

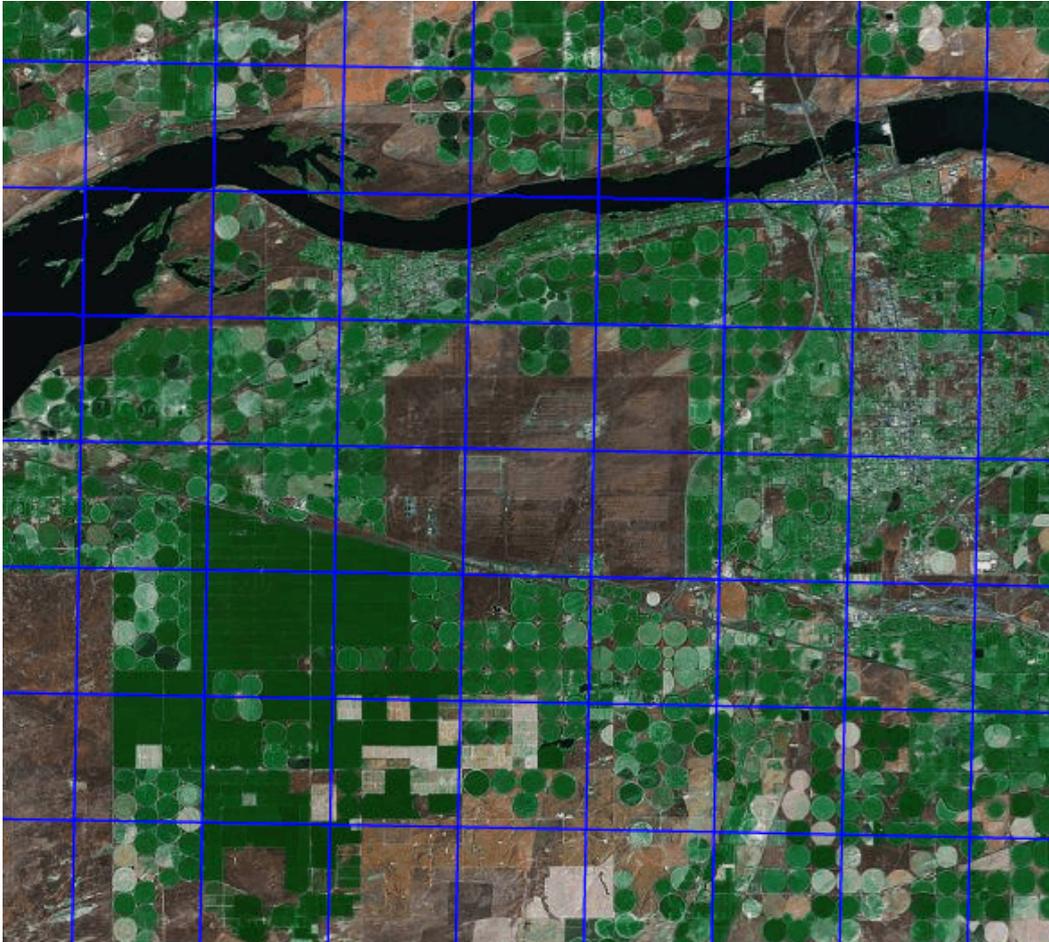
AIRPACT—looking ahead

- 48 hr AIRPACT-4 forecasts
- Update poplar plantation land cover
- Long range transport (LRT)
 - O_3 tracers and climatology of LRT contributions to surface O_3
- Beyond AIRPACT-3
 - western US at 12 km

Extended Forecasts

- Option 1
 - 64-hour forecast with a 12-km version of airpact-"4" (airpact-3 with updated emissions, but no mercury)
- Option 2
 - extend the current 4-km run to 48 hours by doing restart runs starting from hour 25 (so the success of hours 25-48 does not impact our ability to get the first 24 hours of forecast out to the web.)

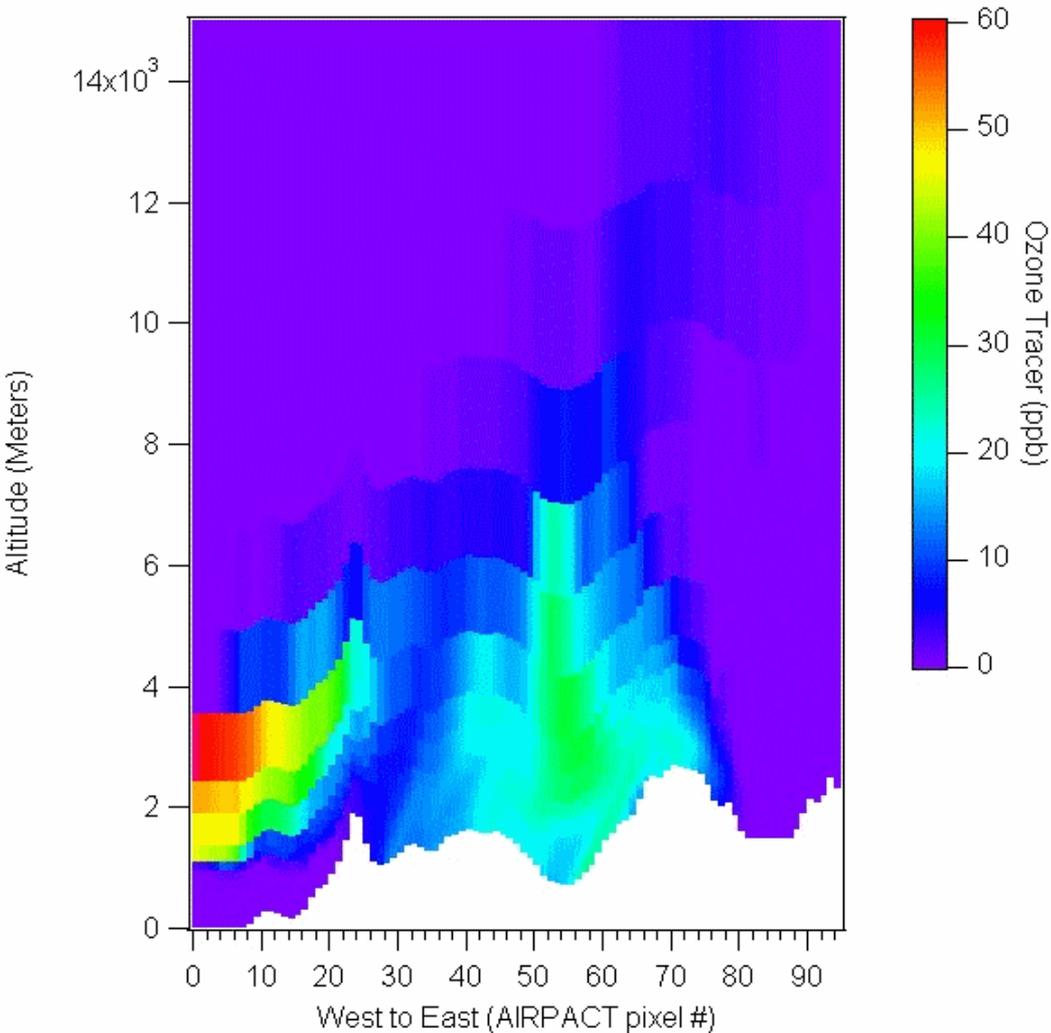
Missing Poplar plantations



- Current landcover data does not recognize poplar plantations
- Requires manual revision of isoprene emission capacity file

Boundary O₃ tracer

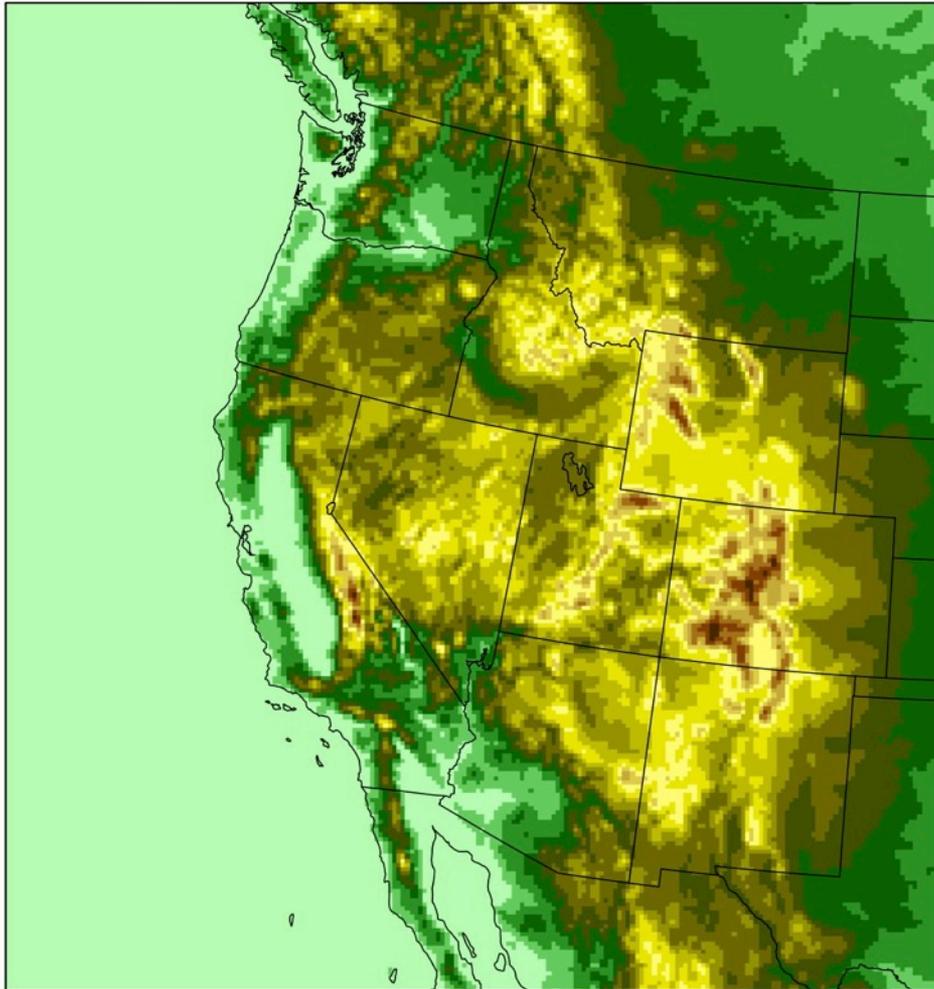
AIRPACT-3 Tracer Results
April 6, 2010 (0 PST, Row 35)
Ozone from West BCON (Layers 13 - 16)



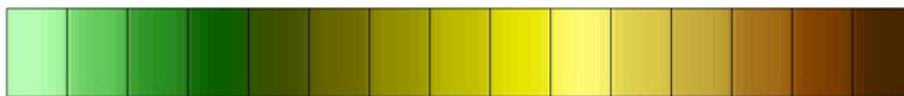
- Implement automated O₃ tracer mid-trop BCON
- Calculate % contribution of LRT to surface O₃ levels

Western US Airport Domain

- 12 km grid cells
- Half of proposed national forecast
- Joint effort with Georgia Tech
- Replaces NOAA national forecast



Terrain Height (m)



250 750 1250 1750 2250 2750 3250