Measuring Uinta Basin's Wintertime Ozone

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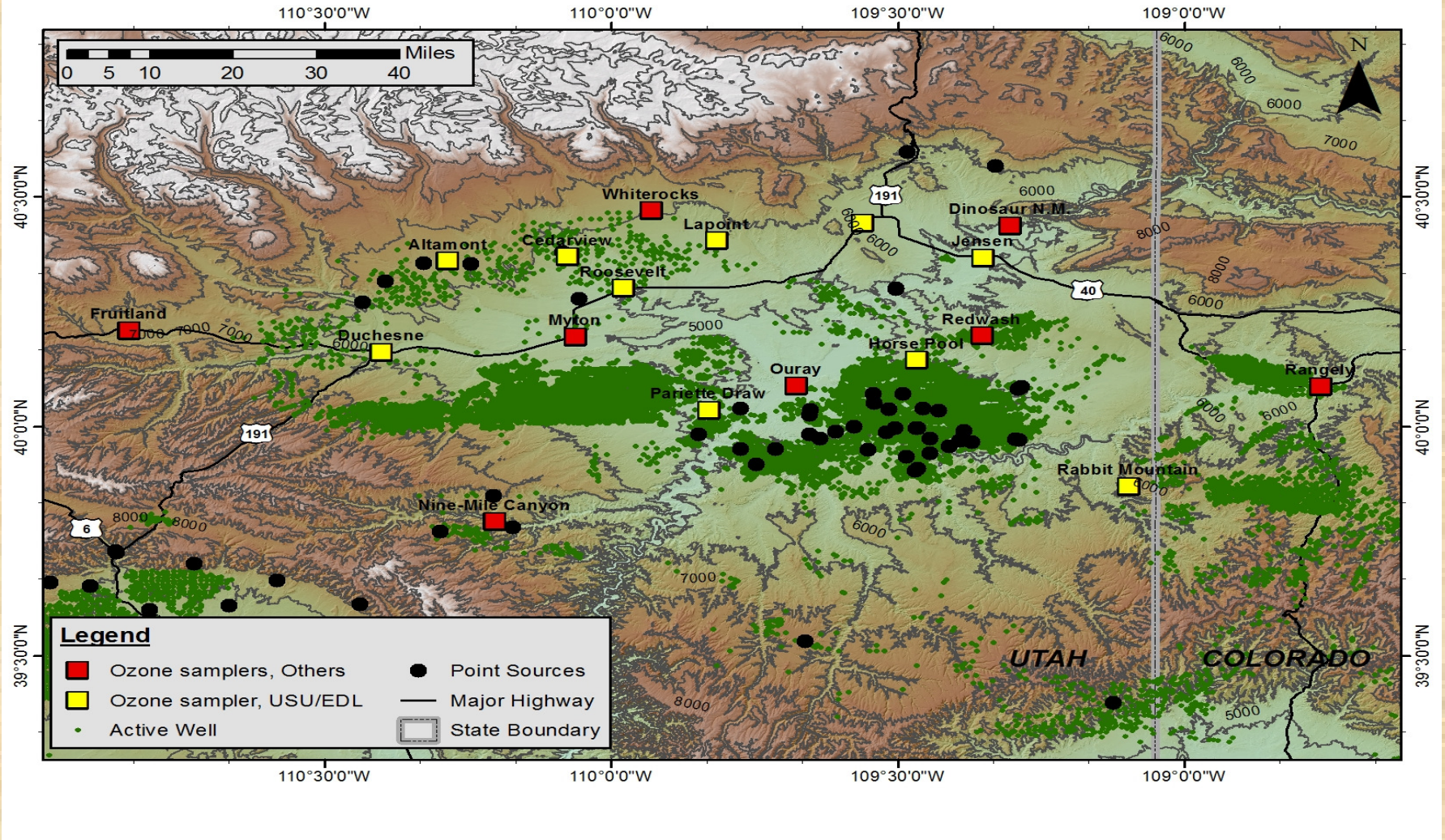
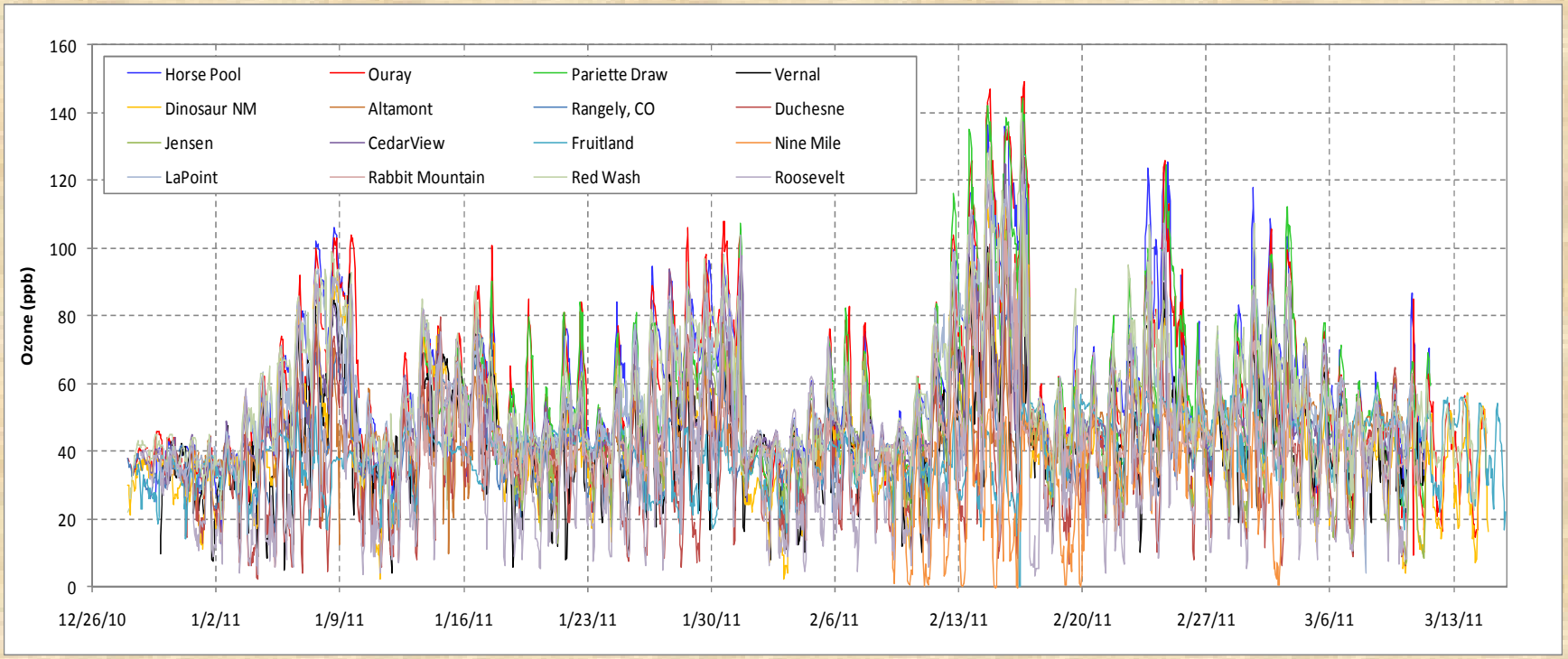
2010/2011 Uinta Basin O_3 Monitoring Locations



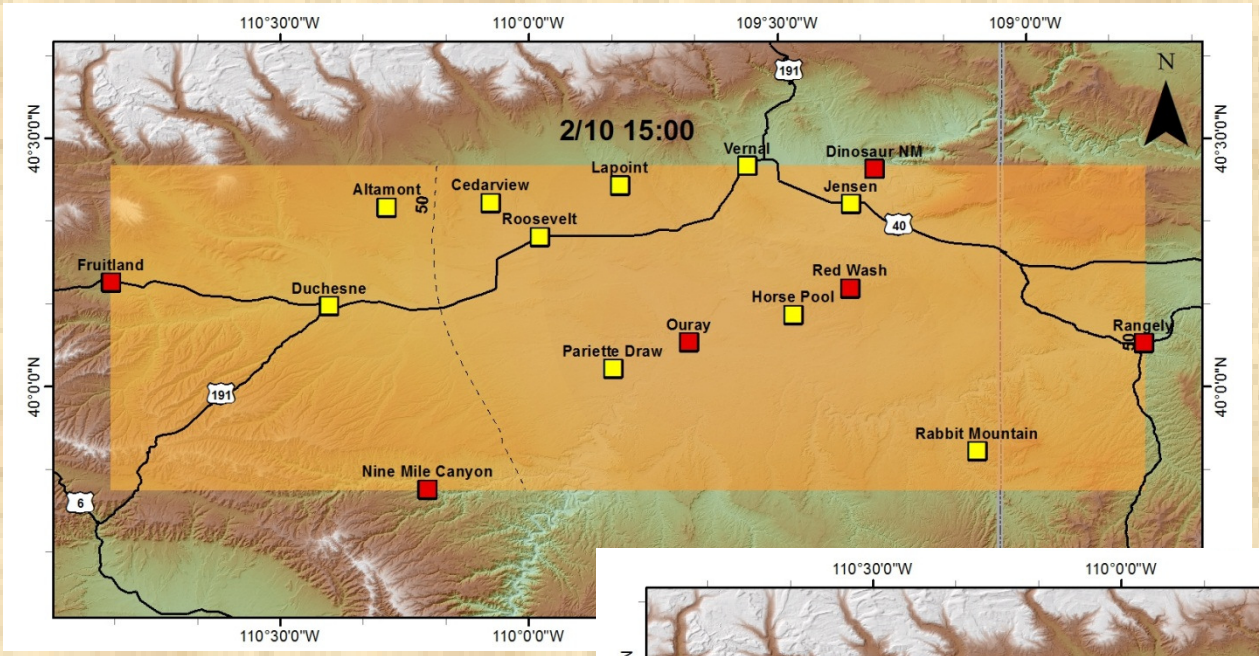
Monitoring area ≈ 10,334 km² (3990 mi²)

Deploying, Downloading, and Auditing the Portable Ozone Samplers

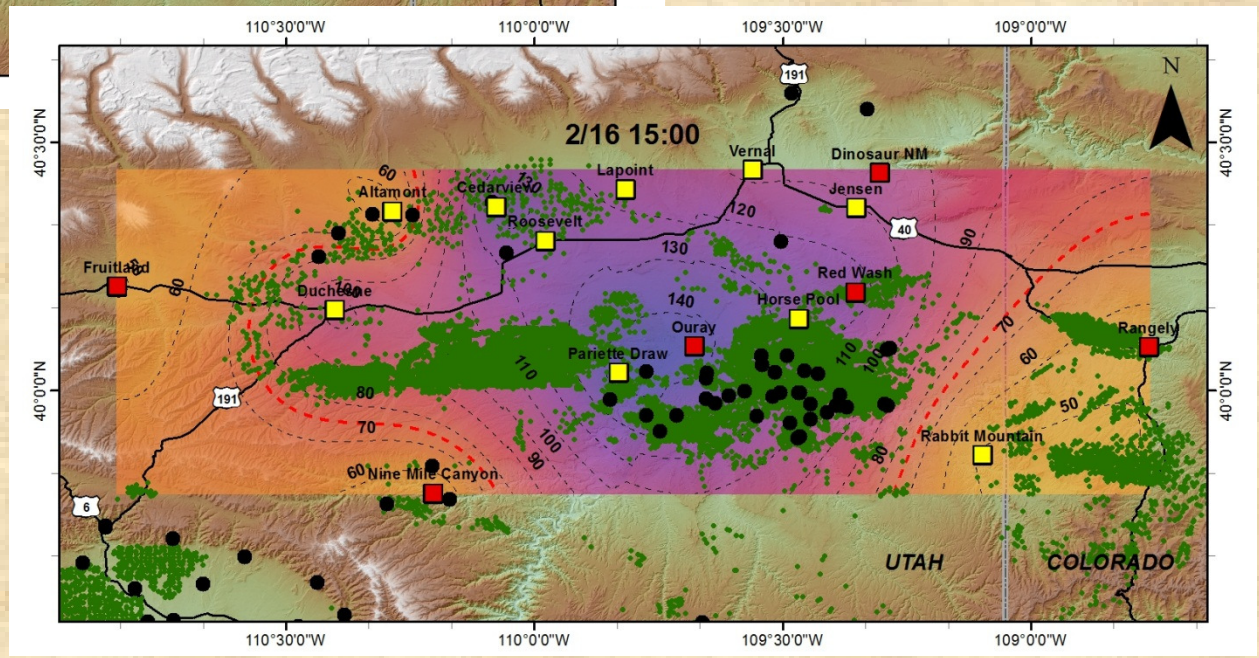
2010-11 Uinta Basin Wintertime O_3 Time Series



Uinta Basin O_3 Contour Maps

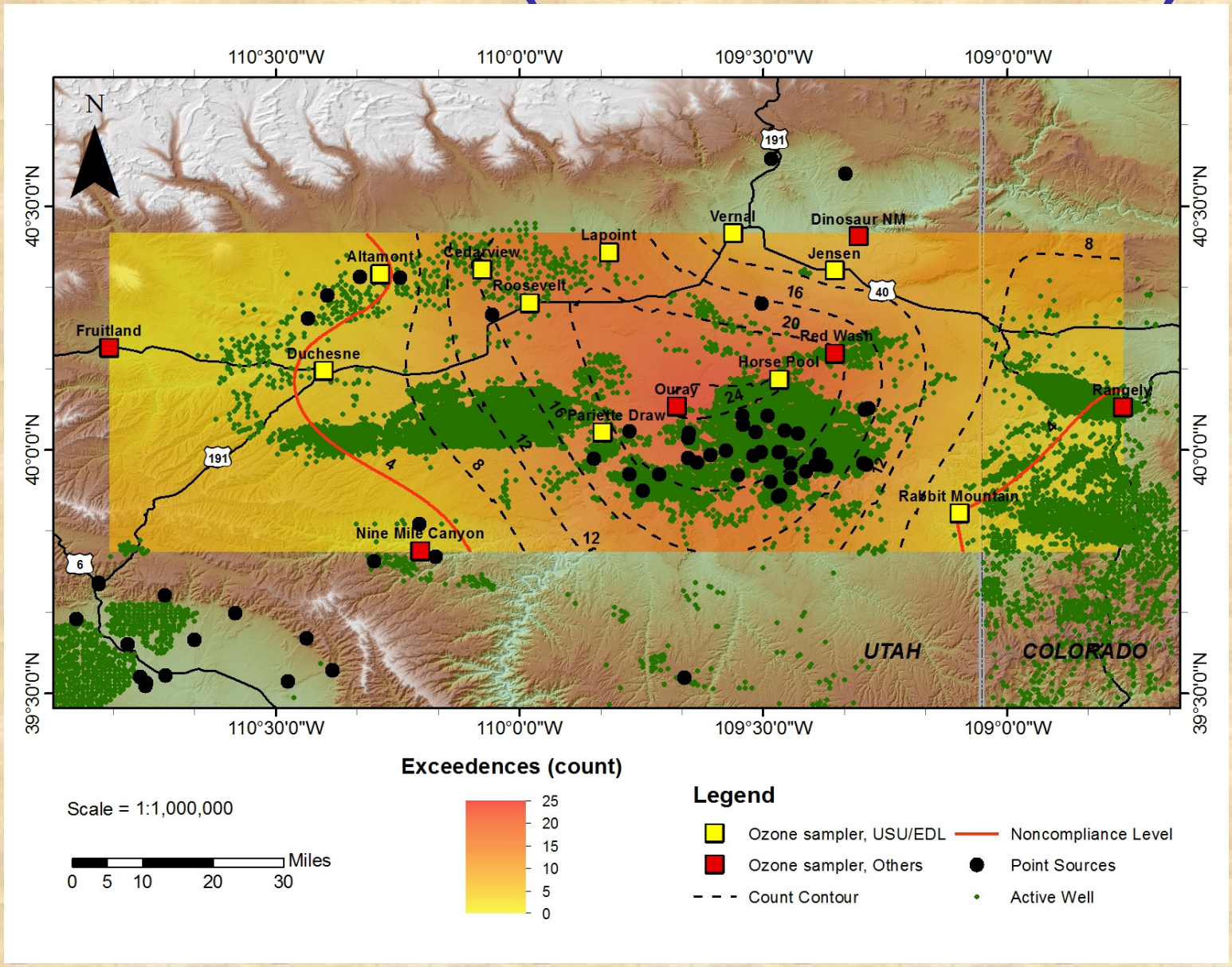


A good day
(15:00; Feb. 10, 2011)

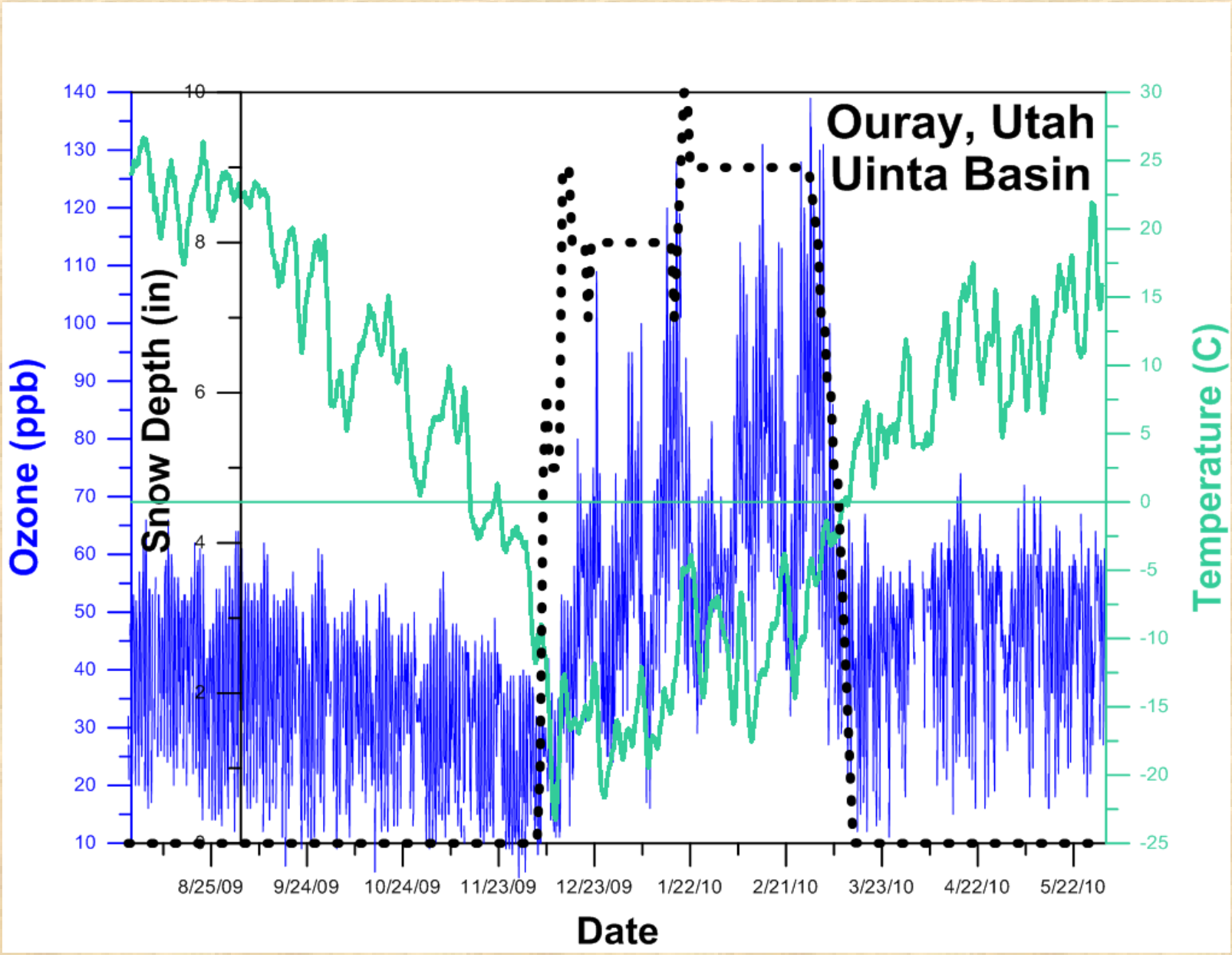


A not so good day
(15:00; Feb. 16, 2011)

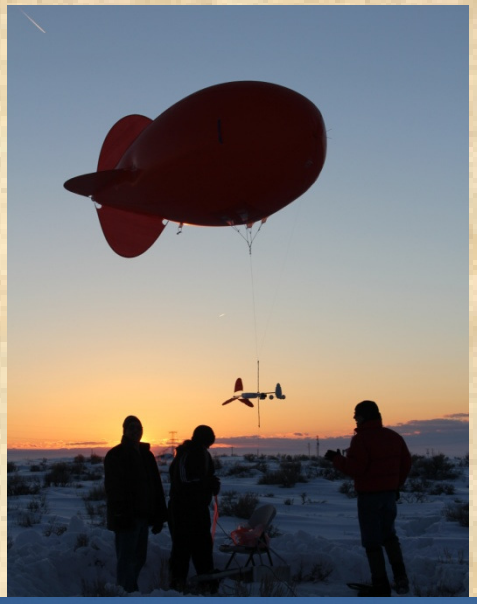
Number of O_3 Exceedances in the Uinta Basin (Winter 2010/2011)

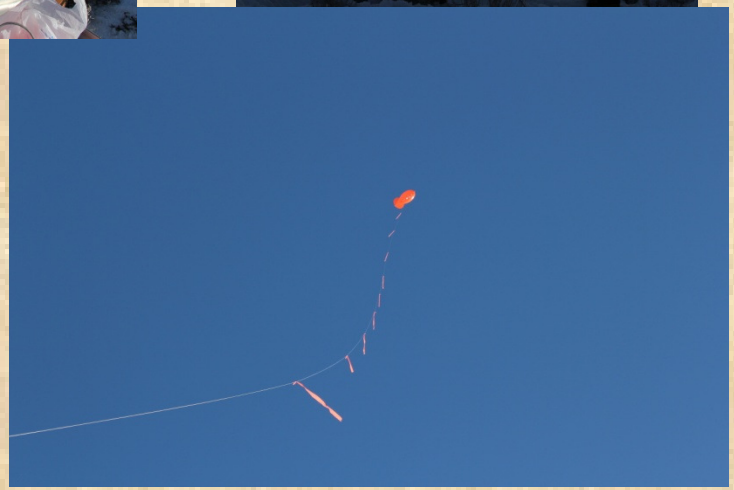


Ozone, Temperature and Snow Depth



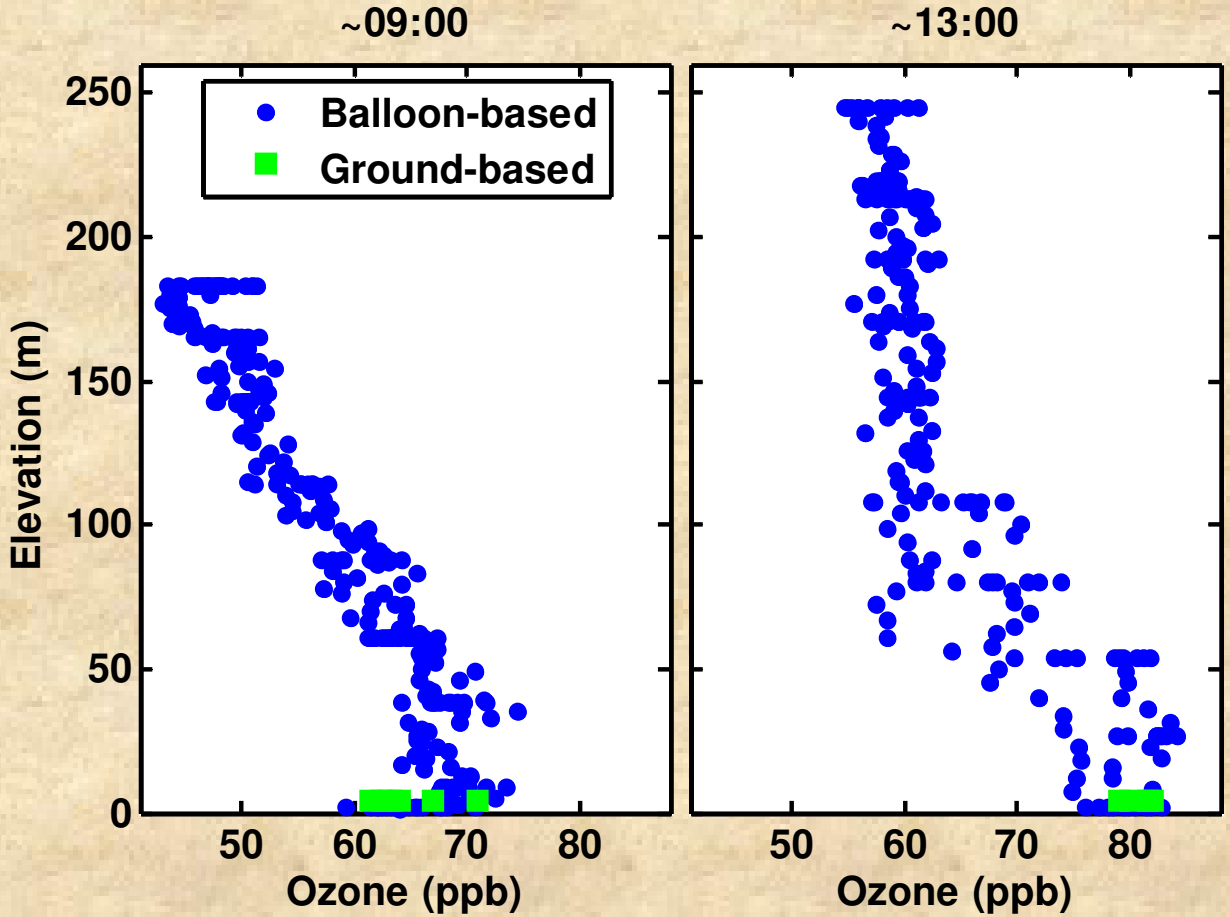
Measuring Vertical O_3 with a Portable O_3 Monitor & a Tethered Balloon





Uinta Basin Vertical O_3 (Red Wash)

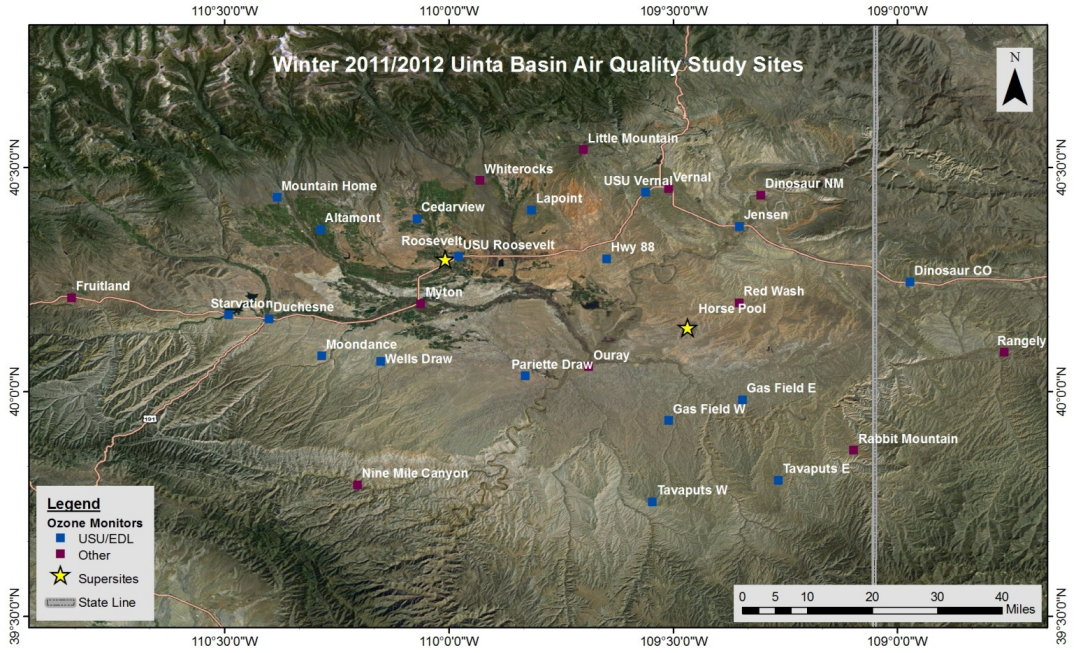
Feb. 2011



Feb. 24, 2011

So, what's going on in 2012 & beyond?

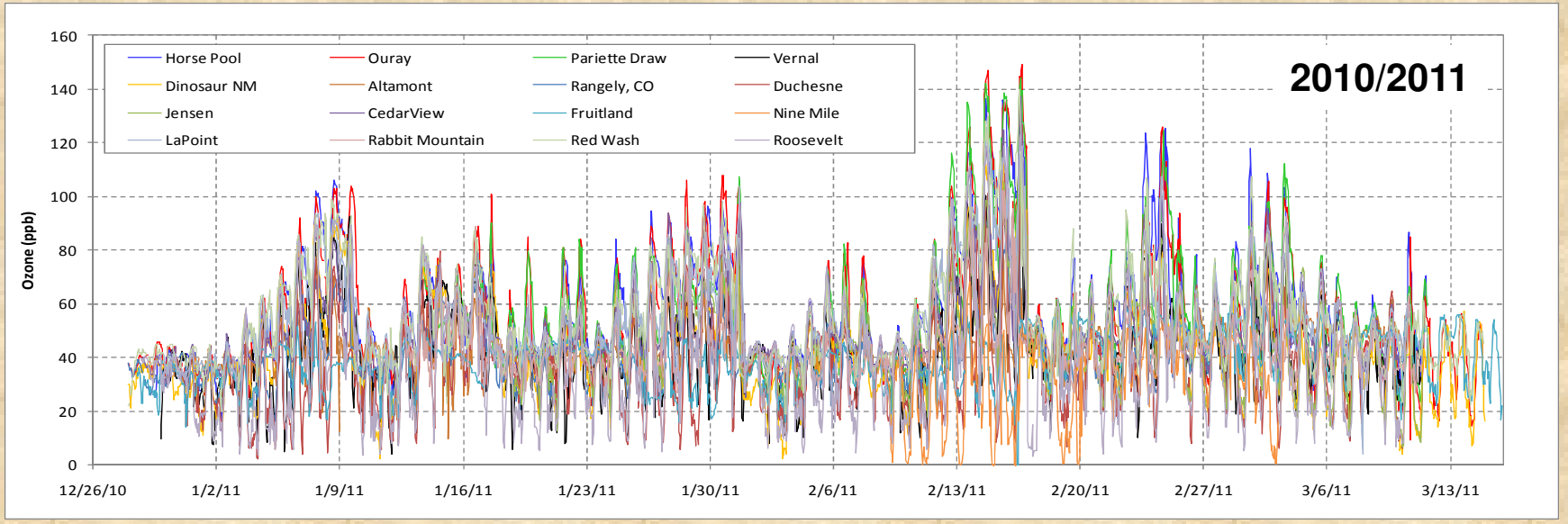
- Refined O_3 monitoring network

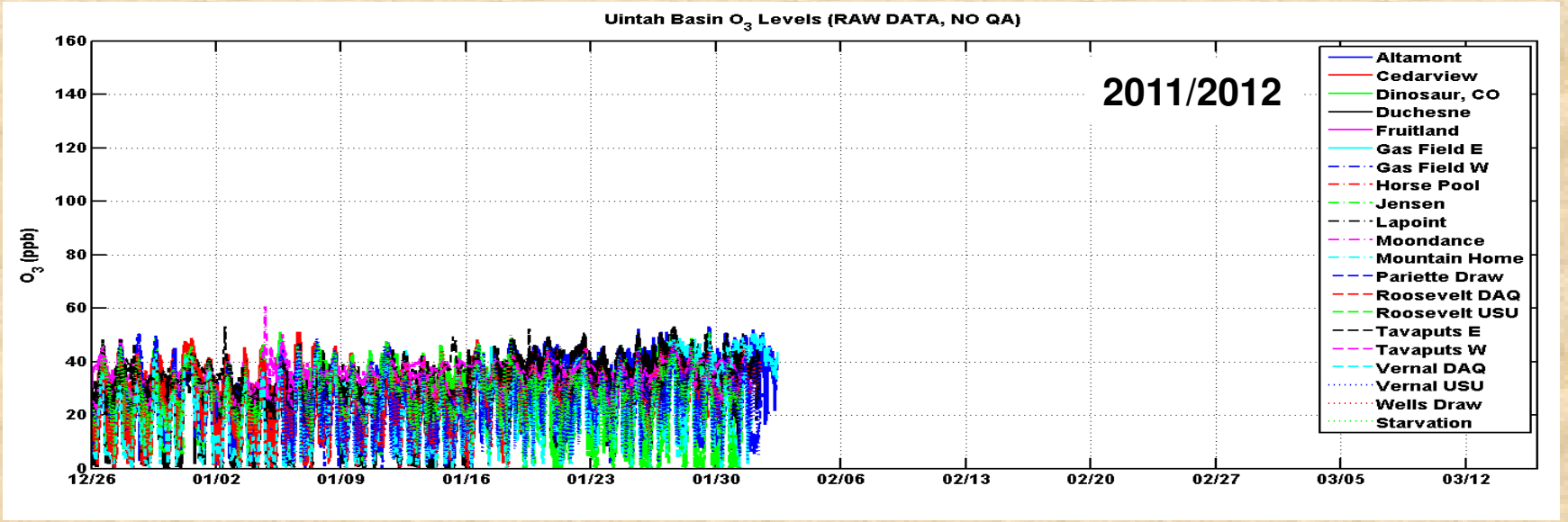


30 total sites in 2012, as opposed to 18 in 2011

- Identify formation compounds and further work to understand wintertime photochemistry
  - oxides of nitrogen (NO_x) and hydrocarbons (VOCs)
  - collaborative studies at "supersites" – Horse Pool and Roosevelt
- Identify air pollutant sources and emission rates
- Develop air quality models to replicate the Basin's air quality behavior and examine remediation scenarios

2012 Ozone Compared to 2011Ozone





Thanks for Listening!

QUESTIONS?

Exceedences vs. Elevation