



# *AQS Development and Enhancement Plans*

AQS CONFERENCE

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# *AQS Development/ Enhancement Plans*

- Purpose
  - System Status
  - Development Plan
  - Data Improvements
  - Software Implementations
- 



## *Purpose*

- To present an overview of the AQS data system including status, development plan, data improvements, and software implementations.



# *System Status*

- Operational for 52 months
  - Average of 7.2 million values per month
- For April 2006
  - 1343 Files loaded with 7.4 million values
  - 697 Post jobs
- Agencies reporting data
  - State – 55
  - Local – 41
  - Tribe – 33 reporting, 24 others registered
  - Other -8



## *System Status*

- About 5,125 retrievals in April 2006
- Number of new software bugs low
- 585 Active registered users, 447 inactive
- Raw Data 1993 to present on AQSPROD
  - 852 million rows



# *System Status*

- First system to migrate to new hardware
  - Replaced database server May 2005
    - » Improved Performance
    - » One Password
  - Replaced application server March 3, 2006
    - » New WEB address
    - » New version JInitiator - User issues



# *Development Plan*

- Maintenance
  - Software bug resolution
- Documentation Updates
- Technology Assessment
- Implement revised Facility Data Standard
- Monitoring regulation/NAAQS changes



# *Development Plan*

- Lab blanks reporting
- Implement the New CBSA Definitions
- 2006 Conference Issues
- Modify Processing for alt MDL
- Exceptional Event Changes
- Monitoring Season for any parameter





# *Data Improvements*

- IMPROVE Data – Years 1988 to 1999
- Archive planned for 1993 to 1995
- Update WEB files by year for criteria parameters and speciation
- PM2.5 parameter changes planned



# *Data Improvements*

- AQS Raw Data Mart implemented
- Katrina data processing
- Recalculate summaries for MDL change
- Coordinate updates



# *Software Implementations*

- Major Software Implementations
  - Precision/ Accuracy Summary Extraction
  - Implement Disaster Recovery Plan
  - 2004 Conference Recommendations
    - » Automatic Precision Data Generation
    - » Enter Single Date to Terminate a Monitor
  - New XML schema for ESAR data standard



# *Software Implementations*

- Major Software Implementations
  - WEB Services for retrievals from Data Mart
  - Katrina Data Assessment Report
  - AQS P & A Tribal Codes
- Minor Software Enhancements
  - Modify Critical Review Reports for Tribal Codes – uses standard report interface
  - Quick Look format change



# Software Implementations Quick Look Before Change

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
AIR QUALITY SYSTEM  
QUICK LOOK REPORT (AMP450)

Mar. 27, 2006

Sulfur dioxide (42401)

New York

Parts per million (007)

SITE ID	P O C	REP ORG	CITY	COUNTY	ADDRESS	YEAR	METH	# OBS	1ST	2ND	#OBS >0.14	1ST	2ND	#OBS >0.5	1ST	2ND	ARITH MEAN	CERT	EDT
									MAX 24-HR	MAX 24-HR		MAX 3-HR	MAX 3-HR		MAX 1-HR	MAX 1-HR			
36-005-0083	1	0768	New York	Bronx	200TH STREE	2003	009	8627	.051	.048	0	.079	.079	0	.097	.085	.0087	Y	0
36-005-0083	1	0768	New York	Bronx	200TH STREE	2004	009	8705	.036	.033	0	.070	.057	0	.073	.072	.0087		0
36-005-0083	1	0768	New York	Bronx	200TH STREE	2005	009	8418	.042	.039	0	.061	.054	0	.070	.064	.0093		0
36-005-0110	1	0768	New York	Bronx	E 156TH ST	2003	009	8458	.052	.051	0	.089	.078	0	.113	.094	.0106	Y	0
36-005-0110	1	0768	New York	Bronx	E 156TH ST	2004	009	8608	.036	.035	0	.072	.061	0	.102	.079	.0103		0
36-005-0110	1	0768	New York	Bronx	E 156TH ST	2005	009	7817	.047	.042	0	.079	.067	0	.102	.094	.0109		0
36-061-0056	1	0768	New York	New York	PS 59, 288	2003	009	5176	.047	.047	0	.071	.071	0	.093	.081	.0139*	Y	0
36-061-0056	1	0768	New York	New York	PS 59, 288	2004	009	6923	.037	.034	0	.073	.054	0	.116	.073	.0102		0
36-061-0056	1	0768	New York	New York	PS 59, 288	2005	009	8565	.042	.038	0	.058	.056	0	.081	.073	.0112		0
36-081-0124	1	0768	New York	Queens	14439 GRAVE	2003	009	8443	.039	.032	0	.051	.049	0	.135	.056	.0070	Y	0
36-081-0124	1	0768	New York	Queens	14439 GRAVE	2004	009	8310	.029	.028	0	.059	.048	0	.098	.068	.0056		0
36-081-0124	1	0768	New York	Queens	14439 GRAVE	2005	009	8490	.030	.025	0	.048	.047	0	.085	.057	.0065		0

QUICK LOOK REPORT (AMP450)

May. 25, 2006

Sulfur dioxide (42401)

New York

Parts per million (007)

	P	O	REP				#	1ST	2ND		1ST	2ND		1ST	2ND		
SITE ID	C	ORG	CITY	COUNTY	ADDRESS	YEAR	METH OBS	MAX	MAX	#OBS	MAX	MAX	#OBS	MAX	MAX	ARITH	
								24-HR	24-HR	>0.14	3-HR	3-HR	>0.5	1-HR	1-HR	MEAN	CERT EDT
36-001-0012	1	0768	Albany	Albany	LOUDONVILLE RESERVOIR	2004	009 8642	.031	.017	0	.057	.050	0	.072	.070	.0044	0
36-001-0012	1	0768	Albany	Albany	LOUDONVILLE RESERVOIR	2005	009 8614	.023	.021	0	.027	.026	0	.028	.028	.0052	0
36-005-0083	1	0768	New York	Bronx	200TH STREET AND SOUTHERN BLVD	2004	009 8705	.036	.033	0	.070	.057	0	.073	.072	.0087	0
36-005-0083	1	0768	New York	Bronx	200TH STREET AND SOUTHERN BLVD	2005	009 8418	.042	.039	0	.061	.054	0	.070	.064	.0093	0
36-005-0110	1	0768	New York	Bronx	E 156TH ST BET DAWSON AND KELLY	2004	009 8608	.036	.035	0	.072	.061	0	.102	.079	.0103	0
36-005-0110	1	0768	New York	Bronx	E 156TH ST BET DAWSON AND KELLY	2005	009 7817	.047	.042	0	.079	.067	0	.102	.094	.0109	0