



BAY AREA MODELING

Status of District's Modeling Work

Modeling Advisory Committee Meeting March 22, 2005

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Presentation Overview

- Update on District's modeling and data analysis activities
- Review modeled/observed peak ozone comparisons
- Review modeling emissions
- Model sensitivity simulations (ENVIRON)
- Emissions inventory status (AG)
- Next steps



Status Update

- Review and evaluate CMAQ meteorological input for PM modeling
- On-going review of modeling emissions
- On-going participation in Northern California Agencies Transport/SIP Analysis Subgroup
- On-going participation in CCOS activities



Model Sensitivities - Caveats

- Emissions inventory being updated
- Questions regarding VOC area source emissions
- Model performance needs improvement, especially in the San Joaquin Valley
- Focus should be on model sensitivities
- Too early for conclusions about attainment or transport contributions



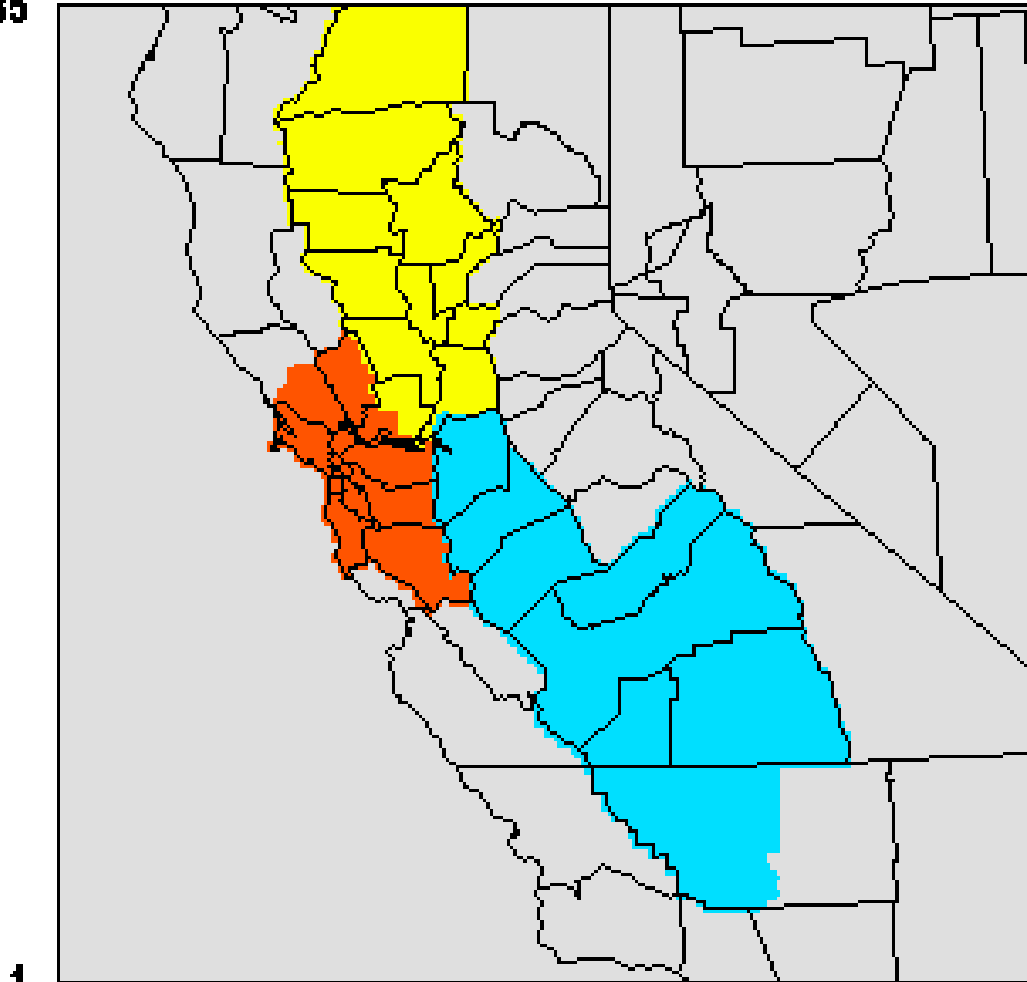
Observed and Modeled Maximum Ozone Values (ppb)

	1-Hour				8-Hour			
	SFB	SAC	Central SJV	Southern SJV	SFB	SAC	Central SJV	Southern SJV
OBSERVED								
7/11/1999	146	137	142	119	116	123	123	97
7/12/1999	156	140	124	70	122	106	109	77
7/31/2000	126	103	118	115	89	89	103	95
8/1/2000	94	133	118	116	76	108	109	104
8/2/2000	98	115	119	151	84	107	106	112
MODELED								
7/11/1999	151	128	111	92	129	108	98	78
7/12/1999	156	132	107	97	135	118	92	80
7/31/2000	126	129	123	111	104	100	101	102
8/1/2000	115	138	115	100	98	106	106	92
8/2/2000	103	109	117	101	84	92	103	92



Sub-regions for Emission Masking

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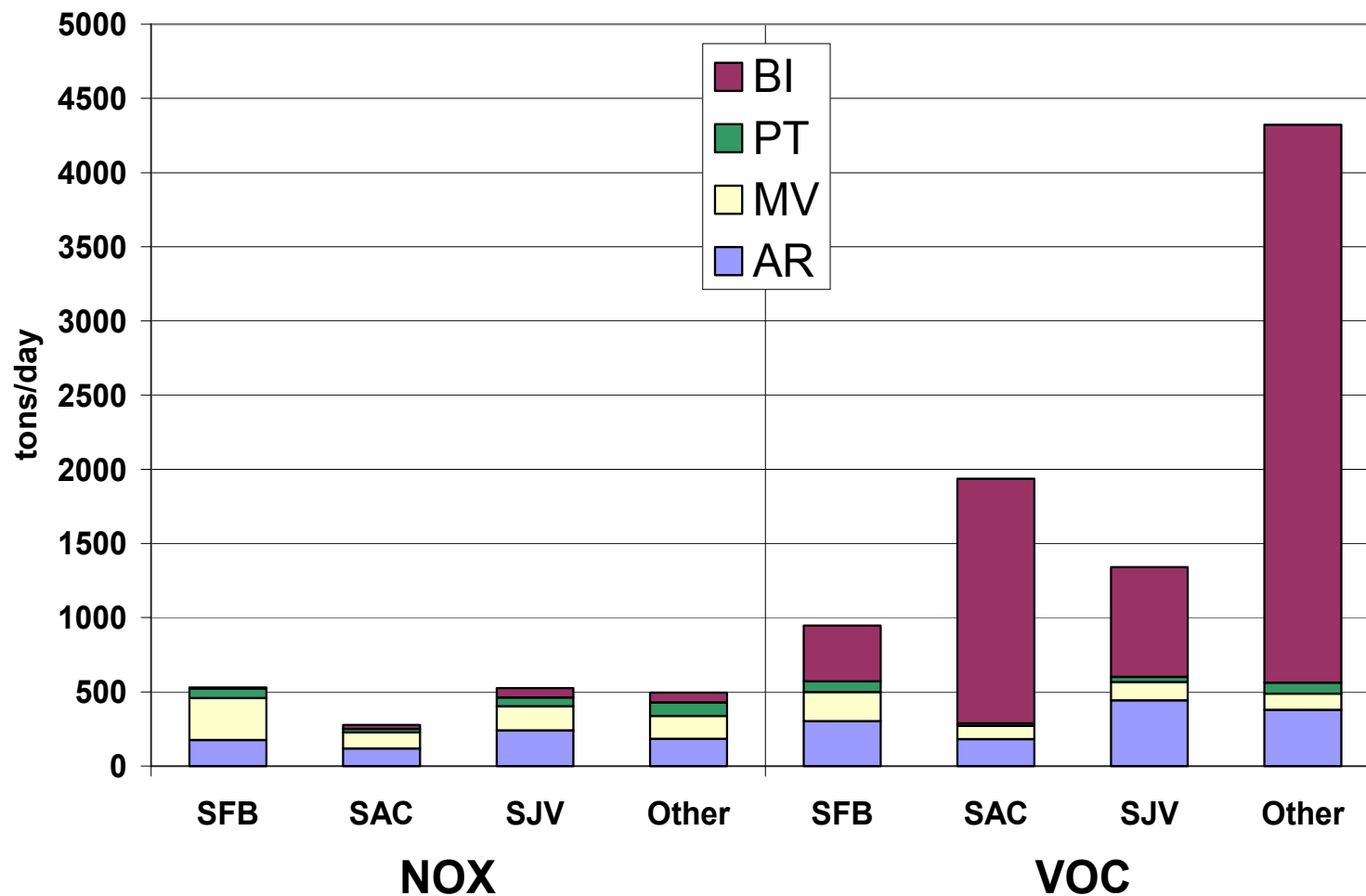
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185

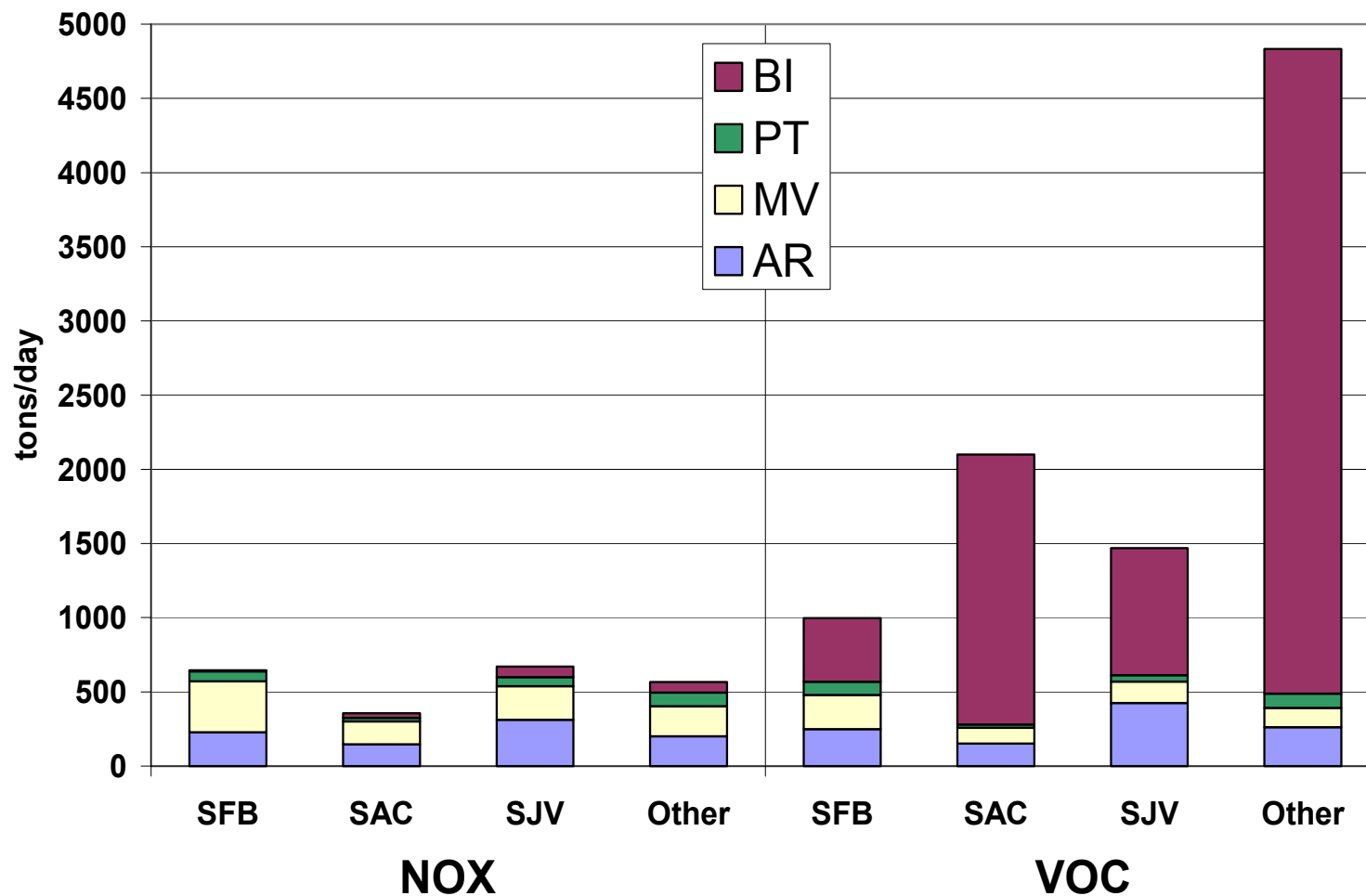


Modeling emissions on 7/11/1999 (Sunday)



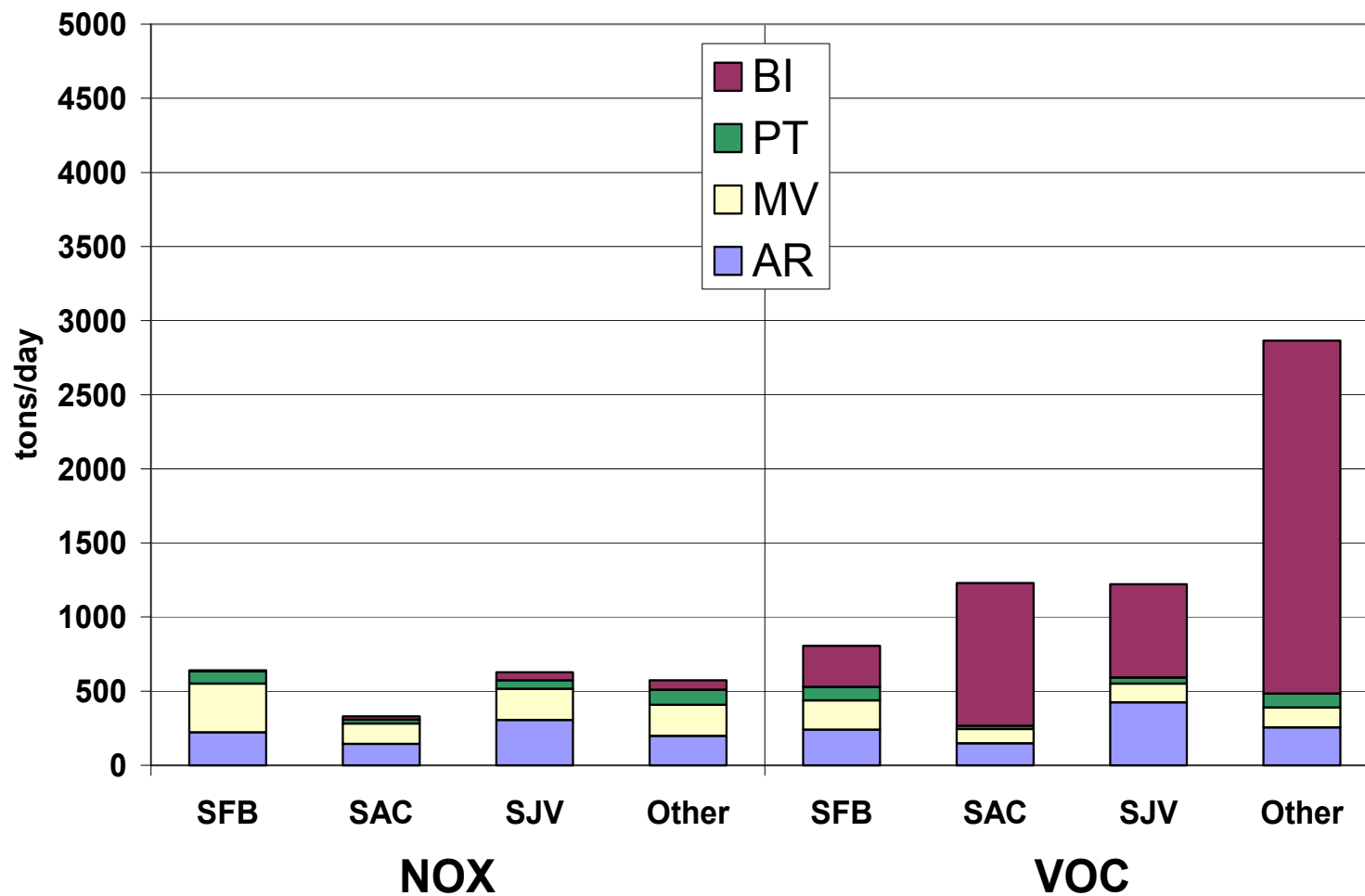


Modeling emissions on 7/12/1999 (Monday)





Modeling emissions on 7/31/2000 (Monday)





Next Steps

- Evaluate updated modeling emissions
- Rerun models with updated emissions
 - Participate in conducting “Placeholder Modeling”
 - Identify areas that need improvements
- Evaluate model performance
- Conduct sensitivity simulations
- Conduct simulations with future-year inventories