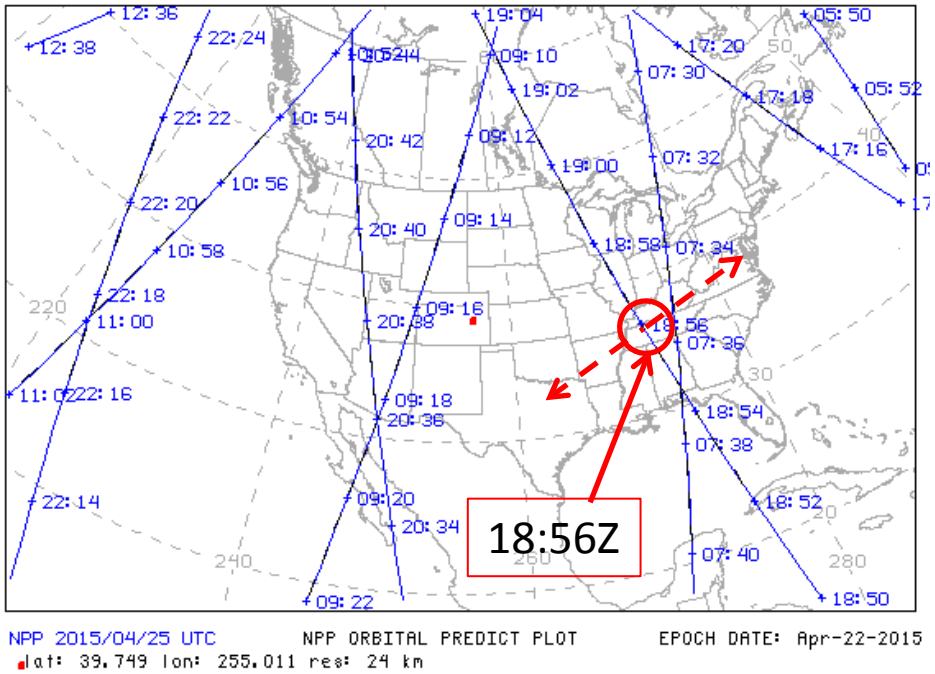
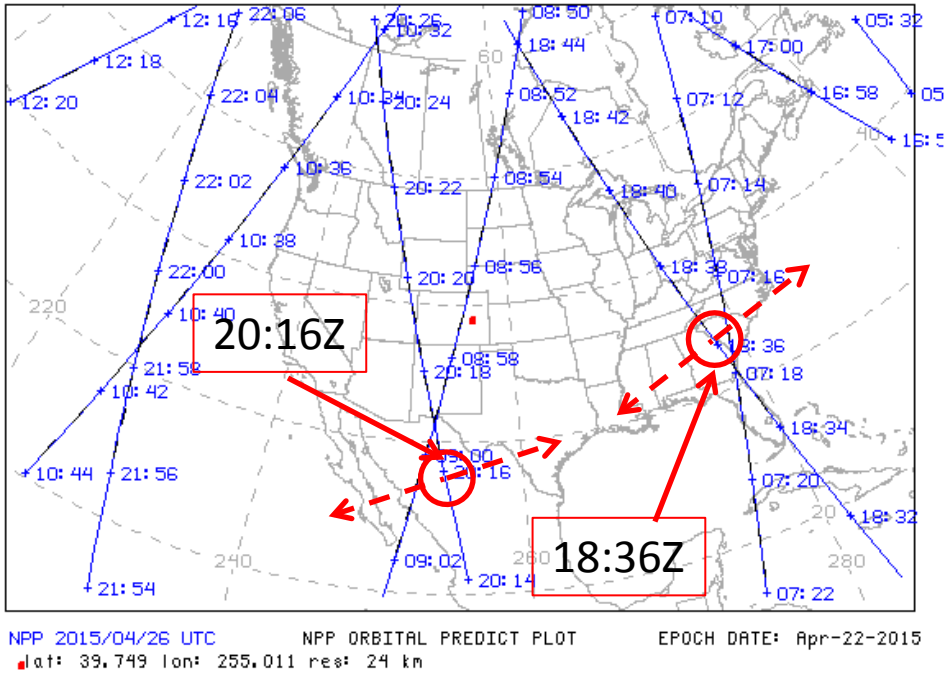
RAQMS 20150424 SONGNEX
54hr FX for 18Z April 25 78hr FX for 18Z April 26
(Haynesville Shale), 2015

S-NPP (CrIS) overpass on 2015/04/25 and 2015/04/26
NUCAPS CO2, O3, CO, CH4 Validation Opportunity
<u>Western (25) and Eastern (24) swath</u>

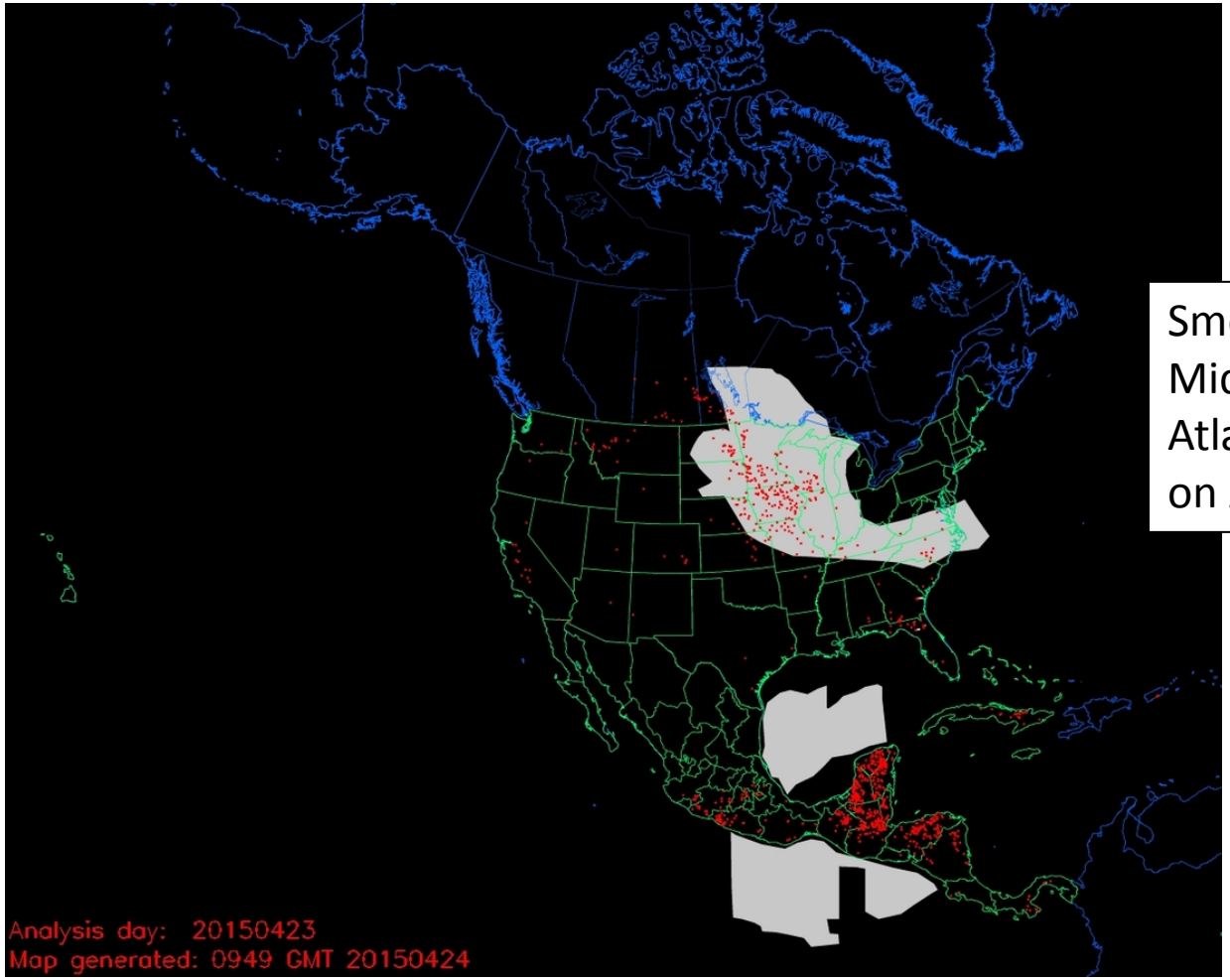




Approximate swath width

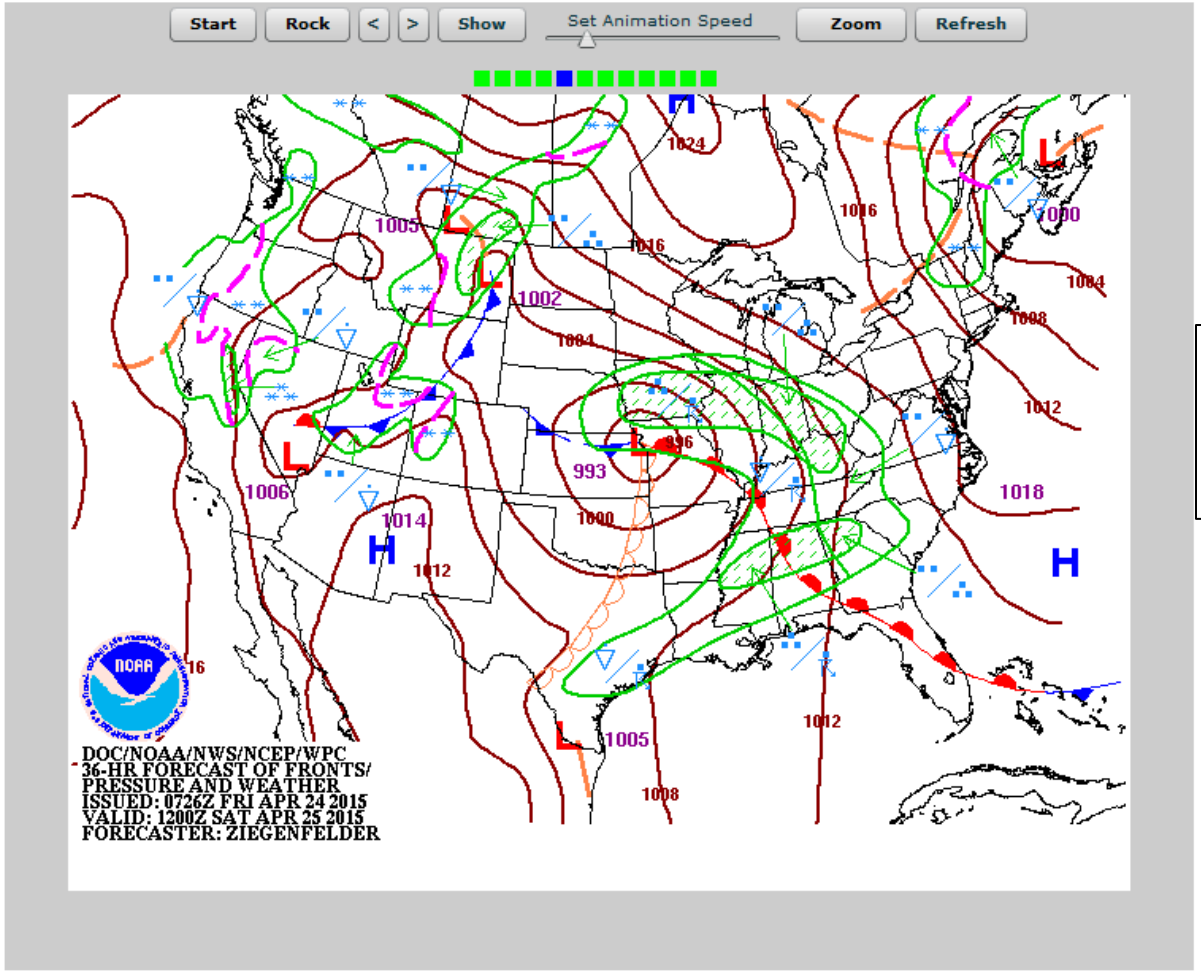
NESDIS Hazard Mapping System (HMS)

http://www.ospo.noaa.gov/data/land/fire/currenthms.jpg



Smoke over Midwest, Mid-Atlantic, and Gulf on April 23, 2015

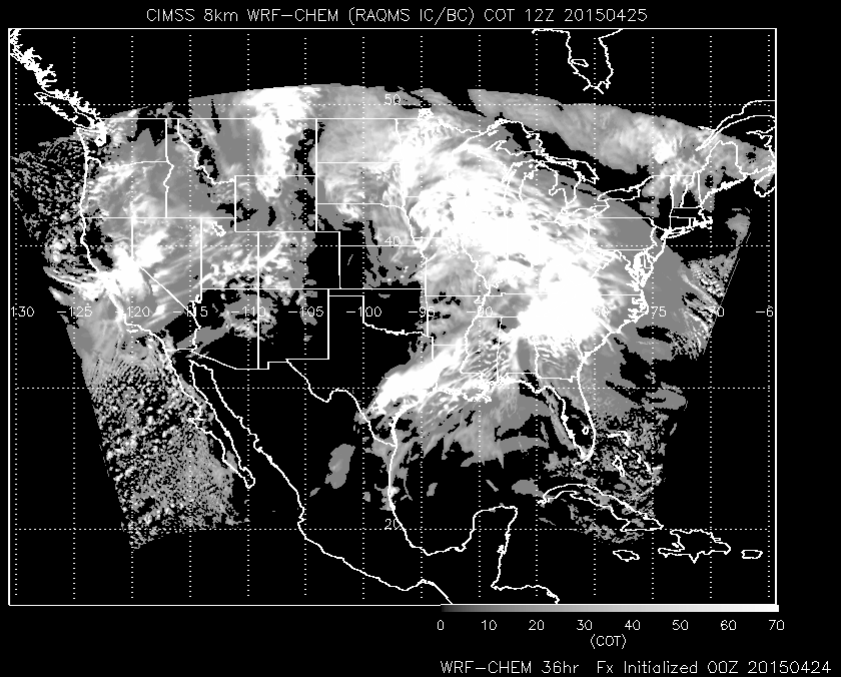
36hr NCEP/WPC forecast valid 12Z 04/25/2015

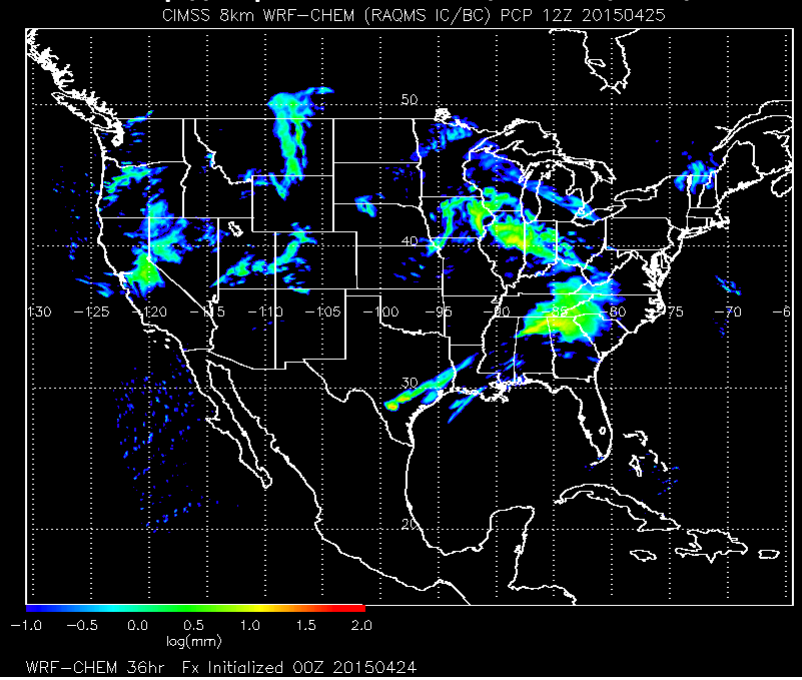


Rain south of Haynesville Shale

http://www.hpc.ncep.noaa.gov/basicwx/day0-7loop.html

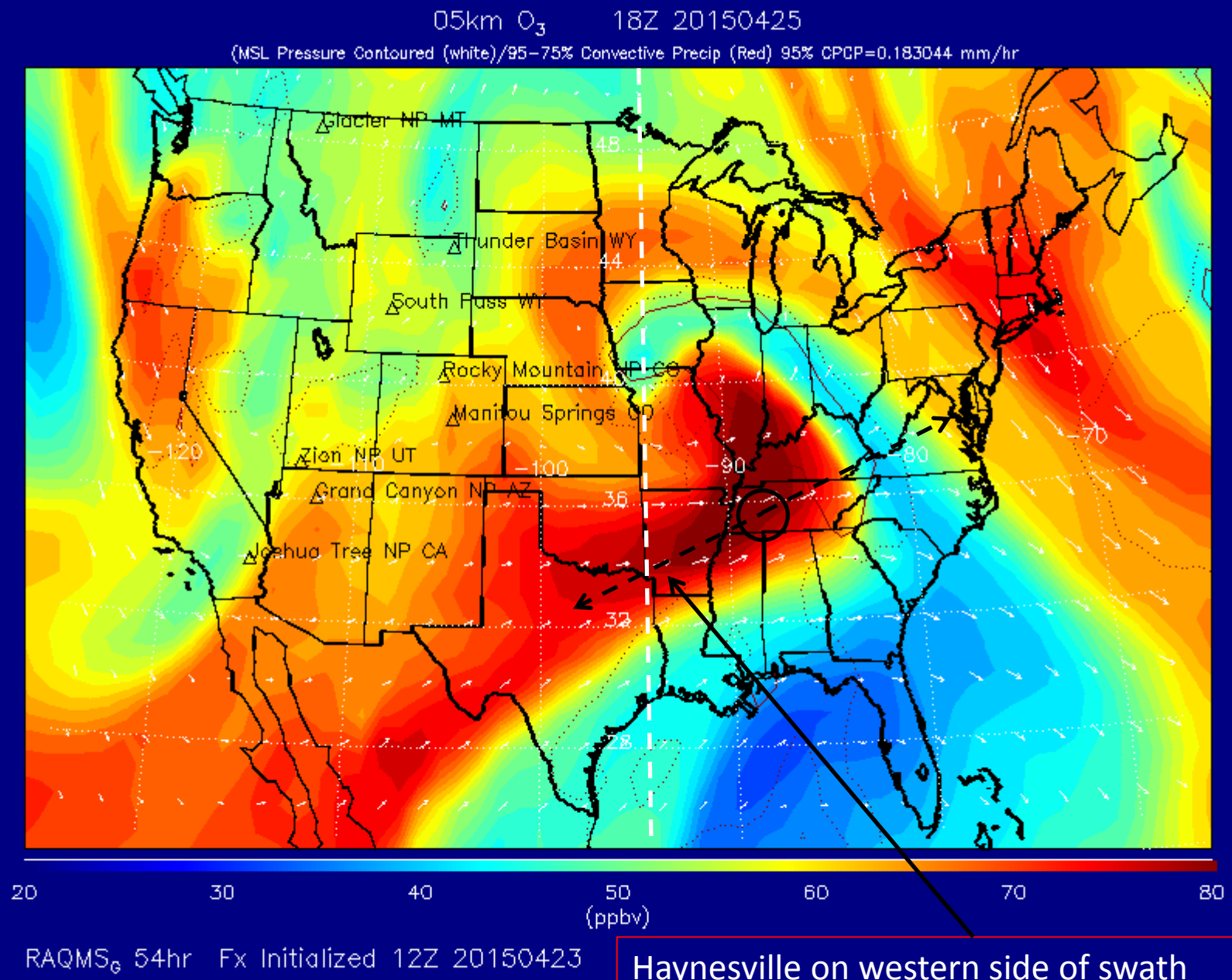
http://raqms.ssec.wisc.edu/forecast/view/20150424





Line of precip South of Haynesville Shale tomorrow morning

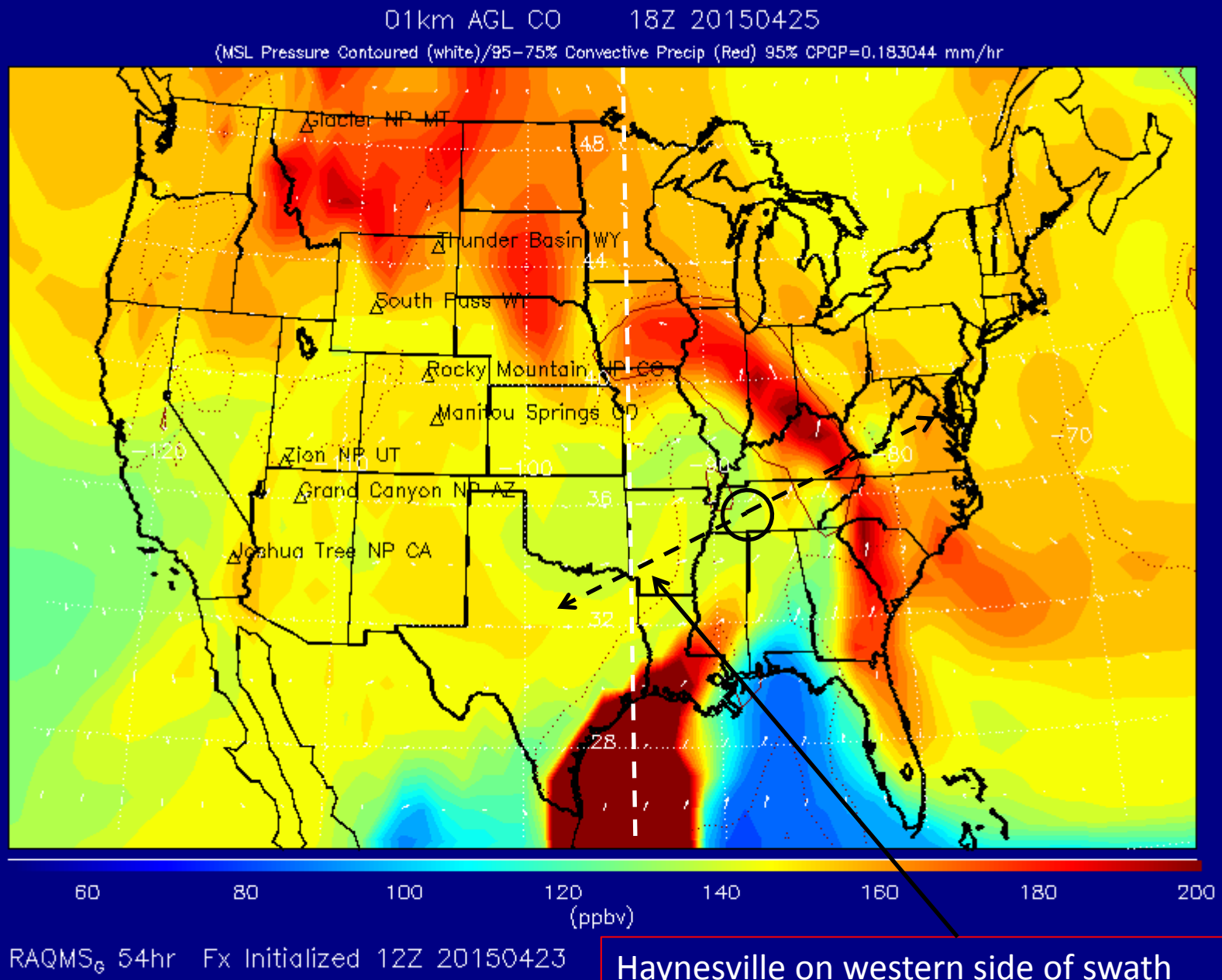
http://raqms.ssec.wisc.edu/forecast/view/20150423



Haynesville on western side of swath

Approximate swath width

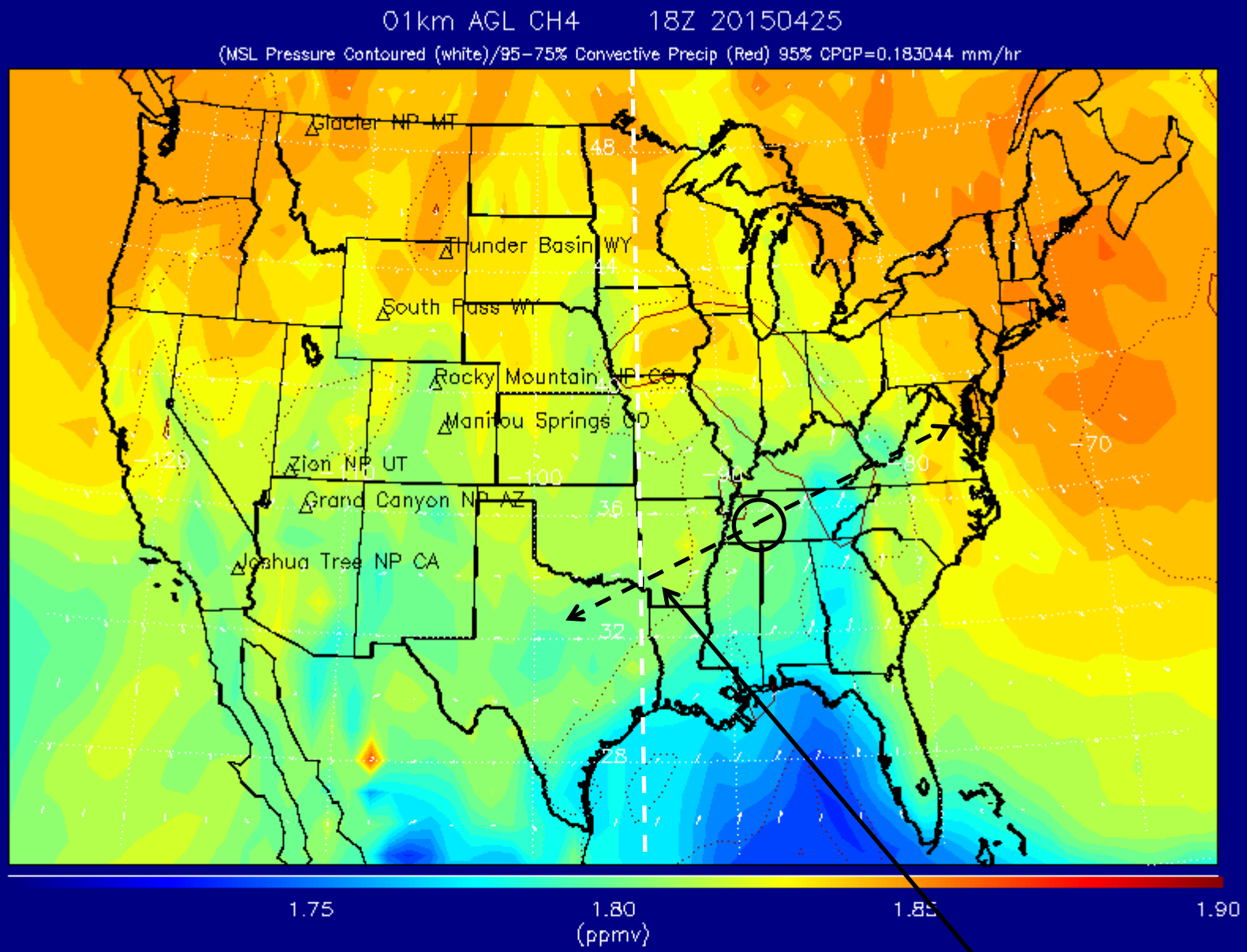
http://raqms.ssec.wisc.edu/forecast/view/20150423



Haynesville on western side of swath

Approximate swath width

http://raqms.ssec.wisc.edu/forecast/view/20150423

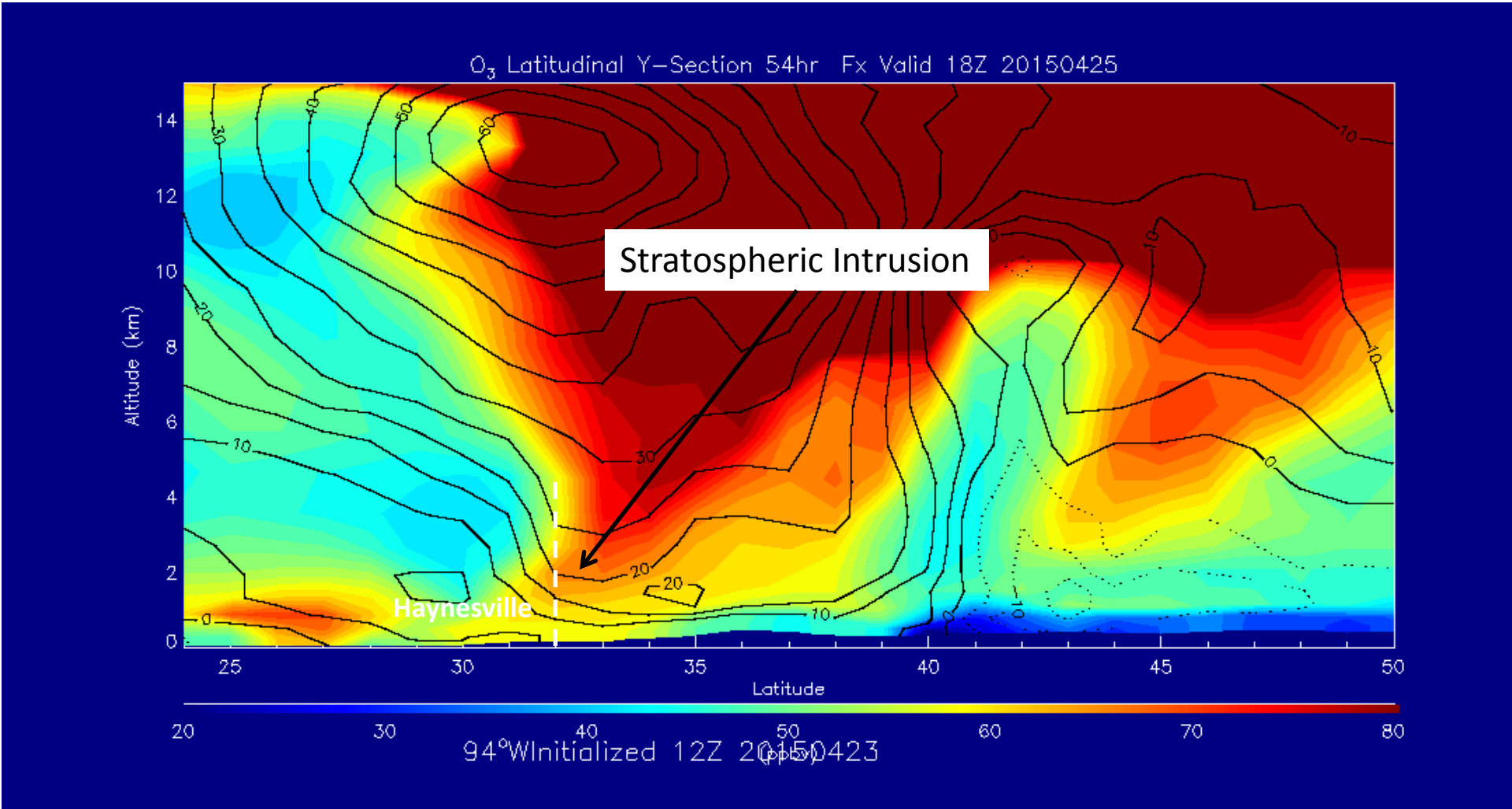


Haynesville on western side of swath

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

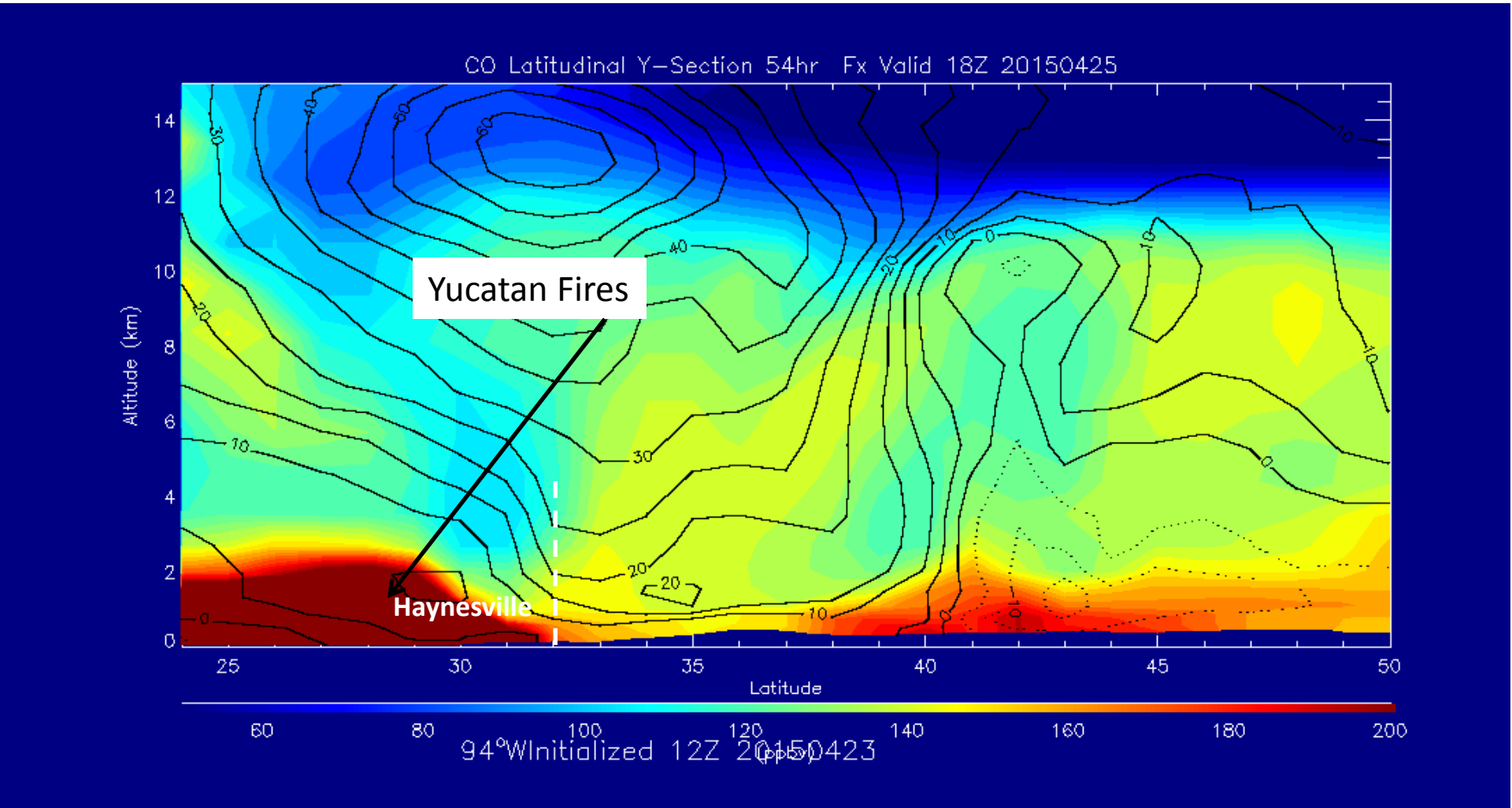
http://raqms.ssec.wisc.edu/forecast/view/20150423

RAQMS 54hr FX O3 Cross-section at 94W (Haynesville Shale)



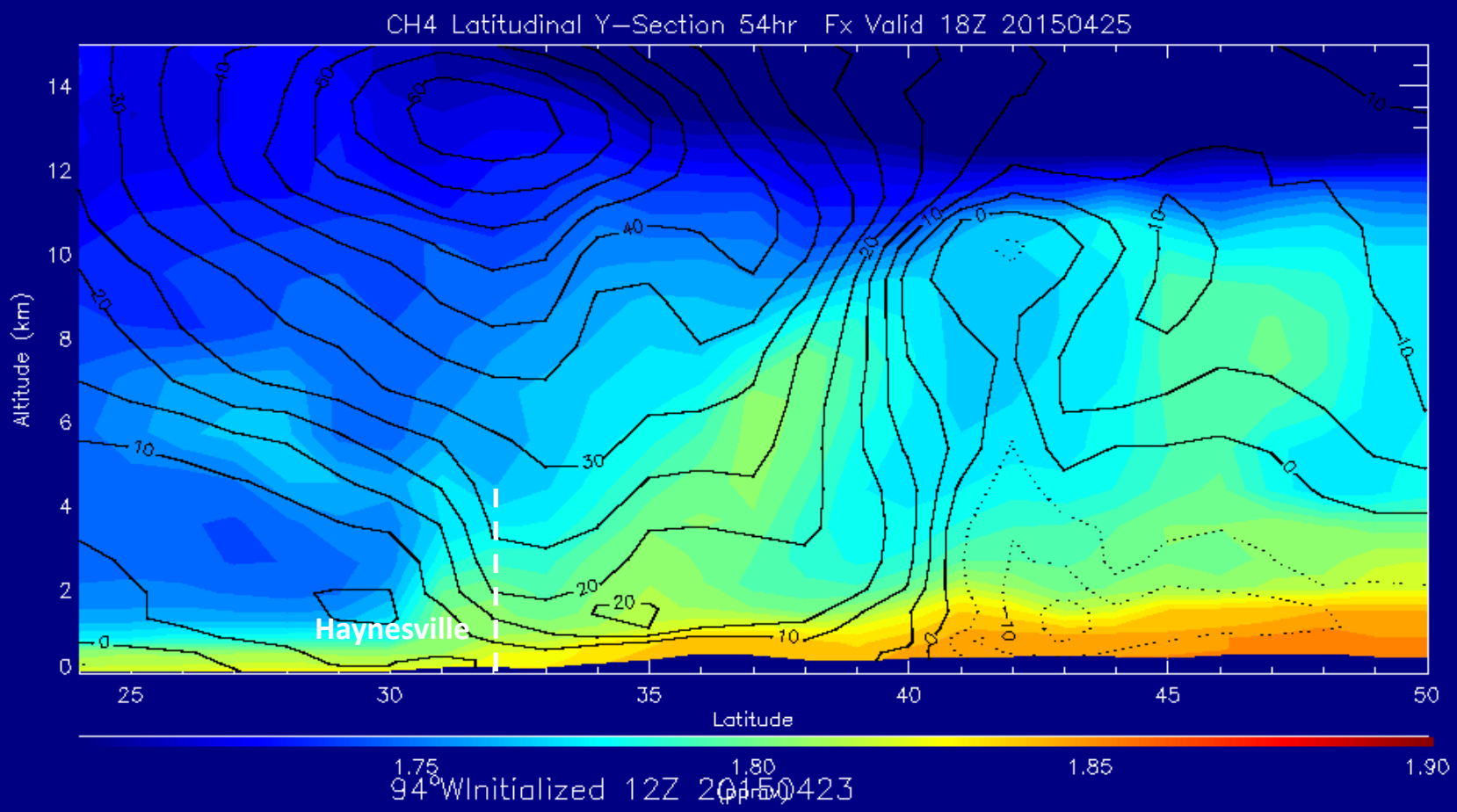
http://raqms.ssec.wisc.edu/forecast/view/20150423

RAQMS 54hr FX CO Cross-section at 94W (Haynesville Shale)



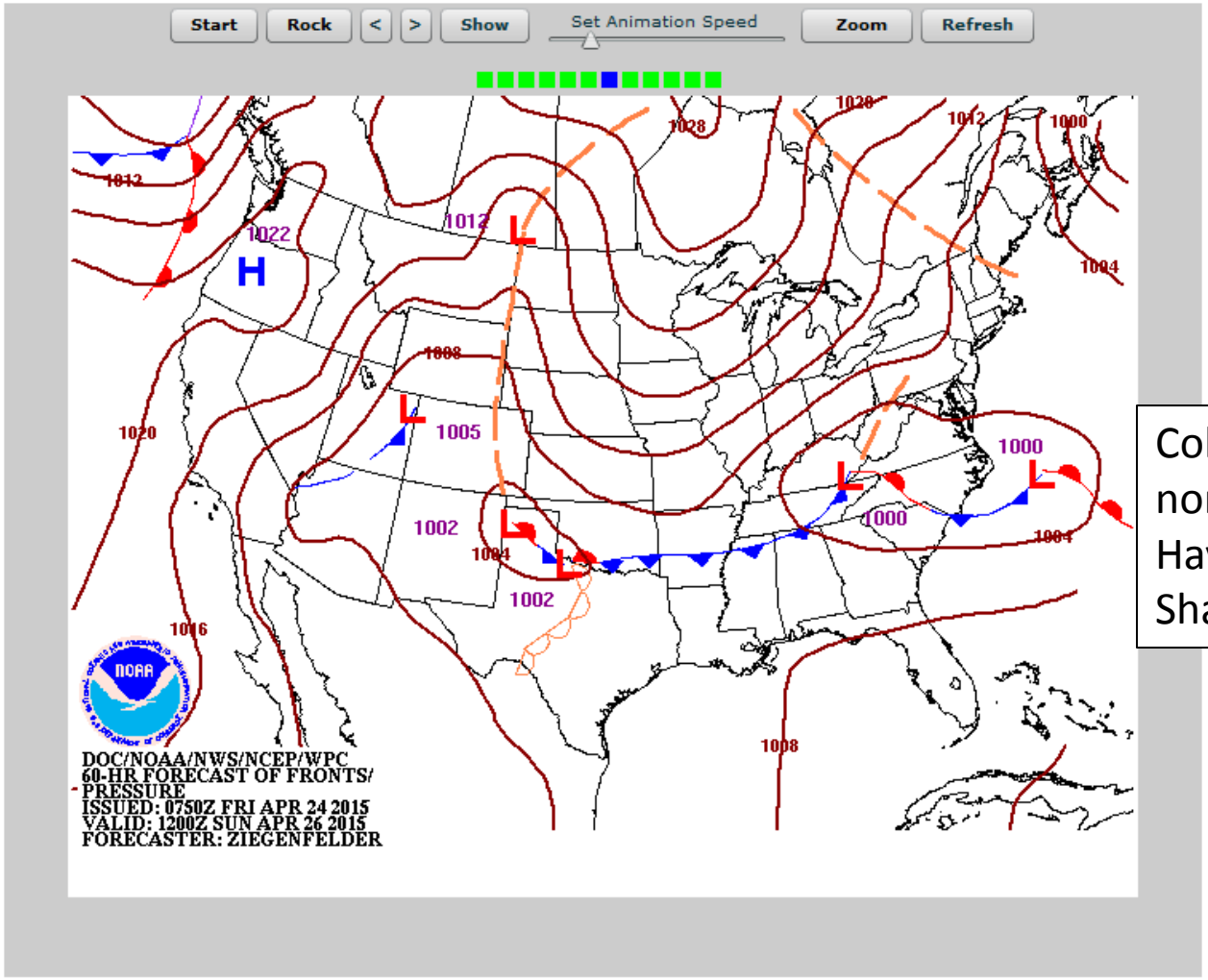
http://raqms.ssec.wisc.edu/forecast/view/20150423

RAQMS 54hr FX CH4 Cross-section at 94W (Haynesville Shale)



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

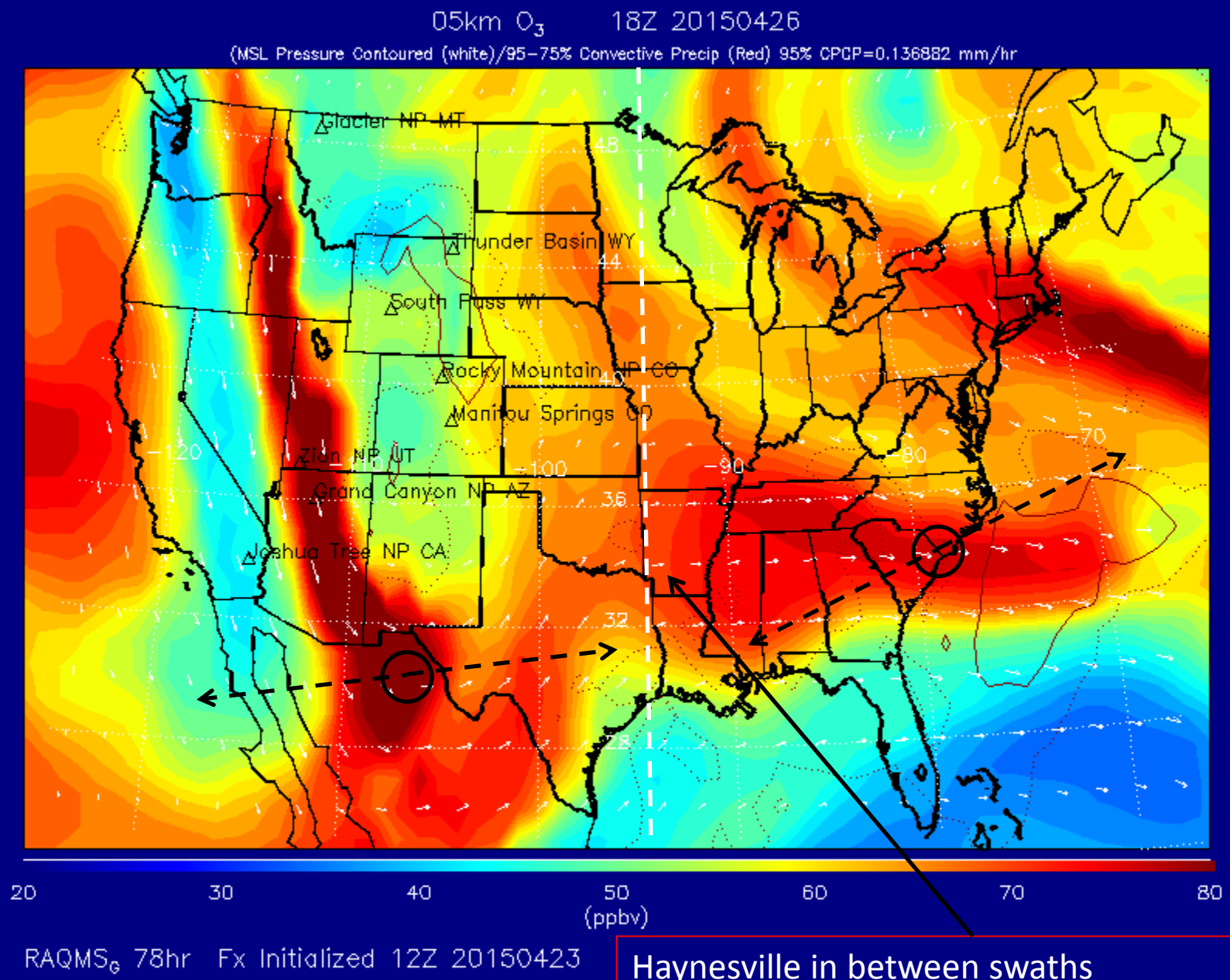
60hr NCEP/WPC forecast valid 12Z 04/26/2015



Cold front north of Haynesville Shale

http://www.hpc.ncep.noaa.gov/basicwx/day0-7loop.html

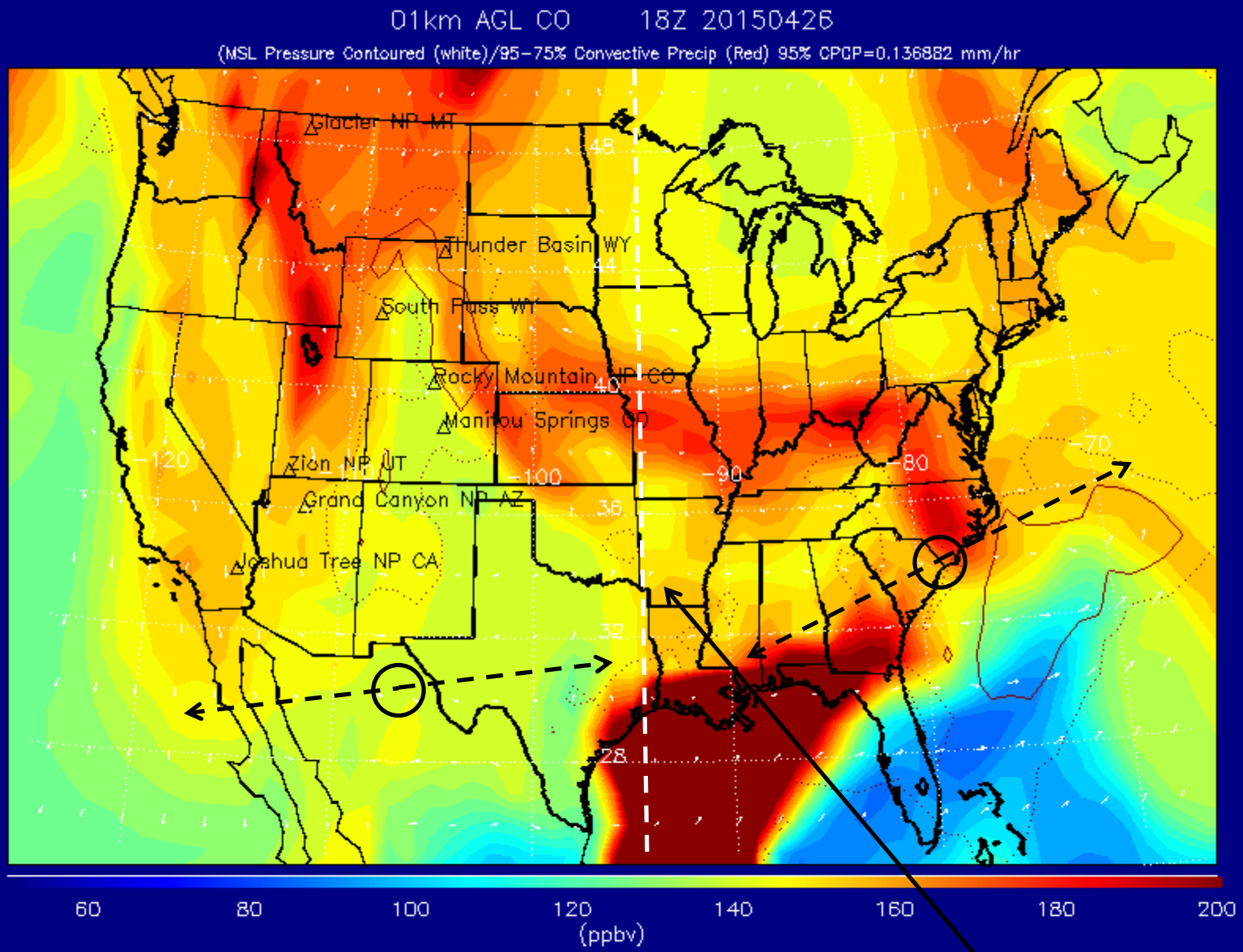
http://raqms.ssec.wisc.edu/forecast/view/20150423



Haynesville in between swaths

Approximate swath width

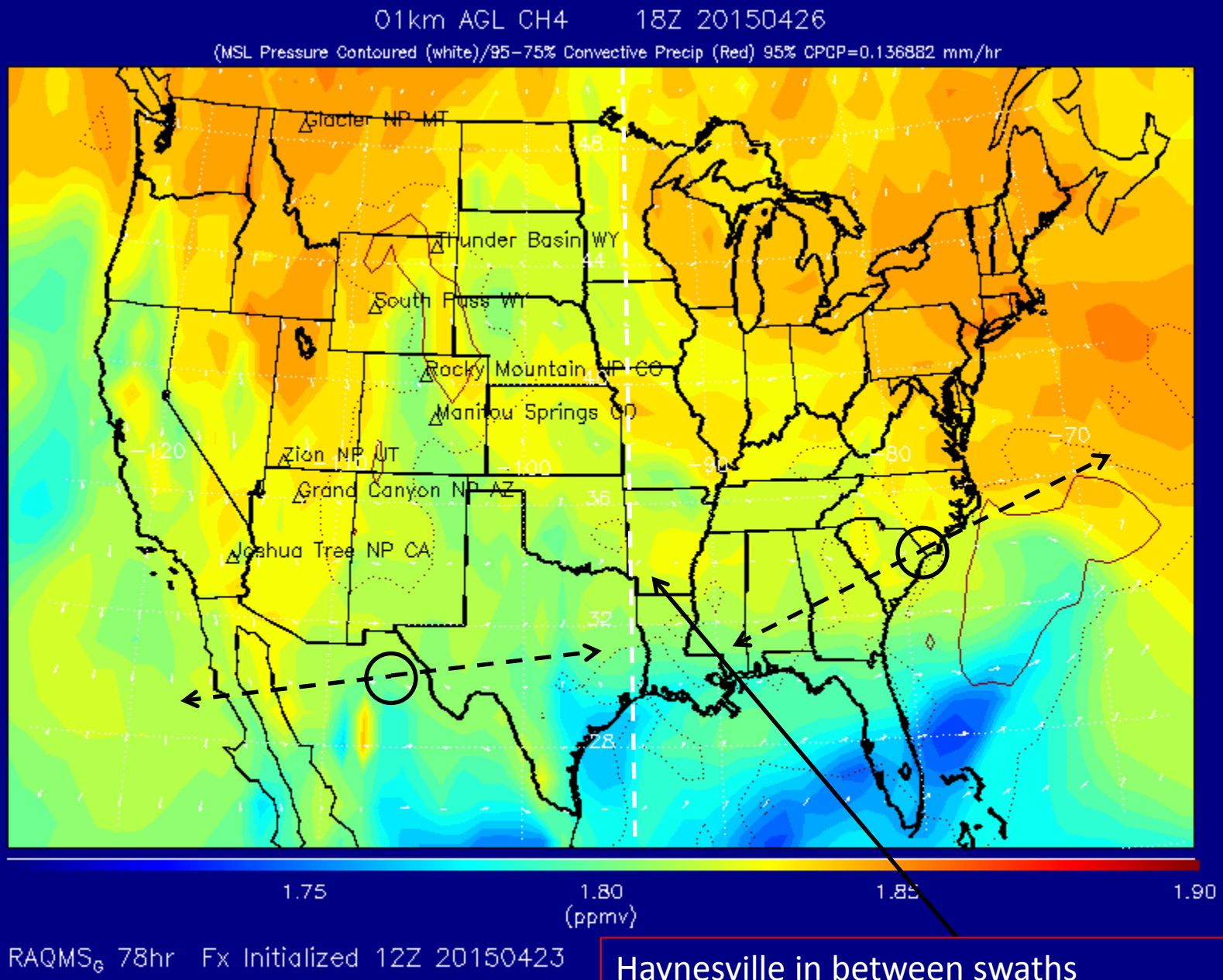
http://raqms.ssec.wisc.edu/forecast/view/20150423



Haynesville in between swaths

Approximate swath width

http://raqms.ssec.wisc.edu/forecast/view/20150423

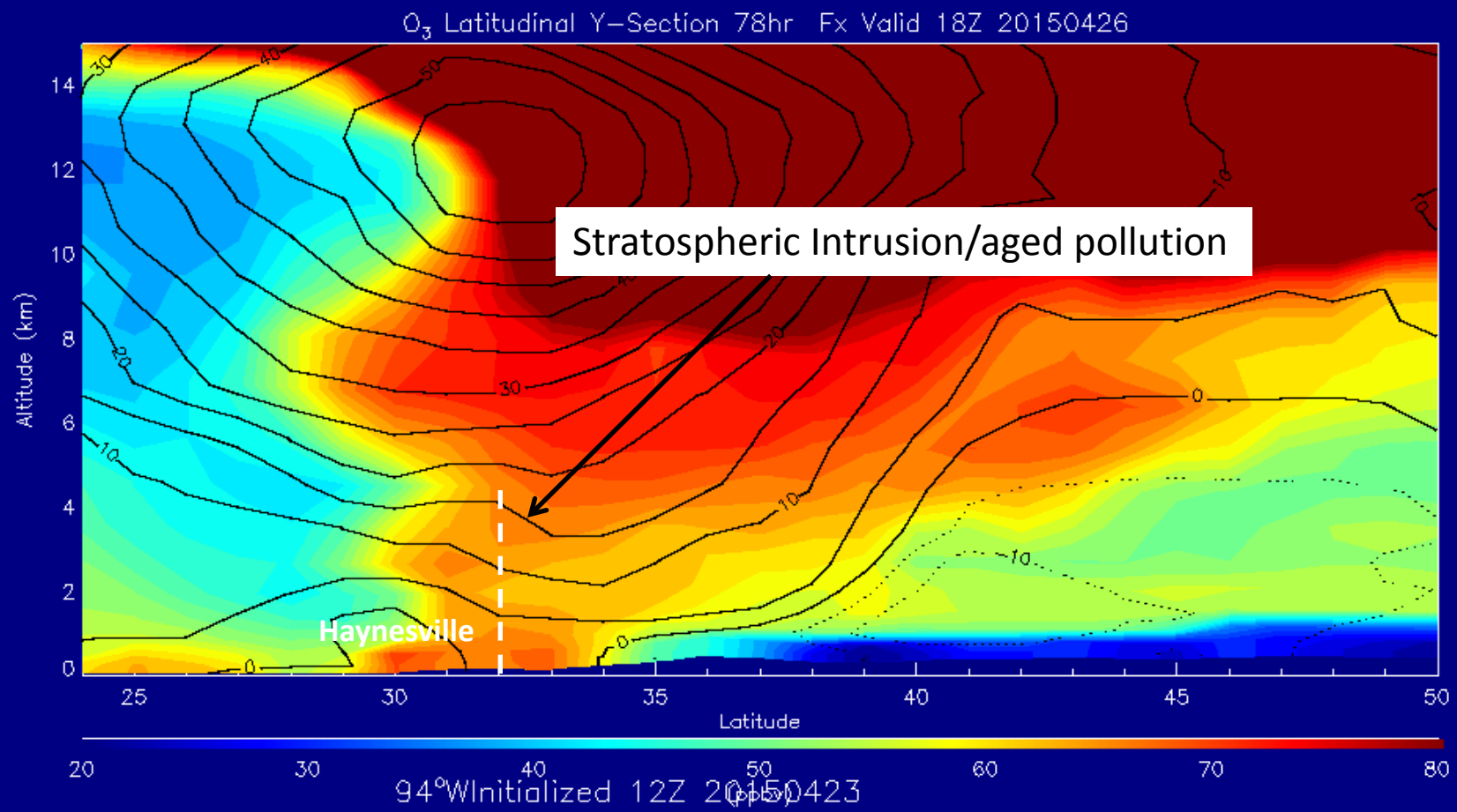


Haynesville in between swaths

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

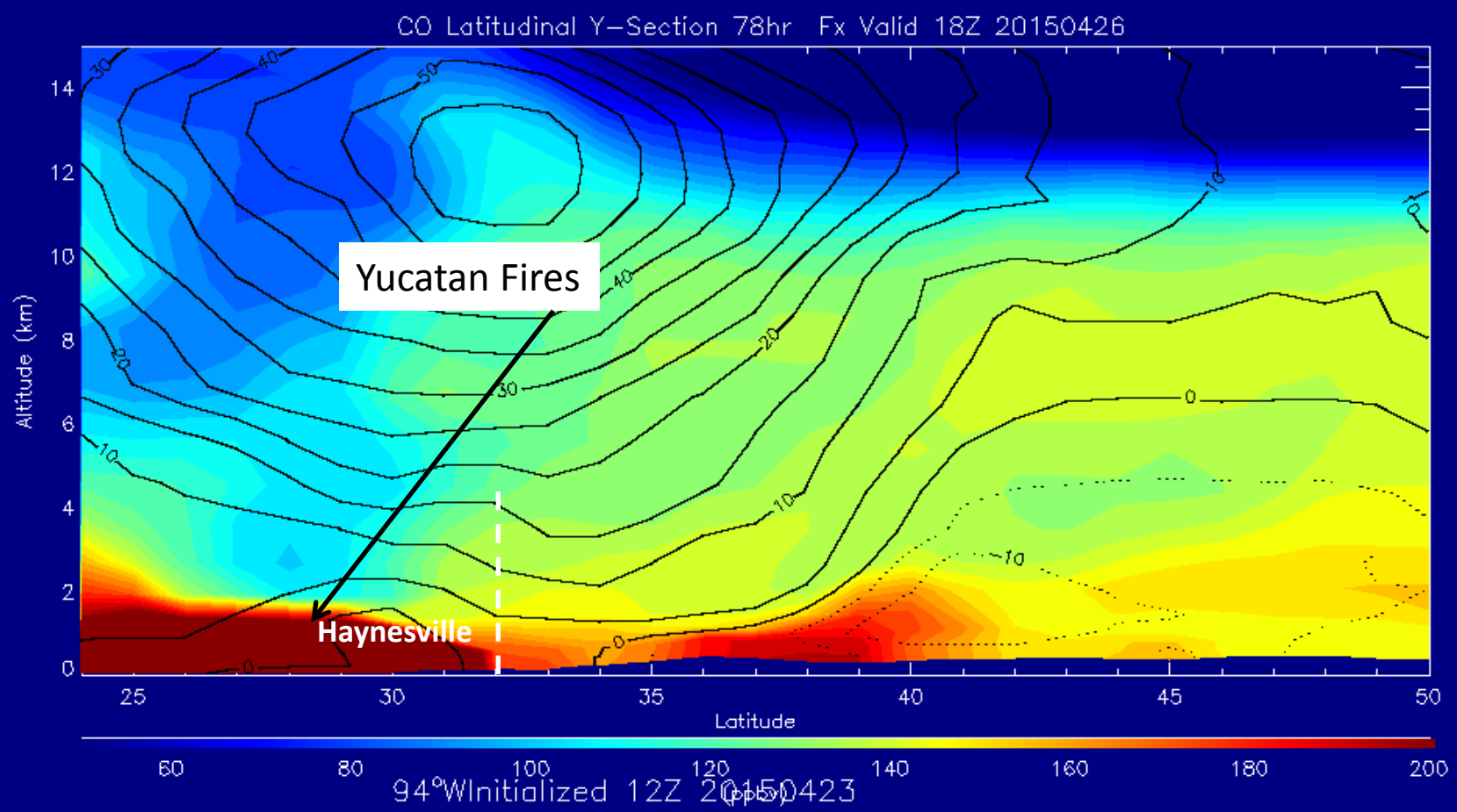
http://raqms.ssec.wisc.edu/forecast/view/20150423

RAQMS 78hr FX O3 Cross-section at 94W (Haynesville Shale)



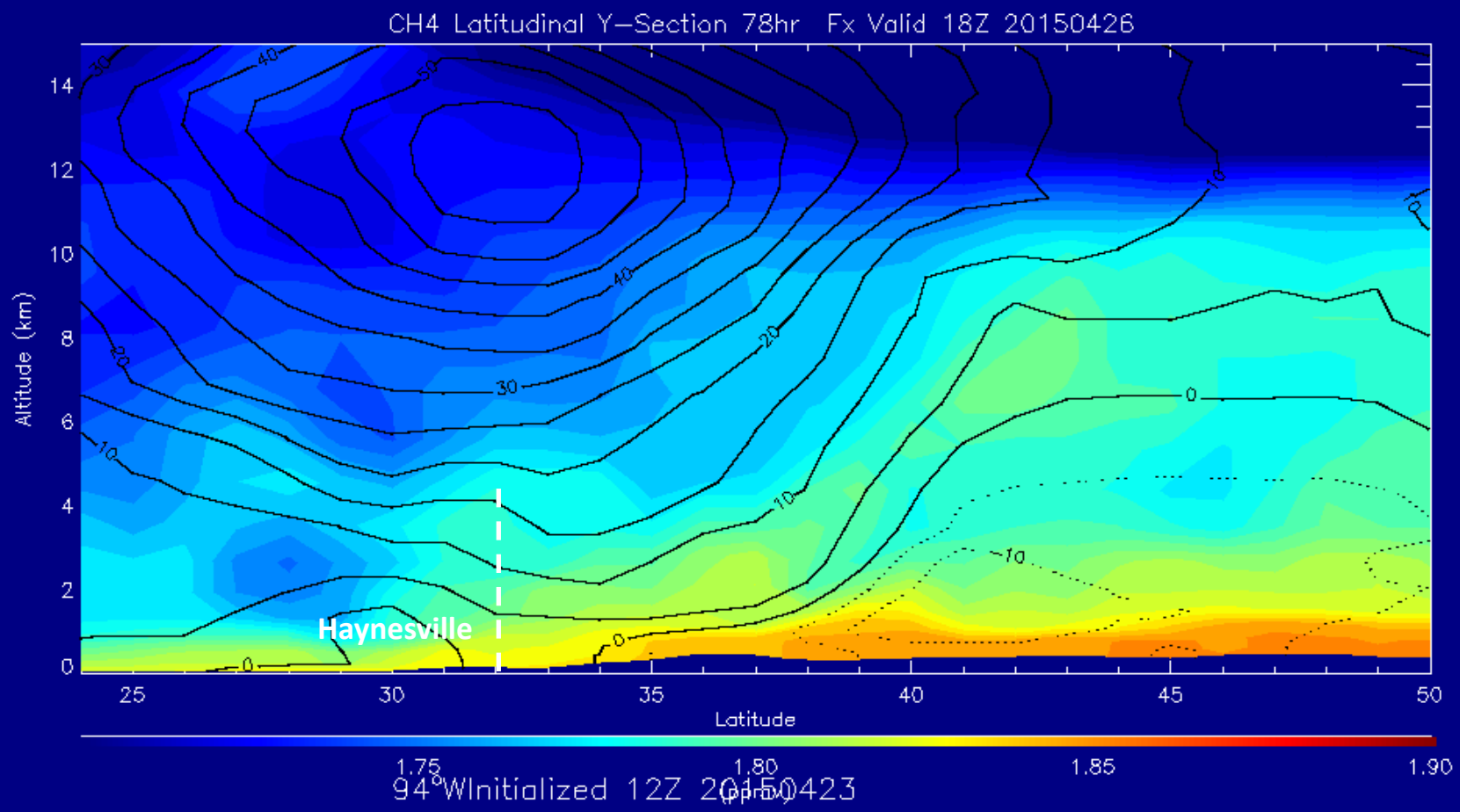
http://raqms.ssec.wisc.edu/forecast/view/20150423

RAQMS 78hr FX CO Cross-section at 94W (Haynesville Shale)



http://raqms.ssec.wisc.edu/forecast/view/20150423

RAQMS 78hr FX CH4 Cross-section at 94W (Haynesville Shale)



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