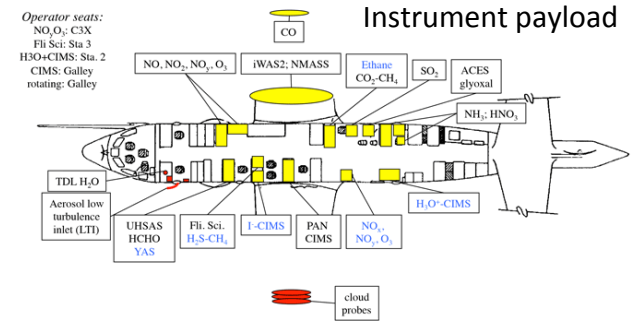
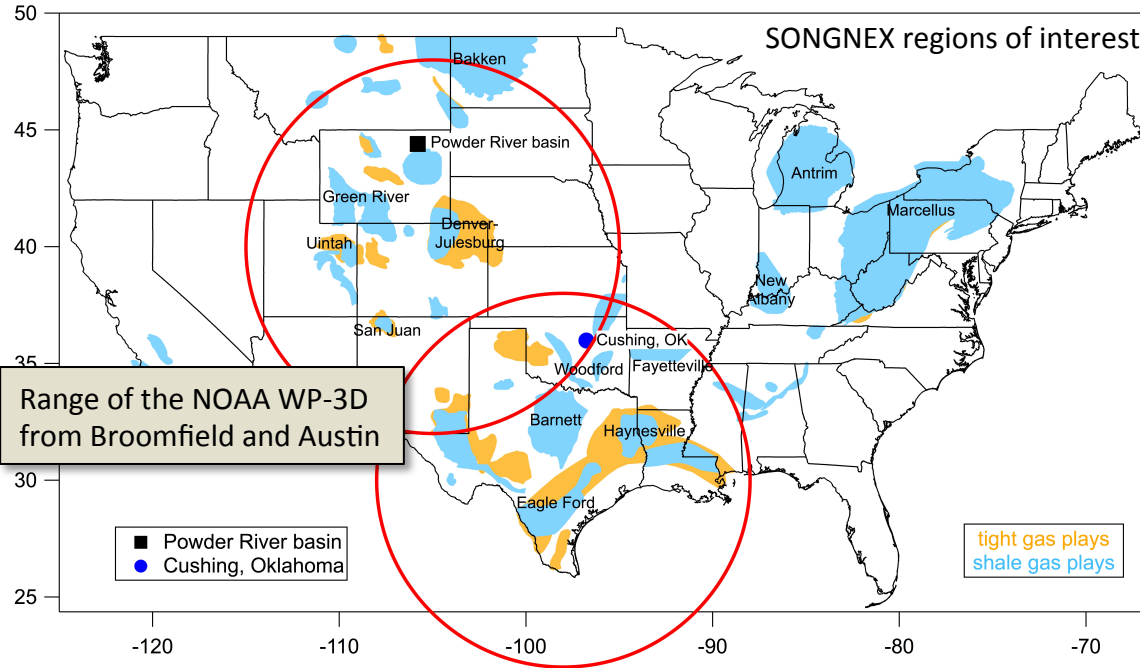


Shale Oil and Natural Gas Nexus (SONGNEX)

A NOAA airborne field mission in March-April 2015

www.esrl.noaa.gov/csd/projects/songnex



- SONGNEX Science Questions:**
1. What are the effects of shale and natural gas production on climate (GHG emissions)
 2. What are the effects on air quality (hydrocarbon and NO_x emissions)
 3. What are the emissions of air toxics (BTEX, H₂S)
 4. What are the emissions from other components of the U.S. energy infrastructure (coal, pipelines, biofuels)

Results from NOAA WP-3D measurements in 2013 during SENEX [Peischl et al., JGR 2015]

