

Gaseous Oxidized Mercury (GOM) Dry Deposition Measurements in the Four Corners Area

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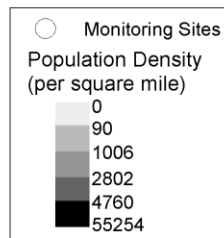
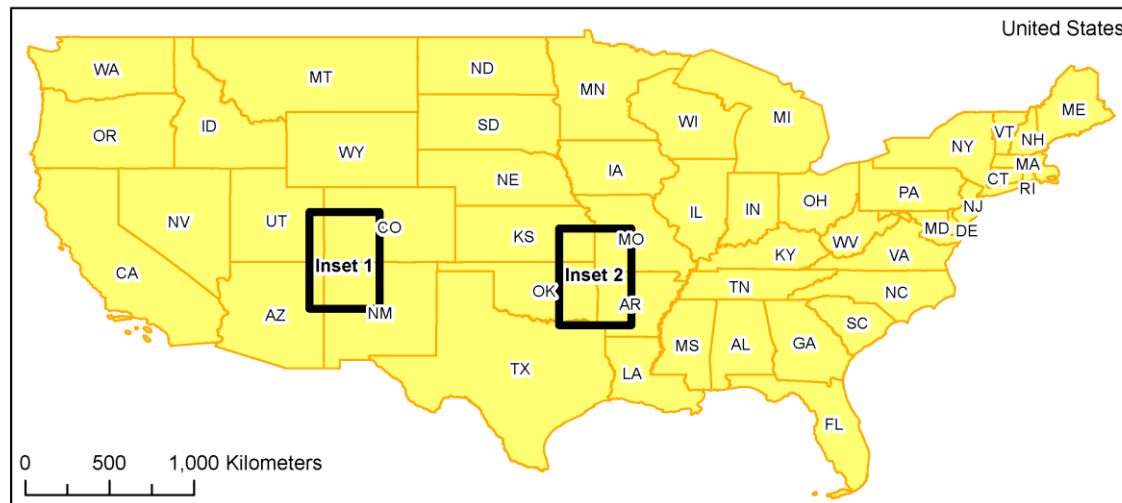
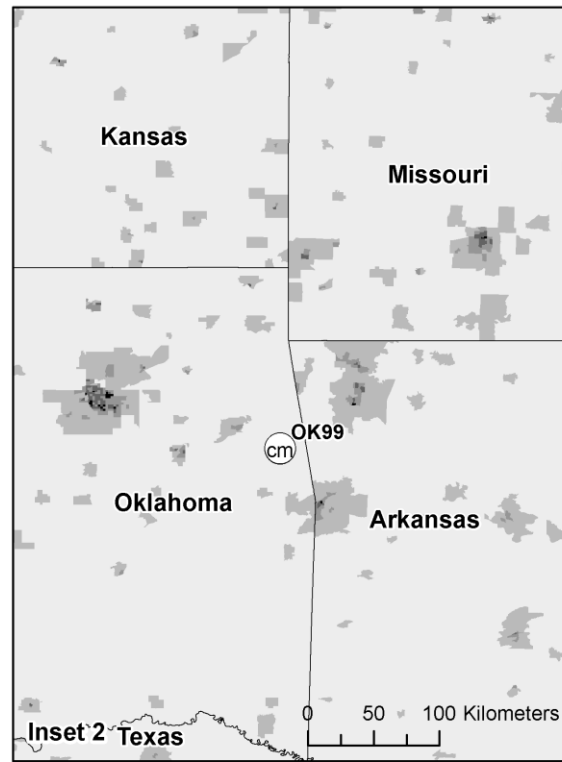
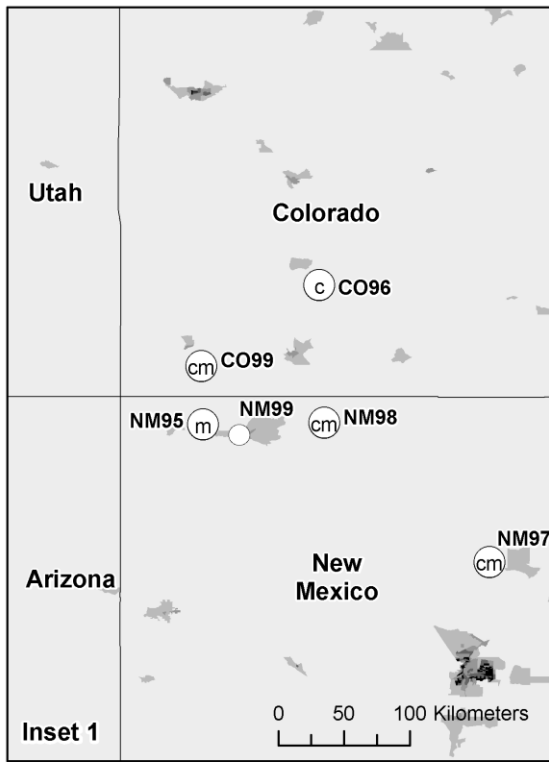
Presented at the Four Corners Air Quality Group Meeting
October 23, 2019

Purpose of Study

- To compare follow-up GOM dry deposition measurements in the Four Corners Area from August, 2017-August, 2019 to previous baseline measurements taken from August, 2009-August, 2011
- Significant actions over past 10 years:
 - December 31, 2013 – permanent shutdown of 3 units at Four Corners Power Plant
 - April, 2016 – national compliance date for all major coal fired power plants in U.S. to have installed at least 90% mercury control required by national Mercury and Air Toxics Standards (MATS) rule
- Measurement data from this study will be useful in assessing effectiveness of these actions

Study Team

- EPA Regions 6 and 8, EPA ORD
- NMED
- USFS
- NPS
- EPA Contractor – Alion; Subcontractor – Eurofins Frontier Global Sciences

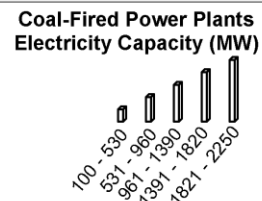
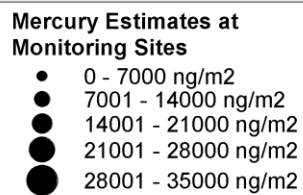
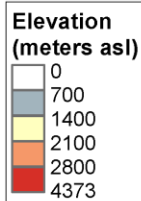
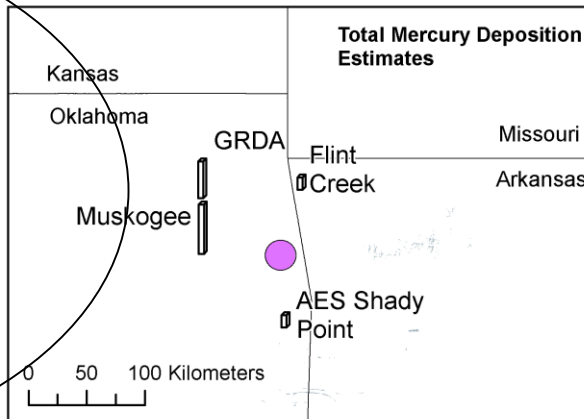
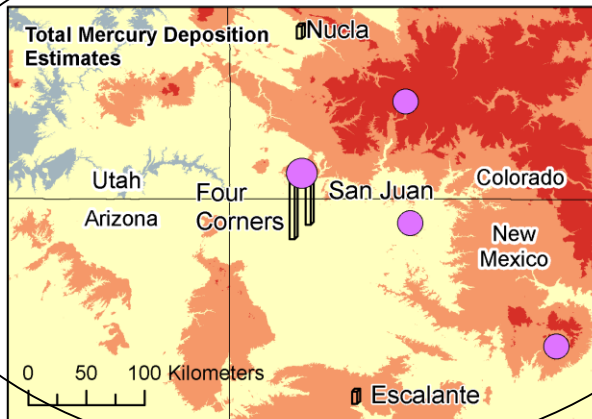
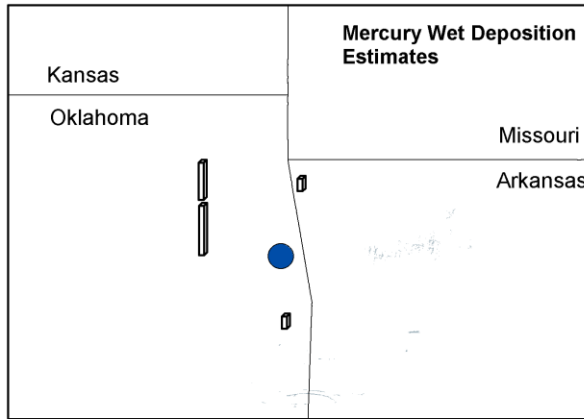
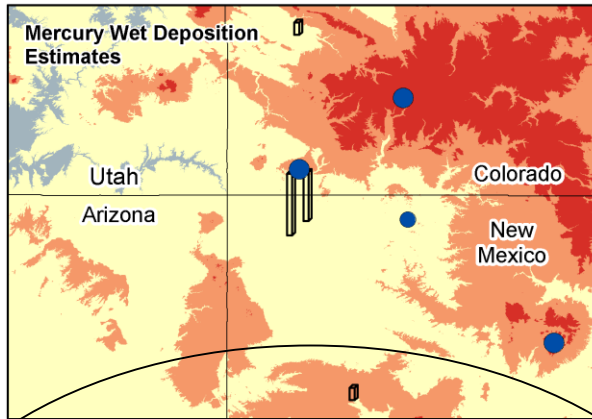
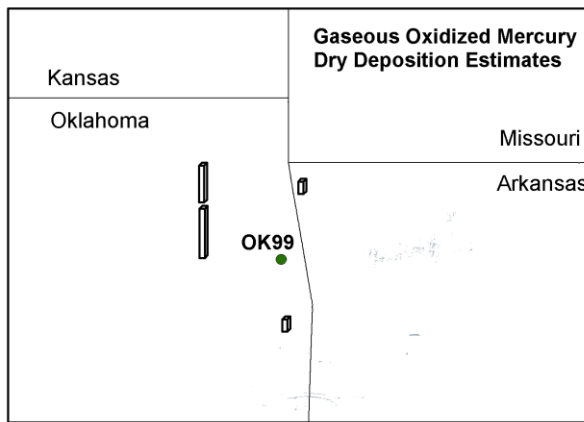
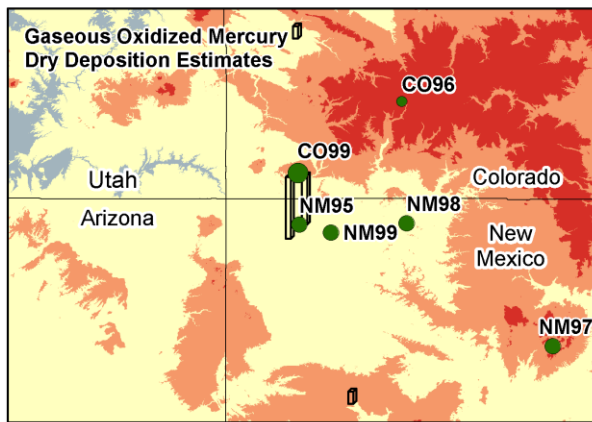


c - Collocated dry and wet mercury measurements
m - meteorological measurements



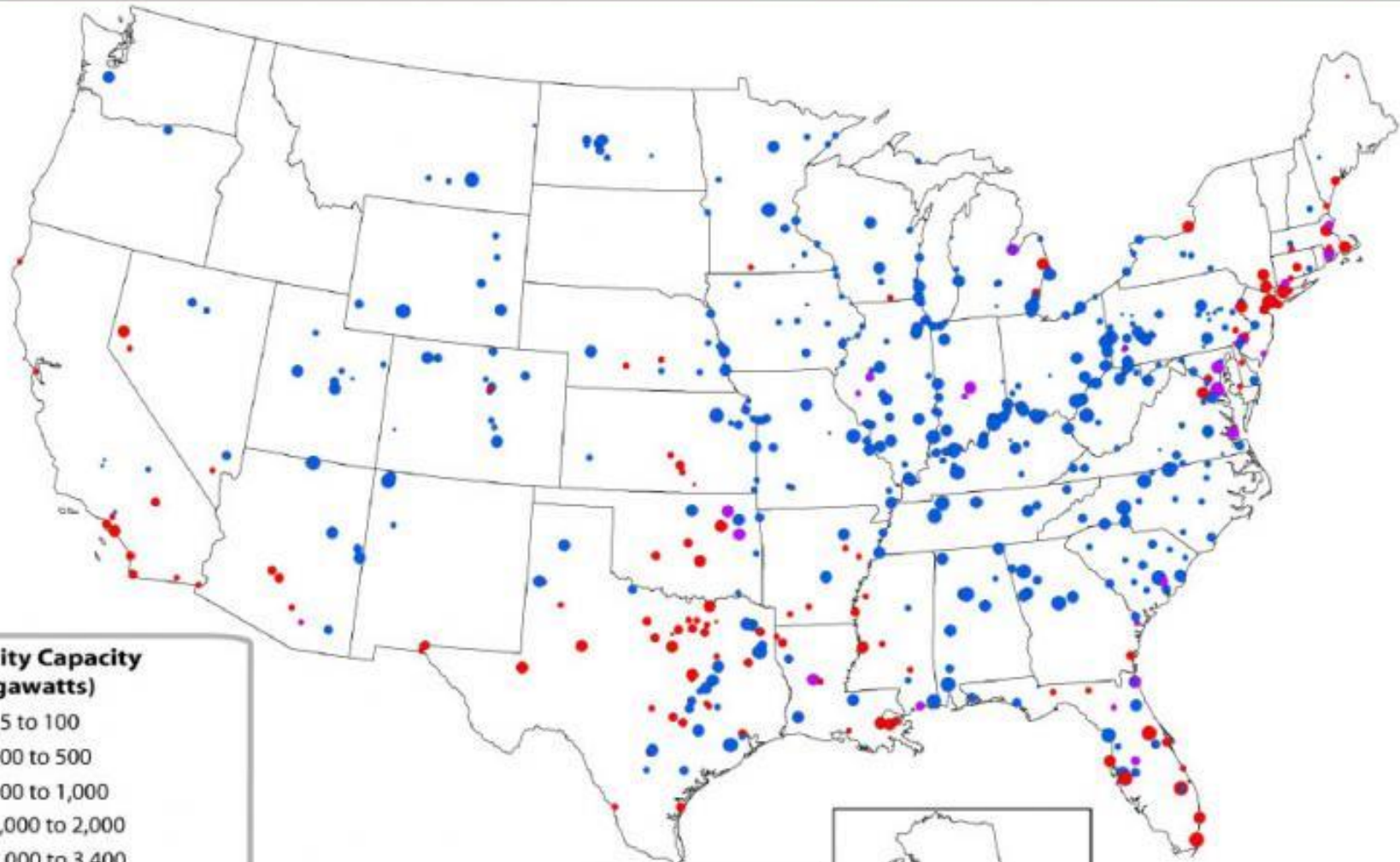
Source: AQS, US EPA,
2010 US Census Bureau

EPA Region 6
GIS M2P2 Division
February 13, 2013
20130213DEG



The Toxics Rule Facilities

National Electric Energy Data System (NEEDS 4.10 MATS) (EPA, December 2011)



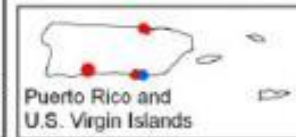
Facility Capacity (megawatts)

- 25 to 100
- 100 to 500
- 500 to 1,000
- 1,000 to 2,000
- 2,000 to 3,400

Facility has coal units

Facility has oil units

Facility has coal and oil units



NM95 Substation



NM99 Farmington Airport

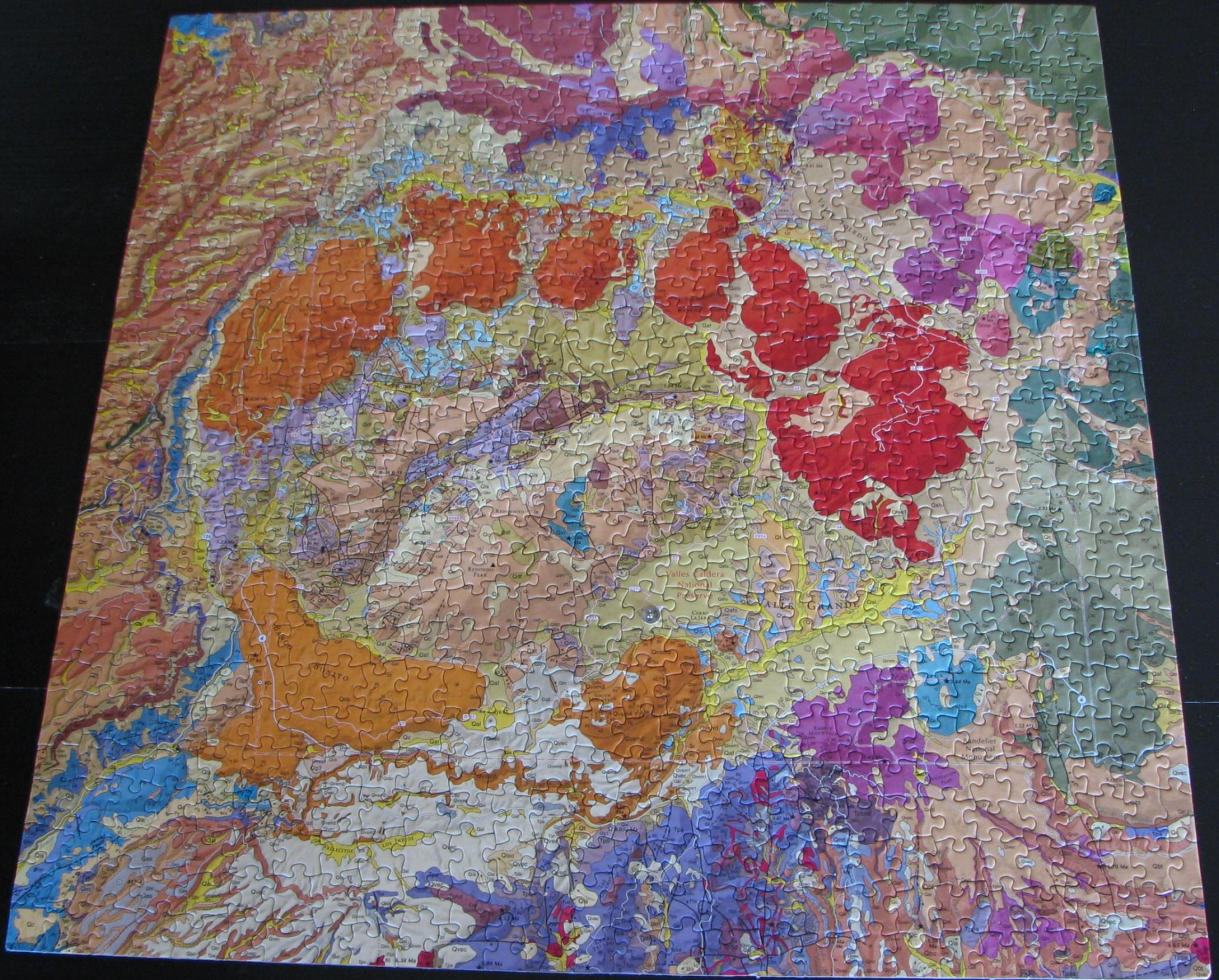


NM98 Navajo Lake



NM97 Valles Caldera









Valles Caldera
National
Preserve

CERRO
LA JARA

SOUTH
MOUNTAIN

East

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0202

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0201

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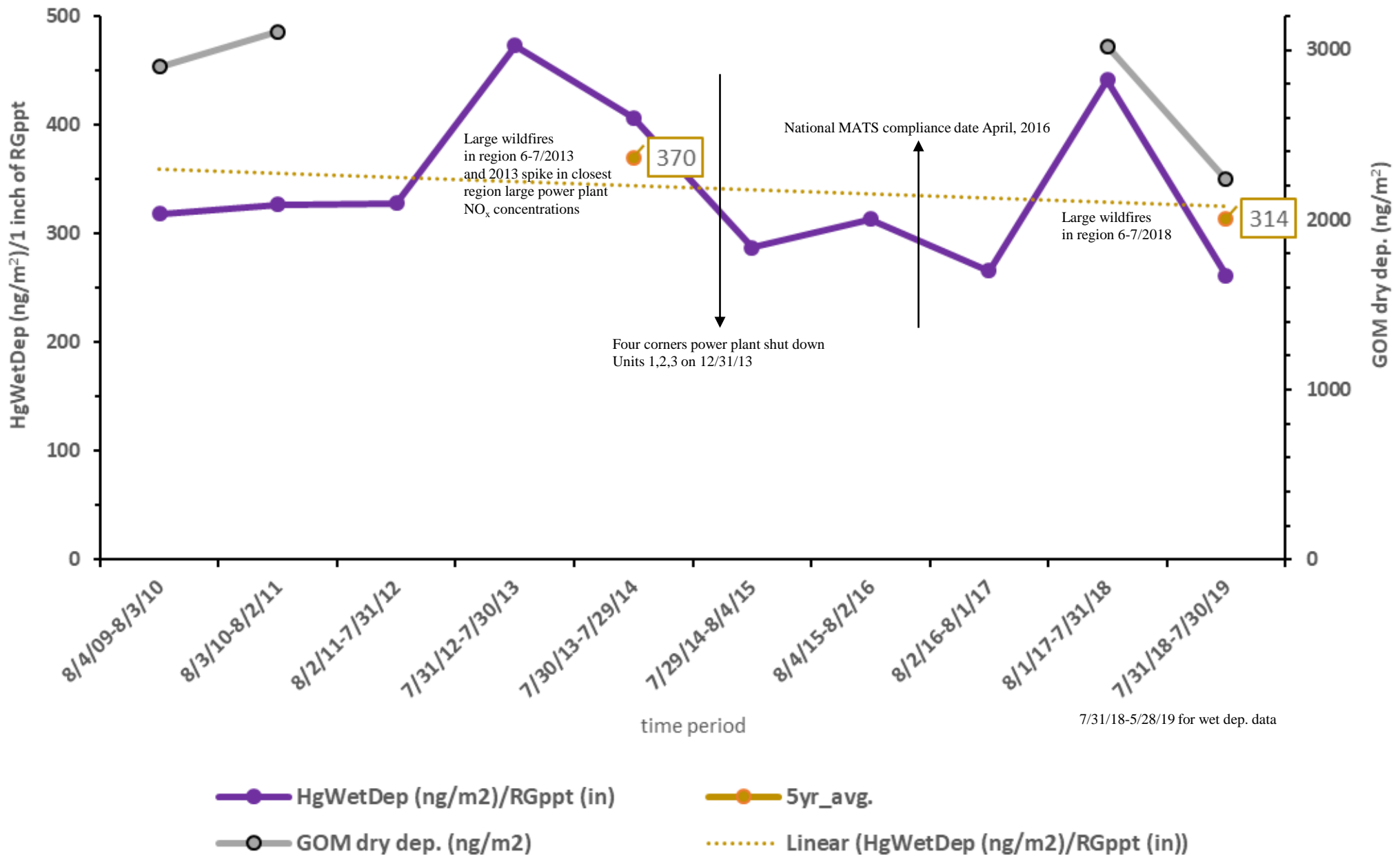
CO99 Mesa Verde National Park



CO96 Molas Pass



Molas Pass (CO96) Hg wet and dry dep. data time series (DRAFT)



Four Corners Area GOM Dry Deposition Estimates (DRAFT)

