



# The PM<sub>2.5</sub> Performance Evaluation Program

U. S. Environmental Protection  
Agency

Office Of Air Quality Planning and Standards

# Agenda

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- Introduction and Field Activities - M. Papp
- Region 4 and 10 lab Activities - G. Noah, K. Marasigan
- PED Data Management - T. Hanley
- Data Quality Assessment - M. Riggs, S. Eberly

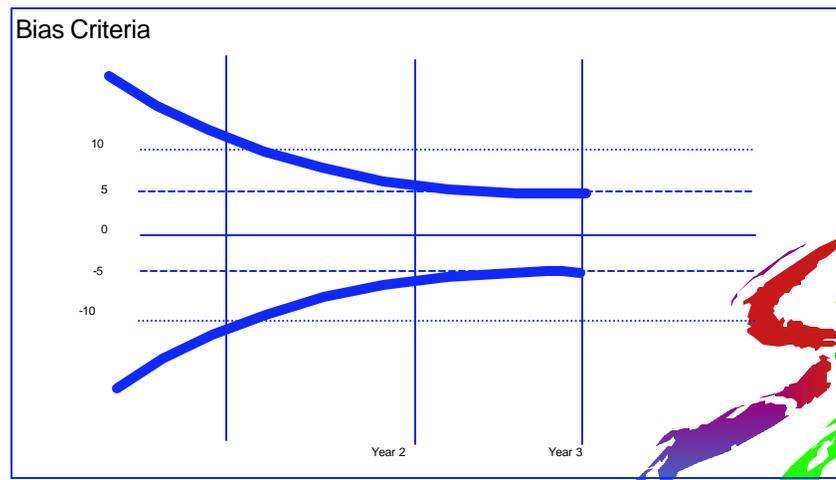
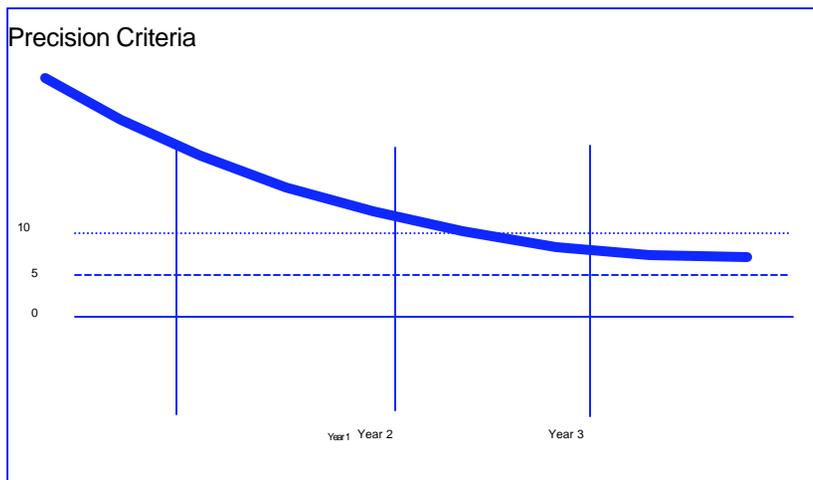


# Data Quality Objective

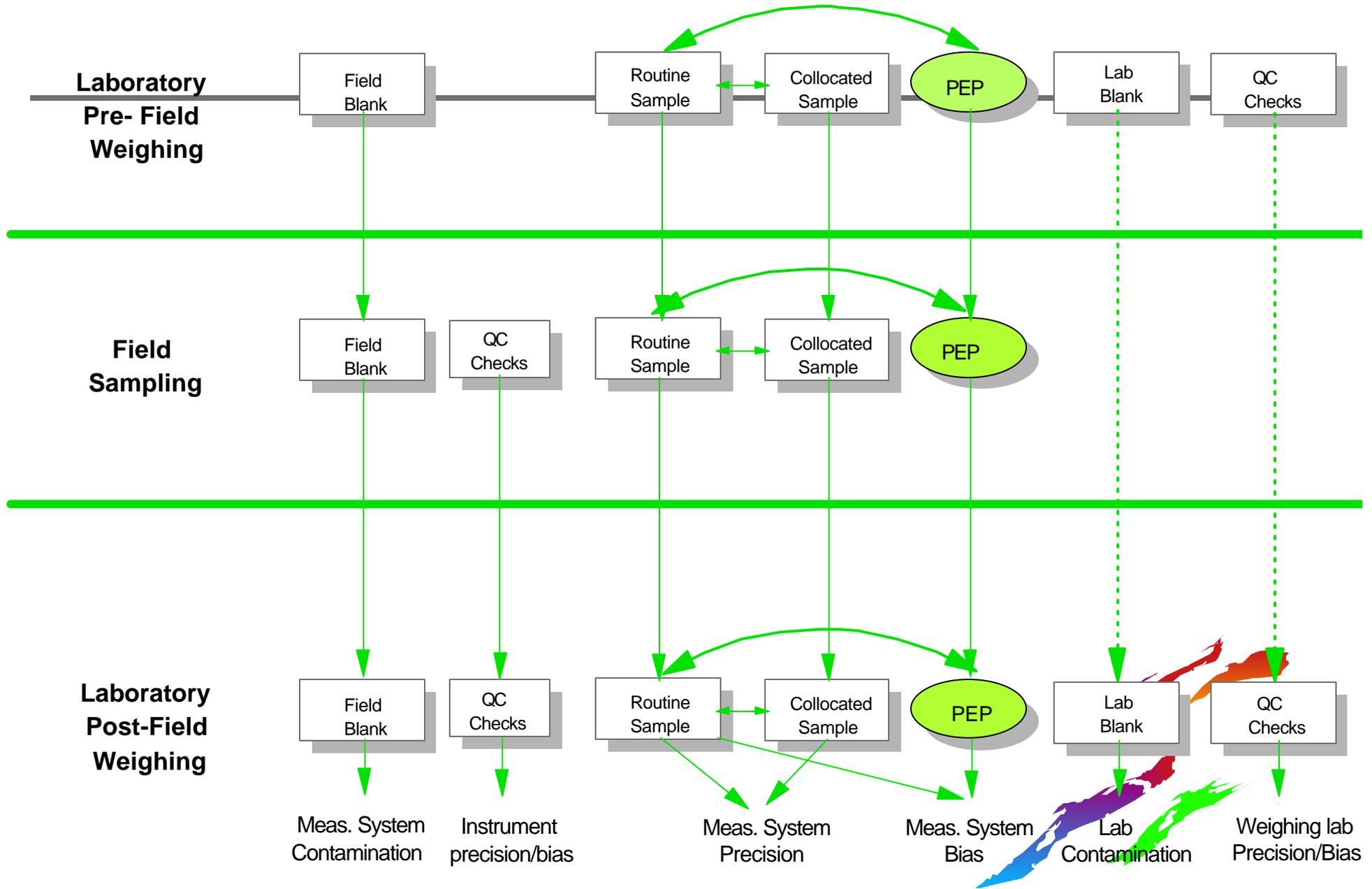
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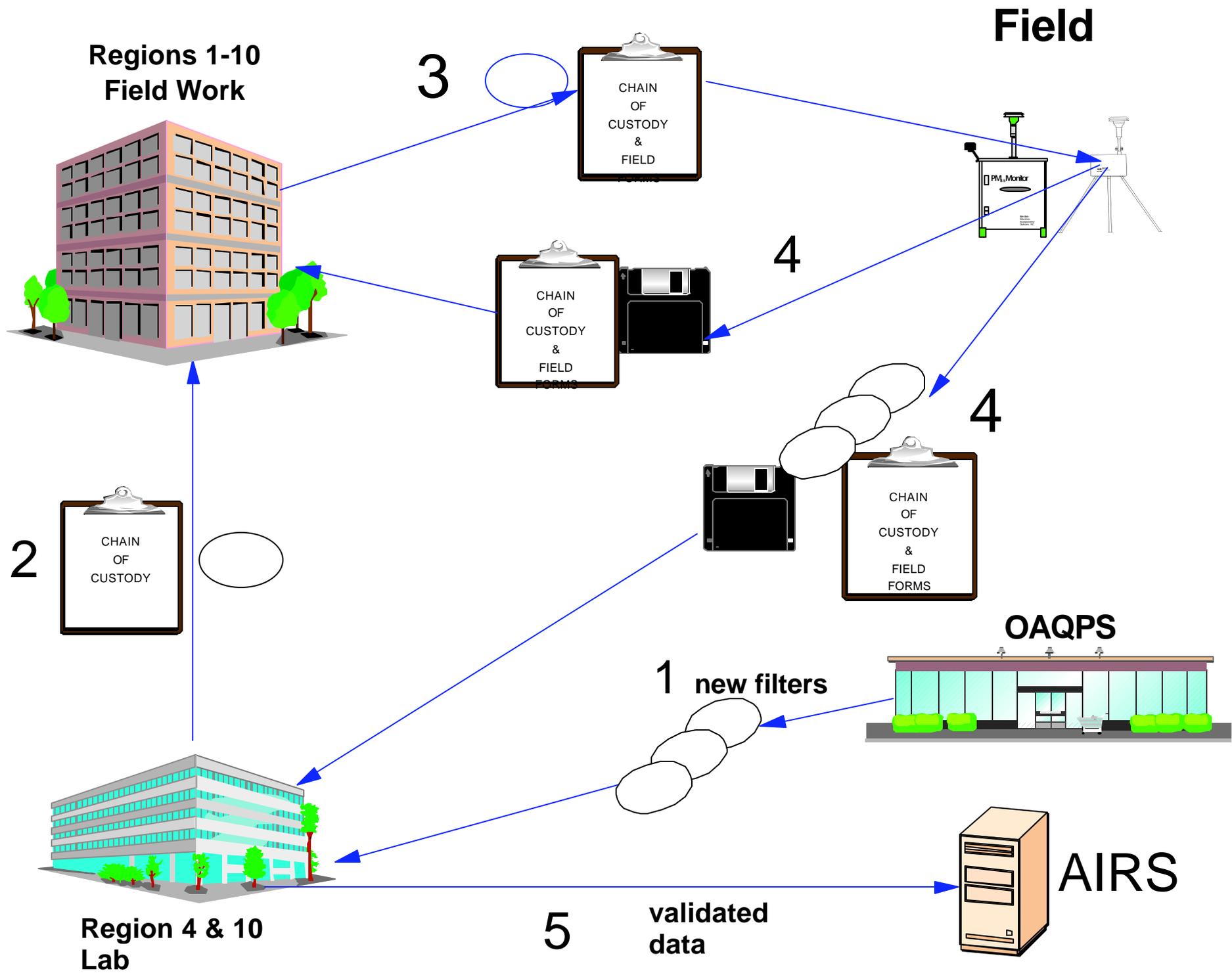
Attainment /nonattainment decision can be made with 95% confidence if :

- ✓ precision can be controlled to **10%** coefficient of variation, and
- ✓ bias can be controlled to  **$\pm 10\%$**



# 1112.3 Quality Control Sampling Scheme





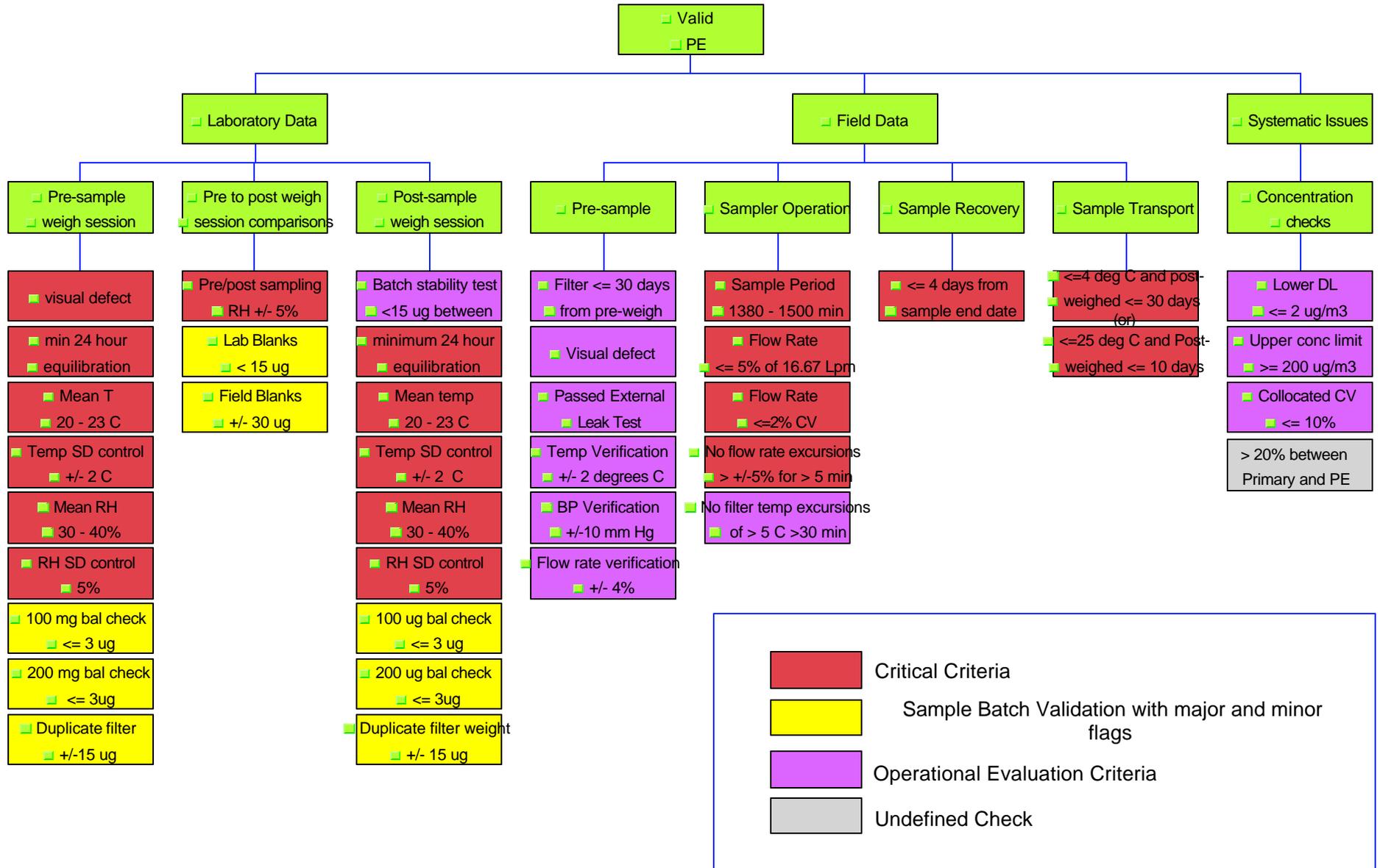
# Program Highlights

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- MOU with Office of Emergency and Remedial Response, Contract Management Center
- Training/Certification
- Added .5FTE in Region 9 and .25 FTE in each lab for FY00
- Conference calls
- Verification/Validation activities
  - Field sampler access to field data
  - FDV Forms for the field
  - Automated use of validation template.
- Revision of precision implementation



# PEP Validation Matrix



# Field Highlights

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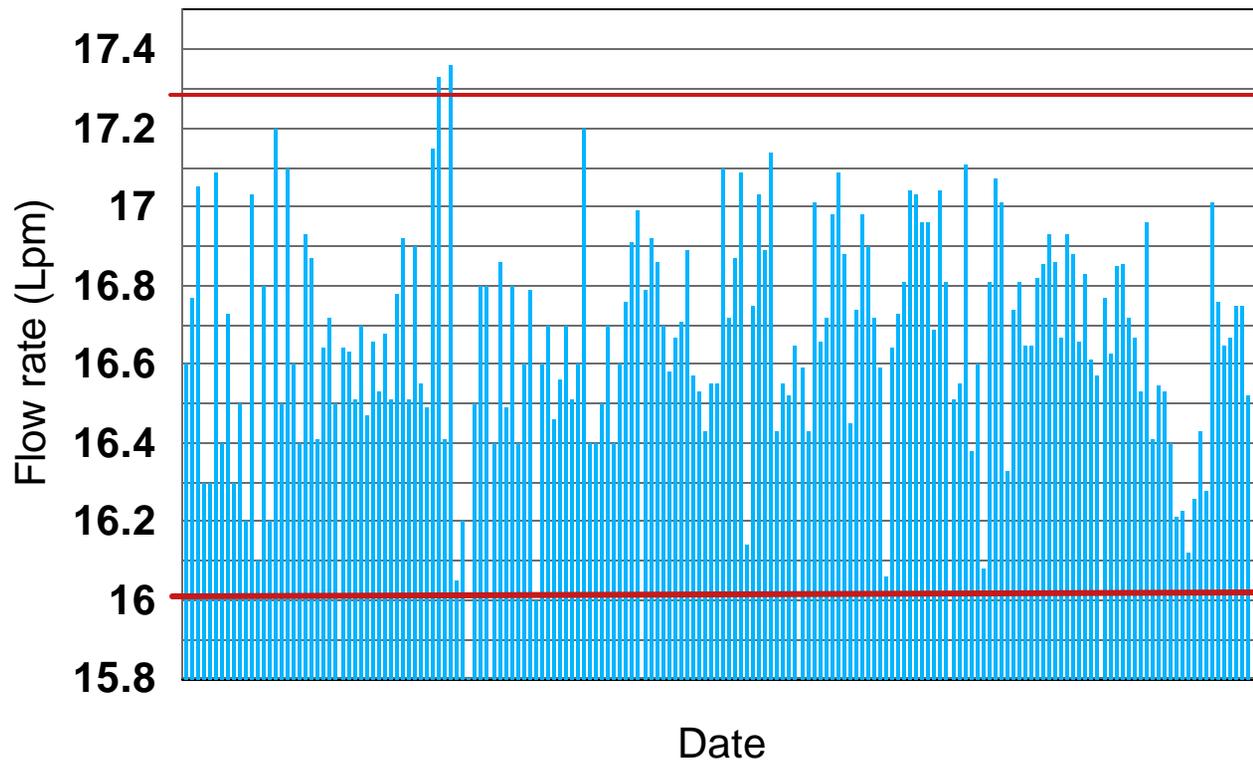
- Minor SOP changes
- Technical systems audits
- Recertification of standards
- State cooperation
- Data Quality
  - Sampler Verifications
  - Data completeness



# Flow Rate Data

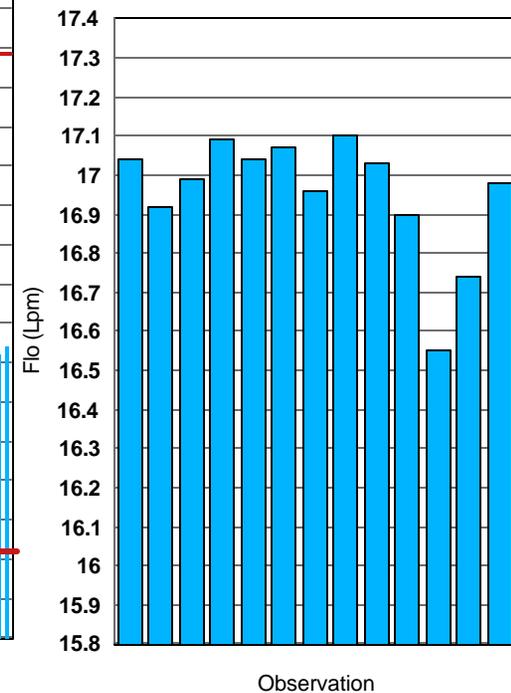
(Acceptance Criteria 4%= 17.34 - 16.00 Lpm)

## Eastern Flow Rate Verification Data



Avg Flow Rate = 16.66 Lpm

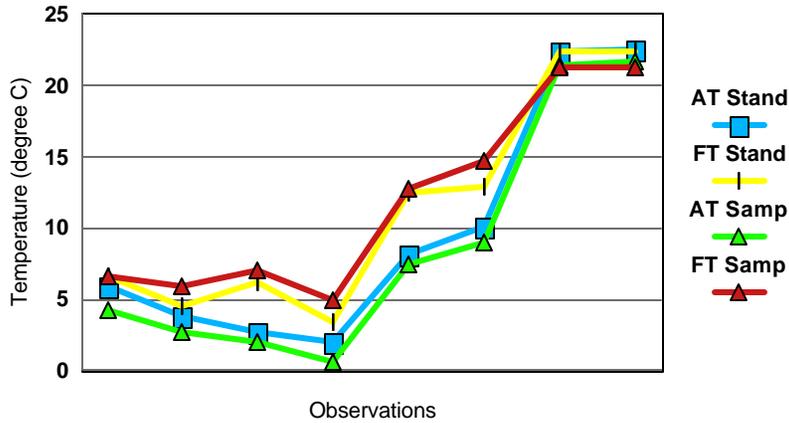
## Flow Rate -Monitor 182



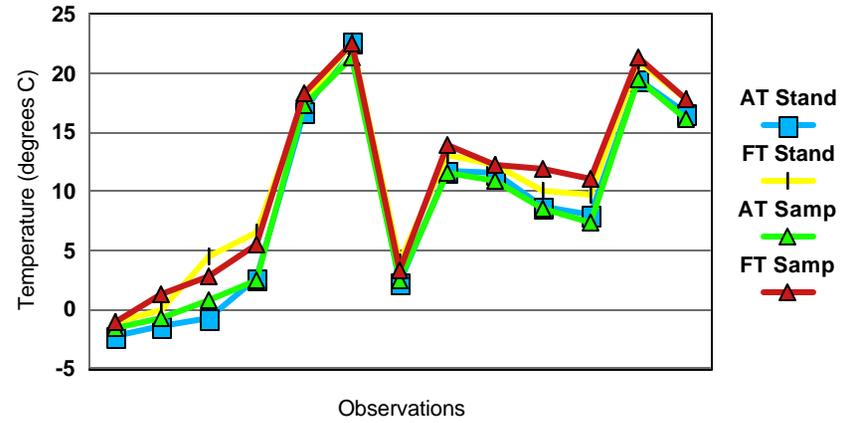
Avg Flow Rate = 16.95 Lpm

# Temperature Checks ( Acceptance + 2°C )

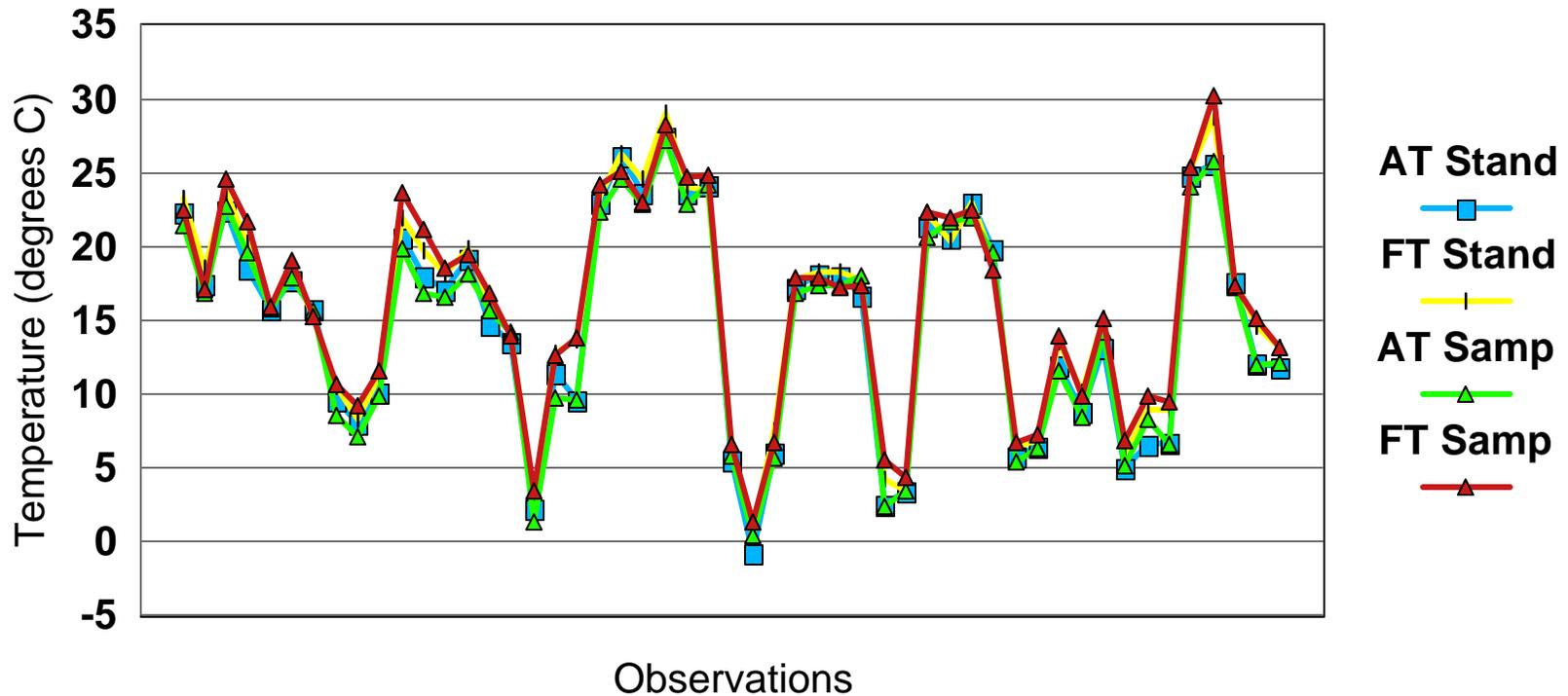
## Region 2 Temperature Checks



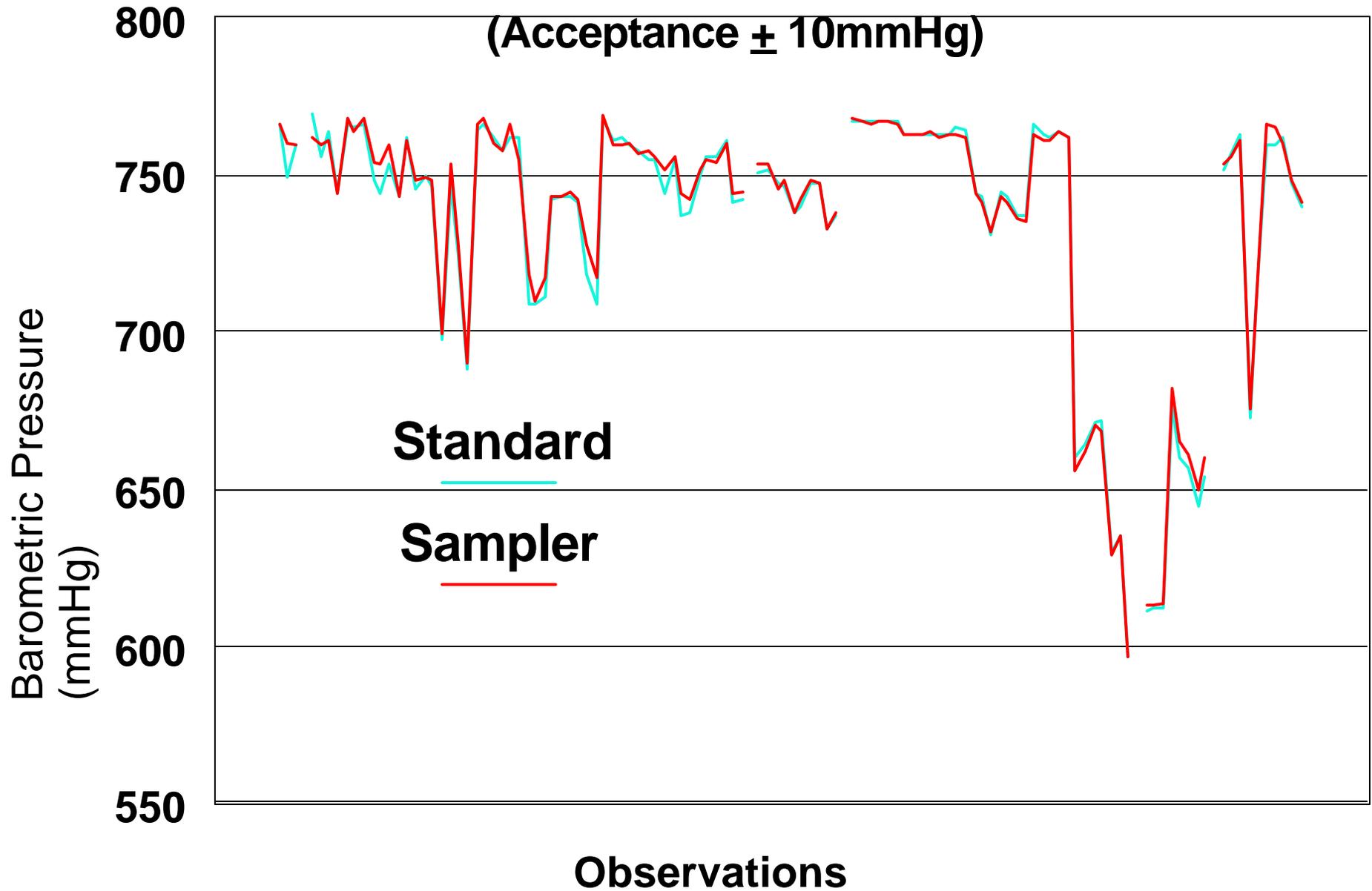
## Region 3 Temperature Checks



# Region 4 Temperature Checks



# Barometric Pressure Checks



# PEP Completeness

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Number of Visits	1 Quarter Visited	2 Quarters Visited	3 Quarters Visited	4 Quarters Visited	Total
1,2	47	27	0	0	74
3	0	7	66	0	73
4	0	1	29	112	142
Total	47	35	<b>95</b>	<b>112</b>	289

207 sites with  $\geq 3$  quarters visited meets site visit completeness requirement!

~726 sites available for sampling on 01/99

207/726 = 28% meets the 25% CFR completeness requirements!



# Summary

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- PEP Field activities appears to be successful
- Appreciate State cooperation on sites, particularly sites with challenging access.
- QC and Completeness good for first year
- Need to establish more quick/efficient data exchange prior to AIRS uploads.

