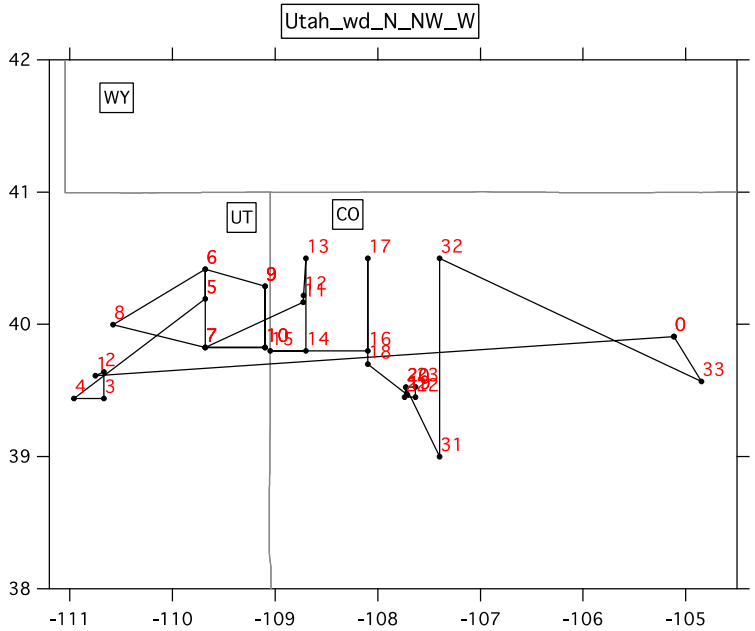
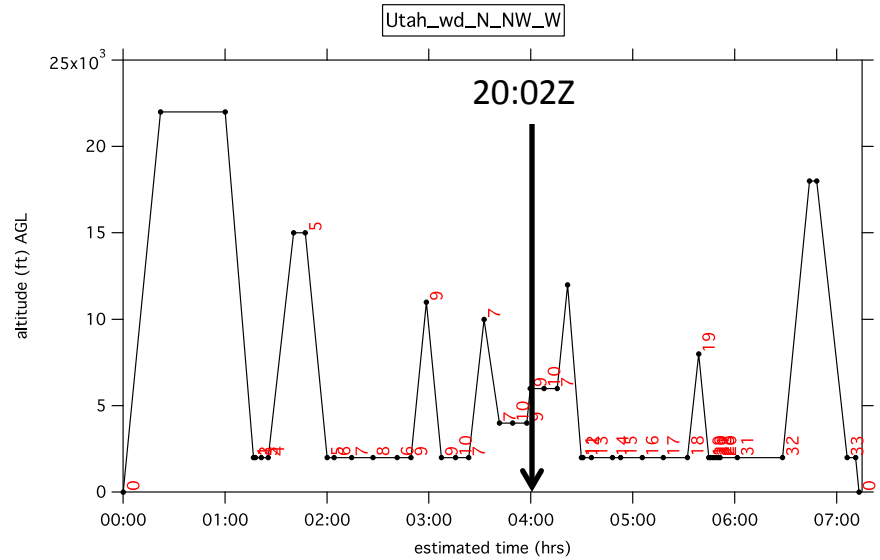
RAQMS 20150326 SONGNEX
30hr Forecast for 18Z March 26, 2015 Unitah Basin Flight
54hr Forecast for 18Z March 27, 2015 Denver-Julesburg basin



Adjust way points and altitudes in Colorado according to terrain
and weather!
Pts 13 - Pt15 are downwind of Uintah basin and Rangely, CO O&G well emissions
Pt 14 - Pt 17 are downwind of Piceance (Rio Blanco County)O&G wells

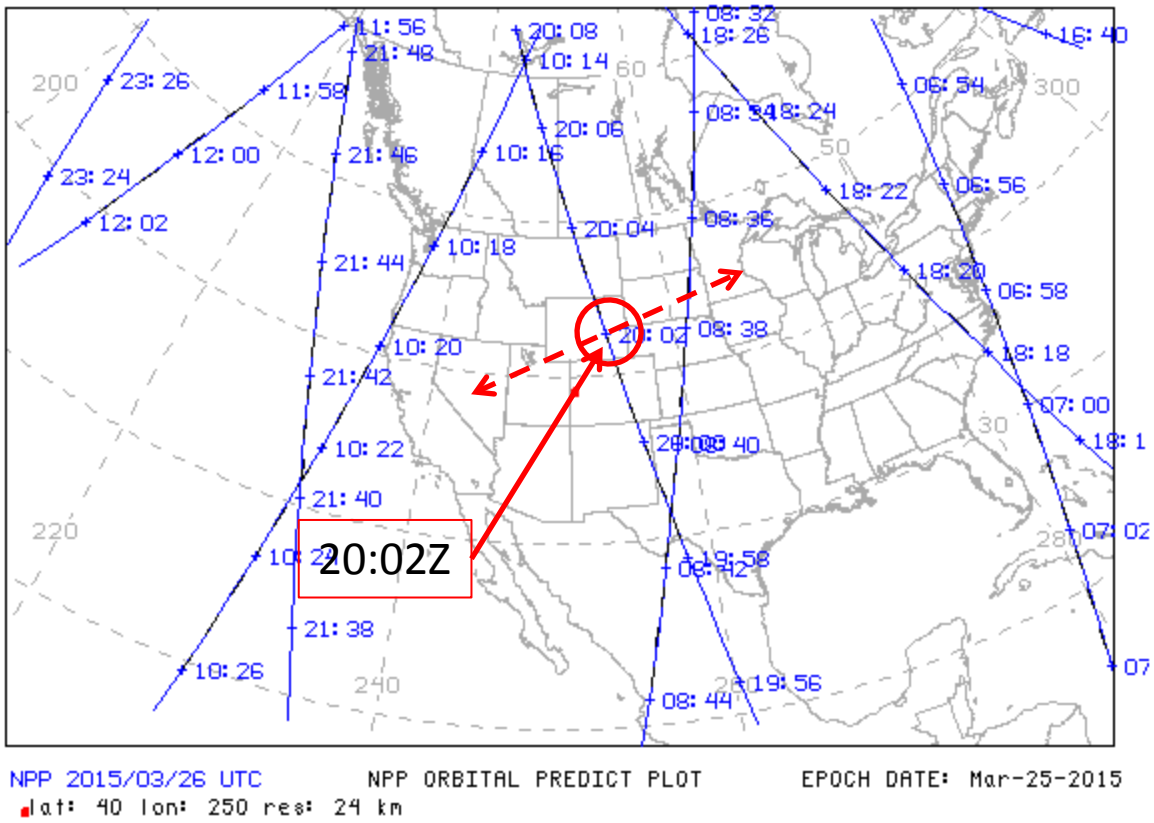
Pts 19 - Pt 23 Piceance (Garfield County) optional



S-NPP (CrIS) overpass on 2015/03/26

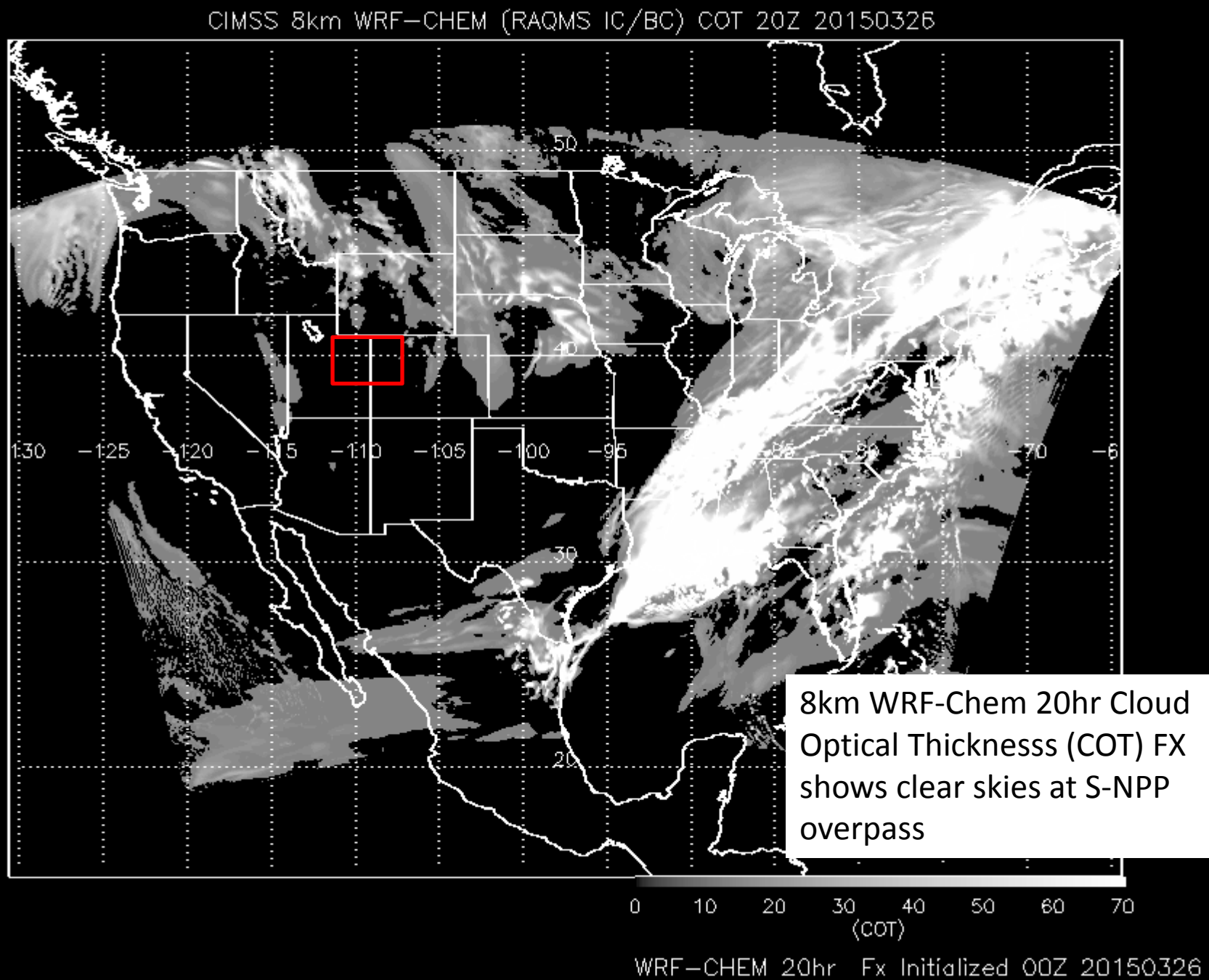
NUCAPS CO2, O3, CO, CH4 Validation Opportunity – ***nadir and western swath***

S-NPP overpass over Denver at 20:02Z (2:02pm Mountain)



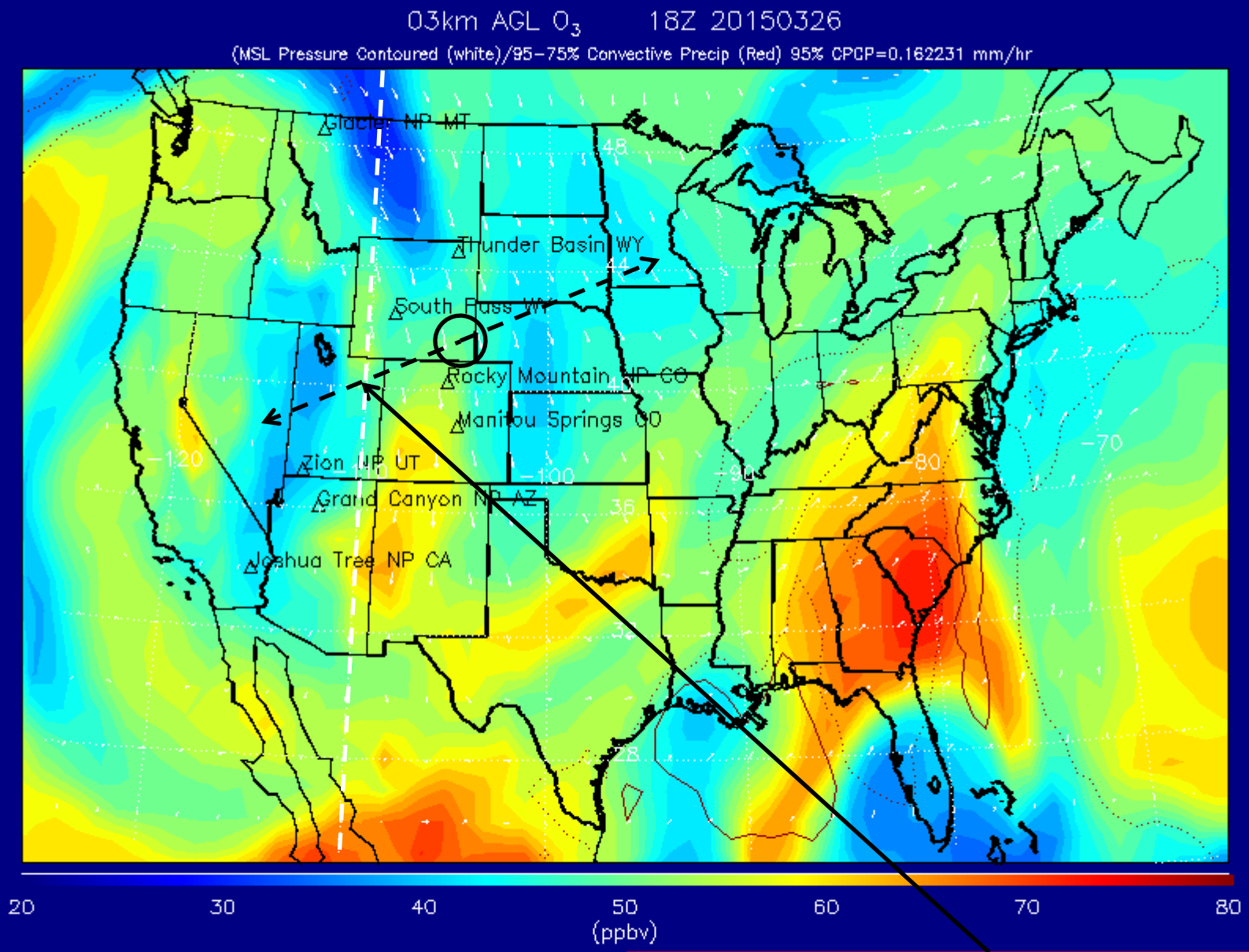
Approximate swath width

http://raqms.ssec.wisc.edu/forecast/view/20150326



8km WRF-Chem 20hr Cloud Optical Thicknesss (COT) FX shows clear skies at S-NPP overpass

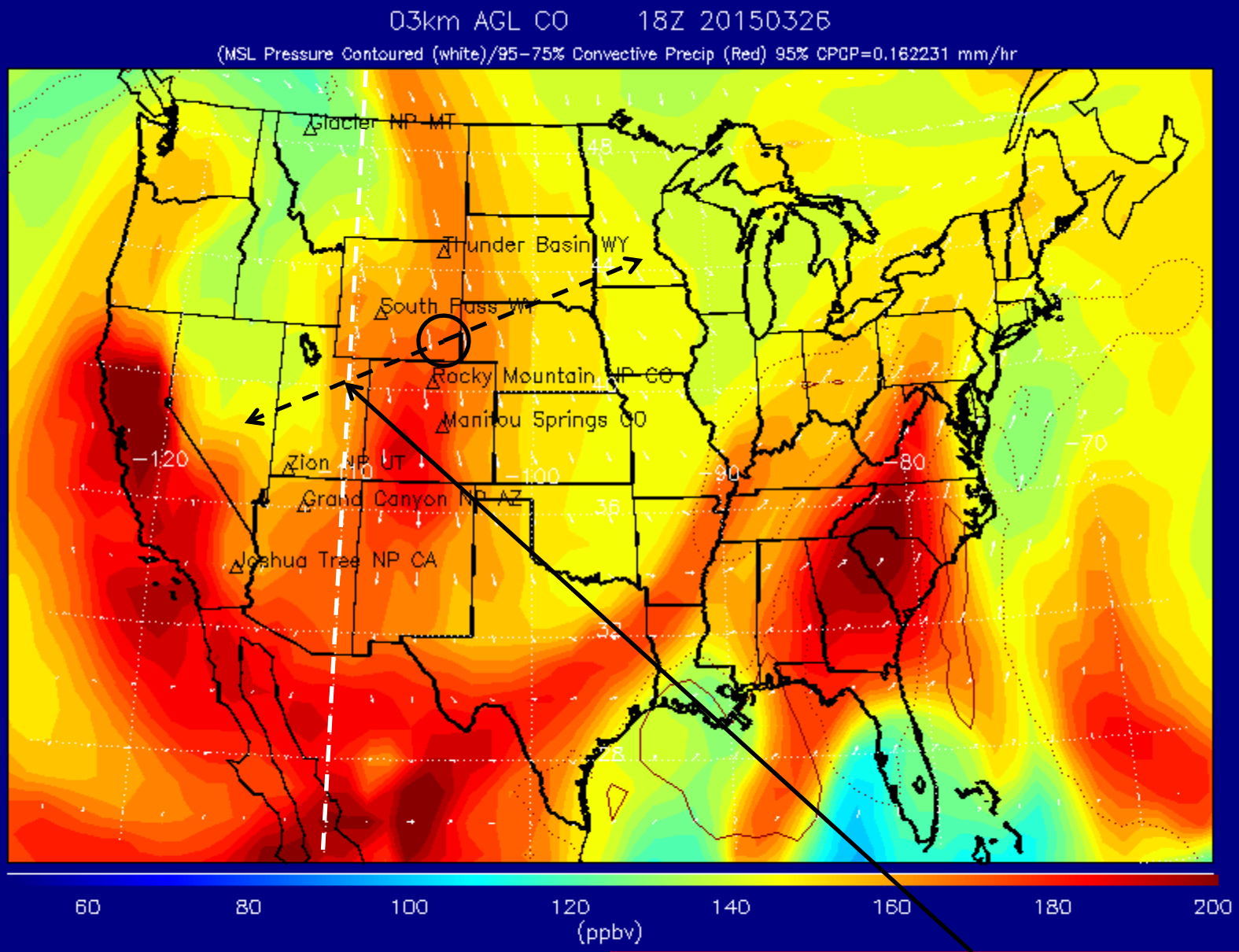
http://raqms.ssec.wisc.edu/forecast/view/20150325



Uintah Basin on western side of S-NPP swath

Approximate swath width

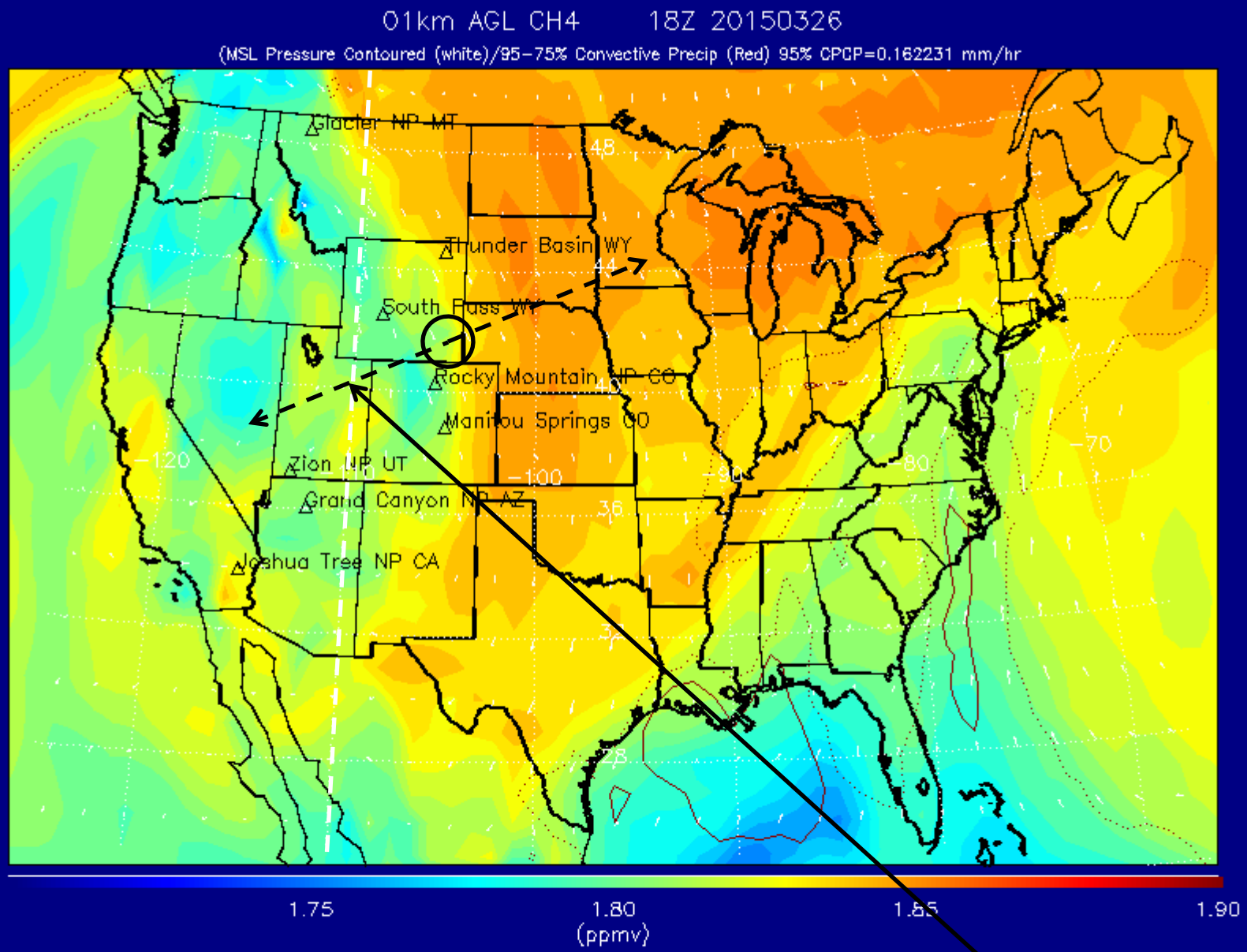
http://raqms.ssec.wisc.edu/forecast/view/20150325



Uintah Basin on western side of S-NPP swath

Approximate swath width

http://raqms.ssec.wisc.edu/forecast/view/20150325

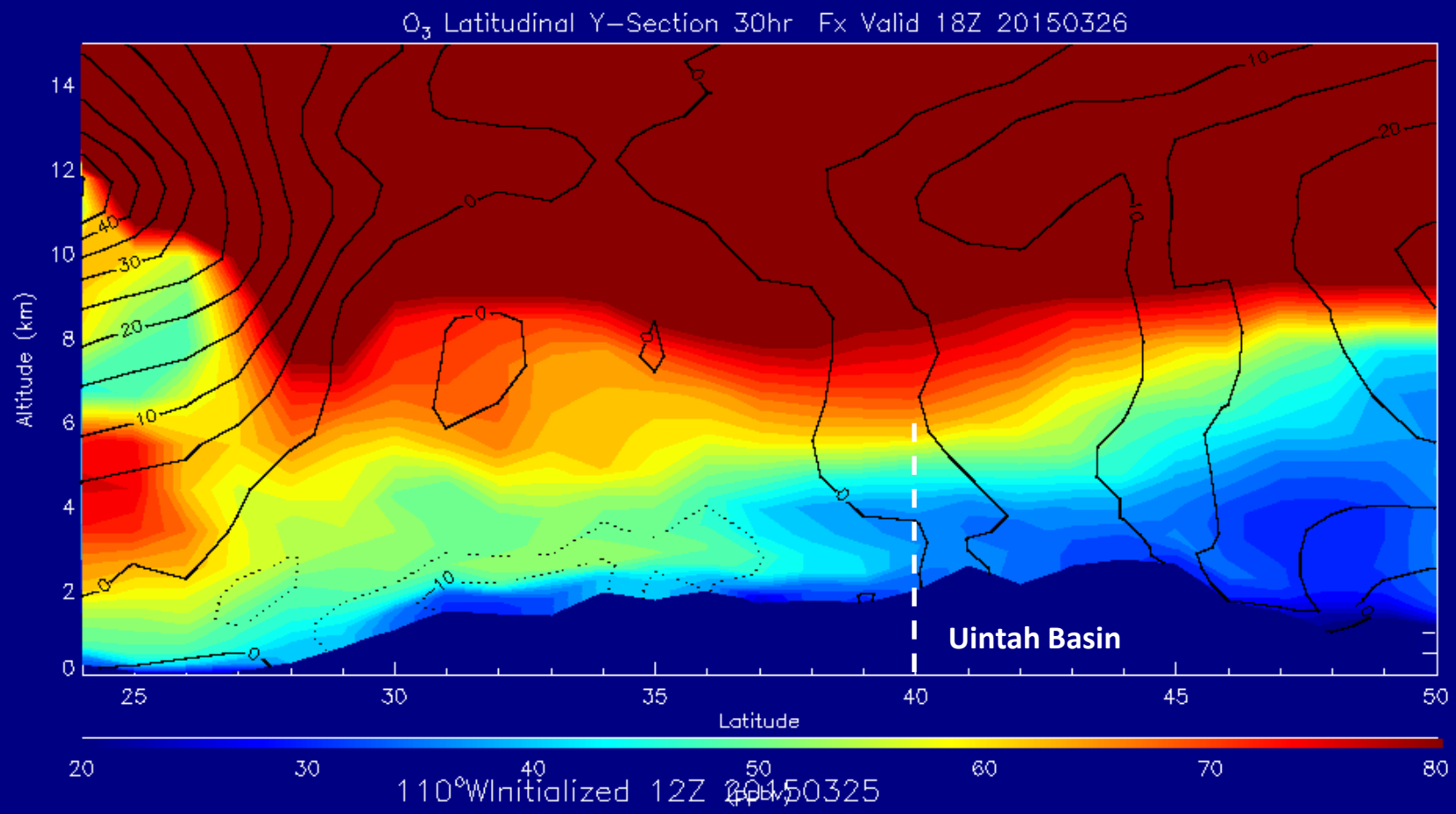


Uintah Basin on western side of S-NPP swath

RAQMS surface CH4 constrained with 1990 mixing ratio – introduces ~0.1ppmv low bias

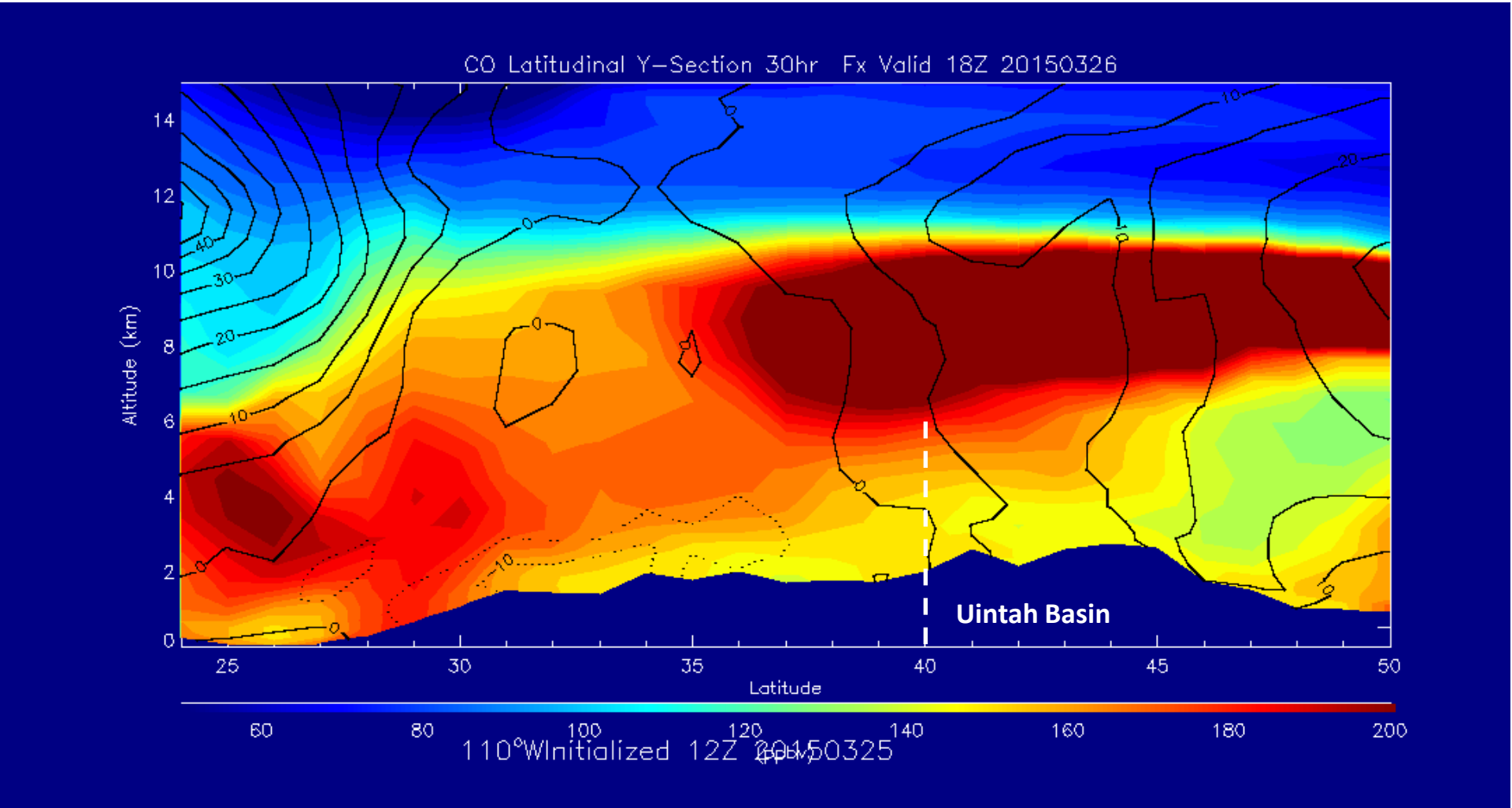
http://raqms.ssec.wisc.edu/forecast/view/20150325

RAQMS 30hr FX O3 Cross-section at 110W (Uintah Basin)



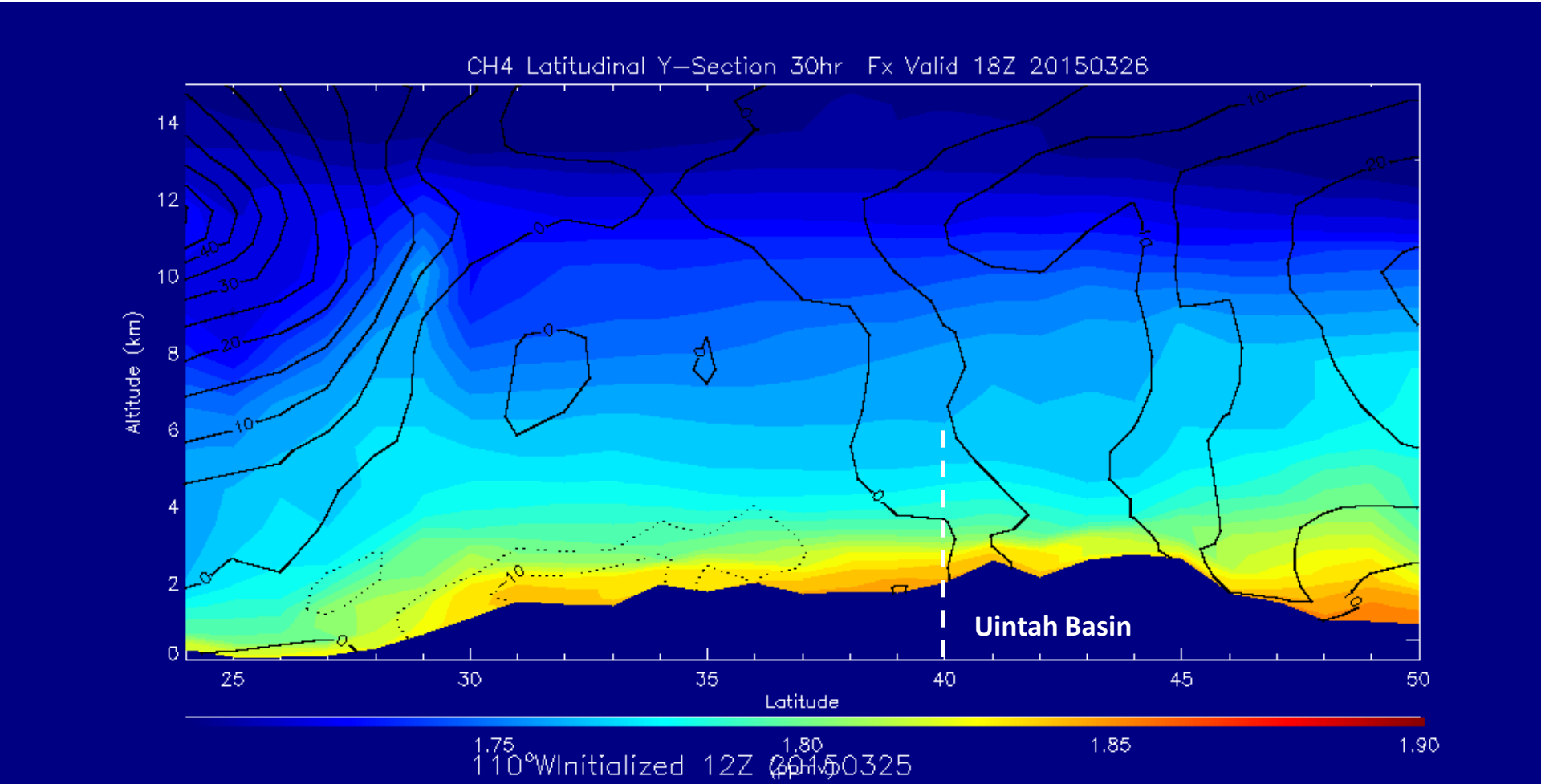
http://raqms.ssec.wisc.edu/forecast/view/20150325

RAQMS 30hr FX CO Cross-section at 110W (Uintah Basin)



http://raqms.ssec.wisc.edu/forecast/view/20150325

RAQMS 30hr FX CH4 Cross-section at 110W (Uintah Basin)

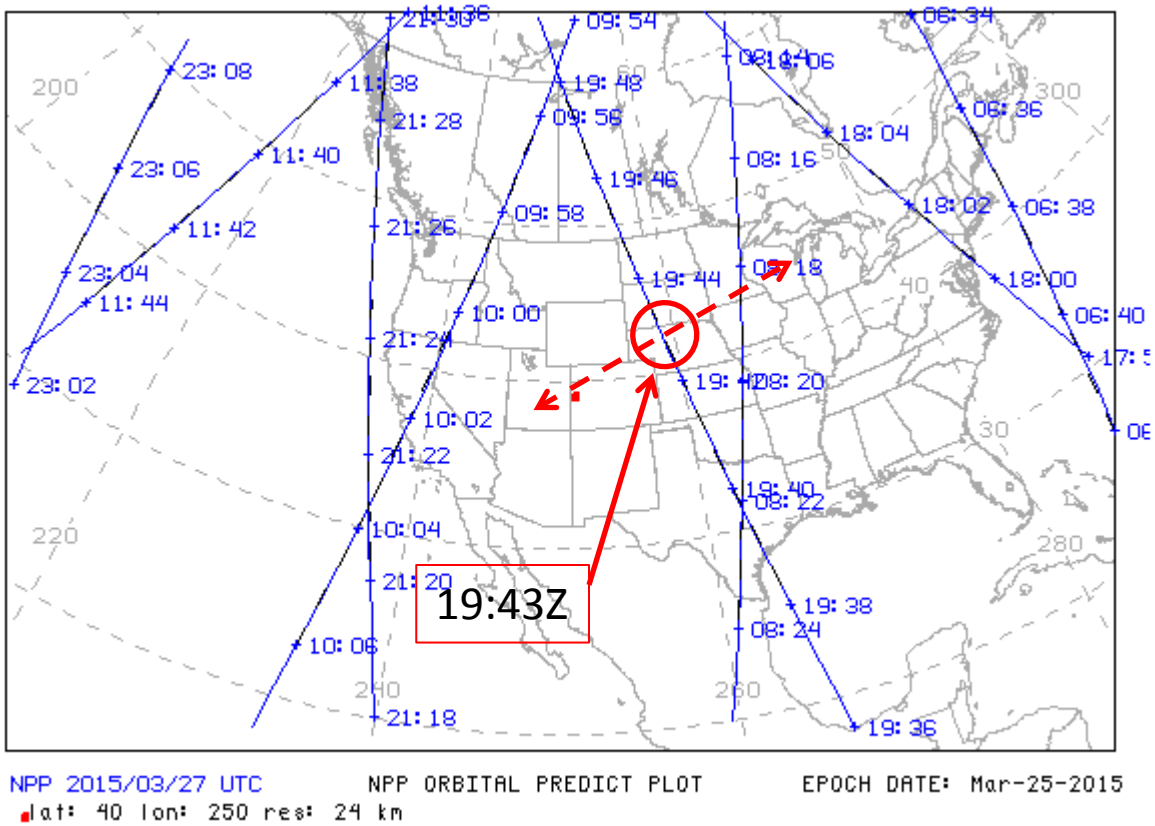


RAQMS surface CH4 constrained with 1990 mixing ratio – introduces ~0.1ppmv low bias

S-NPP (CrIS) overpass on 2015/03/27

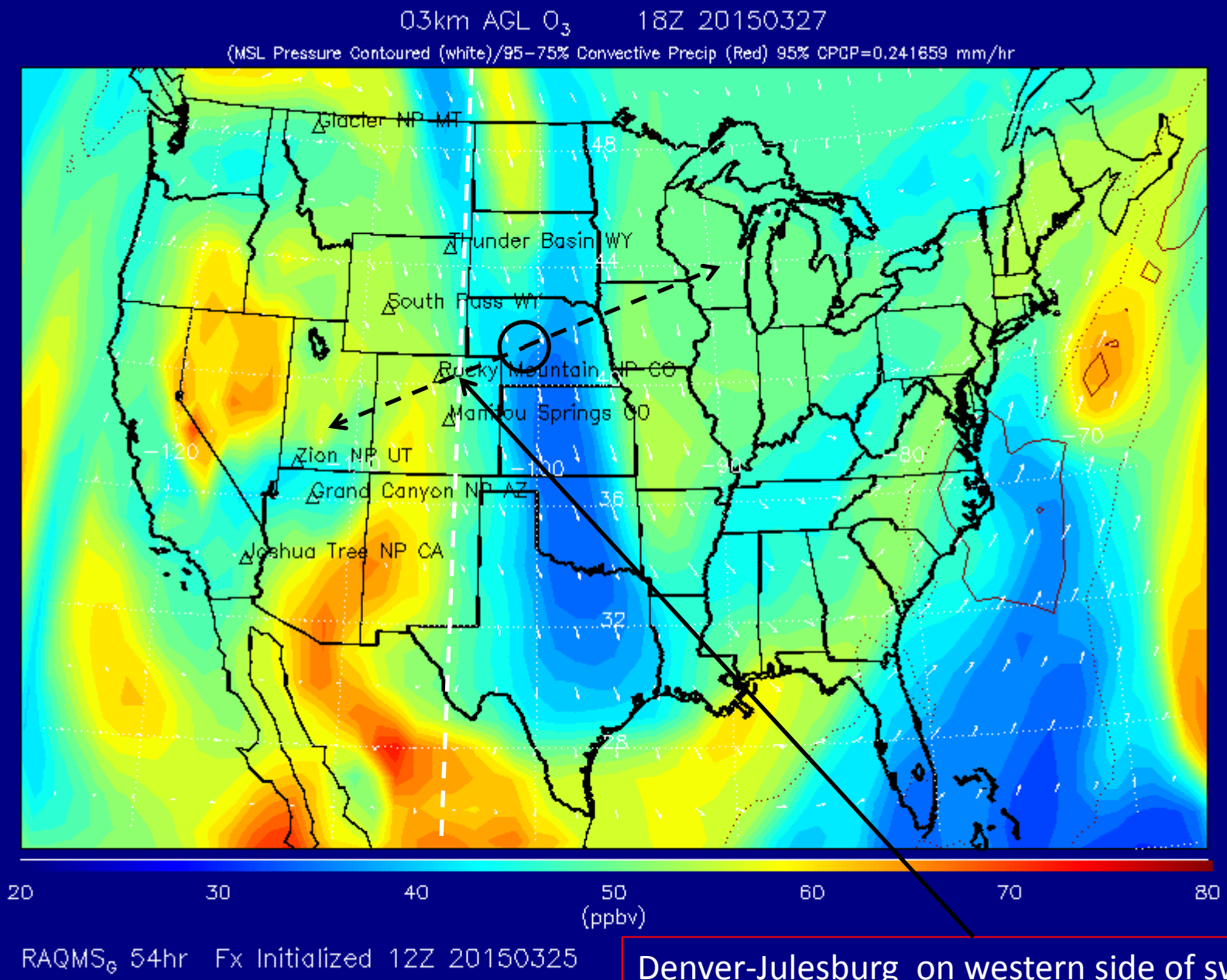
NUCAPS CO2, O3, CO, CH4 Validation Opportunity –***western swath***

S-NPP overpass East of Denver at 19:43Z (1:43pm Mountain)



Approximate swath width

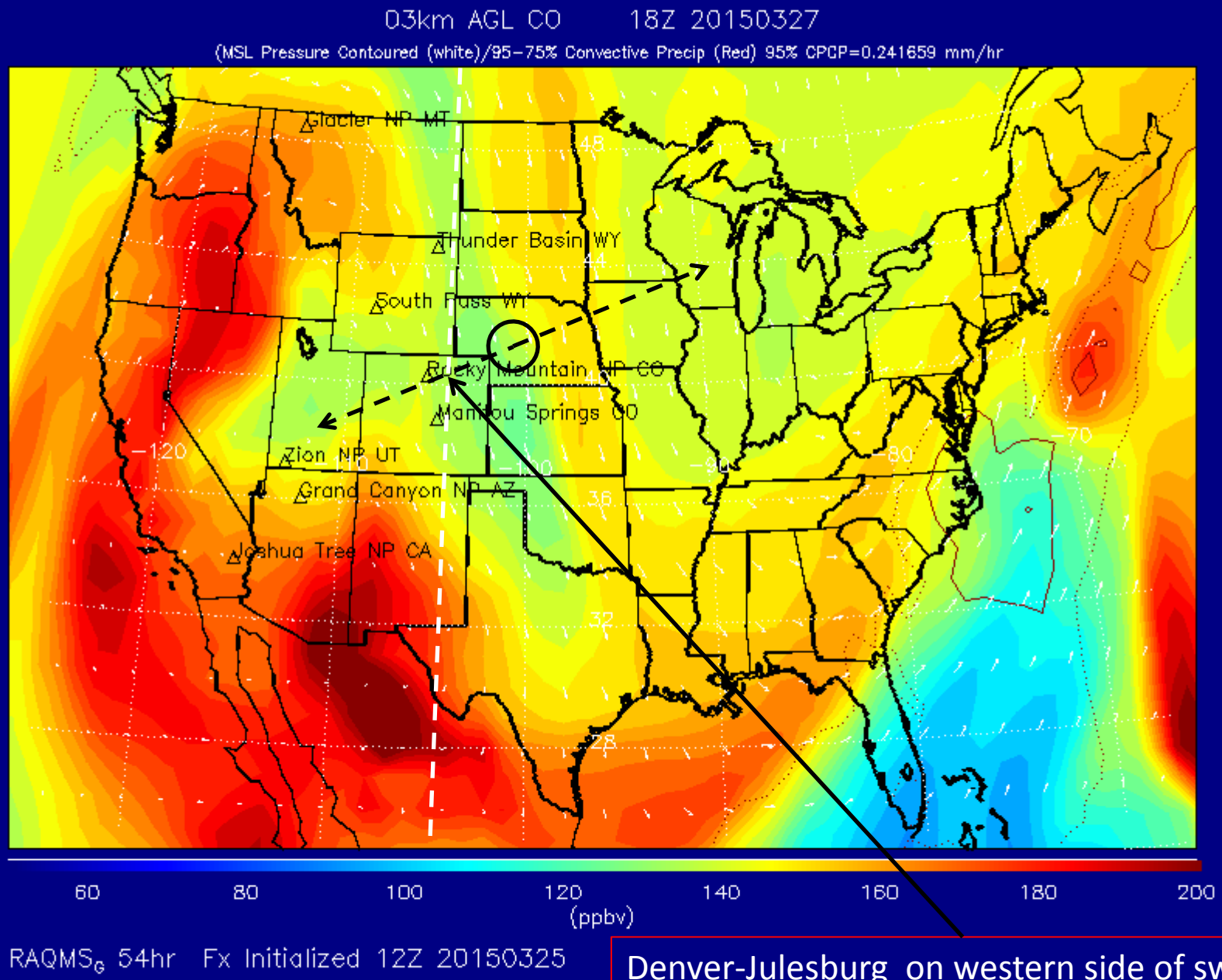
http://raqms.ssec.wisc.edu/forecast/view/20150325



Denver-Julesburg on western side of swath

Approximate swath width

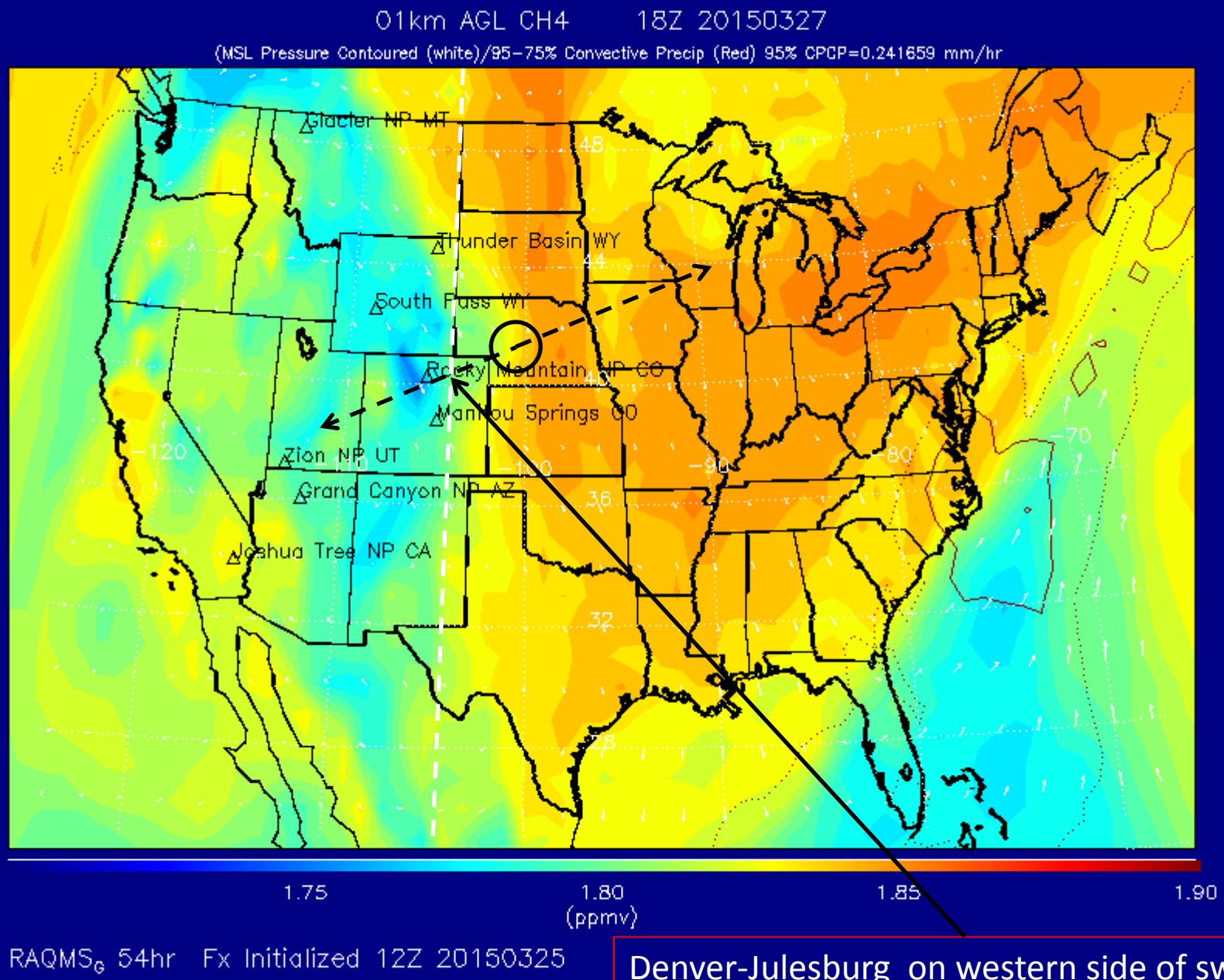
http://raqms.ssec.wisc.edu/forecast/view/20150325



Denver-Julesburg on western side of swath

Approximate swath width

http://raqms.ssec.wisc.edu/forecast/view/20150325

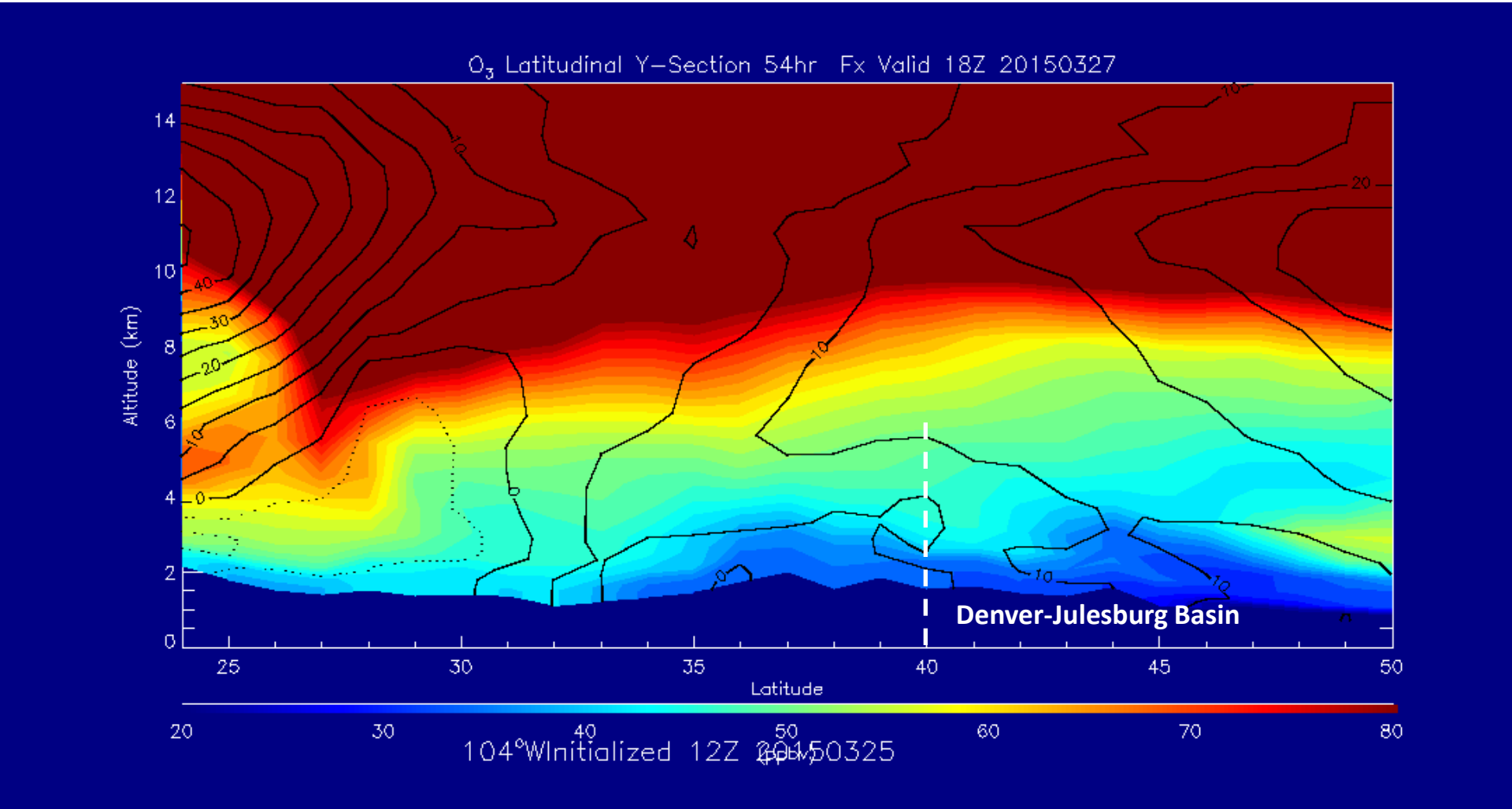


Denver-Julesburg on western side of swath

RAQMS surface CH4 constrained with 1990 mixing ratio – introduces ~0.1ppmv low bias

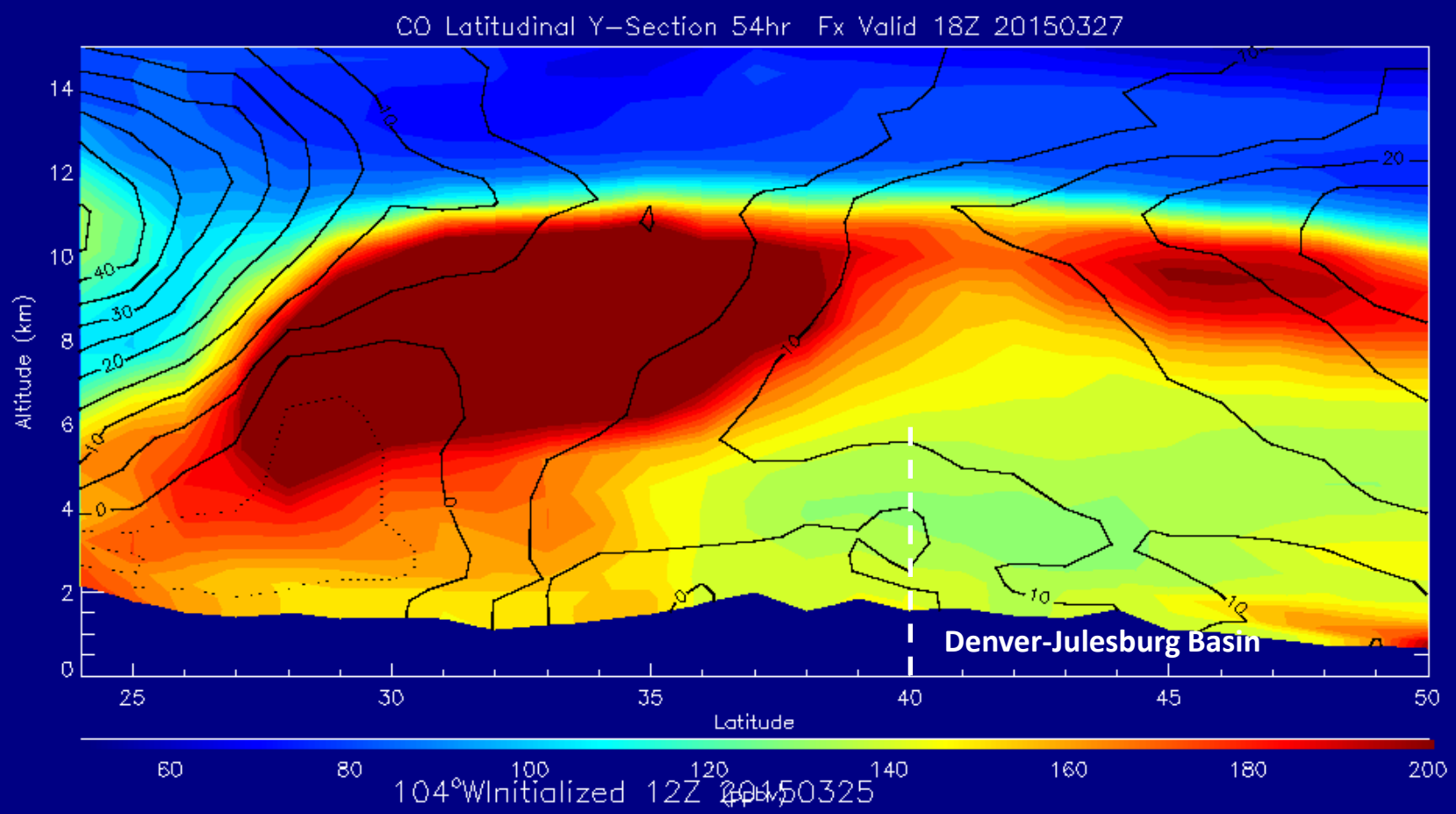
http://raqms.ssec.wisc.edu/forecast/view/20150325

RAQMS 54hr FX O3 Cross-section at 104W (Denver-Julesburg Basin)



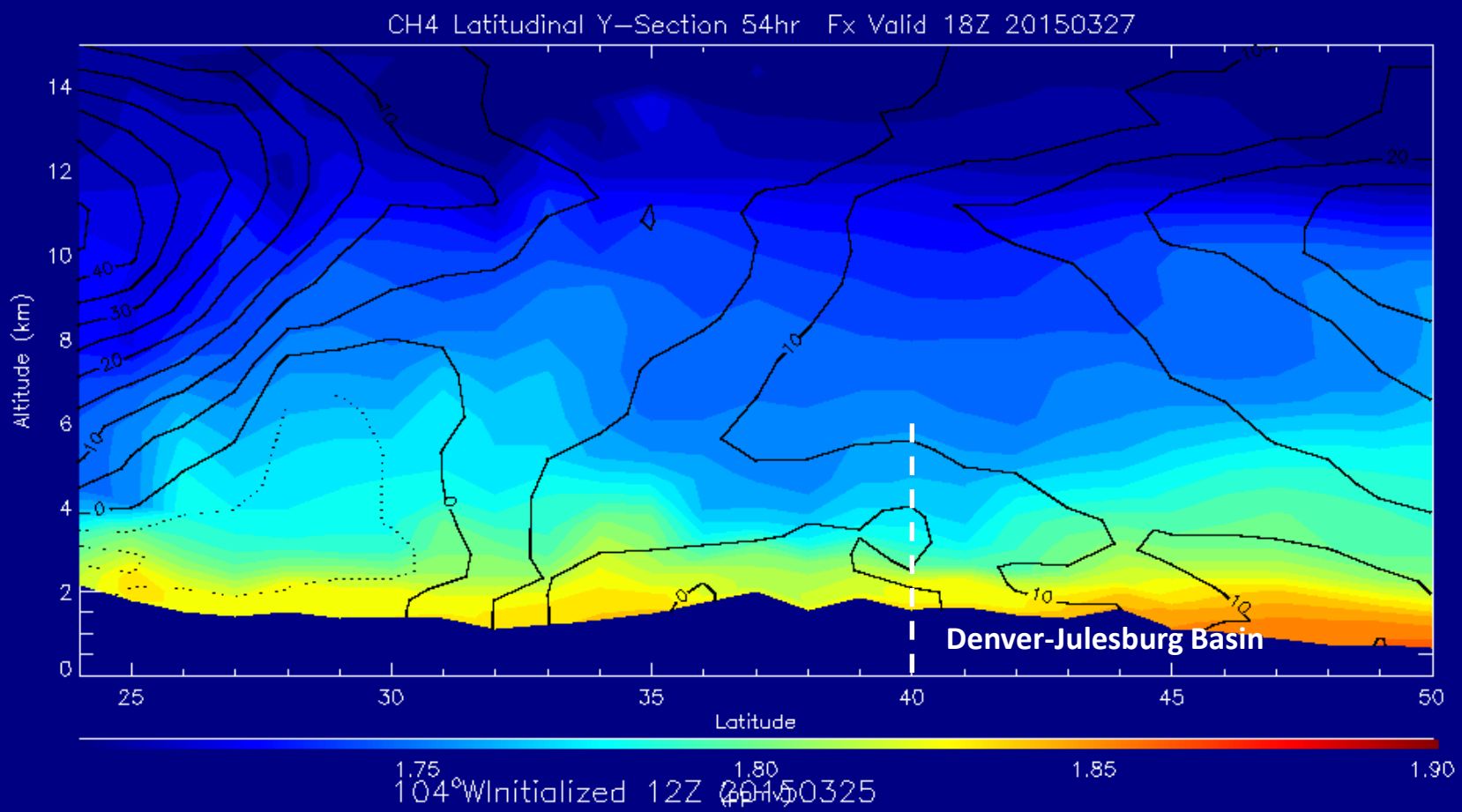
http://raqms.ssec.wisc.edu/forecast/view/20150325

RAQMS 54hr FX CO Cross-section at 104W
(Denver-Julesburg Basin)



http://raqms.ssec.wisc.edu/forecast/view/20150325

RAQMS 54hr FX CH4 Cross-section at 104W (Denver-Julesburg Basin)



RAQMS surface CH4 constrained with 1990 mixing ratio – introduces ~0.1ppmv low bias