PM10 Technical Enhancement Program (PTEP)

Monitoring | Emissions Inventory | Modeling

Enhanced Particulate Monitoring Program

Objective

Develop a Comprehensive Ambient Profile of Fine Particulate Concentration Throughout the South Coast Air Basin over a One-Year Period

Enhanced Particulate Monitoring Program

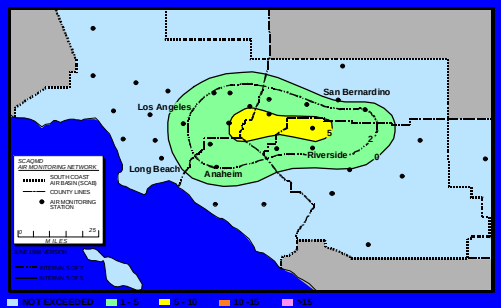
Schedule

Jan - Mar 1995	One 24-Hr Sample/ 6 days
Apr - Jun 1995	One 24-Hr Sample/ 3 days*
July - Dec 1995	Everyday Sampling*

*San Nicolas: 1 Sample every 6 days; everyday sampling may extend to March 1996

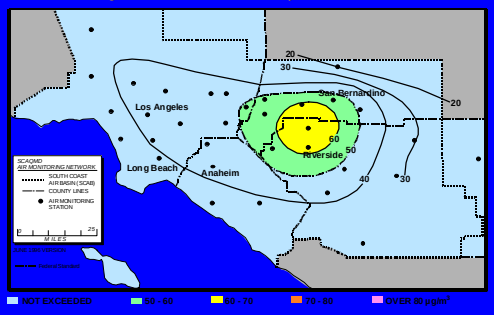
PM10 - 1995

Percent of Days Exceeding Federal Standard

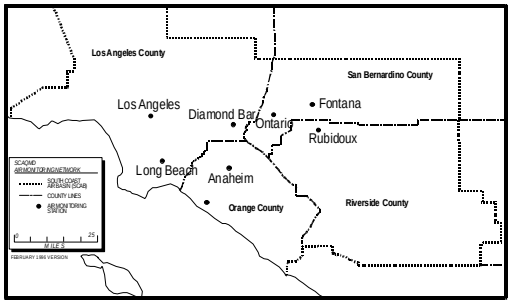


PM10 - 1995

Annual Average Concentration Compared to Federal Standard



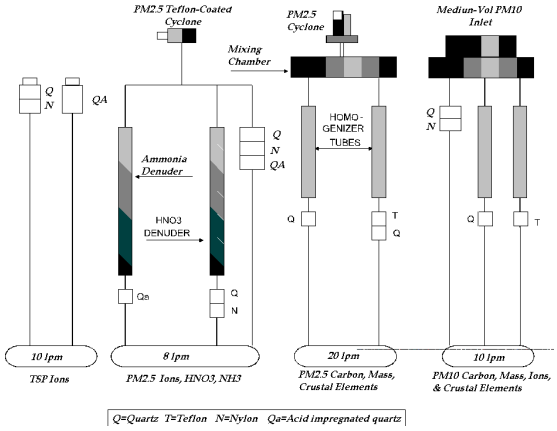
Enhanced Fine Particulate Monitoring Network

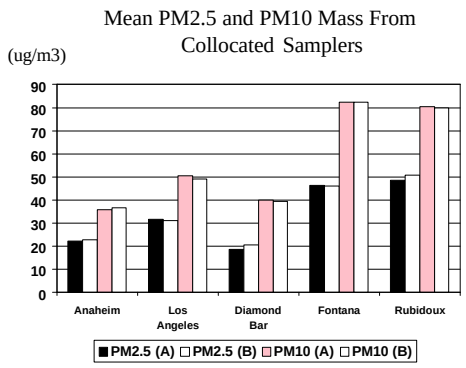


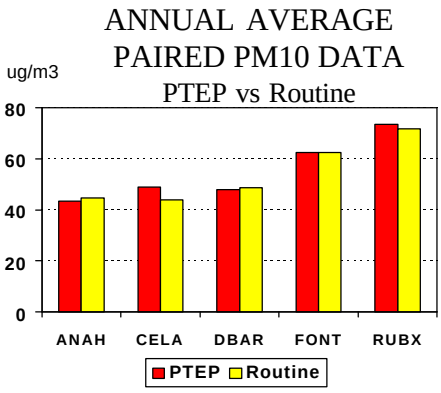
Enhanced Particulate Monitoring Program

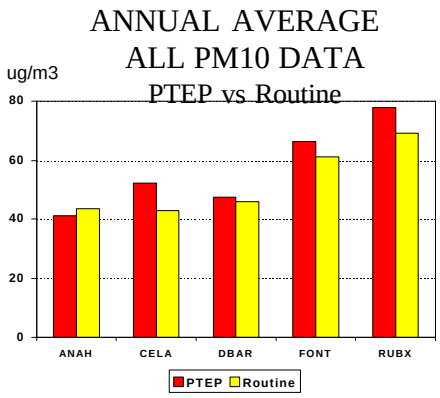
Fine Particulate Sample Profiles

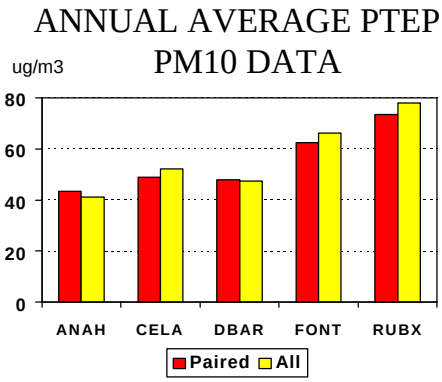
- TSP, PM_{10}, $PM_{2.5}$
- Nitric Acid & Ammonia Gas
- Total Ammonium, NO_3, SO_4, Cl, Na, K
- PM_{10} & $PM_{2.5}$ Ions (NO_3, SO_4, Cl, Na, K)
- PM_{10} & $PM_{2.5}$ Carbon (Organic and Elemental)
- PM_{10} & $PM_{2.5}$ Elemental Speciation

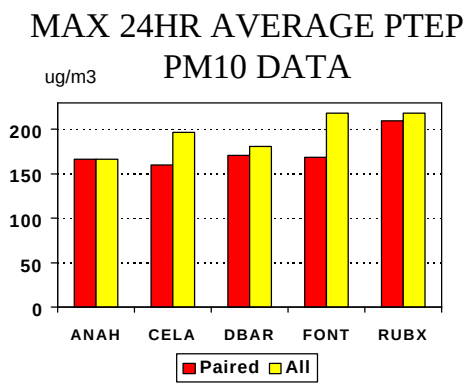


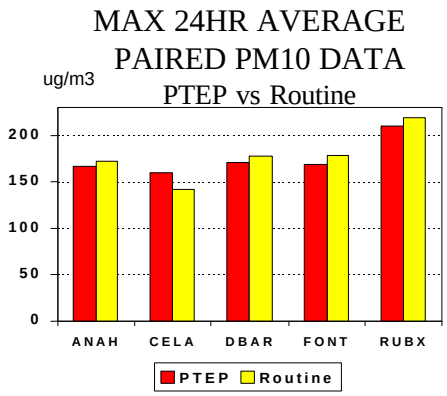


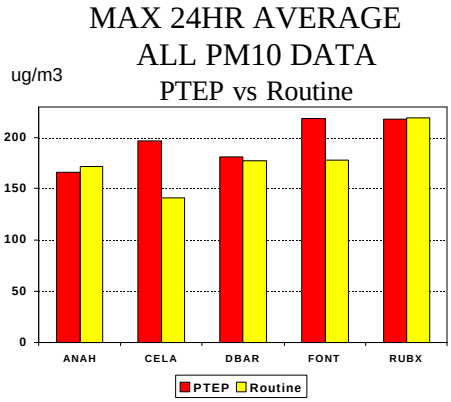


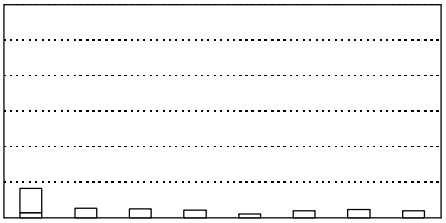




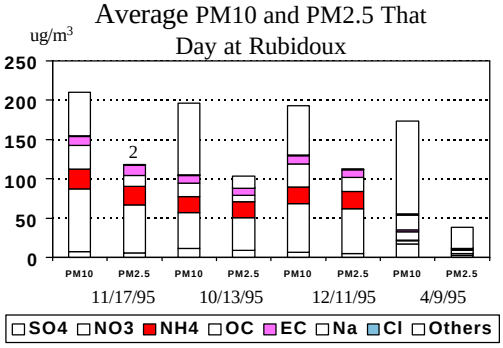

MAX 24HR AVERAGE PTEP PM10 DATA
ug/m3
200
150
100
50
0
ANAH
CELA
DBAR
FONT
RUBX
Paired
All


MAX 24HR AVERAGE PAIRED PM10 DATA
PTEP vs Routine
ug/m3
200
150
100
50
0
ANAH
CELA
DBAR
FONT
RUBX
PTEP
Routine

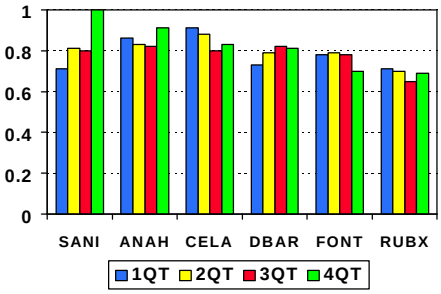

MAX 24HR AVERAGE ALL PM10 DATA
PTEP vs Routine
ug/m3
200
150
100
50
0
ANAH
CELA
DBAR
FONT
RUBX
PTEP
Routine



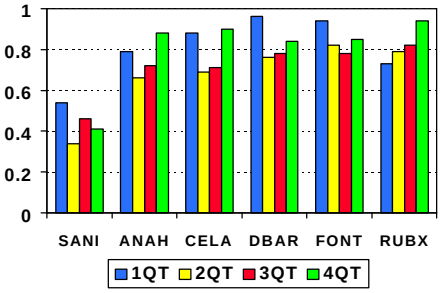
Highest Three 24-Hour Average PM10 and PM2.5 That Day at Rubidoux



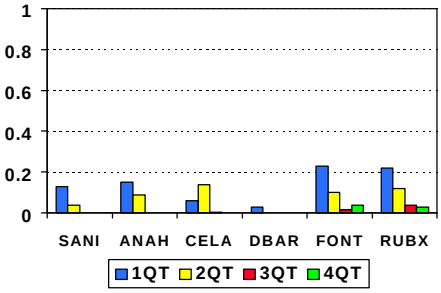
PM2.5 To PM10 Ratio Carbon



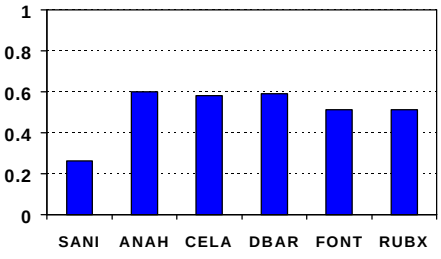
PM2.5 To PM10 Ratio Ions



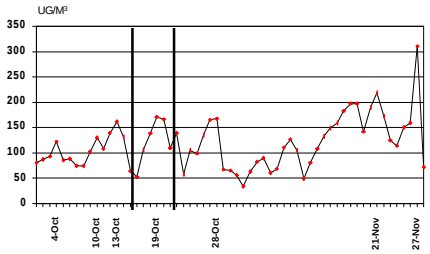
PM2.5 To PM10 Ratio Other



PM2.5 To PM10 Ratio Annual Average

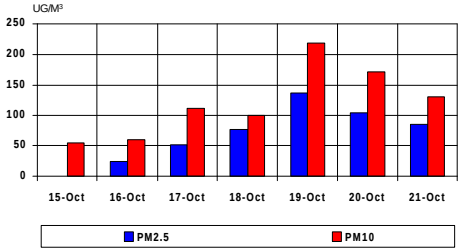


DAILY VARIATION OF BASIN MAX PM10*
OCT 1 - NOV 28, 1995

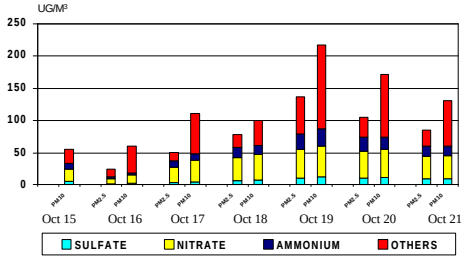


* FROM CONTINUOUS PM10 MONITOR

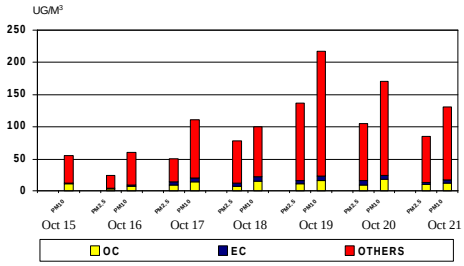
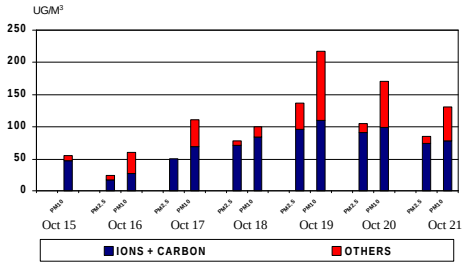
EPISODIC PERIOD AT RUBIDOUX
MASS



EPISODIC PERIOD AT RUBIDOUX
IONS



EPISODIC PERIOD AT RUBIDOUX
CARBON



EPISODIC PERIOD AT RUBIDOUX
OTHER (FUGITIVE DUST)