.6, 9.4)
482011035	1	4.6 (3.3, 8.3)	7	1	2.7 (-0.3, 5.7)
482450021	1	0.7 (0.3, 10.5)*	1	1	-0.7
484391002	1	8.3 (6.2, 12.8)*	11	1	-0.6 (-5.3, 4.1)
484393006	1	3.7 (2.8, 5.8)	11	1	1.9 (0.1, 3.7)
484530020	1	11.7 (8.5, 19.3)*	9	1	2.8 (-4.7, 10.3)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=6 STATE=TX REPORTING ORGANIZATION=001 METHOD=118 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
480290060	2	0.6 (0.4, 2.9)	2	1	-0.6 (-1.6, 0.3)
481130050	2	2.5 (1.9, 3.9)	11	1	1.7 (0.7, 2.8)
481130069	2	2.8 (2.1, 4.2)	12	1	0.7 (-0.8, 2.1)
481410010	2	6.7 (3.9, 29.5)*	2	1	5.8 (-15.7, 27.2)
481410044	2	10.7 (7.9, 17.0)*	10	1	-7.6 (-12.2, -3.0)
482010024	2	3.4 (1.7, 53.4)*	1	1	3.4
482011035	2	4.1 (2.8, 8.6)	5	1	-1.6 (-5.7, 2.4)
482450021	2	1.7 (1.1, 5.0)	3	1	0.4 (-3.1, 3.8)
483550032	2	5.1 (3.5, 10.7)*	5	1	-1.6 (-6.8, 3.6)
484391002	2	2.9 (2.2, 4.4)	12	1	-0.5 (-2.0, 1.0)
484393006	2	4.4 (3.3, 6.5)	13	1	-0.7 (-2.9, 1.5)
484530020	2	1.6 (1.2, 2.7)	9	1	-0.9 (-1.8, 0.1)
480290060	3	5.6 (3.9, 10.0)	7	1	-2.6 (-6.5, 1.2)
481130050	3	3.2 (2.4, 4.6)	14	1	1.1 (-0.3, 2.6)
481130069	3	3.1 (2.4, 4.4)	15	1	0.7 (-0.7, 2.1)
481410044	3	7.8 (5.7, 12.4)*	10	1	-0.1 (-4.9, 4.6)
481671005	3	6.7 (4.2, 19.6)*	3	1	6.6 (3.6, 9.5)
482010024	3	0.5 (0.3, 2.3)	2	1	-0.4 (-2.7, 2.0)
482011035	3	2.7 (2.0, 4.2)	10	1	-1.0 (-2.5, 0.5)
482450021	3	21.1 (15.8, 32.7)*	11	1	12.2 (2.3, 22.0)
483550032	3	3.1 (2.1, 5.9)	6	1	2.5 (0.8, 4.1)
484391002	3	3.4 (2.6, 5.1)	12	1	1.2 (-0.5, 2.9)
484393006	3	2.4 (1.8, 3.5)	14	1	1.3 (0.3, 2.3)
484530020	3	4.1 (3.2, 6.0)	14	1	-1.8 (-3.6, 0.1)
480290060	4	4.6 (3.0, 10.9)*	4	1	2.9 (-1.9, 7.8)
481130050	4	4.0 (3.0, 6.4)	10	1	3.5 (2.3, 4.7)
481130069	4	2.5 (1.9, 3.8)	11	1	-0.4 (-1.8, 1.1)
481410044	4	3.9 (2.9, 6.0)	11	1	2.1 (0.2, 4.0)
481671005	4	3.1 (2.2, 5.6)	7	1	1.6 (-0.6, 3.7)
482011035	4	2.1 (1.5, 3.4)	9	1	-0.4 (-1.7, 0.9)
482450021	4	16.4 (11.6, 29.5)*	7	1	2.8 (-10.0, 15.7)
483550032	4	2.6 (1.8, 4.6)	7	1	0.4 (-1.6, 2.4)
484391002	4	2.5 (1.9, 4.0)	10	1	-1.0 (-2.4, 0.5)
484393006	4	2.9 (2.2, 4.3)	13	1	-0.1 (-1.6, 1.4)
484530020	4	7.4 (4.6, 21.5)*	3	1	-5.3 (-15.9, 5.3)
A	1	7.3 (6.4, 8.6)	62	9	
A	2	4.9 (4.3, 5.6)	85	12	
A	3	7.5 (6.8, 8.5)	118	12	
A	4	5.6 (5.0, 6.3)	92	11	
A	A	6.5 (6.1, 6.9)	357	44	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=7 STATE=IA REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
191532520	1	2.6 (2.0, 3.7)	15	1	1.3 (0.2, 2.4)
191532520	2	2.3 (1.7, 3.4)	13	1	0.4 (-0.7, 1.6)
191532520	3	3.6 (2.8, 5.1)	15	1	1.0 (-0.6, 2.6)
191532520	4	7.2 (5.6, 10.4)*	15	1	0.8 (-2.6, 4.1)
A	1	2.6 (2.0, 3.7)	15	1	
A	2	2.3 (1.7, 3.4)	13	1	
A	3	3.6 (2.8, 5.1)	15	1	
A	4	7.2 (5.6, 10.4)*	15	1	
A	A	4.4 (3.8, 5.2)	58	4	

---------- REGION=7 STATE=IA REPORTING ORGANIZATION=002 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
191130037	1	6.5 (4.8, 10.1)*	11	1	2.9 (-0.4, 6.2)
191130037	2	3.1 (2.3, 5.0)	10	1	1.5 (-0.2, 3.2)
191130037	3	3.1 (2.4, 4.6)	14	1	1.1 (-0.4, 2.5)
191130037	4	2.6 (2.0, 3.9)	13	1	-0.2 (-1.6, 1.1)
A	1	6.5 (4.8, 10.1)*	11	1	
A	2	3.1 (2.3, 5.0)	10	1	
A	3	3.1 (2.4, 4.6)	14	1	
A	4	2.6 (2.0, 3.9)	13	1	
A	A	4.0 (3.5, 4.9)	48	4	

---------- REGION=7 STATE=IA REPORTING ORGANIZATION=003 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
190450021	1	2.3 (1.9, 3.1)	22	1	1.0 (0.3, 1.8)
191550009	1	2.4 (1.9, 3.3)	18	1	-1.2 (-2.0, -0.3)
191630015	1	2.7 (2.1, 3.7)	18	1	-0.2 (-1.3, 0.9)
190450021	2	2.5 (1.9, 3.4)	18	1	1.0 (0.1, 2.0)
191550009	2	3.8 (2.9, 5.3)	16	1	2.8 (1.6, 3.9)
191630015	2	2.5 (1.9, 3.6)	15	1	-1.2 (-2.2, -0.2)
190450021	3	1.8 (1.4, 2.4)	21	1	-0.5 (-1.1, 0.2)
191550009	3	2.7 (2.2, 3.6)	23	1	-0.5 (-1.4, 0.5)
191630015	3	2.2 (1.8, 3.1)	19	1	0.5 (-0.4, 1.4)
190450021	4	4.6 (3.7, 6.3)	21	1	-2.4 (-4.0, -0.9)
191550009	4	5.8 (4.5, 8.5)	14	1	0.8 (-2.1, 3.6)
191630015	4	2.6 (2.0, 3.7)	15	1	-0.7 (-1.9, 0.4)
A	1	2.5 (2.1, 2.9)	58	3	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=7 STATE=IA REPORTING ORGANIZATION=003 METHOD=118 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
A	2	3.0 (2.5, 3.6)	49	3	
A	3	2.3 (2.0, 2.7)	63	3	
A	4	4.5 (3.9, 5.4)	50	3	
A	A	3.1 (2.9, 3.4)	220	12	

---------- REGION=7 STATE=KS REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
200910007	1	2.5 (1.9, 3.6)	14	1	2.1 (1.4, 2.7)
201070002	1	4.2 (3.2, 6.2)	13	1	1.1 (-1.0, 3.2)
201730010	1	6.7 (5.1, 10.2)*	12	1	4.5 (1.8, 7.2)
202090021	1	4.1 (3.1, 5.9)	14	1	-2.9 (-4.3, -1.4)
200910007	2	4.5 (3.4, 6.8)	12	1	1.3 (-1.0, 3.6)
201070002	2	4.1 (3.0, 6.5)	10	1	0.3 (-2.2, 2.8)
201730010	2	5.4 (4.1, 8.2)	12	1	2.2 (-0.5, 4.9)
202090021	2	2.8 (2.1, 4.1)	13	1	1.2 (-0.1, 2.4)
200910007	3	3.8 (2.8, 6.3)	9	1	2.8 (1.0, 4.5)
201070002	3	6.6 (4.6, 11.8)*	7	1	-0.0 (-5.2, 5.2)
201730010	3	3.6 (2.8, 5.2)	15	1	0.0 (-1.7, 1.7)
202090021	3	6.3 (4.9, 9.0)	15	1	-1.9 (-4.7, 0.9)
200910007	4	2.3 (1.8, 3.5)	12	1	1.0 (-0.1, 2.2)
201070002	4	1.9 (1.4, 3.1)	10	1	0.4 (-0.8, 1.5)
201730010	4	9.6 (7.2, 14.9)*	11	1	5.9 (1.5, 10.2)
202090021	4	2.1 (1.5, 3.2)	11	1	0.6 (-0.6, 1.7)
A	1	4.5 (3.9, 5.4)	53	4	
A	2	4.3 (3.6, 5.1)	47	4	
A	3	5.2 (4.4, 6.2)	46	4	
A	4	5.1 (4.4, 6.2)	44	4	
A	A	4.8 (4.4, 5.2)	190	16	

---------- REGION=7 STATE=MO REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
290210010	1	2.2 (1.8, 2.8)	27	1	-0.2 (-0.9, 0.5)
290470026	1	4.6 (3.5, 6.8)	13	1	1.3 (-0.9, 3.6)
291831002	1	2.7 (2.2, 3.6)	22	1	0.8 (-0.2, 1.7)
290210010	2	2.5 (2.0, 3.4)	20	1	-0.6 (-1.6, 0.3)
290470026	2	5.2 (4.0, 7.8)	13	1	3.2 (1.1, 5.3)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=7 STATE=MO REPORTING ORGANIZATION=001 METHOD=118 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
291831002	2	2.6 (2.2, 3.4)	26	1	-0.4 (-1.3, 0.5)
290210010	3	2.0 (1.6, 2.5)	27	1	0.4 (-0.2, 1.1)
290470026	3	3.6 (2.8, 5.5)	12	1	2.9 (1.7, 4.1)
291831002	3	2.2 (1.8, 2.8)	29	1	0.6 (-0.0, 1.3)
290210010	4	2.8 (2.2, 3.6)	24	1	-1.3 (-2.1, -0.4)
290470026	4	3.1 (2.3, 4.8)	11	1	0.3 (-1.5, 2.0)
291831002	4	3.5 (2.8, 4.5)	25	1	1.4 (0.3, 2.5)
A	1	3.0 (2.6, 3.5)	62	3	
A	2	3.3 (2.9, 3.9)	59	3	
A	3	2.4 (2.1, 2.8)	68	3	
A	4	3.1 (2.7, 3.7)	60	3	
A	A	3.0 (2.8, 3.2)	249	12	

---------- REGION=7 STATE=MO REPORTING ORGANIZATION=002 METHOD=117 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
291892003	2	1.9 (1.1, 8.2)	2	1	0.2 (-11.5, 11.9)
A	2	1.9 (1.1, 8.2)	2	1	

---------- REGION=7 STATE=MO REPORTING ORGANIZATION=002 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
291892003	1	5.7 (4.2, 9.1)	10	1	3.7 (1.0, 6.3)
291892003	2	4.2 (3.0, 6.9)	9	1	1.3 (-1.3, 3.9)
291892003	3	8.6 (6.6, 12.8)*	13	1	-3.2 (-7.3, 0.9)
291892003	4	2.8 (2.1, 4.5)	10	1	1.6 (0.2, 3.1)
A	1	5.7 (4.2, 9.1)	10	1	
A	2	4.2 (3.0, 6.9)	9	1	
A	3	8.6 (6.6, 12.8)*	13	1	
A	4	2.8 (2.1, 4.5)	10	1	
A	A	6.0 (5.1, 7.4)	42	4	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=7 STATE=MO REPORTING ORGANIZATION=003 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
295100085	1	10.1 (9.0, 11.6)*	83	1	1.2 (-0.6, 3.1)
295100085	2	2.9 (2.5, 3.3)	75	1	0.4 (-0.2, 0.9)
295100085	3	2.2 (1.9, 2.5)	89	1	-0.6 (-1.0, -0.3)
295100085	4	5.2 (4.5, 6.0)	68	1	-0.6 (-1.6, 0.4)
A	1	10.1 (9.0, 11.6)*	83	1	
A	2	2.9 (2.5, 3.3)	75	1	
A	3	2.2 (1.9, 2.5)	89	1	
A	4	5.2 (4.5, 6.0)	68	1	
A	A	6.0 (5.6, 6.4)	315	4	

---------- REGION=7 STATE=MO REPORTING ORGANIZATION=004 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
290952002	1	2.3 (1.8, 3.3)	16	1	-1.7 (-2.4, -1.0)
290952002	2	2.7 (2.0, 4.0)	13	1	0.3 (-1.1, 1.6)
290952002	3	1.6 (1.2, 2.3)	14	1	0.6 (-0.1, 1.4)
290952002	4	1.6 (1.2, 2.3)	14	1	-1.0 (-1.6, -0.3)
A	1	2.3 (1.8, 3.3)	16	1	
A	2	2.7 (2.0, 4.0)	13	1	
A	3	1.6 (1.2, 2.3)	14	1	
A	4	1.6 (1.2, 2.3)	14	1	
A	A	2.1 (1.8, 2.5)	57	4	

---------- REGION=7 STATE=MO REPORTING ORGANIZATION=005 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
290770032	1	6.3 (4.8, 9.3)	13	1	1.0 (-2.1, 4.2)
290770032	2	4.1 (3.1, 6.0)	13	1	1.0 (-1.0, 3.0)
290770032	3	2.2 (1.7, 3.3)	13	1	1.2 (0.2, 2.1)
290770032	4	2.1 (1.6, 3.2)	12	1	-1.1 (-2.1, -0.1)
A	1	6.3 (4.8, 9.3)	13	1	
A	2	4.1 (3.1, 6.0)	13	1	
A	3	2.2 (1.7, 3.3)	13	1	
A	4	2.1 (1.6, 3.2)	12	1	
A	A	4.1 (3.5, 4.9)	51	4	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=7 STATE=NE REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
311090022	1	3.4 (2.5, 5.6)	9	1	2.0 (0.1, 3.8)
311530007	1	17.2 (11.2, 40.8)*	4	1	-4.5 (-27.0, 18.1)
311090022	2	4.3 (3.1, 7.1)	9	1	2.8 (0.7, 5.0)
311530007	2	4.4 (2.9, 10.5)*	4	1	2.8 (-1.8, 7.4)
311090022	3	3.5 (2.5, 5.7)	9	1	1.8 (-0.1, 3.7)
311530007	3	2.1 (1.4, 5.1)	4	1	2.0 (1.1, 3.0)
311090022	4	1.9 (1.3, 3.4)	7	1	1.3 (0.1, 2.4)
311530007	4	4.7 (3.3, 8.0)	8	1	2.1 (-0.9, 5.1)
A	1	9.9 (7.6, 14.8)*	13	2	
A	2	4.3 (3.3, 6.5)	13	2	
A	3	3.1 (2.4, 4.6)	13	2	
A	4	3.6 (2.8, 5.2)	15	2	
A	A	5.9 (5.1, 7.0)	54	8	

---------- REGION=7 STATE=NE REPORTING ORGANIZATION=003 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
310550019	1	14.7 (10.9, 23.4)*	10	1	7.0 (-0.9, 14.9)
310550052	1	26.1 (18.7, 44.7)*	8	1	-7.7 (-25.6, 10.2)
310550019	2	5.6 (3.9, 10.8)*	6	1	3.7 (-0.1, 7.5)
310550052	2	22.3 (13.8, 65.0)*	3	1	4.0 (-41.3, 49.2)
310550019	3	3.9 (2.9, 6.1)	11	1	-0.1 (-2.3, 2.2)
310550052	3	2.6 (1.8, 4.9)	6	1	1.4 (-0.5, 3.3)
310550019	4	19.0 (12.8, 39.8)*	5	1	-3.3 (-23.3, 16.7)
310550052	4	13.7 (7.0, 218.3)*	1	1	-13.7
A	1	20.6 (16.2, 28.5)*	18	2	
A	2	13.7 (10.0, 22.5)*	9	2	
A	3	3.5 (2.7, 4.9)	17	2	
A	4	18.3 (12.6, 35.0)*	6	2	
A	A	15.2 (13.0, 18.2)*	50	8	

---------- REGION=8 STATE=CO REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
080010001	1	4.0 (3.1, 5.8)	15	1	1.2 (-0.6, 3.0)
080410011	1	11.1 (7.6, 21.2)*	6	1	-3.7 (-13.1, 5.7)
080770003	1	1.8 (1.3, 3.2)	8	1	-0.9 (-2.0, 0.3)
080010001	2	5.8 (4.2, 9.5)	9	1	-3.5 (-6.5, -0.5)
080410011	2	3.6 (2.4, 7.6)	5	1	1.4 (-2.1, 5.0)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=8 STATE=CO REPORTING ORGANIZATION=001 METHOD=118 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
080770003	2	4.2 (2.1, 66.3)*	1	1	-4.2
080010001	3	5.6 (4.3, 8.2)	14	1	0.1 (-2.7, 2.9)
080410011	3	7.9 (5.9, 11.9)*	12	1	-3.4 (-7.2, 0.4)
080770003	3	1.4 (0.9, 4.0)	3	1	0.1 (-2.8, 2.9)
080010001	4	6.4 (4.8, 9.7)	12	1	2.4 (-0.8, 5.7)
080410011	4	11.5 (8.8, 17.1)*	13	1	3.4 (-2.3, 9.1)
080770003	4	8.6 (6.4, 13.4)*	11	1	4.4 (0.2, 8.6)
A	1	5.9 (4.9, 7.5)	29	3	
A	2	5.1 (3.9, 7.3)	15	3	
A	3	6.4 (5.3, 8.2)	29	3	
A	4	9.2 (7.7, 11.4)*	36	3	
A	A	7.2 (6.5, 8.1)	109	12	

---------- REGION=8 STATE=MT REPORTING ORGANIZATION=001 METHOD=116 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
300530018	1	2.5 (1.8, 3.8)	11	1	-1.3 (-2.5, -0.1)
300630024	1	3.8 (2.7, 6.9)	7	1	1.1 (-1.8, 4.0)
300530018	3	2.2 (1.5, 3.7)	8	1	1.0 (-0.4, 2.3)
300630024	3	2.2 (1.6, 3.6)	10	1	-0.6 (-1.9, 0.7)
300530018	4	2.2 (1.6, 4.0)	7	1	1.7 (0.5, 2.8)
300630024	4	5.3 (3.0, 23.2)*	2	1	1.0 (-31.6, 33.6)
A	1	3.1 (2.4, 4.2)	18	2	
A	3	2.2 (1.7, 3.0)	18	2	
A	4	3.2 (2.3, 5.2)	9	2	
A	A	2.8 (2.4, 3.4)	45	6	

---------- REGION=8 STATE=MT REPORTING ORGANIZATION=033 METHOD=119 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
300470028	1	6.8 (5.2, 9.9)	14	1	-1.2 (-4.5, 2.1)
300470028	2	4.7 (3.4, 7.7)	9	1	2.4 (-0.2, 5.0)
300470028	3	24.4 (18.1, 38.9)*	10	1	-5.2 (-19.8, 9.4)
300470028	4	3.2 (2.4, 4.8)	12	1	0.4 (-1.3, 2.1)
A	1	6.8 (5.2, 9.9)	14	1	
A	2	4.7 (3.4, 7.7)	9	1	
A	3	24.4 (18.1, 38.9)*	10	1	
A	4	3.2 (2.4, 4.8)	12	1	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=8 STATE=MT REPORTING ORGANIZATION=033 METHOD=119 ----------
(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
A	A	12.4 (10.6, 15.0)*	45	4	

---------- REGION=8 STATE=MT REPORTING ORGANIZATION=037 METHOD=119 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
300870307	1	22.1 (15.3, 42.3)*	6	1	9.2 (-8.9, 27.3)
300870307	2	3.6 (2.2, 10.4)*	3	1	2.6 (-2.3, 7.6)
300870307	3	6.5 (4.8, 10.0)*	11	1	1.4 (-2.2, 5.0)
300870307	4	12.8 (8.6, 26.8)*	5	1	-11.3 (-17.7, -5.0)
A	1	22.1 (15.3, 42.3)*	6	1	
A	2	3.6 (2.2, 10.4)*	3	1	
A	3	6.5 (4.8, 10.0)*	11	1	
A	4	12.8 (8.6, 26.8)*	5	1	
A	A	13.0 (10.6, 17.1)*	25	4	

---------- REGION=8 STATE=ND REPORTING ORGANIZATION=001 METHOD=117 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
380130003	1	6.1 (4.4, 10.0)*	9	1	-4.1 (-7.1, -1.1)
380570004	1	3.4 (2.5, 5.3)	10	1	0.9 (-1.1, 2.9)
380130003	2	2.1 (1.1, 34.0)*	1	1	-2.1
380570004	2	7.9 (4.9, 23.0)*	3	1	-4.1 (-17.9, 9.6)
380130003	3	2.8 (1.8, 8.3)	3	1	-1.9 (-6.3, 2.6)
380570004	3	4.8 (3.3, 9.2)	6	1	1.6 (-2.4, 5.7)
380130003	4	6.6 (4.5, 13.9)*	5	1	3.1 (-3.2, 9.3)
380570004	4	3.7 (2.6, 7.1)	6	1	-2.3 (-4.9, 0.3)
A	1	4.8 (3.8, 6.6)	19	2	
A	2	6.9 (4.5, 16.3)*	4	2	
A	3	4.2 (3.1, 7.0)	9	2	
A	4	5.2 (3.9, 8.1)	11	2	
A	A	5.1 (4.3, 6.2)	43	8	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=8 STATE=ND REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
380171004	1	5.2 (4.1, 7.0)	20	1	2.3 (0.5, 4.2)
380171004	2	2.5 (1.8, 4.1)	9	1	0.2 (-1.4, 1.9)
380171004	3	3.6 (2.8, 5.0)	18	1	0.8 (-0.6, 2.3)
380171004	4	1.4 (1.1, 2.1)	14	1	-0.3 (-1.0, 0.4)
A	1	5.2 (4.1, 7.0)	20	1	
A	2	2.5 (1.8, 4.1)	9	1	
A	3	3.6 (2.8, 5.0)	18	1	
A	4	1.4 (1.1, 2.1)	14	1	
A	A	3.7 (3.3, 4.4)	61	4	

---------- REGION=8 STATE=SD REPORTING ORGANIZATION=001 METHOD=119 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
460130003	1	16.1 (9.3, 71.2)*	2	1	10.5 (-66.9, 87.8)
460990006	1	13.0 (9.3, 22.2)*	8	1	6.3 (-1.9, 14.4)
460130003	2	4.5 (2.6, 19.8)*	2	1	3.2 (-16.8, 23.2)
460990006	2	14.2 (8.8, 41.4)*	3	1	-8.3 (-32.0, 15.4)
460130003	3	3.2 (2.4, 4.8)	12	1	1.2 (-0.3, 2.8)
460990006	3	6.6 (4.9, 9.9)	12	1	2.4 (-0.9, 5.7)
460130003	4	23.4 (16.8, 40.1)*	8	1	-17.3 (-28.6, -5.9)
460990006	4	15.7 (10.9, 30.1)*	6	1	6.8 (-6.0, 19.6)
A	1	13.7 (10.1, 21.8)*	10	2	
A	2	11.3 (7.6, 23.7)*	5	2	
A	3	5.2 (4.2, 6.8)	24	2	
A	4	20.5 (15.8, 29.9)*	14	2	
A	A	13.1 (11.3, 15.6)*	53	8	

---------- REGION=8 STATE=SD REPORTING ORGANIZATION=001 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
461031001	1	18.5 (11.4, 54.0)*	3	1	-9.2 (-42.3, 23.8)
461031001	2	11.9 (7.4, 34.7)*	3	1	-11.4 (-18.5, -4.2)
461031001	3	6.1 (4.5, 9.4)	11	1	-1.8 (-5.1, 1.6)
461031001	4	7.8 (5.5, 14.0)*	7	1	0.9 (-5.2, 7.0)
A	1	18.5 (11.4, 54.0)*	3	1	
A	2	11.9 (7.4, 34.7)*	3	1	
A	3	6.1 (4.5, 9.4)	11	1	
A	4	7.8 (5.5, 14.0)*	7	1	
A	A	9.7 (7.9, 12.8)*	24	4	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=8 STATE=UT REPORTING ORGANIZATION=001 METHOD=117 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
490110001	2	4.6 (2.7, 20.4)*	2	1	-4.5 (-11.1, 2.1)
490570007	2	3.8 (2.2, 16.9)*	2	1	-2.1 (-22.4, 18.1)
490110001	3	5.9 (4.4, 9.2)	11	1	2.0 (-1.2, 5.2)
490570007	3	5.0 (3.7, 7.7)	11	1	1.6 (-1.1, 4.3)
490110001	4	2.5 (1.8, 4.1)	9	1	1.9 (0.8, 3.0)
490570007	4	4.8 (3.5, 7.8)	9	1	2.8 (0.3, 5.3)
A	2	4.2 (2.8, 10.1)*	4	2	
A	3	5.5 (4.4, 7.3)	22	2	
A	4	3.8 (3.0, 5.3)	18	2	
A	A	4.8 (4.1, 5.8)	44	6	

---------- REGION=8 STATE=UT REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
490353007	1	3.7 (1.9, 58.6)*	1	1	-3.7
490494001	1	14.9 (10.9, 24.5)*	9	1	-2.1 (-11.8, 7.6)
490353007	2	10.3 (6.7, 24.5)*	4	1	8.6 (0.8, 16.3)
490494001	2	6.1 (4.4, 10.5)*	8	1	3.4 (-0.3, 7.0)
490353007	3	20.3 (14.8, 33.4)*	9	1	7.8 (-4.5, 20.2)
490494001	3	3.7 (2.6, 6.3)	8	1	3.1 (1.8, 4.5)
490353007	4	2.2 (1.7, 3.3)	12	1	-1.1 (-2.1, -0.1)
490494001	4	2.9 (2.2, 4.5)	11	1	2.2 (1.1, 3.3)
A	1	14.2 (10.5, 22.6)*	10	2	
A	2	7.8 (5.9, 11.8)*	12	2	
A	3	15.0 (11.8, 21.0)*	17	2	
A	4	2.6 (2.1, 3.4)	23	2	
A	A	10.4 (9.1, 12.2)*	62	8	

---------- REGION=8 STATE=WY REPORTING ORGANIZATION=001 METHOD=117 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
560330002	1	4.5 (3.5, 6.6)	14	1	1.3 (-0.8, 3.4)
560330002	2	4.1 (2.9, 7.0)	8	1	0.5 (-2.4, 3.4)
560330002	3	8.6 (6.4, 13.8)*	10	1	-0.7 (-5.9, 4.6)
560330002	4	2.3 (1.7, 3.4)	13	1	1.7 (1.0, 2.5)
A	1	4.5 (3.5, 6.6)	14	1	
A	2	4.1 (2.9, 7.0)	8	1	
A	3	8.6 (6.4, 13.8)*	10	1	
A	4	2.3 (1.7, 3.4)	13	1	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=8 STATE=WY REPORTING ORGANIZATION=001 METHOD=117 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
A	A	5.2 (4.5, 6.3)	45	4	

---------- REGION=9 STATE=AZ REPORTING ORGANIZATION=300 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
040191028	1	6.7 (4.1, 19.4)*	3	1	-6.3 (-10.9, -1.7)
040191028	2	4.3 (3.1, 7.4)	8	1	-2.5 (-5.1, -0.0)
040191028	3	4.8 (3.0, 14.0)*	3	1	2.8 (-5.3, 10.9)
A	1	6.7 (4.1, 19.4)*	3	1	
A	2	4.3 (3.1, 7.4)	8	1	
A	3	4.8 (3.0, 14.0)*	3	1	
A	A	5.0 (3.9, 7.3)	14	3	

---------- REGION=9 STATE=CA REPORTING ORGANIZATION=001 METHOD=117 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
060170011	1	2.0 (1.5, 3.4)	9	1	0.7 (-0.6, 2.0)
061010003	1	10.2 (7.4, 16.8)*	9	1	5.2 (-0.5, 11.0)
060170011	2	6.9 (4.3, 20.3)*	3	1	-5.6 (-14.0, 2.8)
061010003	2	3.3 (2.2, 7.0)	5	1	-1.5 (-4.7, 1.7)
060170011	3	4.2 (2.8, 8.8)	5	1	-1.9 (-5.9, 2.1)
061010003	3	6.1 (4.5, 10.1)*	9	1	2.0 (-1.8, 5.9)
060170011	4	4.7 (3.5, 7.5)	10	1	2.8 (0.5, 5.1)
061010003	4	2.0 (1.5, 2.9)	14	1	-0.7 (-1.6, 0.3)
A	1	7.4 (5.8, 10.2)*	18	2	
A	2	5.0 (3.6, 8.5)	8	2	
A	3	5.5 (4.3, 8.1)	14	2	
A	4	3.4 (2.8, 4.5)	24	2	
A	A	5.4 (4.7, 6.4)	64	8	

---------- REGION=9 STATE=CA REPORTING ORGANIZATION=001 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
060190008	1	13.4 (9.5, 24.2)*	7	1	-1.0 (-11.6, 9.6)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=9 STATE=CA REPORTING ORGANIZATION=001 METHOD=120 ----------
(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
060571001	1	8.5 (6.2, 13.9)*	9	1	7.3 (4.4, 10.1)
060670006	1	10.5 (7.5, 18.0)*	8	1	-2.1 (-9.5, 5.3)
060190008	2	5.6 (4.2, 8.7)	11	1	1.8 (-1.2, 4.9)
060571001	2	17.7 (9.0, 281.9)*	1	1	-17.7
060670006	2	9.1 (6.1, 19.0)*	5	1	-0.9 (-10.5, 8.7)
060190008	3	7.2 (5.6, 10.4)*	15	1	-2.4 (-5.6, 0.8)
060571001	3	7.7 (5.4, 13.8)*	7	1	-3.9 (-9.1, 1.4)
060670006	3	10.4 (7.0, 21.8)*	5	1	-8.8 (-14.8, -2.8)
060190008	4	5.1 (3.8, 8.1)	10	1	-3.8 (-5.9, -1.7)
060571001	4	3.7 (2.6, 6.7)	7	1	-1.9 (-4.5, 0.6)
A	1	10.8 (8.8, 14.2)*	24	3	
A	2	7.9 (6.2, 11.1)*	17	3	
A	3	8.0 (6.6, 10.4)*	27	3	
A	4	4.6 (3.6, 6.4)	17	2	
A	A	8.4 (7.4, 9.6)	85	11	

---------- REGION=9 STATE=CA REPORTING ORGANIZATION=019 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
060271003	2	6.7 (3.4, 107.4)*	1	1	-6.7
060271003	3	8.7 (5.8, 18.1)*	5	1	-1.0 (-10.2, 8.2)
060271003	4	4.4 (2.6, 19.5)*	2	1	-4.4 (-5.3, -3.6)
A	2	6.7 (3.4, 107.4)*	1	1	
A	3	8.7 (5.8, 18.1)*	5	1	
A	4	4.4 (2.6, 19.5)*	2	1	
A	A	7.6 (5.5, 13.0)*	8	3	

---------- REGION=9 STATE=CA REPORTING ORGANIZATION=019 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
060290014	1	4.3 (3.2, 6.7)	11	1	-2.6 (-4.6, -0.6)
060798001	1	3.6 (2.7, 5.5)	11	1	-1.8 (-3.6, -0.0)
061110007	1	6.2 (4.2, 13.1)*	5	1	3.1 (-2.8, 8.9)
060290014	2	6.0 (4.4, 9.9)	9	1	-2.9 (-6.3, 0.6)
060798001	2	2.9 (2.0, 5.2)	7	1	-1.8 (-3.6, -0.0)
061110007	2	3.4 (2.6, 5.1)	12	1	0.4 (-1.4, 2.2)
060290014	3	8.3 (6.4, 12.2)*	14	1	-3.8 (-7.4, -0.2)
060798001	3	3.0 (2.2, 4.9)	9	1	-2.2 (-3.5, -0.8)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=9 STATE=CA REPORTING ORGANIZATION=019 METHOD=120 ----------
(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
061110007	3	2.3 (1.6, 4.4)	6	1	-0.6 (-2.6, 1.4)
060290014	4	5.3 (4.0, 8.1)	12	1	-2.9 (-5.3, -0.5)
060798001	4	2.5 (1.9, 4.0)	10	1	-0.9 (-2.3, 0.5)
061110007	4	2.9 (2.1, 4.8)	9	1	-1.8 (-3.3, -0.4)
A	1	4.5 (3.7, 5.8)	27	3	
A	2	4.3 (3.6, 5.5)	28	3	
A	3	6.1 (5.0, 7.8)	29	3	
A	4	3.9 (3.3, 5.0)	31	3	
A	A	4.8 (4.3, 5.4)	115	12	

---------- REGION=9 STATE=CA REPORTING ORGANIZATION=036 METHOD=119 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
060710014	1	7.9 (4.0, 126.1)*	1	1	-7.9
060250005	2	6.0 (4.6, 8.8)	14	1	1.0 (-1.9, 3.9)
060710014	2	7.8 (5.8, 12.1)*	11	1	-1.5 (-5.9, 2.9)
060730006	2	4.7 (3.5, 7.5)	10	1	3.1 (0.9, 5.3)
060250005	3	7.9 (5.8, 12.5)*	10	1	-0.9 (-5.7, 3.8)
060730006	3	12.9 (9.5, 20.5)*	10	1	5.9 (-1.1, 12.9)
A	1	7.9 (4.0, 126.1)*	1	1	
A	2	6.3 (5.3, 7.9)	35	3	
A	3	10.7 (8.5, 14.5)*	20	2	
A	A	8.2 (7.1, 9.7)	56	6	

---------- REGION=9 STATE=CA REPORTING ORGANIZATION=036 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
060250005	1	11.3 (8.4, 17.5)*	11	1	-2.6 (-8.9, 3.7)
060710014	1	7.0 (4.8, 13.3)*	6	1	4.0 (-1.2, 9.1)
060730006	1	7.0 (5.2, 10.9)*	11	1	0.6 (-3.4, 4.6)
060250005	4	3.1 (2.3, 4.9)	10	1	-0.5 (-2.4, 1.3)
060730006	4	4.7 (3.6, 7.0)	13	1	1.8 (-0.4, 4.1)
A	1	8.9 (7.3, 11.5)*	28	3	
A	4	4.1 (3.3, 5.4)	23	2	
A	A	7.2 (6.2, 8.6)	51	5	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=9 STATE=CA REPORTING ORGANIZATION=061 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
060371103	1	2.6 (2.0, 3.8)	13	1	2.3 (1.7, 2.9)
060658001	1	9.6 (7.1, 15.2)*	10	1	-0.8 (-6.7, 5.0)
060712002	1	3.5 (2.6, 5.2)	12	1	1.6 (-0.0, 3.3)
060371103	2	5.5 (4.2, 8.2)	13	1	0.0 (-2.8, 2.9)
060652002	2	1.7 (1.2, 2.9)	8	1	0.3 (-0.9, 1.5)
060658001	2	5.6 (3.9, 10.0)	7	1	-1.8 (-6.0, 2.3)
060712002	2	4.0 (3.0, 6.1)	11	1	-2.3 (-4.1, -0.4)
060371103	3	3.9 (3.0, 5.7)	14	1	3.2 (2.0, 4.3)
060652002	3	1.2 (0.9, 1.7)	13	1	0.3 (-0.3, 0.9)
060658001	3	2.2 (1.7, 3.2)	15	1	-1.1 (-2.0, -0.3)
060712002	3	4.6 (3.4, 7.1)	11	1	-2.8 (-4.9, -0.8)
060370002	4	5.2 (2.6, 82.4)*	1	1	-5.2
060371103	4	5.5 (4.3, 8.0)	15	1	5.1 (4.0, 6.1)
060652002	4	4.9 (3.6, 7.8)	10	1	3.1 (0.8, 5.4)
060658001	4	6.4 (4.7, 10.2)*	10	1	-5.2 (-7.5, -3.0)
060712002	4	3.1 (2.4, 4.6)	14	1	-2.2 (-3.3, -1.2)
A	1	5.7 (4.8, 7.1)	35	3	
A	2	4.6 (3.9, 5.6)	39	4	
A	3	3.2 (2.7, 3.8)	53	4	
A	4	5.0 (4.3, 6.0)	50	5	
A	A	4.6 (4.2, 5.1)	177	16	

---------- REGION=9 STATE=HI REPORTING ORGANIZATION=120 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
150031001	1	7.0 (4.3, 20.3)*	3	1	5.3 (-3.9, 14.6)
150032004	1	4.0 (2.6, 9.5)	4	1	3.9 (2.4, 5.3)
150032004	2	10.6 (5.4, 168.8)*	1	1	-10.6
A	1	5.5 (3.9, 9.8)	7	2	
A	2	10.6 (5.4, 168.8)*	1	1	
A	A	6.3 (4.6, 10.8)*	8	3	

---------- REGION=9 STATE=NV REPORTING ORGANIZATION=200 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
320310016	1	1.9 (1.4, 3.2)	9	1	-0.4 (-1.6, 0.9)
320310016	2	1.1 (0.7, 2.3)	5	1	0.5 (-0.6, 1.5)
320310016	3	1.7 (1.3, 2.5)	13	1	0.2 (-0.6, 1.1)
320310016	4	1.8 (1.4, 2.6)	15	1	0.3 (-0.5, 1.2)

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=9 STATE=NV REPORTING ORGANIZATION=200 METHOD=120 ----------
(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
A	1	1.9 (1.4, 3.2)	9	1	
A	2	1.1 (0.7, 2.3)	5	1	
A	3	1.7 (1.3, 2.5)	13	1	
A	4	1.8 (1.4, 2.6)	15	1	
A	A	1.7 (1.5, 2.1)	42	4	

---------- REGION=9 STATE=NV REPORTING ORGANIZATION=300 METHOD=120 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
320030560	1	3.5 (2.5, 6.0)	8	1	-1.9 (-4.0, 0.3)
320030560	2	12.7 (9.3, 20.9)*	9	1	0.9 (-7.5, 9.2)
320030560	3	3.9 (2.9, 5.9)	12	1	-1.4 (-3.3, 0.6)
320030560	4	6.3 (4.9, 9.2)	14	1	-0.1 (-3.2, 3.0)
A	1	3.5 (2.5, 6.0)	8	1	
A	2	12.7 (9.3, 20.9)*	9	1	
A	3	3.9 (2.9, 5.9)	12	1	
A	4	6.3 (4.9, 9.2)	14	1	
A	A	7.3 (6.2, 8.9)	43	4	

---------- REGION=10 STATE=AK REPORTING ORGANIZATION=020 METHOD=117 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
020200018	1	20.0 (13.5, 41.9)*	5	1	8.4 (-10.9, 27.8)
020900010	1	10.0 (7.5, 15.5)*	11	1	-3.0 (-8.5, 2.5)
021100004	1	1.2 (0.9, 1.9)	11	1	-0.2 (-0.9, 0.5)
020900010	2	3.1 (1.9, 9.1)	3	1	0.1 (-6.3, 6.5)
021100004	2	6.2 (3.6, 27.2)*	2	1	1.5 (-36.2, 39.2)
020200018	3	4.3 (2.2, 68.3)*	1	1	4.3
020900010	3	2.1 (1.3, 6.1)	3	1	0.3 (-4.0, 4.6)
021100004	3	3.3 (1.7, 53.3)*	1	1	3.3
020200018	4	2.3 (1.6, 3.9)	8	1	1.4 (0.1, 2.7)
020900010	4	2.2 (1.7, 3.2)	14	1	-0.5 (-1.6, 0.5)
021100004	4	2.7 (2.0, 4.7)	8	1	0.3 (-1.6, 2.3)
A	1	10.8 (8.8, 13.9)*	27	3	
A	2	4.6 (3.1, 9.6)	5	2	
A	3	2.9 (2.0, 6.1)	5	3	
A	4	2.4 (2.0, 3.0)	30	3	
A	A	7.2 (6.3, 8.4)	67	11	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=10 STATE=ID REPORTING ORGANIZATION=001 METHOD=117 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
160270004	1	3.6 (2.6, 5.9)	9	1	-0.2 (-2.5, 2.1)
160690009	1	2.4 (1.8, 3.8)	11	1	0.3 (-1.0, 1.7)
160830010	1	2.3 (1.6, 4.1)	7	1	-0.8 (-2.5, 0.9)
160270004	2	4.1 (2.5, 12.0)*	3	1	0.0 (-8.4, 8.5)
160690009	2	1.9 (1.3, 3.6)	6	1	0.6 (-1.0, 2.2)
160830010	2	4.2 (2.7, 9.9)	4	1	0.9 (-4.6, 6.5)
160270004	3	3.5 (2.6, 5.6)	10	1	2.4 (0.8, 4.0)
160690009	3	3.1 (2.3, 4.8)	11	1	0.7 (-1.1, 2.4)
160830010	3	2.2 (1.6, 3.8)	8	1	0.7 (-0.8, 2.2)
160270004	4	2.8 (2.1, 4.5)	10	1	0.7 (-1.0, 2.4)
160690009	4	2.9 (2.2, 4.2)	13	1	1.2 (-0.1, 2.6)
160830010	4	2.8 (2.0, 4.8)	8	1	-1.0 (-2.9, 0.9)
A	1	2.8 (2.3, 3.7)	27	3	
A	2	3.3 (2.5, 4.9)	13	3	
A	3	3.0 (2.5, 3.9)	29	3	
A	4	2.8 (2.4, 3.6)	31	3	
A	A	3.0 (2.7, 3.4)	100	12	

---------- REGION=10 STATE=ID REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
160550006	1	3.3 (2.5, 5.1)	11	1	-1.0 (-2.8, 0.8)
160550006	2	2.3 (1.5, 5.4)	4	1	0.8 (-2.1, 3.7)
160550006	3	4.6 (3.2, 8.2)	7	1	-0.4 (-4.0, 3.2)
160550006	4	3.2 (2.4, 4.6)	14	1	-1.9 (-3.1, -0.6)
A	1	3.3 (2.5, 5.1)	11	1	
A	2	2.3 (1.5, 5.4)	4	1	
A	3	4.6 (3.2, 8.2)	7	1	
A	4	3.2 (2.4, 4.6)	14	1	
A	A	3.4 (2.9, 4.3)	36	4	

---------- REGION=10 STATE=OR REPORTING ORGANIZATION=001 METHOD=117 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
410650007	1	6.3 (4.7, 9.5)	12	1	-1.9 (-5.2, 1.3)
410650007	2	2.4 (1.6, 5.7)	4	1	-1.1 (-4.0, 1.8)
410650007	3	4.0 (2.7, 8.4)	5	1	-3.2 (-5.8, -0.5)
410650007	4	2.0 (1.5, 3.0)	13	1	0.0 (-1.0, 1.1)
A	1	6.3 (4.7, 9.5)	12	1	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=10 STATE=OR REPORTING ORGANIZATION=001 METHOD=117 ----------

(continued)

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
A	2	2.4 (1.6, 5.7)	4	1	
A	3	4.0 (2.7, 8.4)	5	1	
A	4	2.0 (1.5, 3.0)	13	1	
A	A	4.3 (3.6, 5.4)	34	4	

---------- REGION=10 STATE=OR REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
410290133	1	3.5 (2.6, 5.4)	11	1	-0.2 (-2.1, 1.8)
410330107	1	5.9 (4.4, 9.4)	10	1	4.3 (1.9, 6.8)
410370001	1	4.2 (2.8, 8.8)	5	1	0.6 (-3.8, 5.1)
410390060	1	3.5 (2.6, 5.4)	11	1	1.4 (-0.5, 3.2)
410510080	1	2.5 (1.9, 3.6)	14	1	-0.6 (-1.7, 0.6)
410671003	1	6.5 (4.9, 9.9)	12	1	0.7 (-2.8, 4.2)
410290133	2	2.0 (1.3, 4.8)	4	1	1.6 (-0.0, 3.3)
410330107	2	5.0 (2.9, 22.1)*	2	1	-2.3 (-30.4, 25.8)
410370001	2	5.1 (2.6, 81.5)*	1	1	5.1
410510080	2	2.9 (2.1, 4.8)	9	1	2.2 (1.0, 3.5)
410671003	2	3.7 (2.3, 10.7)*	3	1	0.9 (-6.5, 8.2)
410290133	3	3.1 (2.1, 5.9)	6	1	-0.8 (-3.5, 1.9)
410330107	3	2.7 (1.8, 5.6)	5	1	2.3 (0.9, 3.8)
410370001	3	1.6 (0.9, 7.0)	2	1	0.6 (-8.8, 10.0)
410510080	3	4.7 (3.3, 8.0)	8	1	3.2 (0.7, 5.6)
410671003	3	13.6 (9.4, 26.1)*	6	1	-3.5 (-15.4, 8.4)
410290133	4	6.2 (4.7, 9.7)	11	1	3.5 (0.6, 6.5)
410330107	4	3.1 (2.2, 5.3)	8	1	2.6 (1.3, 3.8)
410370001	4	3.5 (2.6, 5.5)	10	1	1.2 (-0.8, 3.2)
410510080	4	3.9 (3.0, 5.5)	15	1	3.2 (2.1, 4.2)
410671003	4	2.2 (1.6, 3.5)	10	1	0.0 (-1.3, 1.4)
A	1	4.5 (4.0, 5.3)	63	6	
A	2	3.3 (2.6, 4.6)	19	5	
A	3	7.2 (5.9, 9.3)	27	5	
A	4	4.1 (3.5, 4.9)	54	5	
A	A	4.8 (4.4, 5.3)	163	21	

* INDICATES UPPER BOUND OF ESTIMATED 90% CONFIDENCE INTERVAL > 10%

---------- REGION=10 STATE=WA REPORTING ORGANIZATION=001 METHOD=118 ----------

AIRS ID	QUARTER	EST. REL. RMSE (90% CONF. INTERVAL)	NO. OF OBSERVATIONS	NO. OF SAMPLER QUARTERS	EST. REL. BIAS (90% CONF. INTERVAL)
530330057	1	2.0 (1.6, 3.0)	14	1	0.9 (0.0, 1.8)
530530031	1	2.4 (1.9, 3.6)	13	1	1.4 (0.4, 2.4)
530630016	1	1.4 (1.1, 2.2)	12	1	0.6 (-0.1, 1.3)
530730015	1	1.5 (1.0, 3.6)	4	1	-0.5 (-2.4, 1.5)
530330057	2	2.8 (2.1, 4.2)	12	1	-0.7 (-2.2, 0.7)
530530031	2	4.1 (3.1, 6.2)	12	1	2.3 (0.4, 4.1)
530630016	2	2.8 (1.9, 5.3)	6	1	1.0 (-1.3, 3.3)
530730015	2	4.6 (3.1, 9.7)	5	1	2.8 (-1.0, 6.7)
530770009	2	1.0 (0.5, 15.3)*	1	1	1.0
530330057	3	5.7 (4.3, 8.6)	12	1	4.8 (3.2, 6.4)
530530031	3	4.1 (3.1, 6.3)	12	1	0.4 (-1.8, 2.6)
530630016	3	6.9 (5.3, 9.9)	15	1	0.3 (-3.0, 3.5)
530730015	3	3.6 (2.5, 6.9)	6	1	1.6 (-1.4, 4.5)
530770009	3	2.2 (1.5, 4.2)	6	1	1.2 (-0.4, 2.9)
530330057	4	3.6 (2.8, 5.1)	15	1	1.2 (-0.4, 2.8)
530530031	4	2.3 (1.7, 3.5)	12	1	1.0 (-0.1, 2.1)
530630016	4	3.5 (2.7, 5.2)	14	1	-1.1 (-2.7, 0.6)
530730015	4	2.9 (2.0, 5.6)	6	1	-2.1 (-3.9, -0.2)
530770009	4	1.7 (1.3, 2.5)	15	1	1.3 (0.7, 1.8)
A	1	2.0 (1.7, 2.4)	43	4	
A	2	3.5 (3.0, 4.4)	36	5	
A	3	5.3 (4.5, 6.3)	51	5	
A	4	2.9 (2.5, 3.4)	62	5	
A	A	3.6 (3.4, 4.0)	192	19	

Attachment 5

PM2.5 Accuracy (Flow Rate)

This section covers the following attachments related to flow rate accuracy:

5-1 Quarterly Completeness Graphs by EPA Region
5-2 Flow Rate Audit Data Completeness
5-3 Flow Rate Data Summaries

1) Annual Flow Rate Data Summary
2) Quarterly Flow Rate Summary
3) Site/Days exceeding 4% Flow Rate Check
4) Site/Days with True or Measured Flow Rate >5% of 16.67 l/m
5)Site/Days with True or Measured Flow Rate >10% of 16.67 l/m

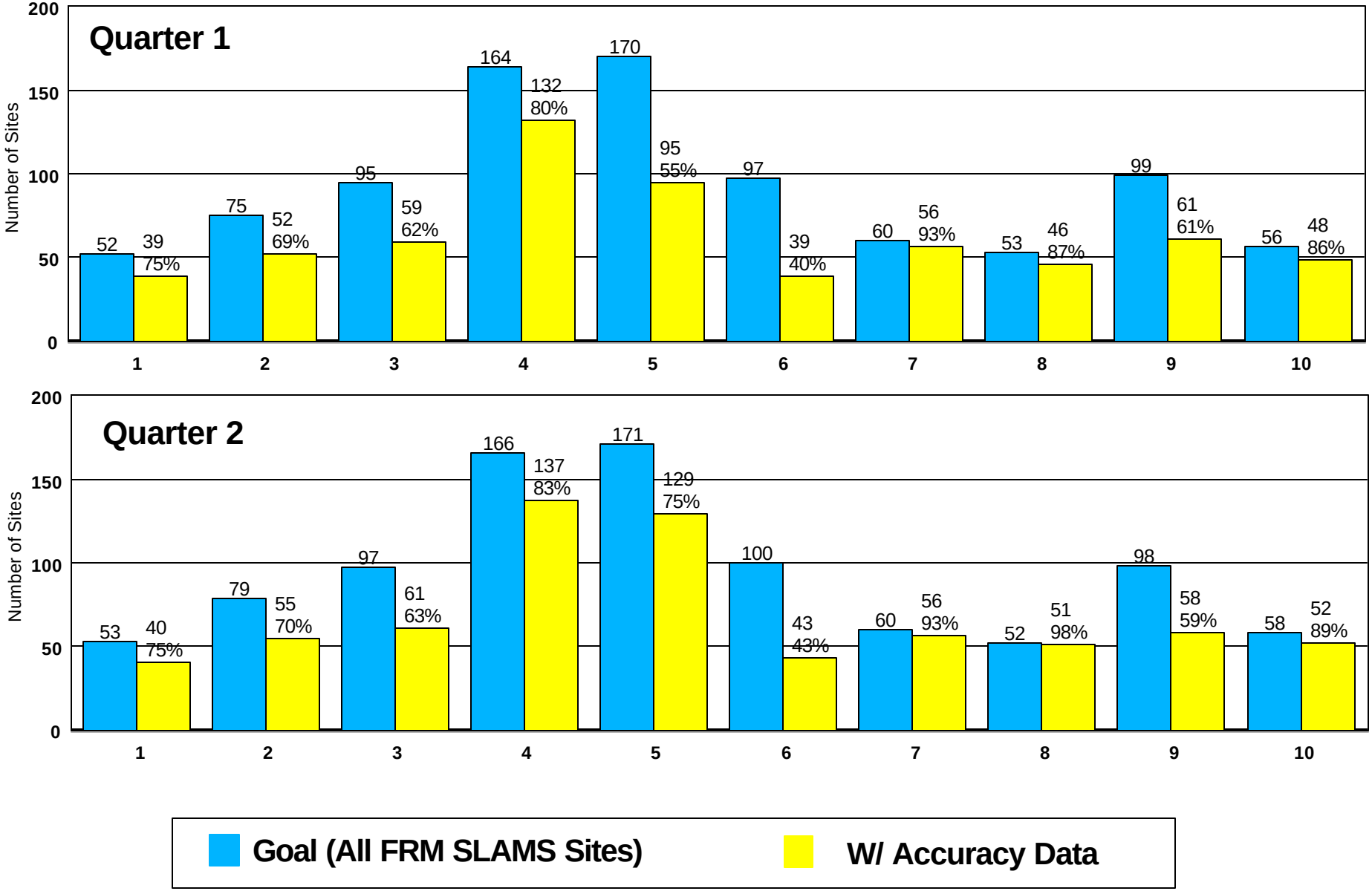
Attachment 5-1

Quarterly Completeness Graphs by EPA Region

Completeness - Accuracy

Data Capture by Region, 2000 Qtr1-Qtr4

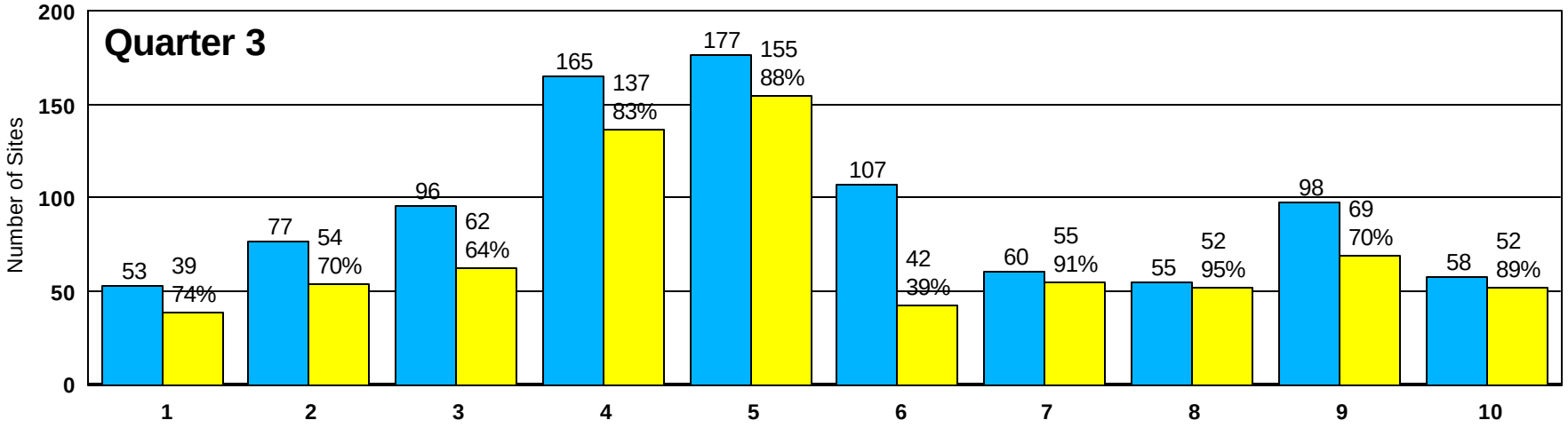
[7/11/01 AIRS Extraction]

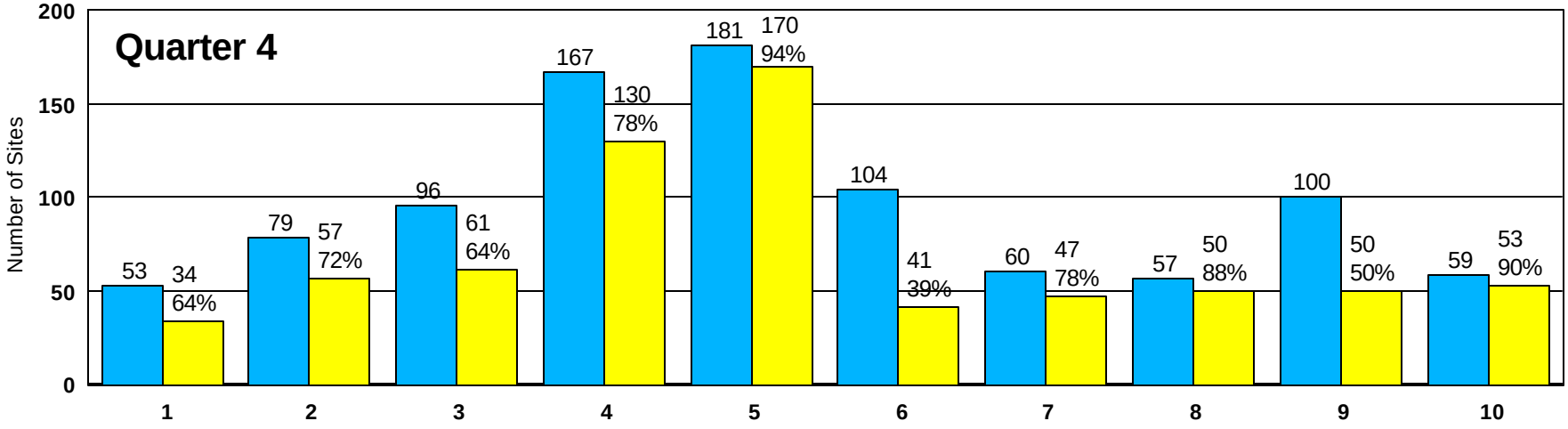


Completeness - Accuracy

Data Capture by Region, 2000 Qtr1-Qtr4

[7/11/01 AIRS Extraction]





# of sites w/ 4 Q's of Accuracy	29	47	57	110	89	31	42	42	27	45

Goal (All FRM SLAMS Sites) | W/ Accuracy Data

Attachment 5-2

Flow Rate Audit Data Completeness

Field Definitions

STATE:	U.S. and State total rows show the total number of FRM SLAMS sites that operated in 2000 [the number of sites where the primary FRM sampler has a Monitor Type='2'], the number of FRM SLAMS sites that operated in all 4 quarters of 2000, the number of SLAMS sites where collocation was required [25% of the total that operated in all 4 quarters], the number of SLAMS sites reporting precision information, and the number of SLAMS sites with 4 complete quarters of precision information. After each State name, all FRM SLAMS sites with 2000 collocation information in AIRS are listed.
SITE:	Site Identification Code = State FIPS code (2 char.) + County FIPS code (3 char.) + AIRS Site ID (4 char.)
POC:	Parameter Occurrence Code.
1st Quarter - 4th Quarter ….	
# Precision:	The total number of collocated FRM sample pairs reported to AIRS for each quarter in 2000 for the primary SLAMS monitor. [If culled from the raw data, at least on of the samples is from the primary SLAMS monitor.]
Percent:	The precision data capture for each quarter in 2000 for the primary SLAMS monitor. [Note: Equals '# Precision' / 15, capped at 100%]
Number of Q w/ P Data:	The number of quarters in 2000 where precision information (collocated pairs) are reported .
All 4 Q's Complete:	'1' = All 4 quarters are 'complete' [11+ pairs]

STATE	SITE	POC	# of Accuracy Records Q1	Q2	Q3	Q4	# Q's w/ Accuracy	Accuracy in All 4 Q's
U.S.	**# SLAMS operated in 2000=972; # SLAMS operated all 4 Q=906; # where Accuracy Reqrd (All)=906; # w/ Accuracy Data =792; # w/ 4 Q Acc.=51**							
AL	# SLAMS operated in 2000=16; # SLAMS operated all 4 Q=16; # where Accuracy Reqrd (All)=16; # w/ Accuracy Data = 1; # w/ 4 Q Acc.= 1							
	010270001	.	0	0	0	0	0	.
	010331002	.	0	0	0	0	0	.
	010690002	.	0	0	0	0	0	.
	010730023	.	0	0	0	0	0	.
	010732003	.	0	0	0	0	0	.
	010735002	.	0	0	0	0	0	.
	010890014	1	1	1	1	1	4	1
	010970002	.	0	0	0	0	0	.
	011010007	.	0	0	0	0	0	.
	011030010	.	0	0	0	0	0	.
	011130001	.	0	0	0	0	0	.
	011170006	.	0	0	0	0	0	.
	011190002	.	0	0	0	0	0	.
	011210002	.	0	0	0	0	0	.
	011250003	.	0	0	0	0	0	.
	011270002	.	0	0	0	0	0	.
AK	# SLAMS operated in 2000= 7; # SLAMS operated all 4 Q= 6; # where Accuracy Reqrd (All)= 6; # w/ Accuracy Data = 7; # w/ 4 Q Acc.= 3							
	020200018	1	1	1	1	1	4	1
	020200044	1	1	1	0	1	3	.
	020900010	2	1	1	1	1	4	1
	021100004	2	1	1	1	1	4	1
	021700004	1	0	1	1	1	3	.
	021700008	1	0	1	1	1	3	.
	022900003	1	.	0	1	1	2	.
AZ	# SLAMS operated in 2000= 5; # SLAMS operated all 4 Q= 5; # where Accuracy Reqrd (All)= 5; # w/ Accuracy Data = 1; # w/ 4 Q Acc.= 0							
	040031005	.	0	0	0	0	0	.
	040051008	.	0	0	0	0	0	.
	040190011	.	0	0	0	0	0	.
	040191028	1	0	1	1	0	2	.
	040230004	.	0	0	0	0	0	.
AR	# SLAMS operated in 2000=24; # SLAMS operated all 4 Q=14; # where Accuracy Reqrd (All)=14; # w/ Accuracy Data =23; # w/ 4 Q Acc.= 6							
	050010001	1	1	1	0	0	2	.
	050010010	1	.	.	1	0	1	.
	050030003	1	1	1	0	0	2	.
	050030004	1	.	.	1	0	1	.
	050310001	1	1	0	1	1	3	.
	050350004	1	1	1	1	0	3	.
	050450002	1	.	1	1	1	3	.
	050510002	1	1	1	1	1	4	1
	050690005	1	1	1	1	1	4	1
	050890001	1	1	1	1	1	4	1
	050910001	.	0	0	0	0	0	.
	050910004	1	1	1	1	0	3	.
	050930007	1	.	.	0	2	1	.
	051070001	1	1	1	1	0	3	.
	051130002	1	2	1	1	1	4	1
	051150003	1	1	1	1	0	3	.

STATE	SITE	POC	# of Accuracy Records				# Q's w/ Accuracy	Accuracy in All 4 Q's
			Q1	Q2	Q3	Q4		
	051190003	1	0	1	0	0	1	.
	051190007	1	1	0	0	2	2	.
	051191004	1	.	.	1	1	2	.
	051191008	1	1	1	1	1	4	1
	051310008	1	0	2	1	1	3	.
	051390004	1	1	1	1	1	4	1
	051430003	1	0	2	0	1	2	.
	051450001	1	.	0	1	1	2	.
CA	# SLAMS operated in 2000=83; # SLAMS operated all 4 Q=80; # where Accuracy Reqrd (All)=80; # w/ Accuracy Data =74; # w/ 4 Q Acc.=25							
	060010007	1	0	0	1	1	2	.
	060011001	1	0	0	1	1	2	.
	060070002	1	1	1	1	1	4	1
	060090001	1	1	1	1	1	4	1
	060111002	1	2	1	2	2	4	1
	060130002	1	0	0	1	1	2	.
	060170011	1	0	1	0	0	1	.
	060170012	1	0	1	0	0	1	.
	060190008	1	1	1	1	1	4	1
	060195001	1	1	1	1	1	4	1
	060195025	.	0	0	0	0	0	.
	060231002	1	1	0	1	1	3	.
	060250003	1	1	1	1	1	4	1
	060250005	1	1	1	1	1	4	1
	060251003	1	1	1	1	1	4	1
	060271003	1	0	1	1	0	2	.
	060290010	1	1	1	1	1	4	1
	060290011	1	1	1	1	1	4	1
	060290012	1	0	1	1	1	3	.
	060290014	1	1	1	1	1	4	1
	060290016	1	1	1	2	1	4	1
	060310004	1	1	1	1	1	4	1
	060333001	1	1	0	1	1	3	.
	060370002	1	1	1	1	0	3	.
	060371002	1	1	1	1	0	3	.
	060371103	1	1	1	1	0	3	.
	060371201	1	1	1	1	0	3	.
	060371301	1	1	1	1	0	3	.
	060371601	1	1	1	1	0	3	.
	060372005	1	1	1	1	0	3	.
	060374002	1	1	1	1	0	3	.
	060379002	1	1	1	1	1	4	1
	060450006	.	0	0	0	0	0	.
	060472510	1	2	1	1	1	4	1
	060490001	1	1	1	1	1	4	1
	060510001	.	0	0	0	0	0	.
	060531002	.	0	0	0	0	0	.
	060531003	1	1	0	1	1	3	.
	060570005	1	1	1	1	1	4	1
	060571001	1	0	1	1	1	3	.

STATE	SITE	POC	# of Accuracy Records				# Q's w/ Accuracy	Accuracy in All 4 Q's
			Q1	Q2	Q3	Q4		
	060590001	1	1	1	1	0	3	.
	060610006	1	1	1	1	0	3	.
	060631006	1	1	1	1	1	4	1
	060631008	.	0	0	0	0	0	.
	060631009	1	0	1	0	0	1	.
	060651003	1	1	1	1	0	3	.
	060652002	1	1	1	1	0	3	.
	060655001	1	1	1	0	0	2	.
	060658001	1	1	1	1	0	3	.
	060670006	1	1	1	1	0	3	.
	060670010	1	1	1	1	1	4	1
	060674001	1	1	1	1	1	4	1
	060710014	1	1	0	0	0	1	.
	060710025	1	1	1	1	0	3	.
	060710306	1	0	0	1	1	2	.
	060712002	1	1	1	1	0	3	.
	060719004	1	1	1	1	0	3	.
	060730001	.	0	0	0	0	0	.
	060730003	1	1	0	0	0	1	.
	060730006	.	0	0	0	0	0	.
	060731002	1	1	0	0	0	1	.
	060731007	.	0	0	0	0	0	.
	060750005	1	0	0	2	1	2	.
	060771002	1	1	1	0	1	3	.
	060792002	1	1	1	1	1	4	1
	060798001	1	1	0	1	1	3	.
	060811001	1	0	0	1	1	2	.
	060830010	1	1	0	1	0	2	.
	060831007	1	1	0	1	1	3	.
	060850004	1	0	0	1	1	2	.
	060852003	1	0	0	1	1	2	.
	060870007	1	0	0	0	1	1	.
	060890004	1	0	1	0	0	1	.
	060950004	1	0	0	1	1	2	.
	060970003	1	0	0	1	1	2	.
	060990005	1	1	2	1	1	4	1
	061010003	1	1	1	1	1	4	1
	061072002	1	1	1	1	1	4	1
	061110007	1	1	1	0	1	3	.
	061110009	.	0	0	0	0	0	.
	061112002	1	1	1	1	0	3	.
	061113001	1	1	1	1	1	4	1
	061131003	1	1	1	1	0	3	.
CO	# SLAMS operated in 2000=13; # SLAMS operated all 4 Q=13; # where Accuracy Reqrd (All)=13; # w/ Accuracy Data =13; # w/ 4 Q Acc.=12							
	080010001	1	0	1	2	1	3	.
	080050005	1	1	1	1	1	4	1
	080130003	1	1	1	1	1	4	1
	080130012	1	1	1	1	1	4	1
	080310002	1	1	1	1	1	4	1

STATE	SITE	POC	# of Accuracy Records Q1	Q2	Q3	Q4	# Q's w/ Accuracy	Accuracy in All 4 Q's
	080390001	1	1	1	1	1	4	1
	080410008	1	1	1	1	1	4	1
	080410011	1	1	1	1	1	4	1
	080690009	1	1	1	1	1	4	1
	080770003	1	1	1	1	1	4	1
	081010012	1	1	1	1	1	4	1
	081230006	1	1	1	1	1	4	1
	081230008	1	1	1	1	1	4	1
CT	# SLAMS operated in 2000=10; # SLAMS operated all 4 Q= 9; # where Accuracy Reqrd (All)= 9; # w/ Accuracy Data =10; # w/ 4 Q Acc.= 9							
	090010010	1	1	1	1	1	4	1
	090010113	1	.	.	2	1	2	.
	090011123	1	1	1	1	1	4	1
	090031003	1	1	1	1	1	4	1
	090031018	1	1	1	1	1	4	1
	090090018	1	1	1	1	1	4	1
	090091123	1	1	1	1	1	4	1
	090092123	1	1	1	1	1	4	1
	090099005	1	1	1	1	1	4	1
	090113002	1	1	1	1	1	4	1
DEL	# SLAMS operated in 2000= 7; # SLAMS operated all 4 Q= 7; # where Accuracy Reqrd (All)= 7; # w/ Accuracy Data = 7;							
	100010002	1	1	1	1	1	4	1
	100010003	1	1	1	2	1	4	1
	100031003	1	1	1	1	1	4	1
	100031007	1	1	1	1	1	4	1
	100031012	1	1	2	1	1	4	1
	100032004	1	1	1	1	1	4	1
	100051002	1	1	1	1	1	4	1
DC	# SLAMS operated in 2000= 3; # SLAMS operated all 4 Q= 3; # where Accuracy Reqrd (All)= 3; # w/ Accuracy Data = 0; # w/ 4 Q Acc.= 0							
	110010041	.	0	0	0	0	0	.
	110010042	.	0	0	0	0	0	.
	110010043	.	0	0	0	0	0	.
FL	# SLAMS operated in 2000=29; # SLAMS operated all 4 Q=29; # where Accuracy Reqrd (All)=29; # w/ Accuracy Data =29; # w/ 4 Q Acc.=22							
	120010023	1	1	1	1	1	4	1
	120010024	1	0	0	0	1	1	.
	120090007	1	0	1	1	1	3	.
	120111002	1	1	1	1	1	4	1
	120112004	1	1	1	1	1	4	1
	120113002	1	1	1	1	1	4	1
	120170005	1	0	0	0	1	1	.
	120251016	1	1	1	1	0	3	.
	120256001	1	1	1	1	0	3	.
	120310098	1	1	1	1	1	4	1
	120310099	1	1	1	1	1	4	1
	120330004	1	1	1	1	0	3	.
	120570030	1	1	1	1	1	4	1
	120571075	1	1	1	1	1	4	1
	120710005	1	1	1	1	1	4	1
	120730012	1	1	1	1	1	4	1
	120814012	1	1	1	1	1	4	1

STATE	SITE	POC	# of Accuracy Records				# Q's w/ Accuracy	Accuracy in All 4 Q's
			Q1	Q2	Q3	Q4		
	120830003	1	1	1	1	1	4	1
	120951004	1	1	1	1	0	3	.
	120952002	1	2	2	1	1	4	1
	120990009	1	1	1	1	1	4	1
	120992003	1	1	1	1	1	4	1
	121030018	1	1	1	1	1	4	1
	121031008	1	1	1	1	1	4	1
	121056006	1	1	1	1	1	4	1
	121111002	1	1	1	1	1	4	1
	121150013	1	1	1	1	1	4	1
	121171002	1	1	1	1	1	4	1
	121275002	1	1	1	1	1	4	1
GA	# SLAMS operated in 2000=23; # SLAMS operated all 4 Q=23; # where Accuracy Reqrd (All)=23; # w/ Accuracy Data =23; # w/ 4 Q Acc.=23							
	130210007	1	1	1	1	1	4	1
	130210012	1	1	1	2	1	4	1
	130510017	1	1	1	1	1	4	1
	130510091	1	1	1	1	1	4	1
	130590001	1	2	2	2	1	4	1
	130630091	1	1	1	1	1	4	1
	130670003	1	1	1	1	1	4	1
	130890002	1	2	1	1	1	4	1
	130892001	1	1	1	1	1	4	1
	130950007	1	2	1	1	1	4	1
	131150005	1	1	2	1	1	4	1
	131210032	1	1	1	1	1	4	1
	131210039	1	1	1	1	1	4	1
	131211001	1	1	1	1	1	4	1
	131270006	1	1	1	1	1	4	1
	131390003	1	1	1	1	1	4	1
	132150001	1	1	1	1	1	4	1
	132150011	1	1	1	1	3	4	1
	132230003	1	1	1	1	2	4	1
	132450005	1	1	1	1	1	4	1
	132450091	1	1	1	1	1	4	1
	133030001	1	1	1	1	1	4	1
	133190001	1	2	1	1	1	4	1
HI	# SLAMS operated in 2000= 5; # SLAMS operated all 4 Q= 5; # where Accuracy Reqrd (All)= 5; # w/ Accuracy Data = 5; # w/ 4 Q Acc.= 2							
	150030010	1	1	0	1	1	3	.
	150031001	1	1	0	1	1	3	.
	150031004	1	1	1	1	1	4	1
	150032004	1	1	1	1	1	4	1
	150090006	1	1	0	1	1	3	.
ID	# SLAMS operated in 2000= 7; # SLAMS operated all 4 Q= 7; # where Accuracy Reqrd (All)= 7; # w/ Accuracy Data = 6; # w/ 4 Q Acc.= 4							
	160010011	1	0	0	1	0	1	.
	160010017	1	1	1	1	1	4	1
	160050006	1	2	1	1	1	4	1
	160050015	1	0	1	1	1	3	.
	160210001	.	0	0	0	0	0	.
	160270005	1	2	1	1	1	4	1

STATE	SITE	POC	# of Accuracy Records Q1	Q2	Q3	Q4	# Q's w/ Accuracy	Accuracy in All 4 Q's
	160550006	2	2	1	1	1	4	1
IL	# SLAMS operated in 2000=35; # SLAMS operated all 4 Q=35; # where Accuracy Reqrd (All)=35; # w/ Accuracy Data =35; # w/ 4 Q Acc.=26							
	170010006	1	1	1	1	1	4	1
	170190004	1	1	1	1	1	4	1
	170191001	1	1	1	1	1	4	1
	170310014	1	1	1	1	1	4	1
	170310022	1	1	1	1	1	4	1
	170310050	1	1	1	1	1	4	1
	170310052	1	1	1	1	1	4	1
	170310057	1	1	1	1	1	4	1
	170310076	1	1	1	1	1	4	1
	170311016	1	0	1	1	1	3	.
	170312001	1	1	1	1	1	4	1
	170313301	1	1	1	1	1	4	1
	170314006	1	1	1	1	1	4	1
	170314201	1	0	1	1	1	3	.
	170316005	1	1	1	1	1	4	1
	170434002	1	0	1	1	1	3	.
	170890003	1	0	1	1	1	3	.
	170971007	1	0	1	1	1	3	.
	170990007	1	1	1	1	1	4	1
	171110001	1	0	1	1	1	3	.
	171132002	1	0	1	1	1	3	.
	171150013	1	1	1	1	1	4	1
	171190023	1	1	1	1	1	4	1
	171191007	1	1	1	1	1	4	1
	171192009	1	1	1	1	1	4	1
	171193007	1	1	1	1	1	4	1
	171430037	1	1	1	1	1	4	1
	171570001	1	1	1	1	1	4	1
	171610003	1	1	1	1	1	4	1
	171630010	1	1	1	1	1	4	1
	171634001	1	0	1	1	1	3	.
	171670012	1	1	1	1	1	4	1
	171971002	1	1	1	1	1	4	1
	171971011	1	1	1	1	1	4	1
	172010010	1	0	1	1	1	3	.
IN	# SLAMS operated in 2000=40; # SLAMS operated all 4 Q=39; # where Accuracy Reqrd (All)=39; # w/ Accuracy Data =39; # w/ 4 Q Acc.=35							
	180030004	1	1	1	1	1	4	1
	180030014	1	0	1	1	1	3	.
	180030015	.	0	0	0	0	0	.
	180190005	1	1	1	1	1	4	1
	180350006	1	1	1	1	1	4	1
	180372001	1	1	1	1	1	4	1
	180390003	1	1	1	1	1	4	1
	180431004	1	1	1	2	1	4	1
	180650003	1	.	.	.	1	1	.
	180670003	1	1	1	1	1	4	1
	180830004	1	1	1	1	1	4	1

STATE	SITE	POC	# of Accuracy Records				# Q's w/ Accuracy	Accuracy in All 4 Q's
			Q1	Q2	Q3	Q4		
	180890006	1	1	1	1	1	4	1
	180890022	1	1	1	1	1	4	1
	180890026	1	1	1	1	1	4	1
	180890027	1	1	1	1	1	4	1
	180891003	1	1	1	1	1	4	1
	180891016	1	1	1	1	1	4	1
	180892004	1	1	1	1	1	4	1
	180892010	1	1	1	0	1	3	.
	180910011	1	1	1	1	1	4	1
	180910012	1	1	1	1	1	4	1
	180950009	1	1	1	1	1	4	1
	180970042	1	1	1	1	1	4	1
	180970043	1	1	1	1	1	4	1
	180970066	1	0	1	1	1	3	.
	180970078	1	1	1	1	1	4	1
	180970079	1	1	1	1	1	4	1
	180970081	1	1	1	1	1	4	1
	180970083	1	1	1	1	1	4	1
	181270020	1	1	1	1	1	4	1
	181270024	1	1	1	1	1	4	1
	181410014	1	1	1	1	1	4	1
	181411008	1	1	1	1	1	4	1
	181412004	1	1	1	1	1	4	1
	181570007	1	1	1	1	1	4	1
	181630006	1	1	1	1	1	4	1
	181630012	1	1	1	1	1	4	1
	181630016	1	1	1	1	2	4	1
	181670018	1	1	1	1	1	4	1
	181670023	1	1	1	1	1	4	1
IA	# SLAMS operated in 2000=18; # SLAMS operated all 4 Q=16; # where Accuracy Reqrd (All)=16; # w/ Accuracy Data =18; # w/ 4 Q Acc.=16							
	190130008	1	1	1	1	1	4	1
	190330019	1	1	1	1	1	4	1
	190450021	1	1	1	1	1	4	1
	190630003	1	1	1	1	1	4	1
	191032001	1	1	1	1	1	4	1
	191130036	1	1	1	1	1	4	1
	191130037	1	1	1	1	1	4	1
	191390015	1	.	1	1	1	3	.
	191390016	1	1	0	0	0	1	.
	191530059	2	1	1	1	1	4	1
	191532510	1	1	1	1	1	4	1
	191532520	1	1	1	1	1	4	1
	191550009	1	1	1	1	1	4	1
	191630015	2	1	1	1	1	4	1
	191630018	1	1	1	1	1	4	1
	191692530	1	1	1	1	1	4	1
	191770005	1	1	1	1	1	4	1
	191930017	1	1	1	1	1	4	1
KS	# SLAMS operated in 2000=12; # SLAMS operated all 4 Q=12; # where Accuracy Reqrd (All)=12; # w/ Accuracy Data =12; # w/ 4 Q Acc.=12							

STATE	SITE	POC	# of Accuracy Records				# Q's w/ Accuracy	Accuracy in All 4 Q's
			Q1	Q2	Q3	Q4		
	200910007	1	2	1	1	1	4	1
	200910008	1	3	1	1	1	4	1
	200910009	1	2	1	1	1	4	1
	201070002	1	1	1	1	1	4	1
	201730008	1	1	1	1	1	4	1
	201730009	1	1	1	1	1	4	1
	201730010	1	1	1	1	1	4	1
	201770010	1	1	1	1	1	4	1
	201770011	1	1	1	1	1	4	1
	201910002	1	1	1	1	1	4	1
	202090021	1	1	1	1	1	4	1
	202090022	1	1	1	1	1	4	1
KY	# SLAMS operated in 2000=19; # SLAMS operated all 4 Q=19; # where Accuracy Reqrd (All)=19; # w/ Accuracy Data =19; # w/ 4 Q Acc.= 6							
	210190017	1	1	0	1	1	3	.
	210290006	1	1	1	1	0	3	.
	210370003	1	1	1	0	2	3	.
	210430500	1	0	0	1	1	2	.
	210470006	1	1	1	0	1	3	.
	210590014	1	0	1	1	1	3	.
	210670012	1	1	1	1	1	4	1
	210670014	1	1	1	0	1	3	.
	210730006	1	1	1	1	0	3	.
	210930006	1	0	1	1	0	2	.
	211010006	1	1	0	1	1	3	.
	211110043	1	1	1	1	1	4	1
	211110044	1	1	0	1	1	3	.
	211110048	1	1	1	1	1	4	1
	211170007	1	1	1	0	2	3	.
	211451004	1	1	0	1	1	3	.
	211510003	1	1	1	1	1	4	1
	211950002	1	1	1	1	1	4	1
	212270007	1	1	1	1	1	4	1
LA	# SLAMS operated in 2000=21; # SLAMS operated all 4 Q=21; # where Accuracy Reqrd (All)=21; # w/ Accuracy Data =21; # w/ 4 Q Acc.=21							
	220171002	1	1	1	1	1	4	1
	220190009	1	1	1	1	1	4	1
	220190010	1	1	1	1	1	4	1
	220290002	1	1	1	1	1	4	1
	220330002	1	1	2	1	1	4	1
	220330009	1	1	1	1	1	4	1
	220331001	1	1	1	1	1	4	1
	220470005	1	1	1	1	1	4	1
	220470009	1	1	1	1	1	4	1
	220511001	1	1	1	1	1	4	1
	220512001	1	1	1	1	1	4	1
	220550005	1	1	1	1	1	4	1
	220550006	1	1	1	1	1	4	1
	220710010	1	1	1	1	1	4	1
	220710012	1	1	2	1	1	4	1
	220730004	1	1	1	1	1	4	1

STATE	SITE	POC	# of Accuracy Records Q1	Q2	Q3	Q4	# Q's w/ Accuracy	Accuracy in All 4 Q's
	220790001	1	1	1	1	1	4	1
	220870004	1	1	1	1	1	4	1
	221050001	1	1	1	1	1	4	1
	221090001	1	1	1	1	1	4	1
	221210001	1	1	1	1	2	4	1
ME	# SLAMS operated in 2000= 5; # SLAMS operated all 4 Q= 5; # where Accuracy Reqrd (All)= 5; # w/ Accuracy Data = 3; # w/ 4 Q Acc.= 2							
	230030013	.	0	0	0	0	0	.
	230031011	.	0	0	0	0	0	.
	230050027	1	2	2	2	0	3	.
	230090103	1	1	1	1	1	4	1
	230190002	1	2	1	2	1	4	1
MD	# SLAMS operated in 2000=18; # SLAMS operated all 4 Q=18; # where Accuracy Reqrd (All)=18; # w/ Accuracy Data = 0; # w/ 4 Q Acc.= 0							
	240030014	.	0	0	0	0	0	.
	240030019	.	0	0	0	0	0	.
	240031003	.	0	0	0	0	0	.
	240032002	.	0	0	0	0	0	.
	240051007	.	0	0	0	0	0	.
	240053001	.	0	0	0	0	0	.
	240150003	.	0	0	0	0	0	.
	240251001	.	0	0	0	0	0	.
	240313001	.	0	0	0	0	0	.
	240330001	.	0	0	0	0	0	.
	240338001	.	0	0	0	0	0	.
	240430009	.	0	0	0	0	0	.
	245100006	.	0	0	0	0	0	.
	245100007	.	0	0	0	0	0	.
	245100035	.	0	0	0	0	0	.
	245100040	.	0	0	0	0	0	.
	245100049	.	0	0	0	0	0	.
	245100052	.	0	0	0	0	0	.
MA	# SLAMS operated in 2000=21; # SLAMS operated all 4 Q=20; # where Accuracy Reqrd (All)=20; # w/ Accuracy Data =20; # w/ 4 Q Acc.=11							
	250035001	1	1	1	1	1	4	1
	250052004	1	1	1	1	1	4	1
	250053001	1	1	1	1	0	3	.
	250092006	1	1	1	1	1	4	1
	250095005	1	1	1	1	1	4	1
	250096001	1	1	1	1	1	4	1
	250130008	1	1	0	1	1	3	.
	250130016	1	1	1	1	1	4	1
	250132007	1	1	1	1	1	4	1
	250154002	1	1	1	2	1	4	1
	250170008	.	0	0	0	0	0	.
	250171102	1	1	1	0	1	3	.
	250210007	1	1	1	0	0	2	.
	250230004	1	0	1	1	1	3	.
	250250002	1	1	1	2	0	3	.
	250250027	1	1	1	1	0	3	.
	250250042	1	1	1	1	1	4	1
	250250043	1	0	1	1	0	2	.

STATE	SITE	POC	# of Accuracy Records Q1	Q2	Q3	Q4	# Q's w/ Accuracy	Accuracy in All 4 Q's
	250270016	1	1	1	1	1	4	1
	250270020	1	1	1	2	1	4	1
	250272004	1	1	1	0	1	3	.
MI	# SLAMS operated in 2000=24; # SLAMS operated all 4 Q=22; # where Accuracy Reqrd (All)=22; # w/ Accuracy Data =24; # w/ 4 Q Acc.= 8							
	260050003	1	0	1	1	1	3	.
	260070005	1	0	0	0	1	1	.
	260170014	1	.	.	0	1	1	.
	260210014	1	0	1	1	1	3	.
	260490021	1	1	1	1	1	4	1
	260550003	1	0	0	1	1	2	.
	260650012	1	1	0	1	1	3	.
	260770008	1	0	1	1	1	3	.
	260810020	1	0	0	1	1	2	.
	260990009	1	0	0	1	1	2	.
	261150005	1	1	1	1	1	4	1
	261210040	1	0	1	1	1	3	.
	261250001	1	1	0	1	1	3	.
	261390005	1	0	1	1	1	3	.
	261450018	1	0	1	1	1	3	.
	261610005	1	0	0	1	1	2	.
	261610008	1	0	1	1	1	3	.
	261630001	1	1	1	1	1	4	1
	261630015	1	1	1	1	1	4	1
	261630016	1	1	1	2	1	4	1
	261630019	1	.	1	1	1	3	.
	261630025	1	1	1	1	1	4	1
	261630033	1	1	1	1	1	4	1
	261630036	1	1	1	1	1	4	1
MN	# SLAMS operated in 2000=16; # SLAMS operated all 4 Q=16; # where Accuracy Reqrd (All)=16; # w/ Accuracy Data =16; # w/ 4 Q Acc.= 1							
	270376018	1	0	0	1	1	2	.
	270530960	1	0	0	0	1	1	.
	270530961	1	0	0	1	1	2	.
	270531007	1	0	0	0	1	1	.
	270532006	1	0	0	0	1	1	.
	270953051	1	0	0	0	1	1	.
	271095008	1	0	0	1	0	1	.
	271230866	1	0	0	0	1	1	.
	271230868	2	0	0	0	1	1	.
	271230871	1	0	0	1	0	1	.
	271230872	1	0	0	1	1	2	.
	271377001	1	1	1	0	1	3	.
	271377550	1	1	1	1	1	4	1
	271377551	1	1	1	1	0	3	.
	271390505	1	0	0	0	1	1	.
	271453052	1	0	0	1	1	2	.
MS	# SLAMS operated in 2000=16; # SLAMS operated all 4 Q=15; # where Accuracy Reqrd (All)=15; # w/ Accuracy Data =16; # w/ 4 Q Acc.=12							
	280010004	1	1	1	1	1	4	1
	280110001	1	1	1	1	0	3	.
	280330002	1	1	1	1	0	3	.

STATE	SITE	POC	# of Accuracy Records Q1	Q2	Q3	Q4	# Q's w/ Accuracy	Accuracy in All 4 Q's
	280350004	1	1	1	1	1	4	1
	280470008	1	1	1	1	0	3	.
	280490010	1	1	1	1	1	4	1
	280490018	1	1	1	1	1	4	1
	280590006	1	1	1	1	1	4	1
	280670002	1	1	1	1	1	4	1
	280750003	1	1	1	1	1	4	1
	280810005	1	1	1	1	1	4	1
	280870001	1	1	1	1	1	4	1
	281090001	1	.	1	1	1	3	.
	281210001	1	1	1	1	1	4	1
	281230001	1	1	1	1	1	4	1
	281490004	1	1	1	1	1	4	1
MO	# SLAMS operated in 2000=19; # SLAMS operated all 4 Q=17; # where Accuracy Reqrd (All)=17; # w/ Accuracy Data =19; # w/ 4 Q Acc.=14							
	290210010	1	1	1	1	1	4	1
	290370003	1	0	1	1	1	3	.
	290390001	1	1	1	1	1	4	1
	290470005	1	1	1	1	1	4	1
	290470026	1	1	1	1	1	4	1
	290470041	1	1	0	1	1	3	.
	290770032	1	2	2	2	2	4	1
	290910003	1	1	2	1	1	4	1
	290950036	1	1	0	0	0	1	.
	290950037	1	.	1	1	1	3	.
	290952002	1	1	1	1	1	4	1
	290990012	1	1	1	1	1	4	1
	291831002	1	1	1	1	1	4	1
	291860006	1	1	1	1	1	4	1
	291892003	1	2	2	2	1	4	1
	291895001	1	1	1	1	1	4	1
	295100007	1	0	1	1	1	3	.
	295100085	1	1	1	1	1	4	1
	295100086	1	1	1	1	1	4	1
MT	# SLAMS operated in 2000= 7; # SLAMS operated all 4 Q= 7; # where Accuracy Reqrd (All)= 7; # w/ Accuracy Data = 7; # w/ 4 Q Acc.= 5							
	300131026	1	1	1	1	1	4	1
	300290039	1	1	1	1	1	4	1
	300290047	1	1	1	1	1	4	1
	300530018	1	2	1	1	1	4	1
	300630024	1	1	1	1	1	4	1
	300810001	1	0	1	1	1	3	.
	301111065	1	1	1	1	0	3	.
NE	# SLAMS operated in 2000=13; # SLAMS operated all 4 Q=13; # where Accuracy Reqrd (All)=13; # w/ Accuracy Data =12; # w/ 4 Q Acc.= 0							
	310250002	1	2	3	2	0	3	.
	310270001	1	3	3	2	0	3	.
	310310001	1	1	2	2	0	3	.
	310490001	1	2	3	2	0	3	.
	310550019	1	1	0	0	0	1	.
	310550051	1	0	1	0	0	1	.
	310550052	1	1	0	0	0	1	.

STATE	SITE	POC	# of Accuracy Records Q1	Q2	Q3	Q4	# Q's w/ Accuracy	Accuracy in All 4 Q's
	310790003	1	2	4	0	0	2	.
	311090022	.	0	0	0	0	0	.
	311111002	1	2	3	1	0	3	.
	311530007	1	2	3	2	0	3	.
	311570003	1	2	2	2	0	3	.
	311770002	1	2	3	2	0	3	.
NV	# SLAMS operated in 2000= 8; # SLAMS operated all 4 Q= 8; # where Accuracy Reqrd (All)= 8; # w/ Accuracy Data = 1; # w/ 4 Q Acc.= 0							
	320030022	.	0	0	0	0	0	.
	320030298	.	0	0	0	0	0	.
	320030560	.	0	0	0	0	0	.
	320031019	.	0	0	0	0	0	.
	320032002	.	0	0	0	0	0	.
	320050008	1	0	1	0	0	1	.
	320310016	.	0	0	0	0	0	.
	320312002	.	0	0	0	0	0	.
NH	# SLAMS operated in 2000= 9; # SLAMS operated all 4 Q= 8; # where Accuracy Reqrd (All)= 8; # w/ Accuracy Data = 0; # w/ 4 Q Acc.= 0							
	330012003	.	0	0	0	0	0	.
	330050007	.	0	0	0	0	0	.
	330070014	.	0	0	0	0	0	.
	330110019	.	0	0	0	0	0	.
	330111007	.	0	0	0	0	0	.
	330130003	.	0	0	0	0	0	.
	330135001	.	0	0	0	0	0	.
	330150009	.	0	0	0	0	0	.
	330190003	.	0	0	0	0	0	.
NJ	# SLAMS operated in 2000=19; # SLAMS operated all 4 Q=19; # where Accuracy Reqrd (All)=19; # w/ Accuracy Data =18; # w/ 4 Q Acc.=15							
	340030003	1	2	3	3	3	4	1
	340070003	1	2	3	2	2	4	1
	340071007	1	2	3	0	2	3	.
	340130011	.	0	0	0	0	0	.
	340130015	1	2	3	2	2	4	1
	340155001	1	1	3	2	2	4	1
	340171003	1	2	3	2	1	4	1
	340172002	1	2	2	2	1	4	1
	340210008	1	2	4	3	2	4	1
	340218001	1	0	2	2	3	3	.
	340230006	1	2	3	3	3	4	1
	340270004	1	2	3	2	3	4	1
	340273001	1	2	3	3	4	4	1
	340292002	1	2	1	2	2	4	1
	340310005	1	1	0	2	0	2	.
	340390004	1	1	2	2	3	4	1
	340390006	1	1	3	3	3	4	1
	340392003	1	2	1	2	1	4	1
	340410006	1	3	3	3	2	4	1
NM	# SLAMS operated in 2000= 3; # SLAMS operated all 4 Q= 2; # where Accuracy Reqrd (All)= 2; # w/ Accuracy Data = 2; # w/ 4 Q Acc.= 0							
	350010023	1	0	1	0	1	2	.
	350010024	1	0	1	0	1	2	.
	350010027	.	0	0	0	0	0	.

STATE	SITE	POC	# of Accuracy Records Q1	Q2	Q3	Q4	# Q's w/ Accuracy	Accuracy in All 4 Q's
NY	# SLAMS operated in 2000=50; # SLAMS operated all 4 Q=43; # where Accuracy Reqrd (All)=43; # w/ Accuracy Data =41; # w/ 4 Q Acc.=32							
	360010005	1	1	2	1	1	4	1
	360010012	1	1	1	1	1	4	1
	360050080	1	1	1	1	1	4	1
	360050083	1	1	1	1	1	4	1
	360050110	1	2	1	1	1	4	1
	360070009	1	1	1	1	1	4	1
	360130011	1	1	1	1	1	4	1
	360271004	1	1	1	1	1	4	1
	360290002	1	1	1	1	1	4	1
	360290005	1	1	1	1	1	4	1
	360291007	1	1	1	1	1	4	1
	360310003	1	1	1	1	1	4	1
	360470011	1	1	1	1	1	4	1
	360470052	1	.	1	1	1	3	.
	360470076	1	1	1	1	1	4	1
	360470118	.	0	0	0	0	0	.
	360470121	.	0	0	0	0	0	.
	360552002	1	1	1	0	1	3	.
	360556001	1	1	1	1	1	4	1
	360590005	.	0	0	0	0	0	.
	360590008	1	1	0	1	1	3	.
	360590011	.	0	0	0	0	0	.
	360590012	1	.	.	0	1	1	.
	360590013	1	1	0	0	1	2	.
	360610010	1	3	1	1	1	4	1
	360610056	1	1	1	1	1	4	1
	360610062	1	1	1	1	1	4	1
	360610079	1	1	1	1	1	4	1
	360610115	.	0	0	0	0	0	.
	360610117	.	0	0	0	0	0	.
	360610119	.	0	0	0	0	0	.
	360632008	1	1	1	1	1	4	1
	360652001	1	1	1	1	1	4	1
	360670019	1	1	1	1	1	4	1
	360670020	1	.	1	1	1	3	.
	360671015	1	1	1	1	1	4	1
	360679999	.	0	0	0	0	0	.
	360710002	1	1	2	1	1	4	1
	360810094	1	1	1	1	1	4	1
	360810096	1	.	1	1	1	3	.
	360810097	1	1	1	1	1	4	1
	360810116	.	0	0	0	0	0	.
	360850055	1	1	1	1	1	4	1
	360850067	1	1	1	1	1	4	1
	360893001	1	1	1	1	1	4	1
	360930003	1	1	1	1	1	4	1
	361010003	1	1	1	1	1	4	1
	361030001	1	1	1	1	1	4	1

STATE	SITE	POC	# of Accuracy Records Q1	Q2	Q3	Q4	# Q's w/ Accuracy	Accuracy in All 4 Q's
	361030005	1	0	1	0	0	1	.
	361191002	1	0	2	1	1	3	.
NC	# SLAMS operated in 2000=31; # SLAMS operated all 4 Q=28; # where Accuracy Reqrd (All)=28; # w/ Accuracy Data =29; # w/ 4 Q Acc.=23							
	370010002	1	1	1	1	2	4	1
	370210034	1	1	1	1	1	4	1
	370350004	1	1	1	1	1	4	1
	370370004	1	1	1	2	1	4	1
	370510009	1	3	1	1	1	4	1
	370610002	1	1	1	1	1	4	1
	370630001	1	1	1	1	1	4	1
	370650003	1	0	1	1	1	3	.
	370670022	1	1	1	1	1	4	1
	370670024	1	1	1	1	1	4	1
	370710016	1	1	1	1	1	4	1
	370810009	1	2	1	1	1	4	1
	370811005	1	1	1	1	1	4	1
	370870010	1	1	1	1	1	4	1
	371190010	1	1	1	1	1	4	1
	371190034	.	0	0	0	0	0	.
	371190040	1	1	1	1	0	3	.
	371190041	1	1	1	1	1	4	1
	371190042	1	.	.	0	1	1	.
	371210001	1	1	1	1	1	4	1
	371290009	1	1	1	1	1	4	1
	371330005	1	1	1	1	1	4	1
	371350007	1	1	1	1	1	4	1
	371390002	1	2	1	1	1	4	1
	371470005	1	0	1	1	1	3	.
	371550004	1	2	0	0	0	1	.
	371550005	.	0	0	0	0	0	.
	371730002	1	1	1	1	1	4	1
	371830014	1	1	1	1	1	4	1
	371830015	1	1	1	1	1	4	1
	371910005	1	0	1	1	1	3	.
ND	# SLAMS operated in 2000= 7; # SLAMS operated all 4 Q= 6; # where Accuracy Reqrd (All)= 6; # w/ Accuracy Data = 7; # w/ 4 Q Acc.= 6							
	380070002	1	.	.	1	1	2	.
	380150003	1	2	1	1	1	4	1
	380171004	1	1	1	1	1	4	1
	380350004	1	1	1	1	1	4	1
	380570004	1	1	1	1	1	4	1
	380890002	1	1	1	1	1	4	1
	380910001	1	1	1	1	1	4	1
OH	# SLAMS operated in 2000=45; # SLAMS operated all 4 Q=37; # where Accuracy Reqrd (All)=37; # w/ Accuracy Data =40; # w/ 4 Q Acc.= 0							
	390090003	.	0	0	0	0	0	.
	390170003	1	0	2	2	2	3	.
	390170016	1	.	.	.	1	1	.
	390170017	1	.	.	.	1	1	.
	390230005	1	.	.	1	1	2	.
	390350013	1	0	1	1	1	3	.

STATE	SITE	POC	# of Accuracy Records				# Q's w/ Accuracy	Accuracy in All 4 Q's
			Q1	Q2	Q3	Q4		
	390350027	1	0	1	0	1	2	.
	390350034	1	.	.	1	1	2	.
	390350038	1	0	1	2	2	3	.
	390350045	1	0	1	1	1	3	.
	390350060	1	0	2	2	2	3	.
	390350065	1	0	1	1	1	3	.
	390350066	1	0	1	1	1	3	.
	390351002	1	0	1	1	1	3	.
	390490024	1	0	0	0	1	1	.
	390490025	1	0	0	0	2	1	.
	390490028	.	0	0	0	0	0	.
	390490081	.	0	0	0	0	0	.
	390610014	1	0	0	2	2	2	.
	390610040	1	0	1	1	1	3	.
	390610041	1	0	0	2	2	2	.
	390610042	1	.	.	.	1	1	.
	390610043	1	.	.	.	1	1	.
	390617001	1	0	0	1	1	2	.
	390618001	1	0	0	1	1	2	.
	390810016	.	0	0	0	0	0	.
	390811001	.	0	0	0	0	0	.
	390851001	1	0	1	1	1	3	.
	390870010	1	0	0	1	1	2	.
	390930016	1	.	.	1	0	1	.
	390932003	1	0	1	0	2	2	.
	390950024	1	0	0	1	1	2	.
	390950025	1	0	0	1	1	2	.
	390950026	1	0	0	1	1	2	.
	390990005	1	0	1	3	2	3	.
	391130014	1	0	2	2	2	3	.
	391130031	1	0	0	1	1	2	.
	391330002	1	0	0	1	1	2	.
	391351001	1	0	0	1	0	1	.
	391450013	1	0	0	1	1	2	.
	391510017	1	0	2	2	2	3	.
	391510020	1	0	1	1	1	3	.
	391530017	1	0	0	2	2	2	.
	391530023	1	0	0	1	1	2	.
	391550007	1	0	1	1	1	3	.
OK	# SLAMS operated in 2000= 4; # SLAMS operated all 4 Q= 4; # where Accuracy Reqrd (All)= 4; # w/ Accuracy Data = 4; # w/ 4 Q Acc.= 4							
	400190295	1	1	1	1	1	4	1
	401210415	1	1	1	1	1	4	1
	401430110	1	1	1	1	1	4	1
	401430131	1	1	1	1	1	4	1
OR	# SLAMS operated in 2000=25; # SLAMS operated all 4 Q=25; # where Accuracy Reqrd (All)=25; # w/ Accuracy Data =23; # w/ 4 Q Acc.=21							
	410030013	1	1	1	1	1	4	1
	410170113	1	1	1	1	1	4	1
	410250002	1	1	1	0	1	3	.
	410290133	1	1	1	1	1	4	1

STATE	SITE	POC	# of Accuracy Records Q1	Q2	Q3	Q4	# Q's w/ Accuracy	Accuracy in All 4 Q's
	410330107	1	1	1	1	1	4	1
	410350004	1	1	1	1	1	4	1
	410370001	1	1	1	1	1	4	1
	410390060	1	1	1	1	1	4	1
	410391007	1	1	1	1	1	4	1
	410391061	1	1	1	1	1	4	1
	410392013	1	1	1	1	1	4	1
	410430009	1	1	1	1	1	4	1
	410470040	1	1	1	1	1	4	1
	410470109	.	0	0	0	0	0	.
	410470110	1	1	1	1	1	4	1
	410510080	1	1	1	1	1	4	1
	410510244	1	1	1	2	0	3	.
	410510246	1	1	1	1	1	4	1
	410590121	1	1	1	1	1	4	1
	410610006	.	0	0	0	0	0	.
	410610117	1	1	1	1	1	4	1
	410619103	1	1	1	1	1	4	1
	410650007	1	1	1	1	1	4	1
	410670111	1	1	1	1	1	4	1
	410671003	1	1	1	1	1	4	1
PA	# SLAMS operated in 2000=37; # SLAMS operated all 4 Q=36; # where Accuracy Reqrd (All)=36; # w/ Accuracy Data =29; # w/ 4 Q Acc.=26							
	420010001	1	1	1	1	1	4	1
	420030008	.	0	0	0	0	0	.
	420030021	.	0	0	0	0	0	.
	420030064	.	0	0	0	0	0	.
	420030067	.	0	0	0	0	0	.
	420030116	.	0	0	0	0	0	.
	420030131	.	0	0	0	0	0	.
	420031008	.	0	0	0	0	0	.
	420031301	.	0	0	0	0	0	.
	420070014	1	1	1	1	1	4	1
	420110009	1	1	1	1	1	4	1
	420170012	1	1	1	1	1	4	1
	420210011	1	1	1	1	1	4	1
	420270100	1	1	1	1	1	4	1
	420410100	1	1	2	1	1	4	1
	420430401	1	1	1	1	1	4	1
	420450002	1	1	1	1	1	4	1
	420490003	1	1	1	1	1	4	1
	420692006	1	1	1	2	1	4	1
	420710007	1	1	1	1	1	4	1
	420770004	1	1	1	1	1	4	1
	420791101	1	1	1	1	1	4	1
	420850100	1	.	1	1	1	3	.
	420910013	1	1	0	1	1	3	.
	420950025	1	1	1	1	1	4	1
	420990301	1	1	1	1	1	4	1
	421010004	1	2	1	1	1	4	1

STATE	SITE	POC	# of Accuracy Records				# Q's w/ Accuracy	Accuracy in All 4 Q's
			Q1	Q2	Q3	Q4		
	421010020	1	2	1	1	1	4	1
	421010024	1	2	1	1	1	4	1
	421010027	1	.	1	1	0	2	.
	421010047	1	2	1	1	1	4	1
	421010136	1	2	1	1	1	4	1
	421250005	1	1	1	1	1	4	1
	421250200	1	1	1	1	1	4	1
	421255001	1	1	1	1	1	4	1
	421290008	1	1	1	1	1	4	1
	421330008	1	1	1	1	1	4	1
PR	# SLAMS operated in 2000=10; # SLAMS operated all 4 Q=10; # where Accuracy Reqrd (All)=10; # w/ Accuracy Data = 0; # w/ 4 Q Acc.= 0							
	720210009	.	0	0	0	0	0	.
	720530003	.	0	0	0	0	0	.
	720570008	.	0	0	0	0	0	.
	720590016	.	0	0	0	0	0	.
	720610005	.	0	0	0	0	0	.
	720690001	.	0	0	0	0	0	.
	720810001	.	0	0	0	0	0	.
	720970003	.	0	0	0	0	0	.
	721130004	.	0	0	0	0	0	.
	721270003	.	0	0	0	0	0	.
RI	# SLAMS operated in 2000= 6; # SLAMS operated all 4 Q= 6; # where Accuracy Reqrd (All)= 6; # w/ Accuracy Data = 6; # w/ 4 Q Acc.= 4							
	440030002	1	1	1	1	1	4	1
	440070022	1	1	1	1	0	3	.
	440070023	1	1	1	1	0	3	.
	440071005	1	1	1	1	1	4	1
	440071010	1	1	1	1	1	4	1
	440090007	1	1	1	1	1	4	1
SC	# SLAMS operated in 2000=14; # SLAMS operated all 4 Q=13; # where Accuracy Reqrd (All)=13; # w/ Accuracy Data =14; # w/ 4 Q Acc.=13							
	450130007	1	6	6	6	6	4	1
	450190046	1	5	5	5	6	4	1
	450190048	1	7	6	7	7	4	1
	450190049	1	6	6	7	6	4	1
	450370001	1	7	6	7	5	4	1
	450410002	1	8	6	6	6	4	1
	450450009	1	6	7	7	6	4	1
	450470003	1	7	5	6	6	4	1
	450510002	1	.	.	.	1	1	.
	450630008	1	7	7	6	7	4	1
	450730001	1	6	5	7	5	4	1
	450790007	1	4	8	5	6	4	1
	450790019	1	7	6	5	6	4	1
	450830010	1	6	7	7	6	4	1
SD	# SLAMS operated in 2000=11; # SLAMS operated all 4 Q=10; # where Accuracy Reqrd (All)=10; # w/ Accuracy Data =11; # w/ 4 Q Acc.= 9							
	460110002	1	1	1	1	1	4	1
	460130003	1	2	1	1	1	4	1
	460710001	1	1	1	1	1	4	1
	460930001	1	.	.	.	1	1	.
	460990006	1	1	1	1	1	4	1

STATE	SITE	POC	# of Accuracy Records				# Q's w/ Accuracy	Accuracy in All 4 Q's
			Q1	Q2	Q3	Q4		
	460990007	1	1	1	1	1	4	1
	461030015	1	1	1	1	0	3	.
	461030016	1	1	1	1	1	4	1
	461030017	1	1	1	1	1	4	1
	461030019	1	1	1	1	1	4	1
	461031001	1	1	1	1	1	4	1
TN	# SLAMS operated in 2000=21; # SLAMS operated all 4 Q=19; # where Accuracy Reqrd (All)=19; # w/ Accuracy Data =19; # w/ 4 Q Acc.=10							
	470090005	1	1	0	0	0	1	.
	470090011	1	.	0	1	1	2	.
	470370023	1	1	1	1	1	4	1
	470370025	1	1	1	1	0	3	.
	470370036	1	1	1	1	0	3	.
	470650031	1	0	1	0	0	1	.
	470650032	1	0	1	0	0	1	.
	470654002	1	1	1	1	1	4	1
	470930028	1	0	1	1	0	2	.
	470931017	1	1	1	1	1	4	1
	470931020	1	0	0	1	0	1	.
	470990002	1	1	1	1	1	4	1
	471130004	1	1	1	1	1	4	1
	471251009	1	1	1	1	1	4	1
	471450004	1	1	1	1	1	4	1
	471570014	1	0	1	0	0	1	.
	471570038	.	0	0	0	0	0	.
	471570047	1	1	1	1	1	4	1
	471571004	.	0	0	0	0	0	.
	471631007	1	1	1	1	1	4	1
	471650007	1	1	1	1	1	4	1
TX	# SLAMS operated in 2000=57; # SLAMS operated all 4 Q=51; # where Accuracy Reqrd (All)=51; # w/ Accuracy Data = 0; # w/ 4 Q Acc.= 0							
	480290034	.	0	0	0	0	0	.
	480290052	.	0	0	0	0	0	.
	480290053	.	0	0	0	0	0	.
	480290060	.	0	0	0	0	0	.
	480370004	.	0	0	0	0	0	.
	480391003	.	0	0	0	0	0	.
	480550062	.	0	0	0	0	0	.
	480612002	.	0	0	0	0	0	.
	480850005	.	0	0	0	0	0	.
	481130020	.	0	0	0	0	0	.
	481130035	.	0	0	0	0	0	.
	481130050	.	0	0	0	0	0	.
	481130057	.	0	0	0	0	0	.
	481130069	.	0	0	0	0	0	.
	481130087	.	0	0	0	0	0	.
	481350003	.	0	0	0	0	0	.
	481410002	.	0	0	0	0	0	.
	481410010	.	0	0	0	0	0	.
	481410037	.	0	0	0	0	0	.
	481410038	.	0	0	0	0	0	.

STATE	SITE	POC	# of Accuracy Records				# Q's w/ Accuracy	Accuracy in All 4 Q's
			Q1	Q2	Q3	Q4		
	481410044	.	0	0	0	0	0	.
	481410045	.	0	0	0	0	0	.
	481410053	.	0	0	0	0	0	.
	481410057	.	0	0	0	0	0	.
	481670014	.	0	0	0	0	0	.
	481670053	.	0	0	0	0	0	.
	481671005	.	0	0	0	0	0	.
	481830001	.	0	0	0	0	0	.
	482010024	.	0	0	0	0	0	.
	482010026	.	0	0	0	0	0	.
	482010051	.	0	0	0	0	0	.
	482010055	.	0	0	0	0	0	.
	482010058	.	0	0	0	0	0	.
	482010062	.	0	0	0	0	0	.
	482010803	.	0	0	0	0	0	.
	482011035	.	0	0	0	0	0	.
	482011037	.	0	0	0	0	0	.
	482011039	.	0	0	0	0	0	.
	482150042	.	0	0	0	0	0	.
	482150043	.	0	0	0	0	0	.
	482450021	.	0	0	0	0	0	.
	482450022	.	0	0	0	0	0	.
	483030001	.	0	0	0	0	0	.
	483091002	.	0	0	0	0	0	.
	483150050	.	0	0	0	0	0	.
	483390089	.	0	0	0	0	0	.
	483550020	.	0	0	0	0	0	.
	483550032	.	0	0	0	0	0	.
	483611001	.	0	0	0	0	0	.
	483750005	.	0	0	0	0	0	.
	484390063	.	0	0	0	0	0	.
	484391002	.	0	0	0	0	0	.
	484391003	.	0	0	0	0	0	.
	484393006	.	0	0	0	0	0	.
	484530020	.	0	0	0	0	0	.
	484530021	.	0	0	0	0	0	.
	484790016	.	0	0	0	0	0	.
UT	# SLAMS operated in 2000=16; # SLAMS operated all 4 Q=12; # where Accuracy Reqrd (All)=12; # w/ Accuracy Data =14; # w/ 4 Q Acc.=10							
	490030003	1	.	.	0	3	1	.
	490050004	1	0	0	0	3	1	.
	490110001	1	1	1	1	4	4	1
	490350003	1	1	1	1	3	4	1
	490350012	1	1	1	1	3	4	1
	490353003	.	0	0	0	0	0	.
	490353006	1	2	1	1	4	4	1
	490353007	1	1	1	1	3	4	1
	490450002	1	2	1	1	3	4	1
	490490002	1	1	1	1	3	4	1
	490494001	1	1	1	1	3	4	1

STATE	SITE	POC	# of Accuracy Records				# Q's w/ Accuracy	Accuracy in All 4 Q's
			Q1	Q2	Q3	Q4		
	490495008	1	0	1	1	3	3	.
	490495010	1	1	1	1	3	4	1
	490570001	.	0	0	0	0	0	.
	490570007	1	1	1	1	3	4	1
	490571003	1	.	.	.	1	1	.
VT	# SLAMS operated in 2000= 3; # SLAMS operated all 4 Q= 3; # where Accuracy Reqrd (All)= 3; # w/ Accuracy Data = 3; # w/ 4 Q Acc.= 3							
	500030005	1	1	1	1	1	4	1
	500070007	1	1	1	1	1	4	1
	500210002	1	1	1	1	1	4	1
VI	# SLAMS operated in 2000= 3; # SLAMS operated all 4 Q= 1; # where Accuracy Reqrd (All)= 1; # w/ Accuracy Data = 0; # w/ 4 Q Acc.= 0							
	780010012	.	0	0	0	0	0	.
	780050008	.	0	0	0	0	0	.
	780050009	.	0	0	0	0	0	.
VA	# SLAMS operated in 2000=20; # SLAMS operated all 4 Q=20; # where Accuracy Reqrd (All)=20; # w/ Accuracy Data =20; # w/ 4 Q Acc.=19							
	510130020	1	1	1	1	1	4	1
	510360002	1	1	1	1	2	4	1
	510410003	1	1	1	1	1	4	1
	510590030	1	1	1	1	1	4	1
	510591004	1	1	1	1	1	4	1
	510595001	1	1	1	1	1	4	1
	510870014	1	1	1	1	1	4	1
	510870015	1	1	1	1	1	4	1
	511071005	1	1	1	1	1	4	1
	511390004	1	1	1	1	1	4	1
	515200006	1	1	1	1	1	4	1
	515500012	1	1	1	1	1	4	1
	516500004	1	1	1	1	1	4	1
	516800014	1	1	1	1	1	4	1
	517000013	1	1	1	1	2	4	1
	517100024	1	1	1	1	1	4	1
	517600020	1	0	1	1	1	3	.
	517700014	1	1	1	1	1	4	1
	517750010	1	1	1	1	1	4	1
	518100008	1	1	1	1	1	4	1
WA	# SLAMS operated in 2000=20; # SLAMS operated all 4 Q=18; # where Accuracy Reqrd (All)=18; # w/ Accuracy Data =19; # w/ 4 Q Acc.=17							
	530050002	1	1	1	1	1	4	1
	530110013	1	1	1	1	1	4	1
	530330017	1	1	1	1	1	4	1
	530330021	1	1	1	1	1	4	1
	530330024	1	1	1	1	1	4	1
	530330027	1	1	1	2	1	4	1
	530330037	1	.	.	.	1	1	.
	530330057	1	1	1	1	1	4	1
	530330080	1	1	1	1	1	4	1
	530332004	.	0	0	0	0	0	.
	530530029	1	1	1	1	1	4	1
	530530031	1	1	1	1	1	4	1
	530531018	1	1	1	1	1	4	1
	530610005	1	1	1	1	1	4	1

STATE	SITE	POC	# of Accuracy Records				# Q's w/ Accuracy	Accuracy in All 4 Q's
			Q1	Q2	Q3	Q4		
	530611007	1	1	1	1	1	4	1
	530630016	1	1	1	1	1	4	1
	530630047	1	1	1	1	1	4	1
	530670013	1	1	1	1	1	4	1
	530730015	1	1	1	1	1	4	1
	530770009	1	.	1	1	1	3	.
WV	# SLAMS operated in 2000=12; # SLAMS operated all 4 Q=10; # where Accuracy Reqrd (All)=10; # w/ Accuracy Data = 7; # w/ 4 Q Acc.= 5							
	540030003	1	3	3	3	3	4	1
	540090005	.	0	0	0	0	0	.
	540110006	1	2	2	2	2	4	1
	540290011	.	0	0	0	0	0	.
	540291004	.	0	0	0	0	0	.
	540390009	1	3	2	0	0	2	.
	540390010	1	.	0	3	2	2	.
	540391005	1	2	1	2	2	4	1
	540511002	.	0	0	0	0	0	.
	540610003	1	3	3	3	3	4	1
	540690008	.	0	0	0	0	0	.
	541071002	1	3	3	3	3	4	1
WI	# SLAMS operated in 2000=21; # SLAMS operated all 4 Q=21; # where Accuracy Reqrd (All)=21; # w/ Accuracy Data =21; # w/ 4 Q Acc.=19							
	550090005	1	2	1	1	1	4	1
	550090026	1	1	1	1	1	4	1
	550250025	1	2	1	1	1	4	1
	550290004	1	1	1	1	1	4	1
	550310025	1	2	1	1	1	4	1
	550590019	3	1	1	1	1	4	1
	550710007	1	1	1	1	1	4	1
	550790010	2	1	1	1	1	4	1
	550790026	1	2	0	1	1	3	.
	550790043	1	1	1	1	1	4	1
	550790050	1	1	1	1	1	4	1
	550790051	1	1	1	1	1	4	1
	550790059	2	2	1	1	1	4	1
	550790099	1	1	1	1	1	4	1
	550870009	1	1	1	1	1	4	1
	550890008	1	1	1	1	1	4	1
	551050002	1	2	1	1	1	4	1
	551330027	2	2	1	1	1	4	1
	551330034	1	1	1	1	1	4	1
	551390011	1	1	1	1	1	4	1
	551410016	1	0	1	1	1	3	.
WY	# SLAMS operated in 2000= 4; # SLAMS operated all 4 Q= 4; # where Accuracy Reqrd (All)= 4; # w/ Accuracy Data = 4; # w/ 4 Q Acc.= 0							
	560131004	1	0	2	2	0	2	.
	560210001	1	0	1	2	0	2	.
	560330001	1	4	4	1	0	3	.
	560330002	1	6	6	1	0	3	.

STATE	SITE	POC	# of Accuracy Records				# Q's w/ Accuracy	Accuracy in All 4 Q's
			Q1	Q2	Q3	Q4		

Attachment 5-3

1) Annual Flow Rate Data Summary

2) Quarterly Flow Rate Summary

3) Site/Days exceeding 4% Flow Rate Check

4) Site/Days with True or Measured Flow Rate >5% of 16.67 l/m

5) Site/Days with True or Measured Flow Rate >10% of 16.67 l/m

Annual Flow Rate Summary for CY2000
based on 7/11/01 extraction from AIRS

Method	Num Sites in year	Avg Num Flow Checks per Site	Num Flow Audits	Num Flow Audits Diff > 4%	% > 4%	Num Flow Rates > 5% from 16.67	% > 5%	Average Accuracy (%)
BGI Single	12	3.92	47	4	8.5	3	6.4	-1.52
RP Single	91	3.59	327	11	3.4	8	2.4	-0.14
RP Seq	567	4.76	2700	80	3.0	37	1.4	-0.06
And Single	32	2.53	81	3	3.7	2	2.5	-0.65
And Seq	223	3.22	719	70	9.7	47	6.5	-0.22
_National	925	4.19	3874	168	4.3	97	2.5	-0.13

Quarterly Flow Rate Summary for CY2000
based on 7/11/01 extraction from AIRS

Method	Qtr	Num Sites	Avg Num Flow Checks per Site	Num Flow Audits	Num Flow Audits Diff > 4%	% > 4%	Num Flow Rates > 5% from 16.67	% > 5%	Average Accuracy (%)
And Seq	1	143	1.07	153	13	8.5	9	5.9	-0.83
	2	170	1.04	177	13	7.3	9	5.1	-0.10
	3	190	1.09	207	24	11.6	17	8.2	0.15
	4	168	1.08	182	20	11.0	12	6.6	-0.26
And Single	1	14	1.07	15	1	6.7	1	6.7	-2.09
	2	14	1.00	14	0	0.0	0	0.0	-0.50
	3	23	1.00	23	0	0.0	0	0.0	0.33
	4	29	1.00	29	2	6.9	1	3.4	-0.76
BGI Single	1	11	1.09	12	1	8.3	1	8.3	-7.90
	2	12	1.00	12	1	8.3	0	0.0	0.08
	3	12	1.00	12	0	0.0	0	0.0	-0.43
	4	11	1.00	11	2	18.2	2	18.2	2.53
RP Seq	1	489	1.36	666	23	3.5	8	1.2	-0.02
	2	516	1.32	683	18	2.6	6	0.9	0.06
	3	524	1.30	679	20	2.9	10	1.5	-0.05
	4	518	1.30	672	19	2.8	13	1.9	-0.24
RP Single	1	66	1.24	82	3	3.7	2	2.4	-0.16
	2	72	1.13	81	2	2.5	3	3.7	-0.24
	3	78	1.03	80	2	2.5	1	1.3	0.21
	4	73	1.15	84	4	4.8	2	2.4	-0.38
_National	1	723	1.28	928	41	4.4	21	2.3	-0.30
	2	784	1.23	967	34	3.5	18	1.9	-0.00
	3	827	1.21	1001	46	4.6	28	2.8	0.02
	4	799	1.22	978	47	4.8	30	3.1	-0.24

Site/Days exceeding 4% Flow Rate Check in CY2000
based on 7/11/01 AIRS Extraction

State	Rep Org	Date	AIRS ID	Method	Measured Value	True Value	% Diff
ARKANSAS	001	07/13/2000	050910004	117	16.00	16.70	-4.2
CALIFORNIA	001	03/03/2000	060670006	120	16.58	20.70	-19.9
		05/23/2000	060570005	117	16.60	17.98	-7.7
		05/17/2000	060631009	120	16.66	18.12	-8.1
		06/01/2000	060670006	120	16.67	12.70	31.3
		06/15/2000	060890004	117	16.63	17.78	-6.5
		04/26/2000	060990005	120	16.66	17.96	-7.2
		09/05/2000	060670006	120	16.64	19.58	-15.0
		10/31/2000	060674001	120	16.63	18.32	-9.2
		11/01/2000	060771002	120	16.67	17.50	-4.7
CALIFORNIA	004	08/16/2000	060011001	120	16.64	17.48	-4.8
		08/15/2000	060750005	120	16.67	18.14	-8.1
		09/12/2000	060750005	120	16.67	17.87	-6.7
		08/17/2000	060850004	120	16.65	17.59	-5.3
		08/17/2000	060852003	120	16.65	18.14	-8.2
		08/14/2000	060950004	120	16.67	17.70	-5.8
CALIFORNIA	019	02/17/2000	060310004	120	16.68	18.40	-9.3
CALIFORNIA	036	03/07/2000	060250003	120	16.65	17.96	-7.3
		05/02/2000	060251003	120	16.66	15.90	4.8
		07/25/2000	060250003	120	16.65	15.30	8.8
		07/25/2000	060250005	120	16.66	16.00	4.1
		07/25/2000	060251003	120	16.66	15.70	6.1
		08/15/2000	060379002	120	16.65	16.00	4.1
CALIFORNIA	061	02/08/2000	060371002	120	16.61	18.26	-9.0
		05/22/2000	060371002	120	16.65	15.75	5.7
		05/31/2000	060371103	120	16.67	17.91	-6.9
CONNECTICUT	001	06/09/2000	090113002	118	16.71	15.51	7.7
DELAWARE	001	07/13/2000	100010003	120	16.67	15.95	4.5
FLORIDA	001	08/29/2000	120330004	118	16.68	16.00	4.2
FLORIDA	011	05/16/2000	120310099	118	16.71	15.97	4.6
FLORIDA	012	12/06/2000	120570030	118	16.73	17.54	-4.6
FLORIDA	016	09/13/2000	120992003	118	16.67	17.50	-4.7
		11/28/2000	120990009	118	16.70	17.84	-6.4
		11/28/2000	120992003	118	16.69	17.55	-4.9

based on 7/11/01 AIRS Extraction

State	Rep Org	Date	AIRS ID	Method	Measured Value	True Value	% Diff
GEORGIA	010	03/08/2000	130590001	120	16.63	19.00	-12.5
		03/09/2000	130890002	120	16.61	19.59	-15.2
		02/07/2000	130950007	120	16.67	17.43	-4.4
		03/27/2000	133190001	120	16.30	17.02	-4.2
		09/25/2000	130210012	120	16.66	18.79	-11.3
		09/13/2000	130590001	120	16.66	15.72	6.0
		11/14/2000	132150011	120	16.67	17.56	-5.1
		11/19/2000	132150011	120	16.66	16.00	4.1
		11/16/2000	132230003	120	16.64	17.43	-4.5
HAWAII	120	03/09/2000	150090006	120	16.66	15.93	4.6
ILLINOIS	001	05/16/2000	170010006	120	15.93	16.80	-5.2
		07/25/2000	170990007	120	16.70	18.21	-8.3
		07/11/2000	171193007	120	16.61	15.52	7.0
		07/25/2000	171971002	120	16.67	18.20	-8.4
		12/20/2000	170311016	120	16.67	18.80	-11.3
		12/27/2000	170314201	120	16.69	18.40	-9.3
		12/26/2000	170890003	120	18.40	16.68	10.3
		12/28/2000	170971007	120	17.40	16.67	4.4
		12/20/2000	171110001	120	18.50	16.68	10.9
		10/17/2000	171190023	120	16.67	17.45	-4.5
		10/17/2000	171191007	120	16.71	15.92	5.0
		10/04/2000	171570001	119	16.67	15.85	5.2
		10/05/2000	171670012	117	16.67	15.48	7.7
ILLINOIS	003	01/26/2000	170310014	120	16.67	15.47	7.8
		02/16/2000	170310022	120	16.70	17.94	-6.9
		01/27/2000	170310076	120	16.67	15.71	6.1
		01/26/2000	170313301	120	16.67	17.39	-4.1
		05/25/2000	170310014	120	16.70	17.65	-5.4
		05/25/2000	170310057	120	16.70	17.47	-4.4
		06/03/2000	170310076	120	16.67	17.67	-5.7
		08/15/2000	170310014	120	16.67	15.79	5.6
		07/26/2000	170310052	120	16.67	15.94	4.6
		08/15/2000	170313301	120	16.67	15.96	4.4
IOWA	003	02/17/2000	191390016	118	17.40	16.70	4.2
KANSAS	001	03/09/2000	201730008	118	16.65	18.07	-7.9
		03/09/2000	201730009	118	16.68	17.52	-4.8
		03/09/2000	201730010	118	16.69	17.66	-5.5
		03/25/2000	202090021	118	16.65	17.44	-4.5
		04/28/2000	200910007	118	16.66	17.41	-4.3
		04/17/2000	202090021	118	16.65	17.50	-4.9
		11/16/2000	201910002	118	16.65	17.39	-4.3

Site/Days exceeding 4% Flow Rate Check in CY2000
based on 7/11/01 AIRS Extraction

State	Rep Org	Date	AIRS ID	Method	Measured Value	True Value	% Diff
KENTUCKY	001	02/09/2000	210130002	118	16.68	17.50	-4.7
		03/02/2000	210370003	118	16.69	15.66	6.6
		02/04/2000	210670012	118	16.73	15.93	5.0
		06/12/2000	210370003	118	16.70	15.47	8.0
		05/11/2000	210470006	118	16.69	18.24	-8.5
		06/21/2000	210590014	118	16.68	17.79	-6.2
		05/01/2000	210930006	118	16.71	17.41	-4.0
		08/08/2000	210670012	118	16.68	17.98	-7.2
		08/15/2000	211010006	118	16.67	18.08	-7.8
		08/23/2000	211950002	118	16.69	17.84	-6.4
		11/28/2000	210130002	118	16.70	13.60	22.8
		10/13/2000	210370003	118	16.67	17.67	-5.7
LOUISIANA	001	05/31/2000	220710012	118	16.69	15.86	5.2
MAINE	001	03/16/2000	230050015	117	16.60	17.48	-5.0
		05/12/2000	230190002	118	16.67	15.92	4.7
		09/15/2000	230050027	118	16.71	17.47	-4.4
		12/18/2000	230050028	118	16.70	17.43	-4.2
MASSACHUSETTS	001	05/26/2000	250210007	120	17.48	16.67	4.9
		12/12/2000	250171102	120	15.63	16.67	-6.2
MICHIGAN	001	02/22/2000	261150005	118	16.68	17.38	-4.0
		11/28/2000	261630019	118	16.76	17.53	-4.4
		11/28/2000	261630033	118	16.65	15.29	8.9
MISSISSIPPI	100	08/23/2000	280010004	118	16.67	15.39	8.3
MONTANA	001	03/16/2000	301111065	116	16.50	116.70	-85.9
		06/21/2000	300530018	116	16.70	17.50	-4.6
		12/12/2000	300530018	116	16.70	15.60	7.1
		10/18/2000	300630024	116	17.60	16.40	7.3
MONTANA	037	03/30/2000	300870307	119	16.50	21.12	-21.9
		12/19/2000	300870307	119	16.66	17.80	-6.4
NEVADA	310	06/14/2000	320050008	120	16.70	17.96	-7.0
NEW JERSEY	001	02/22/2000	340155001	118	16.69	17.42	-4.2
		06/12/2000	340273001	118	16.66	15.50	7.5
		07/18/2000	340310005	118	16.66	17.90	-6.9
		12/15/2000	340071007	118	16.72	18.30	-8.6
		11/17/2000	340130015	118	16.64	17.42	-4.5
		12/21/2000	340270004	118	16.69	17.51	-4.7

Site/Days exceeding 4% Flow Rate Check in CY2000
based on 7/11/01 AIRS Extraction

State	Rep Org	Date	AIRS ID	Method	Measured Value	True Value	% Diff
NEW YORK	001	03/09/2000	360050080	118	16.66	15.69	6.2
		03/31/2000	360050083	118	16.66	15.83	5.2
		03/09/2000	360610010	118	16.65	15.97	4.3
		03/20/2000	360710002	118	16.67	17.48	-4.6
		07/17/2000	360310003	118	16.67	13.79	20.9
		12/19/2000	360610010	118	16.65	15.31	8.8
		10/13/2000	360930003	118	16.68	15.77	5.8
NORTH CAROLINA	001	02/15/2000	370570002	118	17.50	16.70	4.8
		03/23/2000	371350007	118	17.30	16.60	4.2
		05/04/2000	370570002	118	17.60	16.70	5.4
		04/04/2000	370650003	118	17.40	16.70	4.2
		05/02/2000	370811005	118	15.90	16.70	-4.8
		08/11/2000	370010002	118	17.40	16.70	4.2
		08/14/2000	370710016	118	17.37	16.63	4.4
		08/11/2000	370810009	118	18.15	16.70	8.7
		11/28/2000	370010002	118	17.50	16.70	4.8
NORTH DAKOTA	001	02/09/2000	380130003	117	16.70	17.40	-4.0
		10/04/2000	380570004	117	16.60	17.30	-4.0
OHIO	006	09/20/2000	391530023	120	16.80	18.08	-7.1
OHIO	008	09/06/2000	390610041	120	16.65	17.49	-4.8
OHIO	009	11/15/2000	390350013	120	16.57	17.30	-4.2
OHIO	010	11/16/2000	391130014	120	16.78	18.66	-10.1
OHIO	013	07/13/2000	391450013	120	16.60	15.80	5.1
OHIO	015	07/31/2000	390950024	120	16.80	18.90	-11.1
		11/08/2000	390950024	120	16.66	18.27	-8.8
		11/08/2000	390950025	120	16.67	15.77	5.7
		11/08/2000	390950026	120	16.63	19.36	-14.1
OKLAHOMA	101	11/16/2000	400390852	118	16.70	17.50	-4.6
PENNSYLVANIA	003	11/22/2000	421010136	120	16.67	17.46	-4.5
RHODE ISLAND	001	10/19/2000	440071010	120	16.67	15.83	5.3
SOUTH CAROLINA	001	01/18/2000	450470003	118	16.72	15.96	4.8
		01/20/2000	450630008	118	16.70	17.53	-4.7
		01/19/2000	450910006	118	16.71	17.55	-4.8
		04/27/2000	450370001	118	16.69	17.39	-4.0

Site/Days exceeding 4% Flow Rate Check in CY2000
based on 7/11/01 AIRS Extraction

State	Rep Org	Date	AIRS ID	Method	Measured Value	True Value	% Diff
SOUTH CAROLINA	001	05/25/2000	450370001	118	16.65	17.48	-4.7
		04/25/2000	450790007	118	16.70	15.85	5.4
		08/22/2000	450830010	118	16.70	17.45	-4.3
TENNESSEE	003	06/22/2000	470370023	120	16.64	17.83	-6.7
UTAH	001	03/13/2000	490494001	118	16.70	17.40	-4.0
		10/13/2000	490353006	118	16.70	18.40	-9.2
		11/06/2000	490570007	117	16.60	17.40	-4.6
VERMONT	001	12/27/2000	500210002	118	16.68	15.65	6.6
WASHINGTON	001	07/24/2000	530330027	118	16.69	18.06	-7.6
WEST VIRGINIA	001	02/01/2000	540110006	118	17.44	16.70	4.4
		03/02/2000	540110006	118	17.47	16.71	4.5
		01/20/2000	541071002	118	17.40	16.70	4.2
		06/06/2000	540550002	118	16.05	16.73	-4.1
		09/28/2000	540390010	118	17.50	16.66	5.0
		08/11/2000	540490006	118	17.40	16.66	4.4
		07/18/2000	540550002	118	17.48	16.71	4.6
		08/08/2000	540890001	118	17.43	16.69	4.4
		09/28/2000	540890001	118	15.88	16.69	-4.9
		12/18/2000	540490006	118	17.50	16.70	4.8
WISCONSIN	001	09/26/2000	550290004	118	15.80	16.70	-5.4
		11/30/2000	550430009	117	16.70	17.40	-4.0
WYOMING	001	03/29/2000	560330002	117	16.70	17.60	-5.1
		08/15/2000	560210001	117	15.90	16.70	-4.8

based on 7/11/01 AIRS Extraction

State	Rep Org	Date	AIRS ID	Method	Measured Value	True Value	% Diff
CALIFORNIA	001	03/03/2000	060670006	120	16.58	20.70	-19.9
		05/23/2000	060570005	117	16.60	17.98	-7.7
		05/17/2000	060631009	120	16.66	18.12	-8.1
		06/01/2000	060670006	120	16.67	12.70	31.3
		06/15/2000	060890004	117	16.63	17.78	-6.5
		04/26/2000	060990005	120	16.66	17.96	-7.2
		09/05/2000	060670006	120	16.64	19.58	-15.0
		10/31/2000	060674001	120	16.63	18.32	-9.2
CALIFORNIA	004	08/15/2000	060750005	120	16.67	18.14	-8.1
		09/12/2000	060750005	120	16.67	17.87	-6.7
		08/17/2000	060850004	120	16.65	17.59	-5.3
		08/17/2000	060852003	120	16.65	18.14	-8.2
		08/14/2000	060950004	120	16.67	17.70	-5.8
CALIFORNIA	019	02/17/2000	060310004	120	16.68	18.40	-9.3
CALIFORNIA	036	03/07/2000	060250003	120	16.65	17.96	-7.3
		07/25/2000	060250003	120	16.65	15.30	8.8
		07/25/2000	060251003	120	16.66	15.70	6.1
CALIFORNIA	061	02/08/2000	060371002	120	16.61	18.26	-9.0
		05/22/2000	060371002	120	16.65	15.75	5.7
		05/31/2000	060371103	120	16.67	17.91	-6.9
COLORADO	001	10/16/2000	080070002	117	17.00	17.52	-3.0
CONNECTICUT	001	06/09/2000	090113002	118	16.71	15.51	7.7
FLORIDA	012	12/06/2000	120570030	118	16.73	17.54	-4.6
FLORIDA	016	11/28/2000	120990009	118	16.70	17.84	-6.4
		11/28/2000	120992003	118	16.69	17.55	-4.9
GEORGIA	010	03/08/2000	130590001	120	16.63	19.00	-12.5
		03/09/2000	130890002	120	16.61	19.59	-15.2
		09/25/2000	130210012	120	16.66	18.79	-11.3
		09/13/2000	130590001	120	16.66	15.72	6.0
		11/14/2000	132150011	120	16.67	17.56	-5.1
ILLINOIS	001	07/25/2000	170990007	120	16.70	18.21	-8.3
		07/11/2000	171193007	120	16.61	15.52	7.0
		07/25/2000	171971002	120	16.67	18.20	-8.4
		12/20/2000	170311016	120	16.67	18.80	-11.3
		12/27/2000	170314201	120	16.69	18.40	-9.3
		12/26/2000	170890003	120	18.40	16.68	10.3

based on 7/11/01 AIRS Extraction

State	Rep Org	Date	AIRS ID	Method	Measured Value	True Value	% Diff
ILLINOIS	001	12/20/2000	171110001	120	18.50	16.68	10.9
		10/05/2000	171670012	117	16.67	15.48	7.7
ILLINOIS	003	01/26/2000	170310014	120	16.67	15.47	7.8
		02/16/2000	170310022	120	16.70	17.94	-6.9
		01/27/2000	170310076	120	16.67	15.71	6.1
		05/25/2000	170310014	120	16.70	17.65	-5.4
		06/03/2000	170310076	120	16.67	17.67	-5.7
		08/15/2000	170310014	120	16.67	15.79	5.6
KANSAS	001	03/09/2000	201730008	118	16.65	18.07	-7.9
		03/09/2000	201730009	118	16.68	17.52	-4.8
		03/09/2000	201730010	118	16.69	17.66	-5.5
KENTUCKY	001	03/02/2000	210370003	118	16.69	15.66	6.6
		06/12/2000	210370003	118	16.70	15.47	8.0
		05/11/2000	210470006	118	16.69	18.24	-8.5
		06/21/2000	210590014	118	16.68	17.79	-6.2
		08/08/2000	210670012	118	16.68	17.98	-7.2
		08/15/2000	211010006	118	16.67	18.08	-7.8
		08/23/2000	211950002	118	16.69	17.84	-6.4
		11/28/2000	210130002	118	16.70	13.60	22.8
		10/13/2000	210370003	118	16.67	17.67	-5.7
MAINE	001	03/30/2000	230112002	117	17.10	17.75	-3.7
		08/31/2000	230112002	117	16.40	15.77	4.0
MASSACHUSETTS	001	12/12/2000	250171102	120	15.63	16.67	-6.2
MICHIGAN	001	11/28/2000	261630019	118	16.76	17.53	-4.4
		11/28/2000	261630033	118	16.65	15.29	8.9
MISSISSIPPI	100	08/23/2000	280010004	118	16.67	15.39	8.3
MONTANA	001	03/16/2000	301111065	116	16.50	116.70	-85.9
		12/12/2000	300530018	116	16.70	15.60	7.1
		10/18/2000	300630024	116	17.60	16.40	7.3
MONTANA	037	03/30/2000	300870307	119	16.50	21.12	-21.9
		12/19/2000	300870307	119	16.66	17.80	-6.4
NEVADA	310	06/14/2000	320050008	120	16.70	17.96	-7.0
NEW JERSEY	001	06/12/2000	340273001	118	16.66	15.50	7.5
		07/18/2000	340310005	118	16.66	17.90	-6.9
		12/15/2000	340071007	118	16.72	18.30	-8.6

based on 7/11/01 AIRS Extraction

State	Rep Org	Date	AIRS ID	Method	Measured Value	True Value	% Diff
NEW JERSEY	001	12/21/2000	340270004	118	16.69	17.51	-4.7
NEW YORK	001	03/09/2000	360050080	118	16.66	15.69	6.2
		03/31/2000	360050083	118	16.66	15.83	5.2
		07/17/2000	360310003	118	16.67	13.79	20.9
		12/19/2000	360610010	118	16.65	15.31	8.8
		10/13/2000	360930003	118	16.68	15.77	5.8
NORTH CAROLINA	001	05/04/2000	370570002	118	17.60	16.70	5.4
		08/11/2000	370810009	118	18.15	16.70	8.7
OHIO	006	09/20/2000	391530023	120	16.80	18.08	-7.1
OHIO	010	11/16/2000	391130014	120	16.78	18.66	-10.1
OHIO	013	07/13/2000	391450013	120	16.60	15.80	5.1
OHIO	015	07/31/2000	390950024	120	16.80	18.90	-11.1
		11/08/2000	390950024	120	16.66	18.27	-8.8
		11/08/2000	390950025	120	16.67	15.77	5.7
		11/08/2000	390950026	120	16.63	19.36	-14.1
OREGON	001	05/23/2000	410619103	117	17.00	17.60	-3.4
RHODE ISLAND	001	10/19/2000	440071010	120	16.67	15.83	5.3
SOUTH CAROLINA	001	01/20/2000	450630008	118	16.70	17.53	-4.7
		01/19/2000	450910006	118	16.71	17.55	-4.8
		07/05/2000	450190049	118	17.70	17.20	2.9
TENNESSEE	003	06/22/2000	470370023	120	16.64	17.83	-6.7
UTAH	001	10/13/2000	490353006	118	16.70	18.40	-9.2
VERMONT	001	12/27/2000	500210002	118	16.68	15.65	6.6
WASHINGTON	001	07/24/2000	530330027	118	16.69	18.06	-7.6
WISCONSIN	001	09/26/2000	550290004	118	15.80	16.70	-5.4
WYOMING	001	03/29/2000	560330002	117	16.70	17.60	-5.1

based on 7/11/01 AIRS Extraction

State	Rep Org	Date	AIRS ID	Method	Measured Value	True Value
CALIFORNIA	001	03/03/2000	060670006	120	16.58	20.70
		06/01/2000	060670006	120	16.67	12.70
		09/05/2000	060670006	120	16.64	19.58
CALIFORNIA	019	02/17/2000	060310004	120	16.68	18.40
GEORGIA	010	09/25/2000	130210012	120	16.66	18.79
		03/08/2000	130590001	120	16.63	19.00
		03/09/2000	130890002	120	16.61	19.59
ILLINOIS	001	12/20/2000	170311016	120	16.67	18.80
		12/27/2000	170314201	120	16.69	18.40
		12/26/2000	170890003	120	18.40	16.68
		12/20/2000	171110001	120	18.50	16.68
KENTUCKY	001	11/28/2000	210130002	118	16.70	13.60
MONTANA	001	03/16/2000	301111065	116	16.50	116.70
MONTANA	037	03/30/2000	300870307	119	16.50	21.12
NEW YORK	001	07/17/2000	360310003	118	16.67	13.79
OHIO	010	11/16/2000	391130014	120	16.78	18.66
OHIO	015	07/31/2000	390950024	120	16.80	18.90
		11/08/2000	390950026	120	16.63	19.36
UTAH	001	10/13/2000	490353006	118	16.70	18.40

Attachment 6

PM2.5 Bias (Performance Evaluation Program)

This section covers the following attachments related to bias

6-1 Completeness

1) Bias Completeness Estimates for CY 99 and CY2000
2) Number of pairs by Region/ State/ Year/Site

6-2 Bias Estimates

1) National Bias Estimates
2) Bias Estimates by State/Reporting Organization

Attachment 6-1

1) Bias Completeness Estimates for CY 99 and CY2000

2) Number of Pairs by Region/ State/ Year/Site

---------- Year=1999 ----------

Table of numind by compind

numind(Num PEP) compind(Num Qtrs PEP Occur)

Frequency	1 Qtr	2 Qtrs	3 Qtrs	4 Qtrs	Total
1 or 2 PEP	18	18	0	0	36
3 PEP	0	7	65	0	72
4 PEP	0	0	33	125	158
> 4 PEP	0	0	3	13	16
Total	18	25	101	138	282

---------- Year=2000 ----------

Table of numind by compind

numind(Num PEP) compind(Num Qtrs PEP Occur)

Frequency	1 Qtr	2 Qtrs	3 Qtrs	4 Qtrs	Total
1 or 2 PEP	7	8	0	0	15
3 PEP	0	0	35	0	35
4 PEP	0	2	26	185	213
> 4 PEP	0	0	1	20	21
Total	7	10	62	205	284

---------- Year=1999 ----------

Table of numind by compind

numind(Num Pairs for Bias) compind(Num Qtrs Pairs for Bias Occur)

Frequency	1 Qtr	2 Qtrs	3 Qtrs	4 Qtrs	Total
1 or 2 Pairs for Bias	30	48	0	0	78
3 Pairs for Bias	0	6	67	0	73
4 Pairs for Bias	0	0	17	74	91
> 4 Pairs for Bias	0	0	0	4	4
Total	30	54	84	78	246

---------- Year=2000 ----------

Table of numind by compind

numind(Num Pairs for Bias) compind(Num Qtrs Pairs for Bias Occur)

Frequency	1 Qtr	2 Qtrs	3 Qtrs	4 Qtrs	Total
1 or 2 Pairs for Bias	6	21	0	0	27
3 Pairs for Bias	0	1	83	0	84
4 Pairs for Bias	0	2	26	127	155
> 4 Pairs for Bias	0	0	1	3	4
Total	6	24	110	130	270

methname	year	qtrname	filetype	numbias	lowercl	avgbias	uppercl
All	1999	1	allgt0_1	128	4.187	10.4574	16.728
			allgt6_1	105	4.255	9.0670	13.879
			bias50gt0_1	119	1.656	4.2195	6.783
			bias50gt6_1	99	1.494	4.1609	6.828
All	1999	2	allgt0_1	198	-2.839	0.8449	4.529
			allgt6_1	148	-1.652	1.4604	4.573
			bias50gt0_1	189	-3.742	-1.5911	0.559
			bias50gt6_1	142	-2.612	-0.4463	1.719
All	1999	3	allgt0_1	206	-4.526	-2.0485	0.429
			allgt6_1	166	-2.837	-0.8080	1.221
			bias50gt0_1	199	-4.176	-2.4229	-0.670
			bias50gt6_1	164	-3.320	-1.5733	0.173
All	1999	4	allgt0_1	197	-5.101	-0.9826	3.135
			allgt6_1	160	-4.481	-1.4292	1.623
			bias50gt0_1	191	-4.331	-2.6998	-1.068
			bias50gt6_1	156	-3.738	-2.1507	-0.563
All	1999	Ann	allgt0_1	729	-0.742	1.2212	3.184
			allgt6_1	579	-0.573	1.3910	3.355
			bias50gt0_1	698	-3.104	-1.1410	0.822
			bias50gt6_1	561	-2.401	-0.4367	1.528
All	2000	1	allgt0_1	209	-3.399	-1.0192	1.361
			allgt6_1	177	-1.880	0.3337	2.547
			bias50gt0_1	201	-3.246	-1.8151	-0.384
			bias50gt6_1	172	-2.319	-0.9966	0.325
All	2000	2	allgt0_1	243	-6.248	-2.7354	0.777
			allgt6_1	193	-4.414	-1.2128	1.988
			bias50gt0_1	238	-6.915	-5.3453	-3.775
			bias50gt6_1	190	-5.149	-3.6253	-2.102
All	2000	3	allgt0_1	251	-6.791	-4.8671	-2.944
			allgt6_1	209	-6.124	-4.8743	-3.624
			bias50gt0_1	249	-7.216	-5.8359	-4.456
			bias50gt6_1	209	-6.124	-4.8743	-3.624
All	2000	4	allgt0_1	238	-6.383	-3.1813	0.020

methname	year	qtrname	filetype	numbias	lowercl	avgbias	uppercl
All	2000	4	allgt6_1	194	-4.817	-2.8600	-0.903
			bias50gt0_1	233	-5.615	-4.1336	-2.653
			bias50gt6_1	192	-4.614	-3.2450	-1.876
All	2000	Ann	allgt0_1	941	-4.998	-3.0356	-1.073
			allgt6_1	773	-4.225	-2.2620	-0.299
			bias50gt0_1	921	-6.363	-4.4009	-2.438
			bias50gt6_1	763	-5.242	-3.2791	-1.316
And Seq	1999	1	allgt0_1	41	15.039	25.4442	35.849
			allgt6_1	36	13.928	25.4853	37.043
			bias50gt0_1	34	7.959	13.1950	18.431
			bias50gt6_1	30	7.307	12.5787	17.851
And Seq	1999	2	allgt0_1	65	0.421	4.5095	8.599
			allgt6_1	52	1.485	5.5016	9.518
			bias50gt0_1	65	0.421	4.5095	8.599
			bias50gt6_1	52	1.485	5.5016	9.518
And Seq	1999	3	allgt0_1	63	-1.556	3.6470	8.850
			allgt6_1	55	-1.663	3.0786	7.820
			bias50gt0_1	60	-3.459	0.5251	4.509
			bias50gt6_1	53	-2.844	0.8572	4.558
And Seq	1999	4	allgt0_1	54	-7.813	4.5483	16.909
			allgt6_1	42	-4.058	0.7900	5.638
			bias50gt0_1	51	-1.435	1.9512	5.338
			bias50gt6_1	41	-1.001	2.4959	5.993
And Seq	1999	Ann	allgt0_1	223	6.153	8.1242	10.095
			allgt6_1	185	5.627	7.6003	9.573
			bias50gt0_1	210	2.184	4.1560	6.128
			bias50gt6_1	176	2.635	4.6091	6.583
And Seq	2000	1	allgt0_1	61	-2.479	2.8212	8.121
			allgt6_1	54	1.096	5.6279	10.160
			bias50gt0_1	57	-1.701	1.2024	4.106
			bias50gt6_1	51	-0.140	2.2827	4.705
And Seq	2000	2	allgt0_1	68	-6.046	3.4918	13.029
			allgt6_1	50	-1.395	5.0187	11.433

methname	year	qtrname	filetype	numbias	lowercl	avgbias	uppercl
And Seq	2000	2	bias50gt0_1	65	-4.216	-0.9497	2.317
			bias50gt6_1	49	-0.663	2.1323	4.928
And Seq	2000	3	allgt0_1	72	-4.052	0.2837	4.619
			allgt6_1	60	-3.983	-1.6671	0.649
			bias50gt0_1	71	-4.048	-1.4824	1.083
			bias50gt6_1	60	-3.983	-1.6671	0.649
And Seq	2000	4	allgt0_1	60	-8.589	2.1901	12.969
			allgt6_1	53	-2.704	0.3260	3.356
			bias50gt0_1	58	-4.111	-1.0424	2.027
			bias50gt6_1	53	-2.704	0.3260	3.356
And Seq	2000	Ann	allgt0_1	261	0.182	2.1508	4.120
			allgt6_1	217	0.204	2.1755	4.147
			bias50gt0_1	251	-2.603	-0.6331	1.337
			bias50gt6_1	213	-1.323	0.6486	2.620
And Single	1999	4	allgt0_1	2	-147.443	6.9367	161.316
			allgt6_1	2	-147.443	6.9367	161.316
			bias50gt0_1	2	-147.443	6.9367	161.316
			bias50gt6_1	2	-147.443	6.9367	161.316
And Single	1999	Ann	allgt0_1	2		6.9367	
			allgt6_1	2		6.9367	
			bias50gt0_1	2		6.9367	
			bias50gt6_1	2		6.9367	
And Single	2000	1	allgt0_1	4	-34.223	19.6559	73.534
			allgt6_1	2	-76.202	7.0289	90.259
			bias50gt0_1	3	-20.104	3.1635	26.431
			bias50gt6_1	2	-76.202	7.0289	90.259
And Single	2000	2	allgt0_1	3	-75.877	-2.7096	70.458
			bias50gt0_1	3	-75.877	-2.7096	70.458
And Single	2000	3	allgt0_1	8	-21.084	-8.4861	4.112
			allgt6_1	2	-16.278	-0.9898	14.298
			bias50gt0_1	8	-21.084	-8.4861	4.112
			bias50gt6_1	2	-16.278	-0.9898	14.298

methname	year	qtrname	filetype	numbias	lowercl	avgbias	uppercl
And Single	2000	4	allgt0_1	8	-46.278	-0.0493	46.180
			allgt6_1	5	-58.897	19.0059	96.909
			bias50gt0_1	6	-33.260	-11.8383	9.583
			bias50gt6_1	4	-46.146	-7.4224	31.301
And Single	2000	Ann	allgt0_1	23	-1.997	0.0962	2.189
			allgt6_1	9	9.330	11.9009	14.471
			bias50gt0_1	20	-8.998	-6.8778	-4.758
			bias50gt6_1	8	-4.978	-2.2014	0.575
BGI Single	1999	1	allgt0_1	1		-2.9635	
			allgt6_1	1		-2.9635	
			bias50gt0_1	1		-2.9635	
			bias50gt6_1	1		-2.9635	
BGI Single	1999	2	allgt0_1	3	-7.014	-0.5983	5.817
			allgt6_1	2	-29.036	-1.4025	26.231
			bias50gt0_1	3	-7.014	-0.5983	5.817
			bias50gt6_1	2	-29.036	-1.4025	26.231
BGI Single	1999	3	allgt0_1	3	-17.131	-1.1088	14.914
			allgt6_1	3	-17.131	-1.1088	14.914
			bias50gt0_1	3	-17.131	-1.1088	14.914
			bias50gt6_1	3	-17.131	-1.1088	14.914
BGI Single	1999	4	allgt0_1	2	-234.763	13.8631	262.489
			allgt6_1	1		-5.7043	
			bias50gt0_1	2	-234.763	13.8631	262.489
			bias50gt6_1	1		-5.7043	
BGI Single	1999	Ann	allgt0_1	9	-0.388	2.1824	4.753
			allgt6_1	7	-5.297	-2.1142	1.068
			bias50gt0_1	9	-0.388	2.1824	4.753
			bias50gt6_1	7	-5.297	-2.1142	1.068
BGI Single	2000	1	allgt0_1	2	-186.135	18.6244	223.384
			allgt6_1	2	-186.135	18.6244	223.384
			bias50gt0_1	2	-186.135	18.6244	223.384
			bias50gt6_1	2	-186.135	18.6244	223.384
BGI Single	2000	2	allgt0_1	2	-115.140	1.1099	117.360

methname	year	qtrname	filetype	numbias	lowercl	avgbias	uppercl
BGI Single	2000	2	allgt6_1	2	-115.140	1.1099	117.360
			bias50gt0_1	2	-115.140	1.1099	117.360
			bias50gt6_1	2	-115.140	1.1099	117.360
BGI Single	2000	3	allgt0_1	1		-30.2109	
			allgt6_1	1		-30.2109	
			bias50gt0_1	1		-30.2109	
			bias50gt6_1	1		-30.2109	
BGI Single	2000	4	allgt0_1	2	-127.358	-6.9200	113.518
			allgt6_1	2	-127.358	-6.9200	113.518
			bias50gt0_1	2	-127.358	-6.9200	113.518
			bias50gt6_1	2	-127.358	-6.9200	113.518
BGI Single	2000	Ann	allgt0_1	7	-3.837	-0.6546	2.528
			allgt6_1	7	-3.837	-0.6546	2.528
			bias50gt0_1	7	-3.837	-0.6546	2.528
			bias50gt6_1	7	-3.837	-0.6546	2.528
RP Seq	1999	1	allgt0_1	74	-5.459	3.3025	12.064
			allgt6_1	60	-2.812	0.1640	3.140
			bias50gt0_1	72	-2.793	0.0352	2.863
			bias50gt6_1	60	-2.812	0.1640	3.140
RP Seq	1999	2	allgt0_1	117	-5.970	-0.2142	5.542
			allgt6_1	89	-5.459	-0.8910	3.677
			bias50gt0_1	108	-7.098	-4.5655	-2.033
			bias50gt6_1	83	-6.695	-4.3232	-1.951
RP Seq	1999	3	allgt0_1	130	-7.659	-4.7589	-1.859
			allgt6_1	102	-4.882	-2.8797	-0.878
			bias50gt0_1	126	-5.756	-3.8140	-1.872
			bias50gt6_1	102	-4.882	-2.8797	-0.878
RP Seq	1999	4	allgt0_1	131	-7.119	-3.6201	-0.121
			allgt6_1	109	-6.709	-2.6418	1.425
			bias50gt0_1	128	-6.760	-5.0799	-3.399
			bias50gt6_1	106	-6.093	-4.3770	-2.661
RP Seq	1999	Ann	allgt0_1	452	-3.898	-1.9327	0.033
			allgt6_1	360	-3.775	-1.8087	0.158

methname	year	qtrname	filetype	numbias	lowercl	avgbias	uppercl
RP Seq	1999	Ann	bias50gt0_1	434	-5.701	-3.7358	-1.770
			bias50gt6_1	351	-5.120	-3.1529	-1.186
RP Seq	2000	1	allgt0_1	131	-6.058	-3.5052	-0.952
			allgt6_1	111	-4.844	-2.3264	0.191
			bias50gt0_1	128	-5.044	-3.4242	-1.804
			bias50gt6_1	109	-4.175	-2.7635	-1.352
RP Seq	2000	2	allgt0_1	156	-8.147	-4.6755	-1.204
			allgt6_1	134	-6.750	-2.8705	1.009
			bias50gt0_1	154	-8.492	-6.7381	-4.985
			bias50gt6_1	132	-6.997	-5.2496	-3.502
RP Seq	2000	3	allgt0_1	155	-7.847	-5.7254	-3.604
			allgt6_1	136	-7.125	-5.6422	-4.160
			bias50gt0_1	154	-8.026	-6.4496	-4.873
			bias50gt6_1	136	-7.125	-5.6422	-4.160
RP Seq	2000	4	allgt0_1	155	-7.194	-5.4441	-3.694
			allgt6_1	125	-6.898	-5.3130	-3.728
			bias50gt0_1	154	-6.746	-5.1124	-3.479
			bias50gt6_1	124	-6.269	-4.9000	-3.531
RP Seq	2000	Ann	allgt0_1	597	-6.855	-4.8908	-2.927
			allgt6_1	506	-6.064	-4.0995	-2.135
			bias50gt0_1	590	-7.484	-5.5195	-3.556
			bias50gt6_1	501	-6.694	-4.7288	-2.764
RP Single	1999	1	allgt0_1	12	-3.560	4.4929	12.546
			allgt6_1	8	-5.292	3.4610	12.214
			bias50gt0_1	12	-3.560	4.4929	12.546
			bias50gt6_1	8	-5.292	3.4610	12.214
RP Single	1999	2	allgt0_1	13	-15.572	-7.6132	0.345
			allgt6_1	5	-12.691	2.4341	17.559
			bias50gt0_1	13	-15.572	-7.6132	0.345
			bias50gt6_1	5	-12.691	2.4341	17.559
RP Single	1999	3	allgt0_1	10	-10.826	-2.9774	4.871
			allgt6_1	6	-11.183	-1.0670	9.049
			bias50gt0_1	10	-10.826	-2.9774	4.871

methname	year	qtrname	filetype	numbias	lowercl	avgbias	uppercl
RP Single	1999	3	bias50gt6_1	6	-11.183	-1.0670	9.049
RP Single	1999	4	allgt0_1	8	-15.650	-0.8191	14.011
			allgt6_1	6	-5.445	2.9911	11.427
			bias50gt0_1	8	-15.650	-0.8191	14.011
			bias50gt6_1	6	-5.445	2.9911	11.427
RP Single	1999	Ann	allgt0_1	43	-3.915	-1.8927	0.130
			allgt6_1	25	-0.024	2.0561	4.136
			bias50gt0_1	43	-3.915	-1.8927	0.130
			bias50gt6_1	25	-0.024	2.0561	4.136
RP Single	2000	1	allgt0_1	11	-10.748	-3.8005	3.147
			allgt6_1	8	-14.755	-4.7400	5.275
			bias50gt0_1	11	-10.748	-3.8005	3.147
			bias50gt6_1	8	-14.755	-4.7400	5.275
RP Single	2000	2	allgt0_1	14	-19.017	-11.9186	-4.820
			allgt6_1	7	-21.673	-14.6527	-7.632
			bias50gt0_1	14	-19.017	-11.9186	-4.820
			bias50gt6_1	7	-21.673	-14.6527	-7.632
RP Single	2000	3	allgt0_1	15	-22.936	-17.1030	-11.270
			allgt6_1	10	-17.505	-11.9161	-6.327
			bias50gt0_1	15	-22.936	-17.1030	-11.270
			bias50gt6_1	10	-17.505	-11.9161	-6.327
RP Single	2000	4	allgt0_1	13	-12.340	-2.3453	7.650
			allgt6_1	9	-6.652	1.2015	9.055
			bias50gt0_1	13	-12.340	-2.3453	7.650
			bias50gt6_1	9	-6.652	1.2015	9.055
RP Single	2000	Ann	allgt0_1	53	-11.362	-9.3528	-7.343
			allgt6_1	34	-9.361	-7.3187	-5.276
			bias50gt0_1	53	-11.362	-9.3528	-7.343
			bias50gt6_1	34	-9.361	-7.3187	-5.276

Bias by Reporting Organization
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State	Rep Org	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
NAT'L			1999	729	-100	-9	-2	1	6	302
			2000	941	-100	-10	-4	-3	1	292
AK	020	020	1999	7	-25	-21	-7	-8	-0	10
		020	2000	12	-39	-21	-10	-10	-2	24
AL	011	011	1999	3	13	13	16	17	23	23
		011	2000	9	2	3	5	11	24	28
AL	012	012	1999	3	-6	-6	1	-1	3	3
		012	2000	4	-30	-23	-3	-0	22	35
AL	014	014	2000	4	-5	-5	-4	-3	-2	-0
AR	001	001	1999	8	-11	-3	-2	-1	-2	17
		001	2000	17	-57	-14	-7	-11	-3	2
AZ	100	100	1999	10	-22	-3	6	25	41	151
AZ	300	300	1999	4	-12	9	44	42	75	94
		300	2000	3	-25	-25	-15	-9	13	13
CA	001	001	1999	24	-21	-9	2	1	11	19
		001	2000	14	-16	-9	-2	-3	3	6
CA	004	004	1999	11	-16	-2	1	4	11	44
		004	2000	11	-31	-12	1	4	26	52
CA	014	014	2000	2	9	9	11	11	12	12
CA	019	019	1999	11	-18	-12	2	25	4	301
		019	2000	15	-17	-9	-2	-3	2	8
CA	036	036	1999	9	-15	-5	-4	3	2	40
		036	2000	10	-21	-13	-7	-6	3	8
CA	061	061	1999	10	-69	-8	1	-0	7	65
		061	2000	14	-17	-14	-4	-5	-1	9

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State	Rep Org	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
CO	001	001	1999	14	-95	-12	-6	-12	-1	14
		001	2000	20	-23	-9	-4	-3	-1	36
CT	001	001	1999	9	-13	-10	-6	-6	-2	1
		001	2000	11	-58	-14	-9	-11	0	22
DC	001	001	1999	7	-8	-7	5	17	41	81
		001	2000	7	-7	-7	1	1	4	14
DE	001	001	1999	3	-6	-6	-4	-5	-4	-4
		001	2000	8	-1	-0	1	1	2	5
FL	003	003	2000	12	-8	-6	-3	-3	-2	3
FL	004	004	2000	4	-14	-13	-10	-11	-8	-8
FL	006	006	1999	4	-8	-7	-4	-1	6	13
FL	011	011	2000	6	-12	-9	-5	-6	-3	0
FL	012	012	1999	8	-12	-10	-8	-6	-4	9
FL	013	013	1999	6	-30	-13	-9	-8	-3	13
FL	016	016	1999	4	-16	-15	-13	-8	-1	10
FL	017	017	1999	4	-12	-8	-4	-5	-3	-1
FL	018	018	1999	7	-10	-9	-3	-3	-0	6
FL	020	020	1999	4	-21	-9	4	-1	7	8
		020	2000	4	-9	-8	-8	-7	-5	-2
FL	039	039	2000	4	-6	-5	-1	-1	3	5
GA	010	010	1999	15	-21	-1	6	7	16	37
		010	2000	19	-3	2	6	9	12	52

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State	Rep Org	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
HI	120	120	1999	4	-36	-29	-13	-9	11	27
		120	2000	8	-50	-40	-28	-28	-16	-3
IA	001	001	1999	3	-20	-20	-17	-13	-2	-2
IA	002	002	1999	4	-14	-12	-4	-2	8	14
IA	003	003	1999	3	-36	-36	-24	-26	-17	-17
		003	2000	8	-17	-15	-13	-13	-11	-10
ID	001	001	1999	19	-40	-12	-7	-6	4	33
		001	2000	12	-25	-20	-7	-9	0	7
IL	001	001	1999	7	-5	9	20	19	31	44
		001	2000	17	-12	-6	-1	2	9	19
IL	003	003	1999	5	-16	8	8	14	33	39
		003	2000	10	-10	-4	2	15	9	146
IN	001	001	1999	22	-14	-8	-3	14	2	302
		001	2000	25	-64	-7	-4	-5	2	18
IN	008	008	1999	7	-10	-4	1	0	8	10
		008	2000	8	-13	-1	3	2	7	9
KS	001	001	1999	13	-8	-3	4	12	24	54
		001	2000	11	-15	-13	-8	-7	-1	1
KY	001	001	1999	16	-63	-4	-1	-1	8	26
		001	2000	12	-7	-6	-4	-1	4	16
KY	002	002	1999	3	-10	-10	-7	-7	-4	-4
		002	2000	4	-12	-7	-3	-3	1	3
LA	001	001	1999	17	-23	-14	-10	-10	-7	11
		001	2000	20	-45	-13	-9	-10	-5	8
MA	001	001	1999	13	-15	-8	-4	5	13	74

Bias by Reporting Organization
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State	Rep Org	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
MA	001	001	2000	20	-20	-4	8	36	20	292
MD	001	001	1999	1	9	9	9	9	9	9
		001	2000	12	-28	-11	-2	-4	2	9
ME	001	001	1999	11	-2	-0	8	10	12	56
		001	2000	11	-14	-5	0	1	8	14
MI	001	001	1999	22	-31	-10	-5	-5	4	18
		001	2000	22	-13	-7	-4	-2	1	22
MN	001	001	1999	8	-49	-15	-4	-3	13	36
		001	2000	17	-54	-8	-3	8	5	126
MO	001	001	1999	3	-78	-78	-35	-38	-2	-2
		001	2000	12	-8	-7	-5	-3	0	6
MO	002	002	1999	4	-14	-10	-6	-5	0	6
		002	2000	4	-16	-13	-8	-9	-5	-4
MO	003	003	1999	4	-8	-8	-6	-3	2	10
		003	2000	4	-13	-12	-9	-9	-7	-7
MO	004	004	1999	8	-31	-21	2	-1	6	53
		004	2000	4	-15	-13	-9	-8	-4	-0
MS	100	100	1999	13	-45	-5	-1	4	1	116
		100	2000	15	-27	-12	-7	-7	-1	8
MT	001	001	1999	3	-9	-9	-3	-4	1	1
		001	2000	3	-8	-8	3	-1	3	3
MT	033	033	2000	4	-7	-3	7	9	22	29
MT	037	037	2000	3	-28	-28	-2	-5	15	15
NC	001	001	1999	14	-12	-5	-3	-2	4	6
		001	2000	28	-8	-4	-2	-1	0	42

Bias by Reporting Organization
for all bias pairs, based on 071101 extraction

State	Rep Org	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
NC	002	002	2000	8	-4	-2	0	-0	1	4
NC	003	003	1999	11	-8	-5	-2	-2	0	4
NC	004	004	1999	3	-1	-1	1	1	3	3
ND	001	001	1999	10	-21	-7	10	6	21	28
		001	2000	8	-47	-18	-8	-11	-3	14
NE	001	001	1999	4	-43	-34	-16	-19	-5	-2
		001	2000	8	-39	-26	-19	-18	-10	0
NH	001	001	1999	6	-23	11	27	19	36	37
		001	2000	8	-12	-10	-0	5	2	69
NJ	001	001	1999	15	-12	-2	1	6	8	58
		001	2000	20	-38	-3	-1	3	4	101
NM	001	001	1999	3	-9	-9	1	3	17	17
		001	2000	6	-29	-2	16	10	23	36
NM	002	002	1999	8	-22	-13	-12	-12	-9	-8
		002	2000	4	-12	-10	-3	-3	4	5
NM	006	006	2000	4	-17	-11	-1	-4	3	4
NM	007	007	2000	4	-17	-12	-5	-7	-1	0
NV	200	200	1999	4	-23	-16	-6	-9	-2	-0
		200	2000	4	-19	-17	-6	-7	2	2
NV	300	300	1999	4	-16	-13	-8	-9	-5	-3
		300	2000	5	-26	-13	-13	-12	-5	-1
NY	001	001	1999	10	-23	-11	-7	15	13	156
		001	2000	34	-26	-13	-5	2	-2	204
OH	001	001	1999	8	-9	-6	-3	0	6	17

Bias by Reporting Organization
for all bias pairs, based on 071101 extraction

State	Rep Org	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
OH	002	002	2000	2	-2	-2	10	10	22	22
OH	004	004	2000	2	-7	-7	2	2	12	12
OH	006	006	1999	6	-85	-4	6	-4	24	27
		006	2000	3	-5	-5	-4	-0	9	9
OH	007	007	2000	4	-7	-3	1	-0	2	4
OH	008	008	1999	5	-7	0	7	4	7	15
		008	2000	9	-11	-2	-0	-0	3	7
OH	009	009	1999	6	-5	5	8	16	26	54
		009	2000	11	-13	-7	-4	-2	0	23
OH	010	010	1999	5	-37	-2	-1	-4	-0	19
		010	2000	2	-98	-98	-48	-48	1	1
OH	012	012	1999	3	-16	-16	-1	-3	8	8
		012	2000	4	-28	-19	-7	-10	-2	1
OH	013	013	1999	3	-7	-7	-1	-0	8	8
		013	2000	4	-13	-12	-3	1	14	22
OH	015	015	1999	4	-1	0	5	8	15	22
		015	2000	3	-3	-3	-2	5	21	21
OH	016	016	1999	8	-4	-2	4	5	12	18
		016	2000	4	-13	-8	-1	-3	2	3
OK	101	101	1999	10	-22	-19	-13	-15	-11	-6
		101	2000	12	-20	-15	-13	-13	-11	-3
OK	106	106	2000	7	-11	-7	-4	-5	-2	-0
OR	001	001	1999	16	-60	-13	-7	-11	-4	6
		001	2000	19	-43	-26	-15	-17	-8	0

Bias by Reporting Organization
for all bias pairs, based on 071101 extraction

State	Rep Org	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
PA	001	001	1999	11	-15	-7	-5	-4	3	13
		001	2000	15	-21	-6	-4	-5	-1	1
PA	002	002	1999	4	-14	-12	-6	-7	-2	-2
		002	2000	10	-13	-3	-0	-2	1	4
PA	003	003	1999	4	-10	-9	-7	-1	7	18
		003	2000	6	-12	-4	-1	-1	1	11
PR	001	001	1999	6	-19	-13	-10	-12	-10	-7
		001	2000	9	-28	-18	-17	-15	-10	-6
RI	001	001	1999	8	-5	1	6	9	18	26
		001	2000	7	-84	-6	-3	-8	8	24
SC	001	001	1999	15	-13	-10	-7	-2	-0	64
		001	2000	16	-16	-6	-5	-5	-4	3
SD	001	001	1999	10	-13	-5	10	17	25	83
		001	2000	7	-100	-27	-15	-24	0	1
TN	001	001	1999	3	-3	-3	-2	6	23	23
TN	002	002	1999	7	-33	-18	-7	-8	-1	16
TN	003	003	2000	8	-7	-2	0	1	4	11
TN	004	004	1999	4	1	3	6	20	36	66
TN	005	005	2000	8	-8	-4	1	1	5	7
TX	001	001	1999	12	-23	-7	-4	-2	6	15
		001	2000	39	-45	-20	-14	-14	-5	6
TX	822	822	2000	3	-36	-36	-8	-14	2	2
UT	001	001	1999	12	-100	-21	4	7	11	226
		001	2000	16	-16	-11	-2	-2	7	14

Bias by Reporting Organization
for all bias pairs, based on 071101 extraction

State	Rep Org	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
VA	001	001	1999	15	-51	-11	-4	-7	6	17
		001	2000	18	-22	-8	-4	-4	-1	9
VI	001	001	1999	3	-4	-4	3	11	33	33
VT	001	001	1999	3	-13	-13	-3	-5	2	2
		001	2000	8	-20	-11	-7	-8	-5	3
WA	001	001	1999	14	-40	-7	-3	-7	-1	0
		001	2000	19	-11	-7	-4	3	3	106
WI	001	001	1999	20	-38	-2	2	7	8	98
		001	2000	30	-22	-8	-5	-1	-1	104
WV	001	001	1999	9	-12	-2	5	4	6	28
		001	2000	10	-12	-7	-2	-3	3	6
WV	002	002	1999	2	-9	-9	11	11	31	31
		002	2000	7	-16	-12	-6	-8	-5	-4
WY	001	001	1999	3	-8	-8	10	6	17	17
		001	2000	2	-24	-24	-9	-9	6	6

Bias by Reporting Organization

for all bias pairs > 6 ug/m3, based on 071101 extraction

State	Rep Org	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
NAT'L			1999	579	-78	-7	-2	1	6	156
			2000	773	-58	-8	-3	-2	1	204
AK	020	020	1999	2	-0	-0	5	5	10	10
		020	2000	3	-12	-12	-8	-8	-5	-5
AL	011	011	1999	3	13	13	16	17	23	23
		011	2000	7	2	2	3	6	5	25
AL	012	012	1999	3	-6	-6	1	-1	3	3
		012	2000	4	-30	-23	-3	-0	22	35
AL	014	014	2000	4	-5	-5	-4	-3	-2	-0
AR	001	001	1999	8	-11	-3	-2	-1	-2	17
		001	2000	17	-57	-14	-7	-11	-3	2
AZ	100	100	1999	8	-22	4	13	34	54	151
AZ	300	300	1999	4	-12	9	44	42	75	94
		300	2000	3	-25	-25	-15	-9	13	13
CA	001	001	1999	16	-21	-9	6	3	13	19
		001	2000	11	-16	-4	1	-1	4	6
CA	004	004	1999	10	-16	-2	0	-0	3	12
		004	2000	9	-31	-12	2	8	26	52
CA	014	014	2000	2	9	9	11	11	12	12
CA	019	019	1999	9	-18	-1	2	-1	4	6
		019	2000	12	-17	-8	-2	-3	4	8
CA	036	036	1999	9	-15	-5	-4	3	2	40
		036	2000	8	-21	-12	-3	-5	4	8
CA	061	061	1999	10	-69	-8	1	-0	7	65
		061	2000	13	-17	-10	-3	-4	-1	9

Bias by Reporting Organization

for all bias pairs > 6 ug/m3, based on 071101 extraction

State	Rep Org	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
CO	001	001	1999	9	-15	-10	-6	-6	-1	6
		001	2000	13	-13	-4	-3	-1	3	36
CT	001	001	1999	8	-13	-9	-6	-6	-2	1
		001	2000	9	-58	-11	-9	-12	-1	0
DC	001	001	1999	6	-8	-7	6	20	41	81
		001	2000	6	-7	-7	-1	-2	1	4
DE	001	001	1999	3	-6	-6	-4	-5	-4	-4
		001	2000	7	-0	-0	1	1	2	5
FL	003	003	2000	11	-8	-7	-3	-3	-2	3
FL	004	004	2000	4	-14	-13	-10	-11	-8	-8
FL	006	006	1999	3	-8	-8	-7	-5	-0	-0
FL	011	011	2000	6	-12	-9	-5	-6	-3	0
FL	012	012	1999	8	-12	-10	-8	-6	-4	9
FL	013	013	1999	6	-30	-13	-9	-8	-3	13
FL	016	016	1999	3	-16	-16	-13	-6	10	10
FL	017	017	1999	4	-12	-8	-4	-5	-3	-1
FL	018	018	1999	7	-10	-9	-3	-3	-0	6
FL	020	020	1999	3	-21	-21	2	-4	8	8
		020	2000	3	-9	-9	-8	-8	-8	-8
FL	039	039	2000	3	-6	-6	-4	-3	1	1
GA	010	010	1999	15	-21	-1	6	7	16	37
		010	2000	19	-3	2	6	9	12	52

Bias by Reporting Organization

for all bias pairs > 6 ug/m3, based on 071101 extraction

State	Rep Org	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
IA	001	001	1999	2	-17	-17	-9	-9	-2	-2
IA	002	002	1999	2	-10	-10	2	2	14	14
IA	003	003	1999	1	-17	-17	-17	-17	-17	-17
		003	2000	7	-17	-14	-11	-13	-11	-10
ID	001	001	1999	11	-14	-7	-2	-2	4	9
		001	2000	9	-25	-8	-4	-5	1	7
IL	001	001	1999	5	-5	9	9	15	20	44
		001	2000	17	-12	-6	-1	2	9	19
IL	003	003	1999	5	-16	8	8	14	33	39
		003	2000	10	-10	-4	2	15	9	146
IN	001	001	1999	18	-14	-8	-4	-3	1	7
		001	2000	23	-12	-7	-4	-2	4	18
IN	008	008	1999	7	-10	-4	1	0	8	10
		008	2000	8	-13	-1	3	2	7	9
KS	001	001	1999	9	-8	-3	-2	9	15	54
		001	2000	10	-15	-10	-6	-6	-1	1
KY	001	001	1999	16	-63	-4	-1	-1	8	26
		001	2000	11	-7	-6	-3	0	6	16
KY	002	002	1999	3	-10	-10	-7	-7	-4	-4
		002	2000	4	-12	-7	-3	-3	1	3
LA	001	001	1999	17	-23	-14	-10	-10	-7	11
		001	2000	18	-19	-13	-9	-9	-5	4
MA	001	001	1999	10	-13	-8	-1	2	13	26
		001	2000	17	-12	-4	7	11	17	83
MD	001	001	1999	1	9	9	9	9	9	9

Bias by Reporting Organization

for all bias pairs > 6 ug/m3, based on 071101 extraction

State	Rep Org	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
MD	001	001	2000	12	-28	-11	-2	-4	2	9
ME	001	001	1999	9	-2	-0	3	10	11	56
		001	2000	9	-14	-5	3	2	8	14
MI	001	001	1999	16	-17	-7	-3	-2	4	18
		001	2000	22	-13	-7	-4	-2	1	22
MN	001	001	2000	5	-41	-4	-3	15	-2	125
MO	001	001	1999	3	-78	-78	-35	-38	-2	-2
		001	2000	12	-8	-7	-5	-3	0	6
MO	002	002	1999	4	-14	-10	-6	-5	0	6
		002	2000	4	-16	-13	-8	-9	-5	-4
MO	003	003	1999	4	-8	-8	-6	-3	2	10
		003	2000	4	-13	-12	-9	-9	-7	-7
MO	004	004	1999	8	-31	-21	2	-1	6	53
		004	2000	4	-15	-13	-9	-8	-4	-0
MS	100	100	1999	13	-45	-5	-1	4	1	116
		100	2000	15	-27	-12	-7	-7	-1	8
MT	001	001	1999	2	-9	-9	-6	-6	-3	-3
		001	2000	3	-8	-8	3	-1	3	3
MT	033	033	2000	3	-7	-7	0	2	14	14
MT	037	037	2000	2	-2	-2	7	7	15	15
NC	001	001	1999	14	-12	-5	-3	-2	4	6
		001	2000	28	-8	-4	-2	-1	0	42
NC	002	002	2000	8	-4	-2	0	-0	1	4
NC	003	003	1999	9	-8	-5	-2	-2	0	4

Bias by Reporting Organization

for all bias pairs > 6 ug/m3, based on 071101 extraction

State	Rep Org	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
NC	004	004	1999	3	-1	-1	1	1	3	3
ND	001	001	1999	4	-21	-0	23	13	27	28
		001	2000	2	-8	-8	-7	-7	-6	-6
NE	001	001	1999	2	-24	-24	-16	-16	-8	-8
		001	2000	4	-19	-19	-14	-14	-10	-9
NH	001	001	1999	1	32	32	32	32	32	32
		001	2000	4	-11	-10	-5	-4	2	3
NJ	001	001	1999	12	-12	-3	0	1	7	19
		001	2000	17	-38	-2	-1	3	1	101
NM	001	001	1999	2	1	1	9	9	17	17
NM	002	002	1999	3	-13	-13	-10	-10	-8	-8
		002	2000	1	-9	-9	-9	-9	-9	-9
NM	006	006	2000	2	-17	-17	-7	-7	4	4
NM	007	007	2000	4	-17	-12	-5	-7	-1	0
NV	200	200	1999	2	-3	-3	-2	-2	-0	-0
		200	2000	2	-14	-14	-6	-6	2	2
NV	300	300	1999	3	-16	-16	-6	-8	-3	-3
		300	2000	3	-13	-13	-5	-6	-1	-1
NY	001	001	1999	6	-8	-7	9	34	47	156
		001	2000	30	-26	-10	-5	3	-2	204
OH	001	001	1999	8	-9	-6	-3	0	6	17
OH	002	002	2000	2	-2	-2	10	10	22	22
OH	004	004	2000	2	-7	-7	2	2	12	12

Bias by Reporting Organization

for all bias pairs > 6 ug/m3, based on 071101 extraction

State	Rep Org	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
OH	006	006	1999	5	-4	2	11	12	24	27
		006	2000	3	-5	-5	-4	-0	9	9
OH	007	007	2000	4	-7	-3	1	-0	2	4
OH	008	008	1999	5	-7	0	7	4	7	15
		008	2000	9	-11	-2	-0	-0	3	7
OH	009	009	1999	5	-5	5	6	8	10	26
		009	2000	8	-7	-6	-2	0	2	23
OH	010	010	1999	5	-37	-2	-1	-4	-0	19
		010	2000	1	1	1	1	1	1	1
OH	012	012	1999	3	-16	-16	-1	-3	8	8
		012	2000	3	-28	-28	-5	-11	1	1
OH	013	013	1999	3	-7	-7	-1	-0	8	8
		013	2000	4	-13	-12	-3	1	14	22
OH	015	015	1999	4	-1	0	5	8	15	22
		015	2000	3	-3	-3	-2	5	21	21
OH	016	016	1999	8	-4	-2	4	5	12	18
		016	2000	4	-13	-8	-1	-3	2	3
OK	101	101	1999	6	-21	-13	-13	-14	-11	-11
		101	2000	12	-20	-15	-13	-13	-11	-3
OK	106	106	2000	6	-7	-6	-3	-4	-2	-0
OR	001	001	1999	10	-13	-10	-6	-7	-5	-3
		001	2000	9	-28	-13	-11	-10	-5	0
PA	001	001	1999	11	-15	-7	-5	-4	3	13
		001	2000	14	-21	-6	-4	-5	-1	1
PA	002	002	1999	4	-14	-12	-6	-7	-2	-2

Bias by Reporting Organization

for all bias pairs > 6 ug/m3, based on 071101 extraction

State	Rep Org	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
PA	002	002	2000	10	-13	-3	-0	-2	1	4
PA	003	003	1999	4	-10	-9	-7	-1	7	18
		003	2000	5	-12	-4	-3	-1	1	11
PR	001	001	1999	5	-19	-13	-11	-12	-10	-7
		001	2000	4	-18	-18	-18	-15	-13	-8
RI	001	001	1999	6	-5	-0	12	10	18	26
		001	2000	5	-6	-4	-3	0	5	8
SC	001	001	1999	12	-10	-9	-5	1	0	64
		001	2000	15	-13	-6	-5	-5	-4	3
SD	001	001	1999	10	-13	-5	10	17	25	83
		001	2000	2	0	0	1	1	1	1
TN	001	001	1999	3	-3	-3	-2	6	23	23
TN	002	002	1999	7	-33	-18	-7	-8	-1	16
TN	003	003	2000	8	-7	-2	0	1	4	11
TN	004	004	1999	4	1	3	6	20	36	66
TN	005	005	2000	8	-8	-4	1	1	5	7
TX	001	001	1999	10	-23	-9	-5	-5	0	8
		001	2000	32	-45	-19	-10	-12	-3	6
TX	822	822	2000	3	-36	-36	-8	-14	2	2
UT	001	001	1999	5	1	2	7	6	9	13
		001	2000	10	-13	-11	1	-0	9	14
VA	001	001	1999	9	-47	-5	-3	-3	6	17
		001	2000	18	-22	-8	-4	-4	-1	9

for all bias pairs > 6 ug/m3, based on 071101 extraction

State	Rep Org	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
VI	001	001	1999	2	-4	-4	-0	-0	3	3
VT	001	001	1999	2	-3	-3	-0	-0	2	2
		001	2000	4	-7	-6	-5	-3	-0	3
WA	001	001	1999	11	-13	-7	-3	-4	-1	-0
		001	2000	17	-11	-7	-5	-3	-0	10
WI	001	001	1999	15	-38	-3	1	5	6	98
		001	2000	22	-10	-8	-4	2	1	104
WV	001	001	1999	9	-12	-2	5	4	6	28
		001	2000	10	-12	-7	-2	-3	3	6
WV	002	002	1999	2	-9	-9	11	11	31	31
		002	2000	7	-16	-12	-6	-8	-5	-4
WY	001	001	1999	2	10	10	14	14	17	17
		001	2000	1	6	6	6	6	6	6

by Region/State/Site

Region	State	Year	Site	Total Number of Qtrs with Pairs for Bias	Total Num of Pairs for Bias
1	CT	1999	090010010	3	3
			090031003	1	1
			090091123	2	2
			090092123	3	3
1	CT	2000	090011123	4	4
			090012124	1	1
			090031018	3	3
			090090018	3	3
1	MA	1999	250092006	2	2
			250230004	2	2
			250250002	2	3
			250250027	2	3
			250270020	3	3
1	MA	2000	250130008	4	4
			250130016	4	4
			250132007	4	5
			250250042	3	4
			250272004	3	3
1	ME	1999	230031011	3	3
			230050027	3	3
			230110016	3	3
			230190002	2	2
1	ME	2000	230010011	4	4
			230030013	4	4
			230052003	3	3
1	NH	1999	330111007	2	3
			330130003	3	3

by Region/State/Site

Region	State	Year	Site	Total Number of Qtrs with Pairs for Bias	Total Num of Pairs for Bias
1	NH	2000	330070014	3	3
			330150009	1	2
			330190003	3	3
1	RI	1999	440070022	3	4
			440071010	3	4
1	RI	2000	440070020	3	3
			440071005	4	4
1	VT	1999	500210002	2	3
1	VT	2000	500070007	4	4
			500230005	4	4
2	NJ	1999	340030003	4	4
			340070003	4	4
			340130011	4	4
			340390004	3	3
2	NJ	2000	340171003	4	4
			340172002	4	4
			340218001	4	4
			340270004	4	4
			340273001	4	4
2	NY	1999	360050083	1	1
			360290005	1	1
			360470011	2	2
			360556001	1	1
			360590008	2	2
			360671015	1	1
			360810094	1	1
			360850067	1	1

by Region/State/Site

Region	State	Year	Site	Total Number of Qtrs with Pairs for Bias	Total Num of Pairs for Bias
2	NY	2000	360010005	4	4
			360290002	4	4
			360310003	4	4
			360556001	4	4
			360590013	4	4
			360610056	4	4
			360610062	4	4
			360893001	3	3
			361010003	3	3
2	PR	1999	720570008	3	4
			721270003	2	2
2	PR	2000	720210009	4	4
			720530003	1	1
			720590016	3	4
2	VI	1999	780010012	3	3
3	DC	1999	110010041	3	3
			110010043	4	4
3	DC	2000	110010042	3	3
			110010043	4	4
3	DE	1999	100031003	2	2
			100031007	1	1
3	DE	2000	100010002	4	4
			100010003	4	4
3	MD	1999	245100040	1	1
3	MD	2000	240032002	3	3

Number of Pair and Number of Quarters over which Pairs Spread
by Region/State/Site

Region	State	Year	Site	Total Number of Qtrs with Pairs for Bias	Total Num of Pairs for Bias
3	MD	2000	240053001	3	3
			240430009	3	3
			245100035	3	3
3	PA	1999	420030064	2	2
			420031301	2	2
			420170012	2	2
			420430401	3	3
			420950025	1	1
			421010004	3	3
			421010136	1	1
			421290008	2	2
			421330008	3	3
3	PA	2000	420030008	3	3
			420030021	4	4
			420030116	3	3
			420110009	4	4
			420692006	4	4
			420710007	4	4
			420791101	3	3
			421010020	3	3
			421010047	3	3
3	VA	1999	510590030	3	3
			511071005	2	2
			517600020	4	4
			517750010	2	2
			518100008	3	4
3	VA	2000	510130020	4	4
			510595001	3	3
			510870014	3	5
			516500004	3	4

by Region/State/Site

Region	State	Year	Site	Total Number of Qtrs with Pairs for Bias	Total Num of Pairs for Bias
3	VA	2000	517700014	2	2
3	WV	1999	540391005	3	3
			540610003	3	3
			540690008	2	2
			540890001	3	3
3	WV	2000	540030003	3	3
			540110006	4	4
			540291004	4	4
			540511002	3	3
			541071002	3	3
4	AL	1999	010730023	3	3
			011010007	1	1
			011250003	1	1
			011270002	1	1
4	AL	2000	010690002	2	2
			010735002	4	4
			010890014	4	4
			011130001	3	3
			011190002	2	2
			011210002	2	2
4	FL	1999	120111002	4	4
			120251016	3	3
			120256001	4	4
			120570030	4	4
			120571075	4	4
			120951004	4	4
			120992003	4	4
			121030018	2	2
			121031008	4	4

by Region/State/Site

Region	State	Year	Site	Total Number of Qtrs with Pairs for Bias	Total Num of Pairs for Bias
4	FL	1999	121111002	4	4
4	FL	2000	120170005	3	4
			120310098	3	3
			120310099	3	3
			120830003	3	4
			120952002	3	4
			121056006	3	4
			121171002	3	4
			121275002	4	4
4	GA	1999	130510017	4	4
			130510091	4	4
			131270004	1	1
			132450005	3	3
			132450091	3	3
4	GA	2000	130210007	3	4
			130210012	3	4
			130950007	3	3
			132150001	3	4
			132150011	3	4
4	KY	1999	210190017	4	4
			210370003	4	4
			211110043	3	3
			211170007	4	4
			211950002	4	4
4	KY	2000	210470006	4	4
			210590014	3	3
			211010006	2	2
			211110044	4	4
			211451004	3	3

by Region/State/Site

Region	State	Year	Site	Total Number of Qtrs with Pairs for Bias	Total Num of Pairs for Bias
4	MS	1999	280010004	3	3
			280490018	4	4
			281210001	4	4
			281490004	2	2
4	MS	2000	280110001	3	3
			280490010	4	4
			280750003	4	4
			281230001	4	4
4	NC	1999	370210034	3	3
			370350004	4	4
			370710016	4	4
			371190010	4	4
			371190034	3	3
			371190040	3	3
			371190041	1	1
			371210001	2	2
			371730002	4	4
4	NC	2000	370010002	4	4
			370330001	4	4
			370370004	4	4
			370630001	4	4
			370670022	4	4
			370670024	4	4
			370810009	4	4
			370811005	4	4
			371350007	4	4
4	SC	1999	450630008	3	4
			450790007	3	3
			450790019	3	4
			450830010	3	4

by Region/State/Site

Region	State	Year	Site	Total Number of Qtrs with Pairs for Bias	Total Num of Pairs for Bias
4	SC	2000	450370001	3	4
			450450009	4	4
			450470003	3	4
			450730001	4	4
4	TN	1999	470930028	4	4
			471130004	3	3
			471570014	3	3
			471570047	4	4
4	TN	2000	470370023	3	4
			470370036	3	4
			470650031	4	4
			470654002	4	4
5	IL	1999	170310014	2	2
			170311016	2	2
			170313301	3	3
			170314201	2	2
			171670012	3	3
5	IL	2000	170310022	4	4
			170310050	3	3
			170310052	3	3
			170434002	3	3
			170971007	4	4
			170990007	3	3
			171110001	4	4
			171971002	3	3
5	IN	1999	180190005	4	4
			180431004	3	3
			180891003	4	4
			180891016	4	4

by Region/State/Site

Region	State	Year	Site	Total Number of Qtrs with Pairs for Bias	Total Num of Pairs for Bias
5	IN	1999	180892004	3	3
			180970043	3	3
			180970081	4	4
			181270024	4	4
5	IN	2000	180890006	4	4
			180890022	4	4
			180950009	3	3
			180970078	4	4
			180970079	4	4
			181410014	3	3
			181412004	3	3
			181630006	4	4
			181630016	4	4
5	MI	1999	260050003	1	1
			260210014	1	1
			260810020	4	4
			260990009	4	4
			261390005	4	4
			261470005	3	3
			261630015	3	3
			261630036	2	2
5	MI	2000	260050003	4	4
			260210014	4	4
			260490021	3	3
			260650012	4	5
			261250001	3	3
			261630001	3	3
5	MN	1999	271230868	2	2
			271377001	3	3
			271377550	3	3

by Region/State/Site

Region	State	Year	Site	Total Number of Qtrs with Pairs for Bias	Total Num of Pairs for Bias
5	MN	2000	270376018	3	3
			270530961	4	4
			270531007	2	2
			270532006	3	3
			271230871	3	3
			271390505	2	2
5	OH	1999	390350060	2	2
			390350066	4	4
			390490024	4	4
			390490025	4	4
			390610014	3	3
			390617001	2	2
			390851001	3	3
			390950024	4	4
			390990005	4	4
			391130014	2	2
			391130031	3	3
			391450013	3	3
			391530017	3	3
			391530023	3	3
			391550007	4	4
5	OH	2000	390170003	3	3
			390350013	4	4
			390350027	4	4
			390350045	3	3
			390610041	2	2
			390618001	4	4
			390811001	2	2
			390851001	4	4
			390870010	4	4
			390932003	2	2
			390950026	3	3

by Region/State/Site

Region	State	Year	Site	Total Number of Qtrs with Pairs for Bias	Total Num of Pairs for Bias
5	OH	2000	391330002	3	3
			391351001	2	2
			391510017	4	4
			391550007	4	4
5	WI	1999	550590019	4	4
			550790010	4	4
			550790043	1	1
			550790050	4	4
			550790051	3	4
			550790059	3	3
5	WI	2000	550090005	4	4
			550090026	3	3
			550710007	4	4
			550790026	4	4
			550790099	3	3
			550870009	4	4
			550890008	4	4
			551390011	4	4
6	AR	1999	050510002	2	2
			051190003	2	2
			051310008	2	2
			051430003	2	2
6	AR	2000	050350004	3	3
			050910004	4	4
			051070001	3	3
			051190007	4	4
			051191008	3	3
6	LA	1999	220330009	4	4
			220511001	4	4

by Region/State/Site

Region	State	Year	Site	Total Number of Qtrs with Pairs for Bias	Total Num of Pairs for Bias
6	LA	1999	220710010	4	4
			221210001	4	5
6	LA	2000	220171002	4	4
			220190009	4	4
			220470009	4	4
			220550005	4	4
			220710012	4	4
6	NM	1999	350010023	3	4
			350010024	3	4
			350130017	3	3
6	NM	2000	350010023	4	4
			350131006	3	3
			350439003	4	4
			350439004	4	4
			350450006	3	3
6	OK	1999	400310648	2	2
			401090035	3	3
			401210415	2	2
			401430110	3	3
6	OK	2000	400219002	3	3
			400710602	3	3
			400719003	4	4
			401010169	3	3
			401091037	3	3
			401430131	3	3
6	TX	1999	480290034	2	2
			481130035	2	2
			481130050	1	1

by Region/State/Site

Region	State	Year	Site	Total Number of Qtrs with Pairs for Bias	Total Num of Pairs for Bias
6	TX	1999	481410037	1	1
			481410044	2	2
			481671005	1	1
			482011035	1	1
			484393006	1	1
			484530020	1	1
6	TX	2000	480290052	3	3
			480370004	4	5
			480550062	3	3
			481410010	2	2
			481410038	2	2
			481670053	2	2
			481830001	4	4
			482010058	4	4
			482010062	3	3
			482450022	3	4
			483390089	3	3
			483611001	3	3
			484530021	4	4
7	IA	1999	191032001	3	3
			191130036	3	4
			191532510	3	3
7	IA	2000	191390015	3	3
			191630015	3	3
			191630018	2	2
7	KS	1999	200910007	3	3
			201070002	3	4
			201730010	2	3
			202090022	3	3

by Region/State/Site

Region	State	Year	Site	Total Number of Qtrs with Pairs for Bias	Total Num of Pairs for Bias
7	KS	2000	201730009	3	4
			201770011	2	3
			202090021	3	4
7	MO	1999	290950036	3	4
			290952002	3	4
			291831002	2	3
			291895001	3	4
			295100086	3	4
7	MO	2000	290910003	4	4
			290952002	3	4
			290990012	3	4
			291860006	3	4
			291892003	3	4
			295100085	3	4
7	NE	1999	311090022	3	4
7	NE	2000	310790003	2	4
			311090022	2	4
8	CO	1999	080010001	3	3
			080310002	2	2
			080410011	1	1
			080770003	3	3
			081230006	4	5
8	CO	2000	080050005	4	4
			080130012	4	4
			080410011	4	4
			080690009	4	4
			081010012	4	4

by Region/State/Site

Region	State	Year	Site	Total Number of Qtrs with Pairs for Bias	Total Num of Pairs for Bias
8	MT	1999	300630024	3	3
8	MT	2000	300470028	4	4
			300530018	3	3
			300870307	3	3
8	ND	1999	380150003	3	3
			380171004	4	4
			380570004	3	3
8	ND	2000	380350004	4	4
			380910001	4	4
8	SD	1999	461030014	4	4
			461030016	2	2
			461030017	1	1
			461031001	3	3
8	SD	2000	460110002	2	2
			460990006	3	3
			460990007	2	2
8	UT	1999	490353006	4	4
			490494001	4	4
			490570001	4	4
8	UT	2000	490350003	4	4
			490353007	4	4
			490490002	4	4
			490570007	4	4
8	WY	1999	560330002	3	3
8	WY	2000	560210001	2	2

by Region/State/Site

Region	State	Year	Site	Total Number of Qtrs with Pairs for Bias	Total Num of Pairs for Bias
9	AZ	1999	040070008	3	3
			040139991	3	3
			040139992	1	1
			040139997	3	3
			040190011	4	4
9	AZ	2000	040191028	3	3
9	CA	1999	060170011	4	4
			060190008	4	4
			060250005	4	5
			060271003	4	4
			060290012	2	2
			060290014	4	4
			060310004	2	2
			060370002	3	3
			060531002	4	4
			060590001	2	2
			060631008	2	2
			060652002	2	2
			060658001	3	3
			060670006	2	2
			060670010	4	5
			060731007	2	2
			060750005	4	4
			060850004	3	3
			061010003	4	4
			061112002	4	4
9	CA	2000	060011001	4	4
			060231002	4	4
			060251003	2	2
			060290010	4	4
			060290012	1	1

by Region/State/Site

Region	State	Year	Site	Total Number of Qtrs with Pairs for Bias	Total Num of Pairs for Bias
9	CA	2000	060371002	3	3
			060371103	4	4
			060571001	4	4
			060674001	2	2
			060710306	2	2
			060712002	4	4
			060718001	3	3
			060730003	4	4
			060731002	3	3
			060771002	4	4
			060798001	4	4
			060831007	4	4
			060852003	3	3
			061110007	3	3
			061131003	4	4
9	HI	1999	150031001	4	4
9	HI	2000	150031004	4	4
			150032004	4	4
9	NV	1999	320030560	4	4
			320310016	4	4
9	NV	2000	320030298	1	1
			320032002	3	4
			320310016	4	4
10	AK	1999	020200018	2	2
			020900010	1	1
			021100004	2	2
			021700008	2	2
10	AK	2000	020200018	3	3

Number of Pair and Number of Quarters over which Pairs Spread
by Region/State/Site

Region	State	Year	Site	Total Number of Qtrs with Pairs for Bias	Total Num of Pairs for Bias
10	AK	2000	020200044	3	3
			021100004	3	3
			021100026	3	3
10	ID	1999	160010011	4	4
			160050015	4	4
			160170001	4	4
			160270004	4	4
			160830006	3	3
10	ID	2000	160550006	4	4
			160690009	4	4
			160790017	4	4
10	OR	1999	410170113	4	4
			410390060	4	4
			410510080	4	4
			410590121	4	4
10	OR	2000	410030013	4	4
			410391007	3	3
			410392013	1	1
			410430009	4	4
			410610117	3	4
			410650007	3	3
10	WA	1999	530330021	4	4
			530330057	2	2
			530530031	4	4
			530670013	3	3
			530770012	1	1
10	WA	2000	530050002	3	3
			530610005	4	4

Number of Pair and Number of Quarters over which Pairs Spread
by Region/State/Site

Region	State	Year	Site	Total Number of Qtrs with Pairs for Bias	Total Num of Pairs for Bias
10	WA	2000	530611007	4	4
			530630047	4	4
			530730015	4	4

Attachment 6-2

1) National Bias Estimates

2) Bias Estimates by State/Reporting Organization

Field Definitions for National Bias Estimates

This attachment provides bias estimates at the National level for CY99 and CY00, by method designation and for all methods.

The columns of the table are:

Methname: Method designation.

Year: Year.

Qtrname: Quarter. "Ann" means annual.

Filetype: Bias estimates are generated using 4 different data bases. The data bases differ by whether pairs with concentrations # 6 ：g/m^3 are excluded and whether pairs with percent differences > 50% or < -50% are excluded.

allgt0_1: all pairs are included in the bias estimate
allgt6_1: pairs with concentrations # 6 ：g/m^3 are excluded
bias50gt0_1: pairs with percent differences > 50% or -50% are excluded
bias50gt6_1: pairs with concentrations # 6 ：g/m^3 or with percent differences > 50% or -50% are excluded

Numbias: The number of pairs in bias estimate.

Lowercl: Lower 90% confidence limit for the bias estimate.

Avgbias: Bias estimate.

Uppercl: Upper 90% confidence limit for the bias estimate.

Field Definitions for Bias Estimates by State/Reporting Organization

This attachment provides bias estimates at the Reporting Organization level for CY99 and CY00, based on pairs where both concentrations are greater than 6 ：g/m^3.

The columns of the table are:

State: State.

Rep Org: Reporting Organization.

Year: Year.

Number of Bias Pairs: Total number of pairs of PEP and routine data in the reporting organization for the calendar year. Only pairs where both concentrations are greater than 6 ：g/m^3 are included in the count.

Min Bias: The minimum observed bias.

25th Ptile: The 25th percentile of the observed biases.

Median Bias: The median of the observed biases.

Average Bias: The average of the observed biases.

75th Ptile: The 75th percentile of the observed biases.

Max Bias: The maximum observed bias.

methname	year	qtrname	filetype	numbias	lowercl	avgbias	uppercl
All	1999	1	allgt0_1	128	4.187	10.4574	16.728
			allgt6_1	105	4.255	9.0670	13.879
			bias50gt0_1	119	1.656	4.2195	6.783
			bias50gt6_1	99	1.494	4.1609	6.828
All	1999	2	allgt0_1	198	-2.839	0.8449	4.529
			allgt6_1	148	-1.652	1.4604	4.573
			bias50gt0_1	189	-3.742	-1.5911	0.559
			bias50gt6_1	142	-2.612	-0.4463	1.719
All	1999	3	allgt0_1	206	-4.526	-2.0485	0.429
			allgt6_1	166	-2.837	-0.8080	1.221
			bias50gt0_1	199	-4.176	-2.4229	-0.670
			bias50gt6_1	164	-3.320	-1.5733	0.173
All	1999	4	allgt0_1	197	-5.101	-0.9826	3.135
			allgt6_1	160	-4.481	-1.4292	1.623
			bias50gt0_1	191	-4.331	-2.6998	-1.068
			bias50gt6_1	156	-3.738	-2.1507	-0.563
All	1999	Ann	allgt0_1	729	-0.742	1.2212	3.184
			allgt6_1	579	-0.573	1.3910	3.355
			bias50gt0_1	698	-3.104	-1.1410	0.822
			bias50gt6_1	561	-2.401	-0.4367	1.528
All	2000	1	allgt0_1	209	-3.399	-1.0192	1.361
			allgt6_1	177	-1.880	0.3337	2.547
			bias50gt0_1	201	-3.246	-1.8151	-0.384
			bias50gt6_1	172	-2.319	-0.9966	0.325
All	2000	2	allgt0_1	243	-6.248	-2.7354	0.777
			allgt6_1	193	-4.414	-1.2128	1.988
			bias50gt0_1	238	-6.915	-5.3453	-3.775
			bias50gt6_1	190	-5.149	-3.6253	-2.102
All	2000	3	allgt0_1	251	-6.791	-4.8671	-2.944
			allgt6_1	209	-6.124	-4.8743	-3.624
			bias50gt0_1	249	-7.216	-5.8359	-4.456
			bias50gt6_1	209	-6.124	-4.8743	-3.624
All	2000	4	allgt0_1	238	-6.383	-3.1813	0.020

methname	year	qtrname	filetype	numbias	lowercl	avgbias	uppercl
All	2000	4	allgt6_1	194	-4.817	-2.8600	-0.903
			bias50gt0_1	233	-5.615	-4.1336	-2.653
			bias50gt6_1	192	-4.614	-3.2450	-1.876
All	2000	Ann	allgt0_1	941	-4.998	-3.0356	-1.073
			allgt6_1	773	-4.225	-2.2620	-0.299
			bias50gt0_1	921	-6.363	-4.4009	-2.438
			bias50gt6_1	763	-5.242	-3.2791	-1.316
And Seq	1999	1	allgt0_1	41	15.039	25.4442	35.849
			allgt6_1	36	13.928	25.4853	37.043
			bias50gt0_1	34	7.959	13.1950	18.431
			bias50gt6_1	30	7.307	12.5787	17.851
And Seq	1999	2	allgt0_1	65	0.421	4.5095	8.599
			allgt6_1	52	1.485	5.5016	9.518
			bias50gt0_1	65	0.421	4.5095	8.599
			bias50gt6_1	52	1.485	5.5016	9.518
And Seq	1999	3	allgt0_1	63	-1.556	3.6470	8.850
			allgt6_1	55	-1.663	3.0786	7.820
			bias50gt0_1	60	-3.459	0.5251	4.509
			bias50gt6_1	53	-2.844	0.8572	4.558
And Seq	1999	4	allgt0_1	54	-7.813	4.5483	16.909
			allgt6_1	42	-4.058	0.7900	5.638
			bias50gt0_1	51	-1.435	1.9512	5.338
			bias50gt6_1	41	-1.001	2.4959	5.993
And Seq	1999	Ann	allgt0_1	223	6.153	8.1242	10.095
			allgt6_1	185	5.627	7.6003	9.573
			bias50gt0_1	210	2.184	4.1560	6.128
			bias50gt6_1	176	2.635	4.6091	6.583
And Seq	2000	1	allgt0_1	61	-2.479	2.8212	8.121
			allgt6_1	54	1.096	5.6279	10.160
			bias50gt0_1	57	-1.701	1.2024	4.106
			bias50gt6_1	51	-0.140	2.2827	4.705
And Seq	2000	2	allgt0_1	68	-6.046	3.4918	13.029
			allgt6_1	50	-1.395	5.0187	11.433

methname	year	qtrname	filetype	numbias	lowercl	avgbias	uppercl
And Seq	2000	2	bias50gt0_1	65	-4.216	-0.9497	2.317
			bias50gt6_1	49	-0.663	2.1323	4.928
And Seq	2000	3	allgt0_1	72	-4.052	0.2837	4.619
			allgt6_1	60	-3.983	-1.6671	0.649
			bias50gt0_1	71	-4.048	-1.4824	1.083
			bias50gt6_1	60	-3.983	-1.6671	0.649
And Seq	2000	4	allgt0_1	60	-8.589	2.1901	12.969
			allgt6_1	53	-2.704	0.3260	3.356
			bias50gt0_1	58	-4.111	-1.0424	2.027
			bias50gt6_1	53	-2.704	0.3260	3.356
And Seq	2000	Ann	allgt0_1	261	0.182	2.1508	4.120
			allgt6_1	217	0.204	2.1755	4.147
			bias50gt0_1	251	-2.603	-0.6331	1.337
			bias50gt6_1	213	-1.323	0.6486	2.620
And Single	1999	4	allgt0_1	2	-147.443	6.9367	161.316
			allgt6_1	2	-147.443	6.9367	161.316
			bias50gt0_1	2	-147.443	6.9367	161.316
			bias50gt6_1	2	-147.443	6.9367	161.316
And Single	1999	Ann	allgt0_1	2		6.9367	
			allgt6_1	2		6.9367	
			bias50gt0_1	2		6.9367	
			bias50gt6_1	2		6.9367	
And Single	2000	1	allgt0_1	4	-34.223	19.6559	73.534
			allgt6_1	2	-76.202	7.0289	90.259
			bias50gt0_1	3	-20.104	3.1635	26.431
			bias50gt6_1	2	-76.202	7.0289	90.259
And Single	2000	2	allgt0_1	3	-75.877	-2.7096	70.458
			bias50gt0_1	3	-75.877	-2.7096	70.458
And Single	2000	3	allgt0_1	8	-21.084	-8.4861	4.112
			allgt6_1	2	-16.278	-0.9898	14.298
			bias50gt0_1	8	-21.084	-8.4861	4.112
			bias50gt6_1	2	-16.278	-0.9898	14.298

methname	year	qtrname	filetype	numbias	lowercl	avgbias	uppercl
And Single	2000	4	allgt0_1	8	-46.278	-0.0493	46.180
			allgt6_1	5	-58.897	19.0059	96.909
			bias50gt0_1	6	-33.260	-11.8383	9.583
			bias50gt6_1	4	-46.146	-7.4224	31.301
And Single	2000	Ann	allgt0_1	23	-1.997	0.0962	2.189
			allgt6_1	9	9.330	11.9009	14.471
			bias50gt0_1	20	-8.998	-6.8778	-4.758
			bias50gt6_1	8	-4.978	-2.2014	0.575
BGI Single	1999	1	allgt0_1	1		-2.9635	
			allgt6_1	1		-2.9635	
			bias50gt0_1	1		-2.9635	
			bias50gt6_1	1		-2.9635	
BGI Single	1999	2	allgt0_1	3	-7.014	-0.5983	5.817
			allgt6_1	2	-29.036	-1.4025	26.231
			bias50gt0_1	3	-7.014	-0.5983	5.817
			bias50gt6_1	2	-29.036	-1.4025	26.231
BGI Single	1999	3	allgt0_1	3	-17.131	-1.1088	14.914
			allgt6_1	3	-17.131	-1.1088	14.914
			bias50gt0_1	3	-17.131	-1.1088	14.914
			bias50gt6_1	3	-17.131	-1.1088	14.914
BGI Single	1999	4	allgt0_1	2	-234.763	13.8631	262.489
			allgt6_1	1		-5.7043	
			bias50gt0_1	2	-234.763	13.8631	262.489
			bias50gt6_1	1		-5.7043	
BGI Single	1999	Ann	allgt0_1	9	-0.388	2.1824	4.753
			allgt6_1	7	-5.297	-2.1142	1.068
			bias50gt0_1	9	-0.388	2.1824	4.753
			bias50gt6_1	7	-5.297	-2.1142	1.068
BGI Single	2000	1	allgt0_1	2	-186.135	18.6244	223.384
			allgt6_1	2	-186.135	18.6244	223.384
			bias50gt0_1	2	-186.135	18.6244	223.384
			bias50gt6_1	2	-186.135	18.6244	223.384
BGI Single	2000	2	allgt0_1	2	-115.140	1.1099	117.360

methname	year	qtrname	filetype	numbias	lowercl	avgbias	uppercl
BGI Single	2000	2	allgt6_1	2	-115.140	1.1099	117.360
			bias50gt0_1	2	-115.140	1.1099	117.360
			bias50gt6_1	2	-115.140	1.1099	117.360
BGI Single	2000	3	allgt0_1	1		-30.2109	
			allgt6_1	1		-30.2109	
			bias50gt0_1	1		-30.2109	
			bias50gt6_1	1		-30.2109	
BGI Single	2000	4	allgt0_1	2	-127.358	-6.9200	113.518
			allgt6_1	2	-127.358	-6.9200	113.518
			bias50gt0_1	2	-127.358	-6.9200	113.518
			bias50gt6_1	2	-127.358	-6.9200	113.518
BGI Single	2000	Ann	allgt0_1	7	-3.837	-0.6546	2.528
			allgt6_1	7	-3.837	-0.6546	2.528
			bias50gt0_1	7	-3.837	-0.6546	2.528
			bias50gt6_1	7	-3.837	-0.6546	2.528
RP Seq	1999	1	allgt0_1	74	-5.459	3.3025	12.064
			allgt6_1	60	-2.812	0.1640	3.140
			bias50gt0_1	72	-2.793	0.0352	2.863
			bias50gt6_1	60	-2.812	0.1640	3.140
RP Seq	1999	2	allgt0_1	117	-5.970	-0.2142	5.542
			allgt6_1	89	-5.459	-0.8910	3.677
			bias50gt0_1	108	-7.098	-4.5655	-2.033
			bias50gt6_1	83	-6.695	-4.3232	-1.951
RP Seq	1999	3	allgt0_1	130	-7.659	-4.7589	-1.859
			allgt6_1	102	-4.882	-2.8797	-0.878
			bias50gt0_1	126	-5.756	-3.8140	-1.872
			bias50gt6_1	102	-4.882	-2.8797	-0.878
RP Seq	1999	4	allgt0_1	131	-7.119	-3.6201	-0.121
			allgt6_1	109	-6.709	-2.6418	1.425
			bias50gt0_1	128	-6.760	-5.0799	-3.399
			bias50gt6_1	106	-6.093	-4.3770	-2.661
RP Seq	1999	Ann	allgt0_1	452	-3.898	-1.9327	0.033
			allgt6_1	360	-3.775	-1.8087	0.158

methname	year	qtrname	filetype	numbias	lowercl	avgbias	uppercl
RP Seq	1999	Ann	bias50gt0_1	434	-5.701	-3.7358	-1.770
			bias50gt6_1	351	-5.120	-3.1529	-1.186
RP Seq	2000	1	allgt0_1	131	-6.058	-3.5052	-0.952
			allgt6_1	111	-4.844	-2.3264	0.191
			bias50gt0_1	128	-5.044	-3.4242	-1.804
			bias50gt6_1	109	-4.175	-2.7635	-1.352
RP Seq	2000	2	allgt0_1	156	-8.147	-4.6755	-1.204
			allgt6_1	134	-6.750	-2.8705	1.009
			bias50gt0_1	154	-8.492	-6.7381	-4.985
			bias50gt6_1	132	-6.997	-5.2496	-3.502
RP Seq	2000	3	allgt0_1	155	-7.847	-5.7254	-3.604
			allgt6_1	136	-7.125	-5.6422	-4.160
			bias50gt0_1	154	-8.026	-6.4496	-4.873
			bias50gt6_1	136	-7.125	-5.6422	-4.160
RP Seq	2000	4	allgt0_1	155	-7.194	-5.4441	-3.694
			allgt6_1	125	-6.898	-5.3130	-3.728
			bias50gt0_1	154	-6.746	-5.1124	-3.479
			bias50gt6_1	124	-6.269	-4.9000	-3.531
RP Seq	2000	Ann	allgt0_1	597	-6.855	-4.8908	-2.927
			allgt6_1	506	-6.064	-4.0995	-2.135
			bias50gt0_1	590	-7.484	-5.5195	-3.556
			bias50gt6_1	501	-6.694	-4.7288	-2.764
RP Single	1999	1	allgt0_1	12	-3.560	4.4929	12.546
			allgt6_1	8	-5.292	3.4610	12.214
			bias50gt0_1	12	-3.560	4.4929	12.546
			bias50gt6_1	8	-5.292	3.4610	12.214
RP Single	1999	2	allgt0_1	13	-15.572	-7.6132	0.345
			allgt6_1	5	-12.691	2.4341	17.559
			bias50gt0_1	13	-15.572	-7.6132	0.345
			bias50gt6_1	5	-12.691	2.4341	17.559
RP Single	1999	3	allgt0_1	10	-10.826	-2.9774	4.871
			allgt6_1	6	-11.183	-1.0670	9.049
			bias50gt0_1	10	-10.826	-2.9774	4.871

methname	year	qtrname	filetype	numbias	lowercl	avgbias	uppercl
RP Single	1999	3	bias50gt6_1	6	-11.183	-1.0670	9.049
RP Single	1999	4	allgt0_1	8	-15.650	-0.8191	14.011
			allgt6_1	6	-5.445	2.9911	11.427
			bias50gt0_1	8	-15.650	-0.8191	14.011
			bias50gt6_1	6	-5.445	2.9911	11.427
RP Single	1999	Ann	allgt0_1	43	-3.915	-1.8927	0.130
			allgt6_1	25	-0.024	2.0561	4.136
			bias50gt0_1	43	-3.915	-1.8927	0.130
			bias50gt6_1	25	-0.024	2.0561	4.136
RP Single	2000	1	allgt0_1	11	-10.748	-3.8005	3.147
			allgt6_1	8	-14.755	-4.7400	5.275
			bias50gt0_1	11	-10.748	-3.8005	3.147
			bias50gt6_1	8	-14.755	-4.7400	5.275
RP Single	2000	2	allgt0_1	14	-19.017	-11.9186	-4.820
			allgt6_1	7	-21.673	-14.6527	-7.632
			bias50gt0_1	14	-19.017	-11.9186	-4.820
			bias50gt6_1	7	-21.673	-14.6527	-7.632
RP Single	2000	3	allgt0_1	15	-22.936	-17.1030	-11.270
			allgt6_1	10	-17.505	-11.9161	-6.327
			bias50gt0_1	15	-22.936	-17.1030	-11.270
			bias50gt6_1	10	-17.505	-11.9161	-6.327
RP Single	2000	4	allgt0_1	13	-12.340	-2.3453	7.650
			allgt6_1	9	-6.652	1.2015	9.055
			bias50gt0_1	13	-12.340	-2.3453	7.650
			bias50gt6_1	9	-6.652	1.2015	9.055
RP Single	2000	Ann	allgt0_1	53	-11.362	-9.3528	-7.343
			allgt6_1	34	-9.361	-7.3187	-5.276
			bias50gt0_1	53	-11.362	-9.3528	-7.343
			bias50gt6_1	34	-9.361	-7.3187	-5.276

Bias by Reporting Organization

for all bias pairs > 6 ug/m3, based on 071101 extraction

State	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
NAT'L		1999	579	-78	-7	-2	1	6	156
		2000	773	-58	-8	-3	-2	1	204
AK	020	1999	2	-0	-0	5	5	10	10
		2000	3	-12	-12	-8	-8	-5	-5
AL	011	1999	3	13	13	16	17	23	23
		2000	7	2	2	3	6	5	25
AL	012	1999	3	-6	-6	1	-1	3	3
		2000	4	-30	-23	-3	-0	22	35
AL	014	2000	4	-5	-5	-4	-3	-2	-0
AR	001	1999	8	-11	-3	-2	-1	-2	17
		2000	17	-57	-14	-7	-11	-3	2
AZ	100	1999	8	-22	4	13	34	54	151
AZ	300	1999	4	-12	9	44	42	75	94
		2000	3	-25	-25	-15	-9	13	13
CA	001	1999	16	-21	-9	6	3	13	19
		2000	11	-16	-4	1	-1	4	6
CA	004	1999	10	-16	-2	0	-0	3	12
		2000	9	-31	-12	2	8	26	52
CA	014	2000	2	9	9	11	11	12	12
CA	019	1999	9	-18	-1	2	-1	4	6
		2000	12	-17	-8	-2	-3	4	8
CA	036	1999	9	-15	-5	-4	3	2	40
		2000	8	-21	-12	-3	-5	4	8
CA	061	1999	10	-69	-8	1	-0	7	65
		2000	13	-17	-10	-3	-4	-1	9

Bias by Reporting Organization

for all bias pairs > 6 ug/m3, based on 071101 extraction

State	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
CO	001	1999	9	-15	-10	-6	-6	-1	6
		2000	13	-13	-4	-3	-1	3	36
CT	001	1999	8	-13	-9	-6	-6	-2	1
		2000	9	-58	-11	-9	-12	-1	0
DC	001	1999	6	-8	-7	6	20	41	81
		2000	6	-7	-7	-1	-2	1	4
DE	001	1999	3	-6	-6	-4	-5	-4	-4
		2000	7	-0	-0	1	1	2	5
FL	003	2000	11	-8	-7	-3	-3	-2	3
FL	004	2000	4	-14	-13	-10	-11	-8	-8
FL	006	1999	3	-8	-8	-7	-5	-0	-0
FL	011	2000	6	-12	-9	-5	-6	-3	0
FL	012	1999	8	-12	-10	-8	-6	-4	9
FL	013	1999	6	-30	-13	-9	-8	-3	13
FL	016	1999	3	-16	-16	-13	-6	10	10
FL	017	1999	4	-12	-8	-4	-5	-3	-1
FL	018	1999	7	-10	-9	-3	-3	-0	6
FL	020	1999	3	-21	-21	2	-4	8	8
		2000	3	-9	-9	-8	-8	-8	-8
FL	039	2000	3	-6	-6	-4	-3	1	1
GA	010	1999	15	-21	-1	6	7	16	37
		2000	19	-3	2	6	9	12	52

Bias by Reporting Organization

for all bias pairs > 6 ug/m3, based on 071101 extraction

State	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
IA	001	1999	2	-17	-17	-9	-9	-2	-2
IA	002	1999	2	-10	-10	2	2	14	14
IA	003	1999	1	-17	-17	-17	-17	-17	-17
		2000	7	-17	-14	-11	-13	-11	-10
ID	001	1999	11	-14	-7	-2	-2	4	9
		2000	9	-25	-8	-4	-5	1	7
IL	001	1999	5	-5	9	9	15	20	44
		2000	17	-12	-6	-1	2	9	19
IL	003	1999	5	-16	8	8	14	33	39
		2000	10	-10	-4	2	15	9	146
IN	001	1999	18	-14	-8	-4	-3	1	7
		2000	23	-12	-7	-4	-2	4	18
IN	008	1999	7	-10	-4	1	0	8	10
		2000	8	-13	-1	3	2	7	9
KS	001	1999	9	-8	-3	-2	9	15	54
		2000	10	-15	-10	-6	-6	-1	1
KY	001	1999	16	-63	-4	-1	-1	8	26
		2000	11	-7	-6	-3	0	6	16
KY	002	1999	3	-10	-10	-7	-7	-4	-4
		2000	4	-12	-7	-3	-3	1	3
LA	001	1999	17	-23	-14	-10	-10	-7	11
		2000	18	-19	-13	-9	-9	-5	4
MA	001	1999	10	-13	-8	-1	2	13	26
		2000	17	-12	-4	7	11	17	83
MD	001	1999	1	9	9	9	9	9	9

Bias by Reporting Organization

for all bias pairs > 6 ug/m3, based on 071101 extraction

State	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
MD	001	2000	12	-28	-11	-2	-4	2	9
ME	001	1999	9	-2	-0	3	10	11	56
		2000	9	-14	-5	3	2	8	14
MI	001	1999	16	-17	-7	-3	-2	4	18
		2000	22	-13	-7	-4	-2	1	22
MN	001	2000	5	-41	-4	-3	15	-2	125
MO	001	1999	3	-78	-78	-35	-38	-2	-2
		2000	12	-8	-7	-5	-3	0	6
MO	002	1999	4	-14	-10	-6	-5	0	6
		2000	4	-16	-13	-8	-9	-5	-4
MO	003	1999	4	-8	-8	-6	-3	2	10
		2000	4	-13	-12	-9	-9	-7	-7
MO	004	1999	8	-31	-21	2	-1	6	53
		2000	4	-15	-13	-9	-8	-4	-0
MS	100	1999	13	-45	-5	-1	4	1	116
		2000	15	-27	-12	-7	-7	-1	8
MT	001	1999	2	-9	-9	-6	-6	-3	-3
		2000	3	-8	-8	3	-1	3	3
MT	033	2000	3	-7	-7	0	2	14	14
MT	037	2000	2	-2	-2	7	7	15	15
NC	001	1999	14	-12	-5	-3	-2	4	6
		2000	28	-8	-4	-2	-1	0	42
NC	002	2000	8	-4	-2	0	-0	1	4
NC	003	1999	9	-8	-5	-2	-2	0	4

Bias by Reporting Organization

for all bias pairs > 6 ug/m3, based on 071101 extraction

State	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
NC	004	1999	3	-1	-1	1	1	3	3
ND	001	1999	4	-21	-0	23	13	27	28
		2000	2	-8	-8	-7	-7	-6	-6
NE	001	1999	2	-24	-24	-16	-16	-8	-8
		2000	4	-19	-19	-14	-14	-10	-9
NH	001	1999	1	32	32	32	32	32	32
		2000	4	-11	-10	-5	-4	2	3
NJ	001	1999	12	-12	-3	0	1	7	19
		2000	17	-38	-2	-1	3	1	101
NM	001	1999	2	1	1	9	9	17	17
NM	002	1999	3	-13	-13	-10	-10	-8	-8
		2000	1	-9	-9	-9	-9	-9	-9
NM	006	2000	2	-17	-17	-7	-7	4	4
NM	007	2000	4	-17	-12	-5	-7	-1	0
NV	200	1999	2	-3	-3	-2	-2	-0	-0
		2000	2	-14	-14	-6	-6	2	2
NV	300	1999	3	-16	-16	-6	-8	-3	-3
		2000	3	-13	-13	-5	-6	-1	-1
NY	001	1999	6	-8	-7	9	34	47	156
		2000	30	-26	-10	-5	3	-2	204
OH	001	1999	8	-9	-6	-3	0	6	17
OH	002	2000	2	-2	-2	10	10	22	22
OH	004	2000	2	-7	-7	2	2	12	12

Bias by Reporting Organization

for all bias pairs > 6 ug/m3, based on 071101 extraction

State	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
OH	006	1999	5	-4	2	11	12	24	27
		2000	3	-5	-5	-4	-0	9	9
OH	007	2000	4	-7	-3	1	-0	2	4
OH	008	1999	5	-7	0	7	4	7	15
		2000	9	-11	-2	-0	-0	3	7
OH	009	1999	5	-5	5	6	8	10	26
		2000	8	-7	-6	-2	0	2	23
OH	010	1999	5	-37	-2	-1	-4	-0	19
		2000	1	1	1	1	1	1	1
OH	012	1999	3	-16	-16	-1	-3	8	8
		2000	3	-28	-28	-5	-11	1	1
OH	013	1999	3	-7	-7	-1	-0	8	8
		2000	4	-13	-12	-3	1	14	22
OH	015	1999	4	-1	0	5	8	15	22
		2000	3	-3	-3	-2	5	21	21
OH	016	1999	8	-4	-2	4	5	12	18
		2000	4	-13	-8	-1	-3	2	3
OK	101	1999	6	-21	-13	-13	-14	-11	-11
		2000	12	-20	-15	-13	-13	-11	-3
OK	106	2000	6	-7	-6	-3	-4	-2	-0
OR	001	1999	10	-13	-10	-6	-7	-5	-3
		2000	9	-28	-13	-11	-10	-5	0
PA	001	1999	11	-15	-7	-5	-4	3	13
		2000	14	-21	-6	-4	-5	-1	1
PA	002	1999	4	-14	-12	-6	-7	-2	-2

Bias by Reporting Organization

for all bias pairs > 6 ug/m3, based on 071101 extraction

State	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
PA	002	2000	10	-13	-3	-0	-2	1	4
PA	003	1999	4	-10	-9	-7	-1	7	18
		2000	5	-12	-4	-3	-1	1	11
PR	001	1999	5	-19	-13	-11	-12	-10	-7
		2000	4	-18	-18	-18	-15	-13	-8
RI	001	1999	6	-5	-0	12	10	18	26
		2000	5	-6	-4	-3	0	5	8
SC	001	1999	12	-10	-9	-5	1	0	64
		2000	15	-13	-6	-5	-5	-4	3
SD	001	1999	10	-13	-5	10	17	25	83
		2000	2	0	0	1	1	1	1
TN	001	1999	3	-3	-3	-2	6	23	23
TN	002	1999	7	-33	-18	-7	-8	-1	16
TN	003	2000	8	-7	-2	0	1	4	11
TN	004	1999	4	1	3	6	20	36	66
TN	005	2000	8	-8	-4	1	1	5	7
TX	001	1999	10	-23	-9	-5	-5	0	8
		2000	32	-45	-19	-10	-12	-3	6
TX	822	2000	3	-36	-36	-8	-14	2	2
UT	001	1999	5	1	2	7	6	9	13
		2000	10	-13	-11	1	-0	9	14
VA	001	1999	9	-47	-5	-3	-3	6	17
		2000	18	-22	-8	-4	-4	-1	9

Bias by Reporting Organization

for all bias pairs > 6 ug/m3, based on 071101 extraction

State	Rep Org	Year	Number of Bias Pairs	Min Bias	25th Ptile	Median Bias	Average Bias	75th Ptile	Max Bias
VI	001	1999	2	-4	-4	-0	-0	3	3
VT	001	1999	2	-3	-3	-0	-0	2	2
		2000	4	-7	-6	-5	-3	-0	3
WA	001	1999	11	-13	-7	-3	-4	-1	-0
		2000	17	-11	-7	-5	-3	-0	10
WI	001	1999	15	-38	-3	1	5	6	98
		2000	22	-10	-8	-4	2	1	104
WV	001	1999	9	-12	-2	5	4	6	28
		2000	10	-12	-7	-2	-3	3	6
WV	002	1999	2	-9	-9	11	11	31	31
		2000	7	-16	-12	-6	-8	-5	-4
WY	001	1999	2	10	10	14	14	17	17
		2000	1	6	6	6	6	6	6

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16. ABSTRACT

This report documents the quality assurance activities that were undertaken for the SLAMS $PM_{2.5}$ environmental data operations for the calendar year January 1, 2000 to December 31, 2000 (CY00), which was the second year of implementation of the $PM_{2.5}$ monitoring program. The QA Report evaluates the adherence to the quality assurance requirements described in *40 CFR 58 App. A* and evaluates the data quality indicators of precision, accuracy, bias, and completeness.

17. KEY WORDS AND DOCUMENT ANALYSIS

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