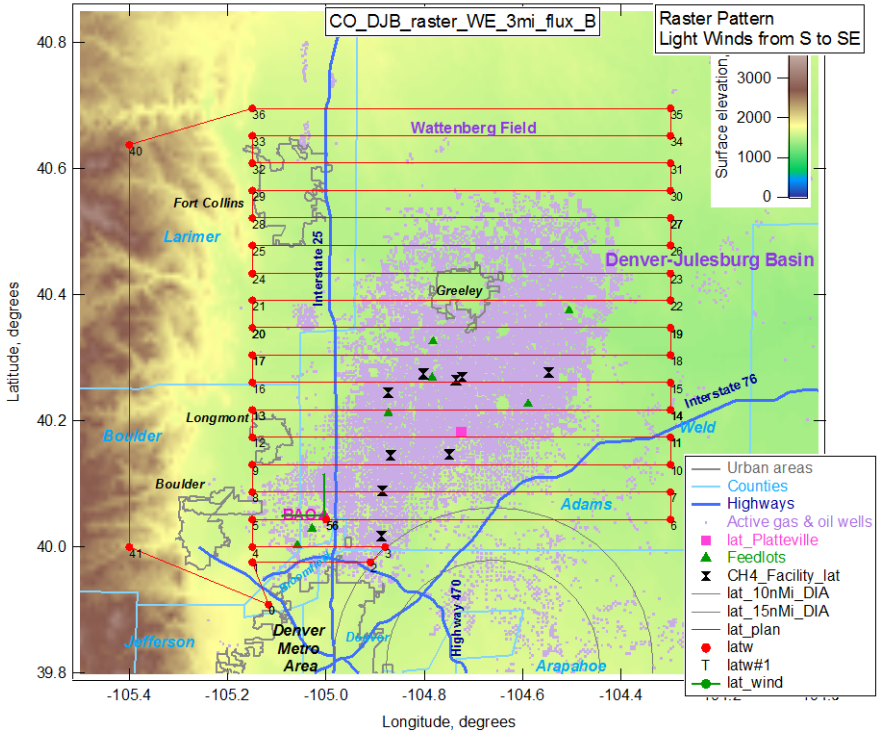
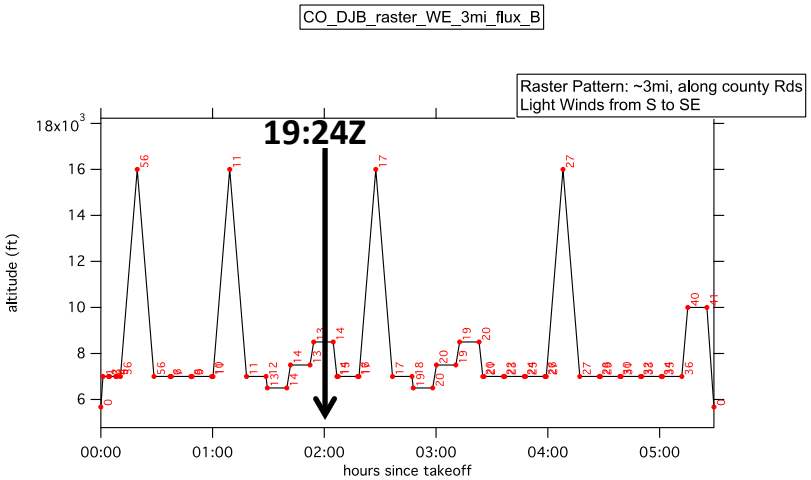
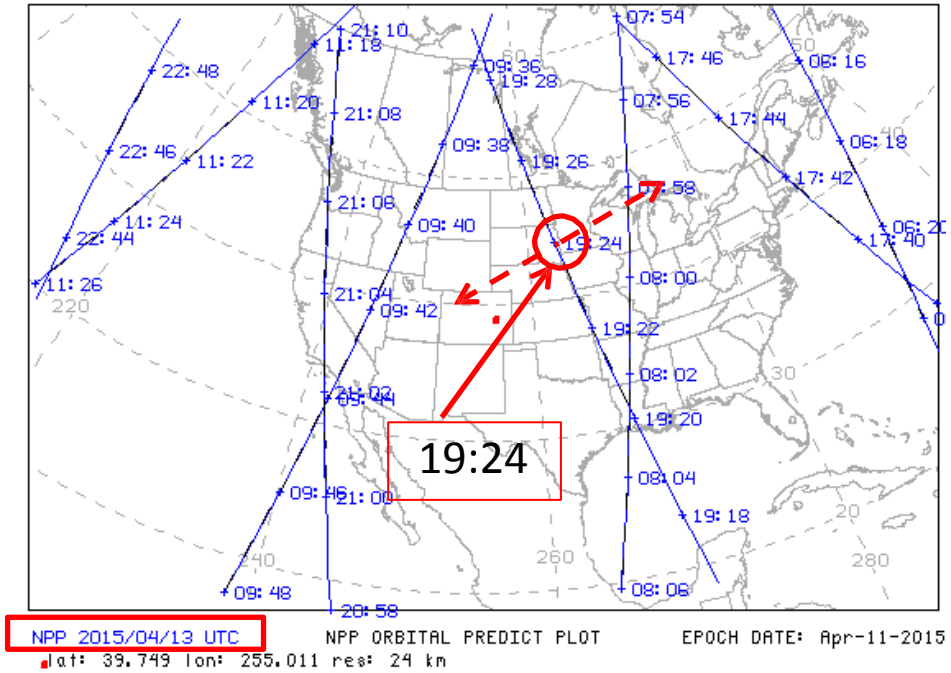
RAQMS 20150413 SONGNEX
30hr FX for 18Z April 13 (Denver Julesburg Basin)
and
54hr FX for 18Z April 14 (Optional Flight Day), 2015

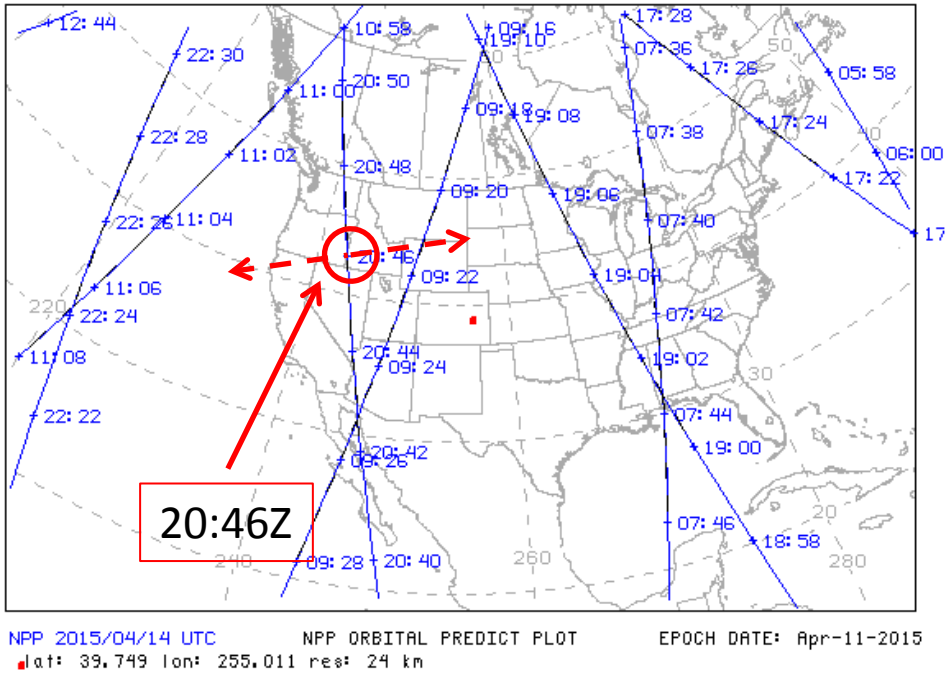




Assuming 11:30am Mountain Take-off

S-NPP (CrIS) overpass on 2015/04/13 and 2015/04/14
NUCAPS CO2, O3, CO, CH4 Validation Opportunity
–***western (13) and eastern (14) swath edge***

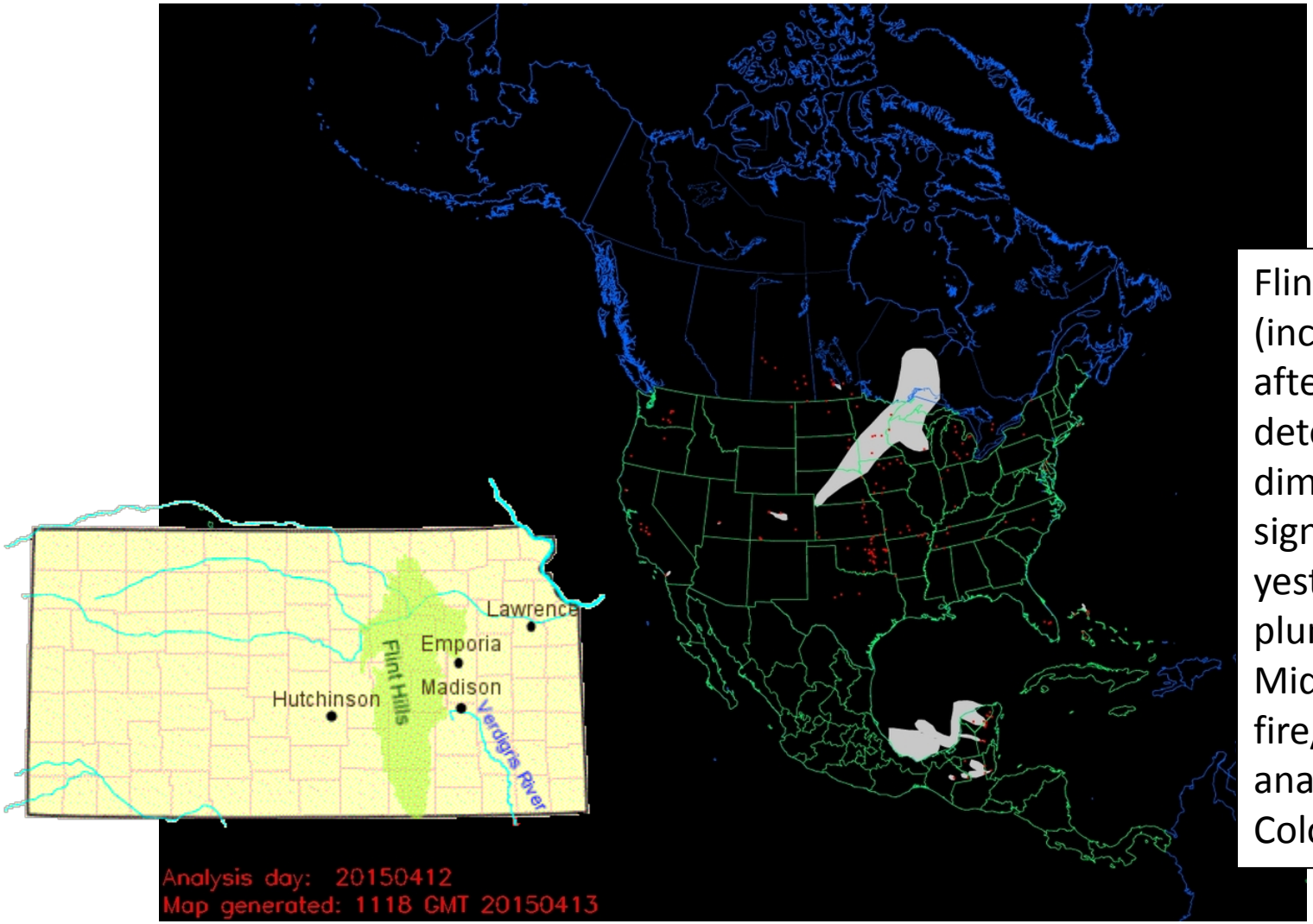




Approximate swath width

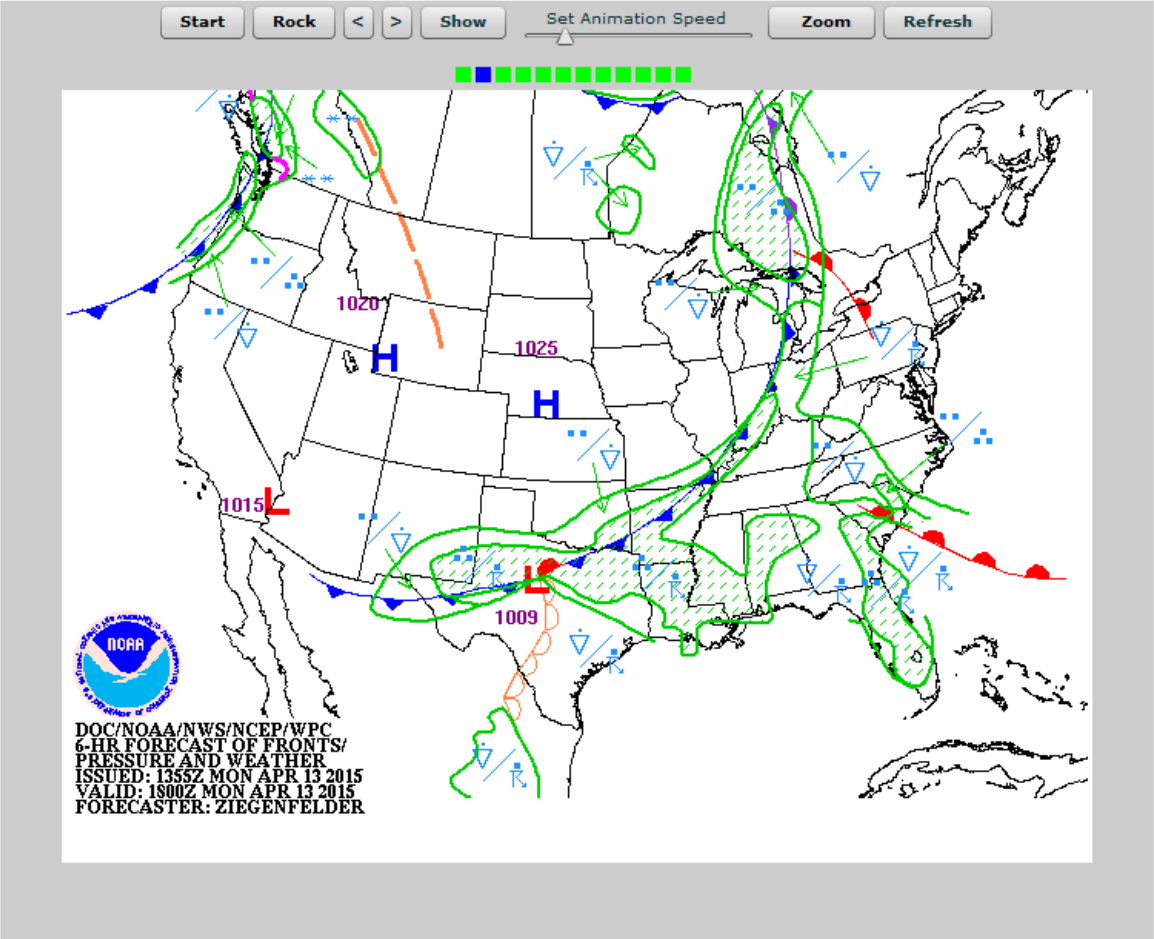
NESDIS Hazard Mapping System (HMS)

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



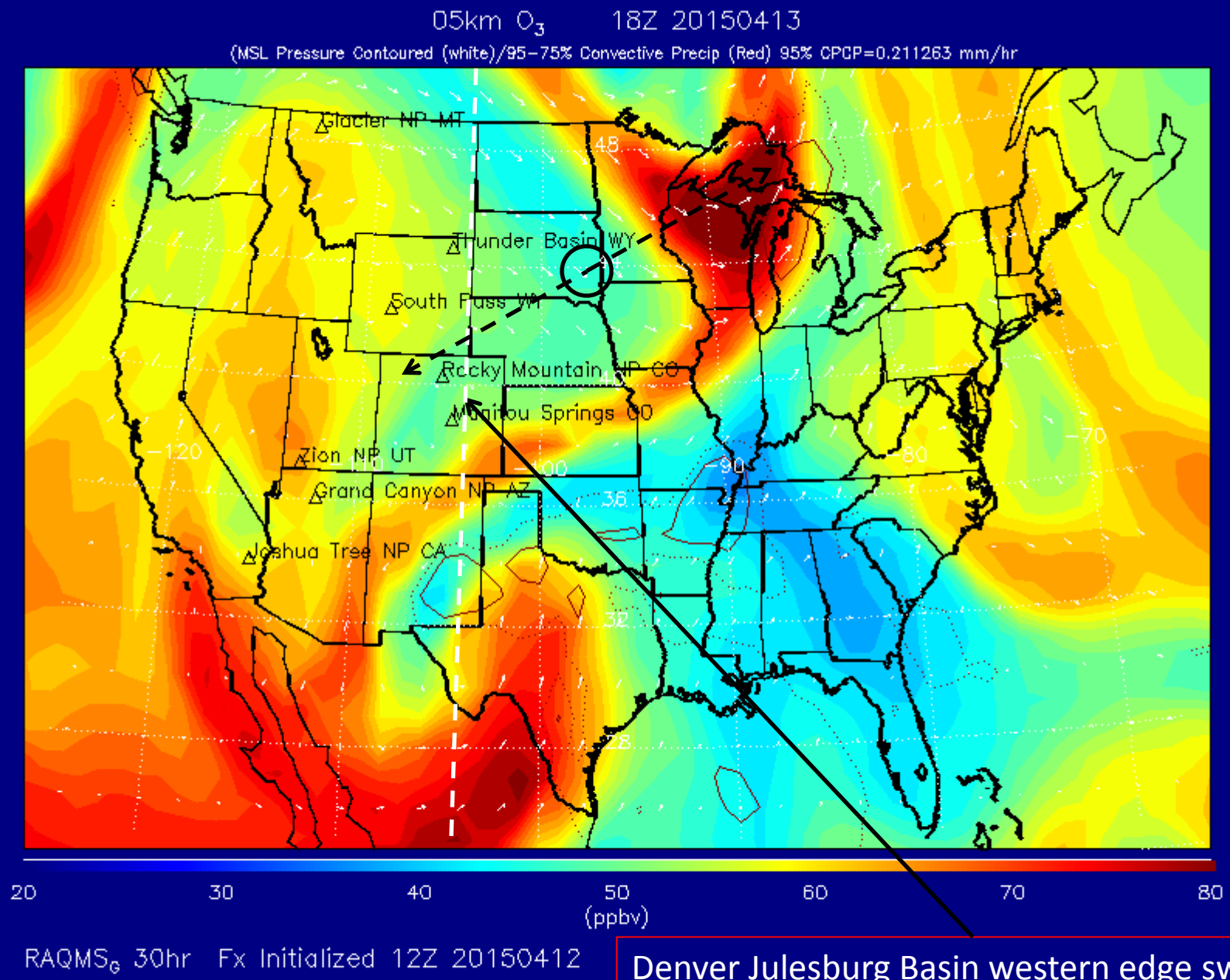
Flint Hill fires (including afternoon detection) diminished significantly since yesterday– smoke plume over Midwest – fire/smoke analyzed over Colorado

6hr NCEP/WPC forecast valid 18Z 04/13/2015



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

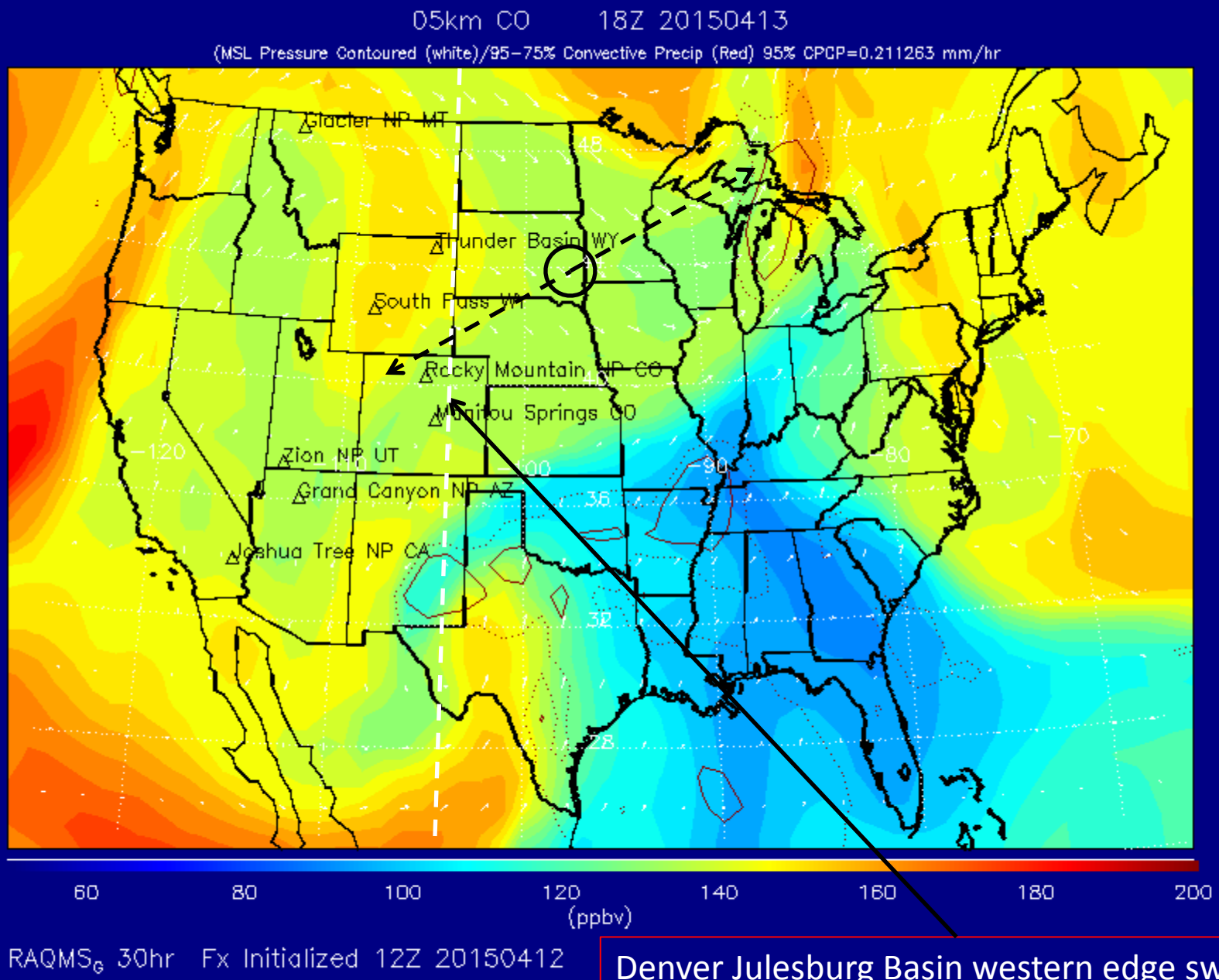
http://raqms.ssec.wisc.edu/forecast/view/20150412



Denver Julesburg Basin western edge swath

Approximate swath width

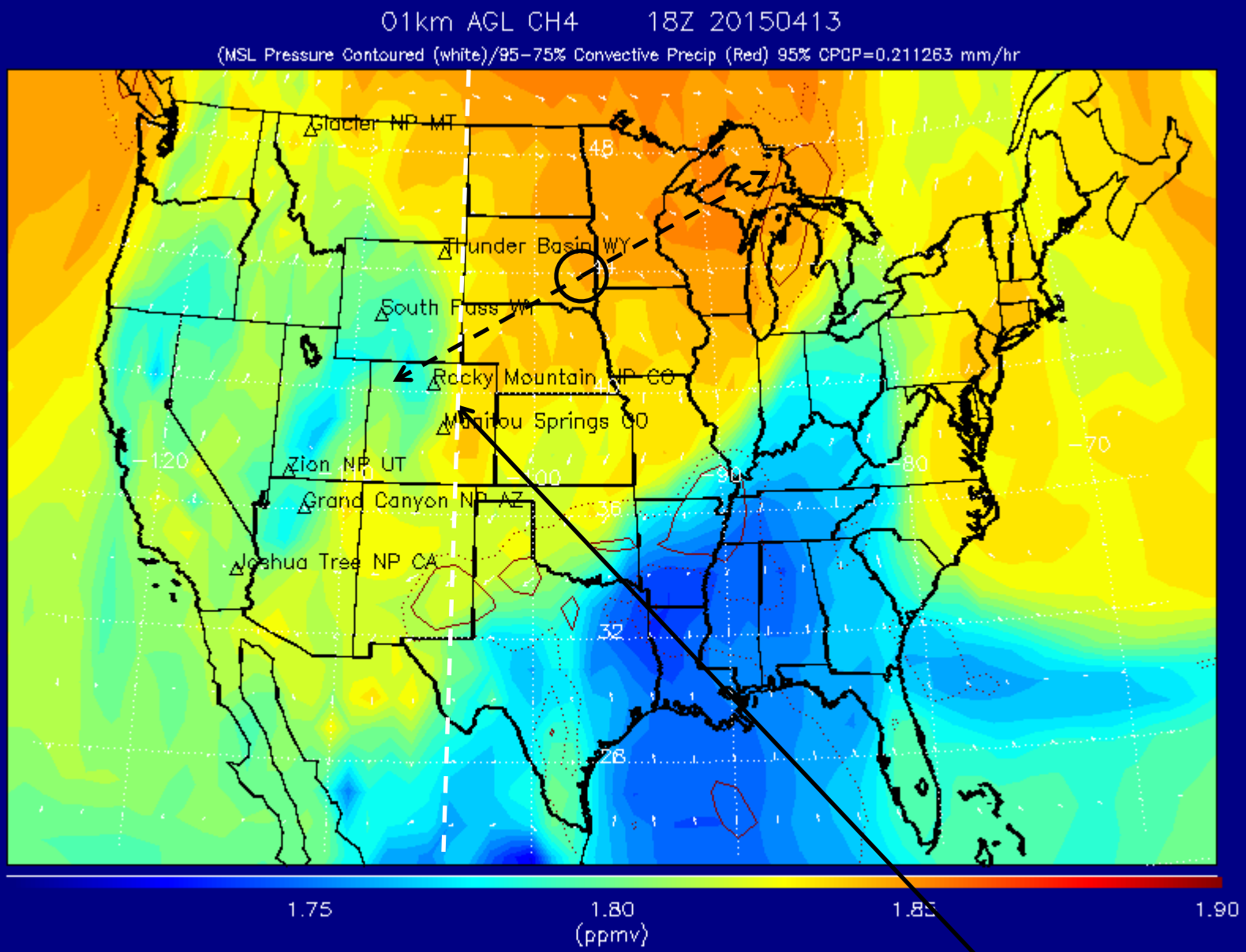
http://raqms.ssec.wisc.edu/forecast/view/20150406



Denver Julesburg Basin western edge swath

Approximate swath width

http://raqms.ssec.wisc.edu/forecast/view/20150406

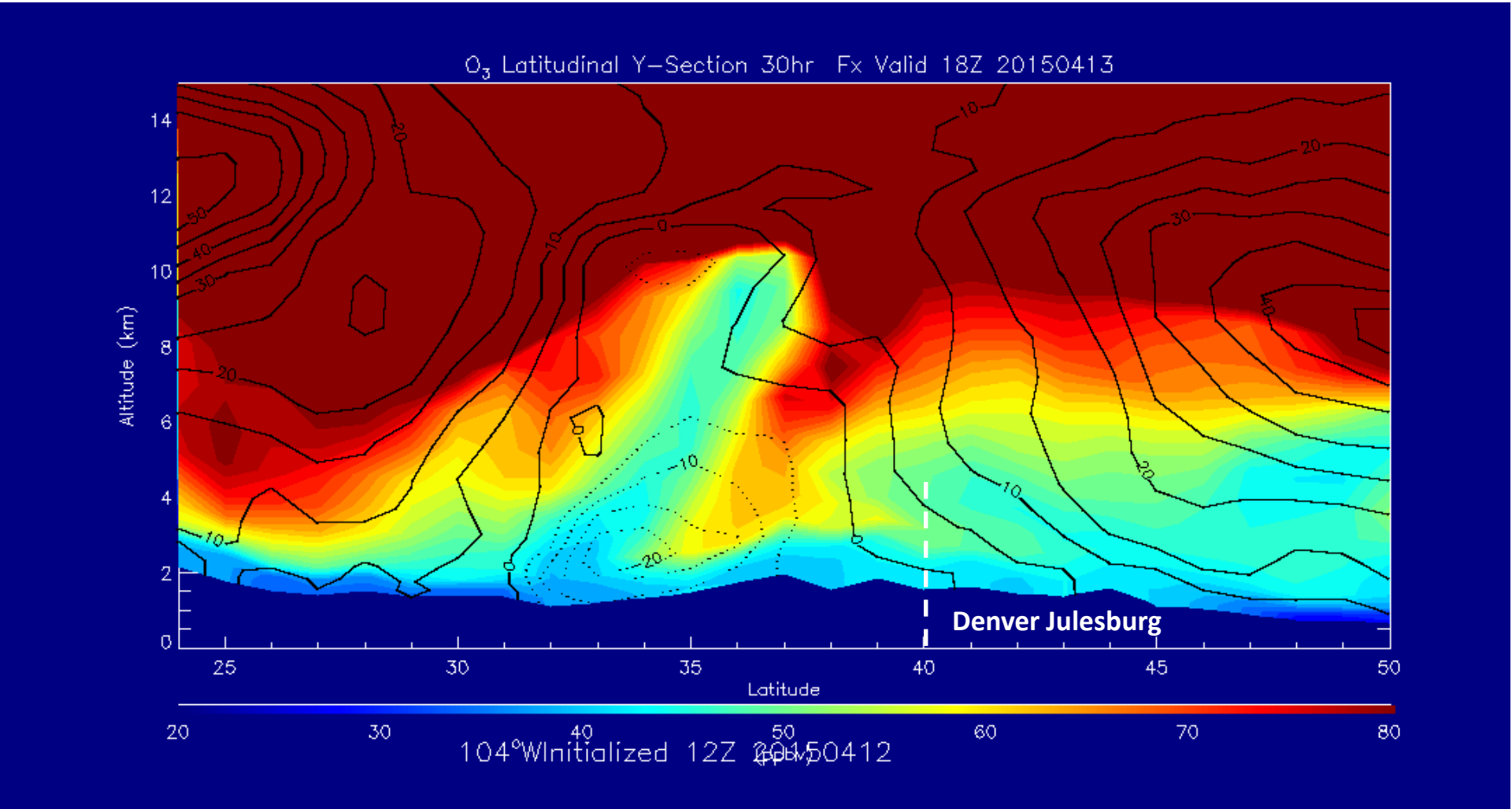


Denver Julesburg Basin western edge swath

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

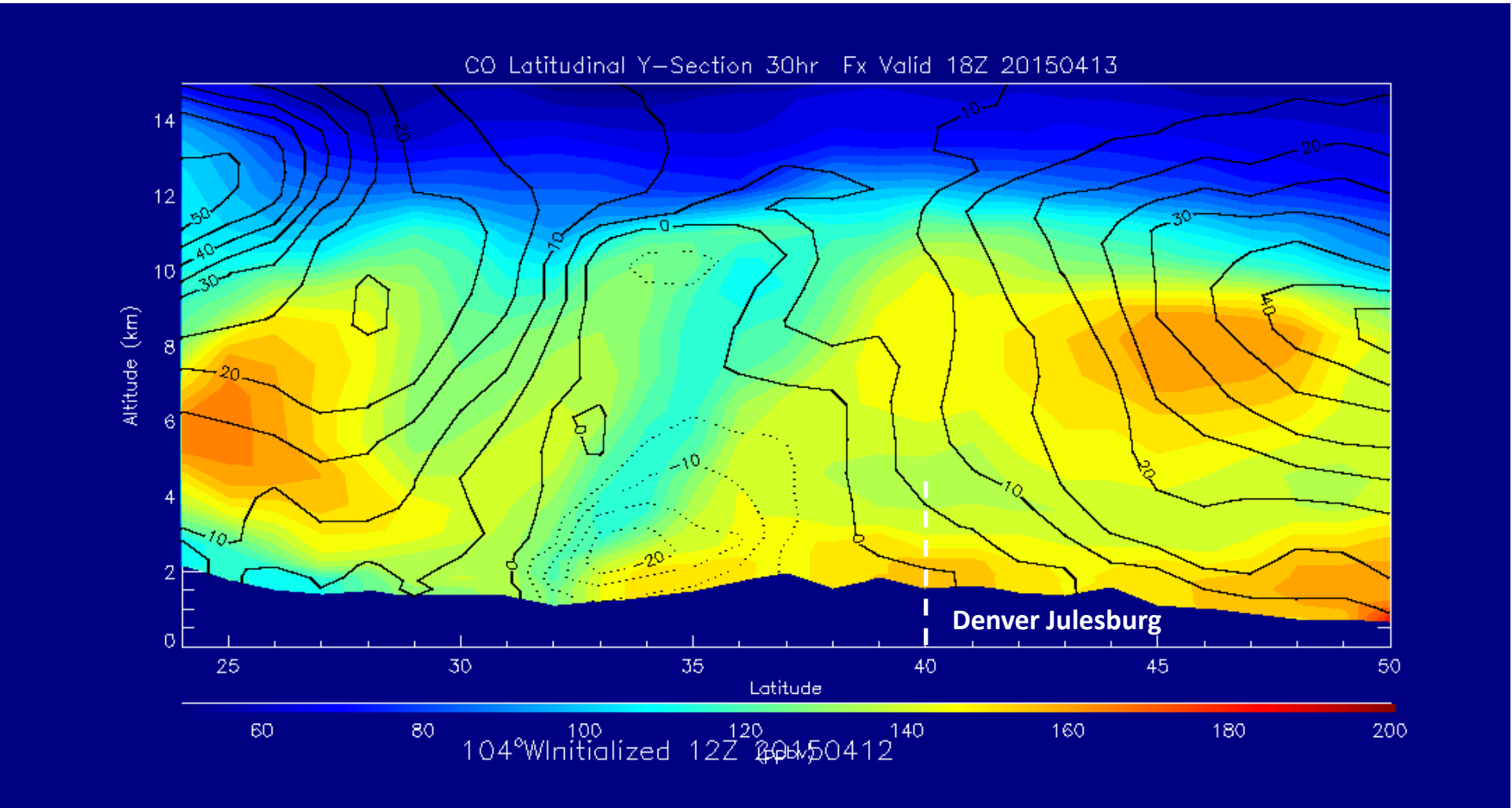
http://raqms.ssec.wisc.edu/forecast/view/20150412

RAQMS 30hr FX O3 Cross-section at 104W
(Denver Julesburg Basin)



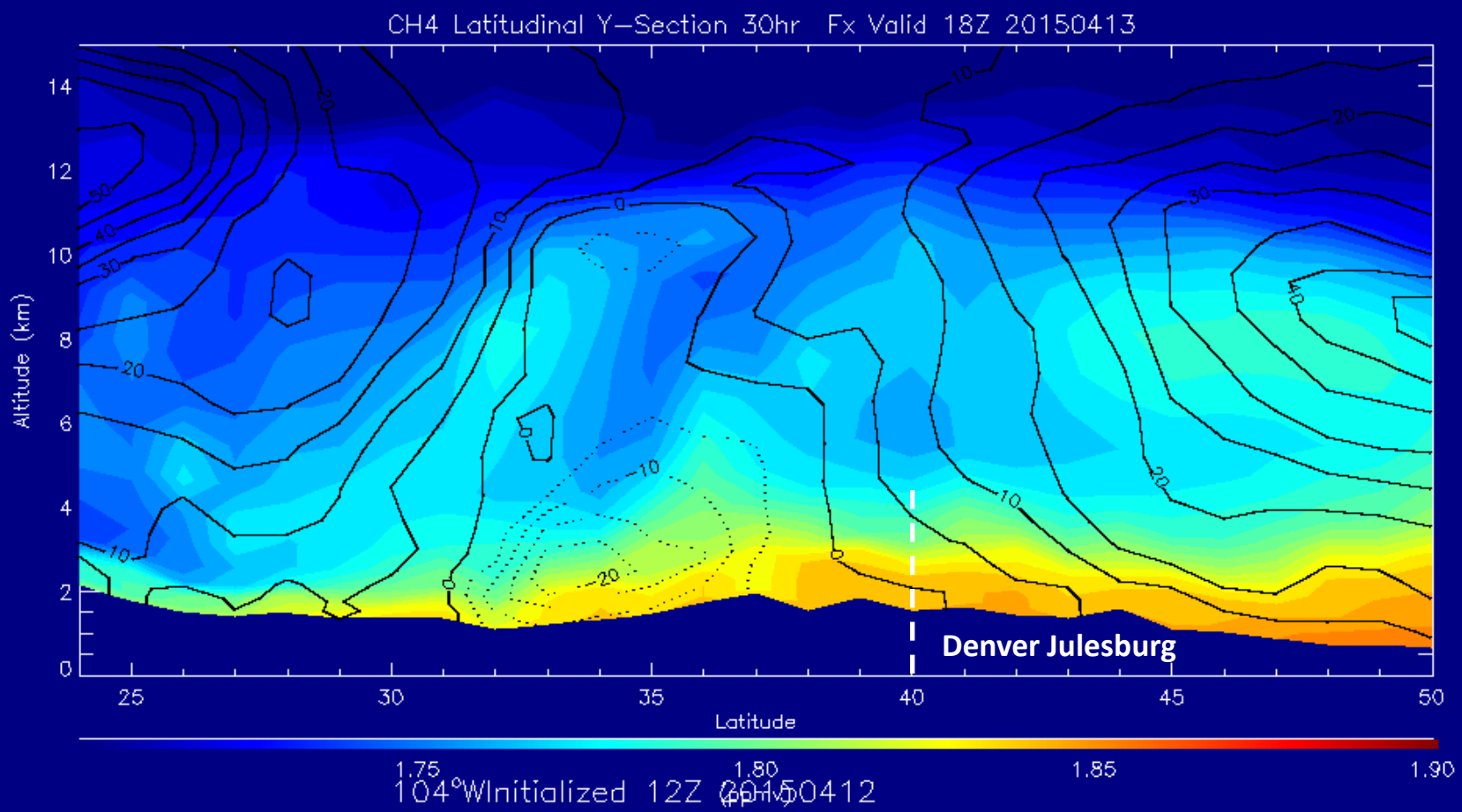
http://raqms.ssec.wisc.edu/forecast/view/20150412

RAQMS 30hr FX CO Cross-section at 104W
(Denver Julesburg Basin)



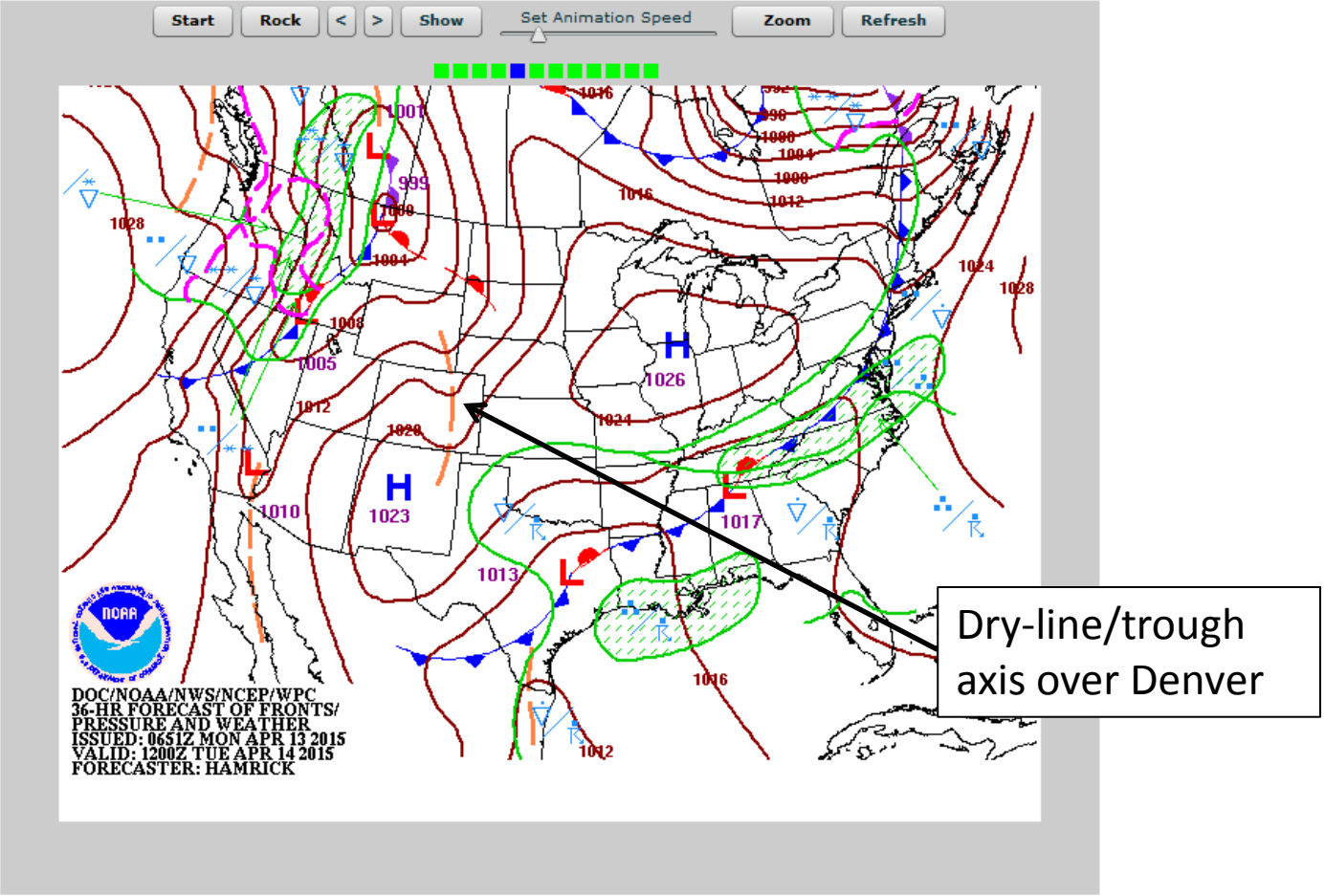
http://raqms.ssec.wisc.edu/forecast/view/20150412

RAQMS 30hr FX CH4 Cross-section at 104W
(Denver Julesburg Basin)



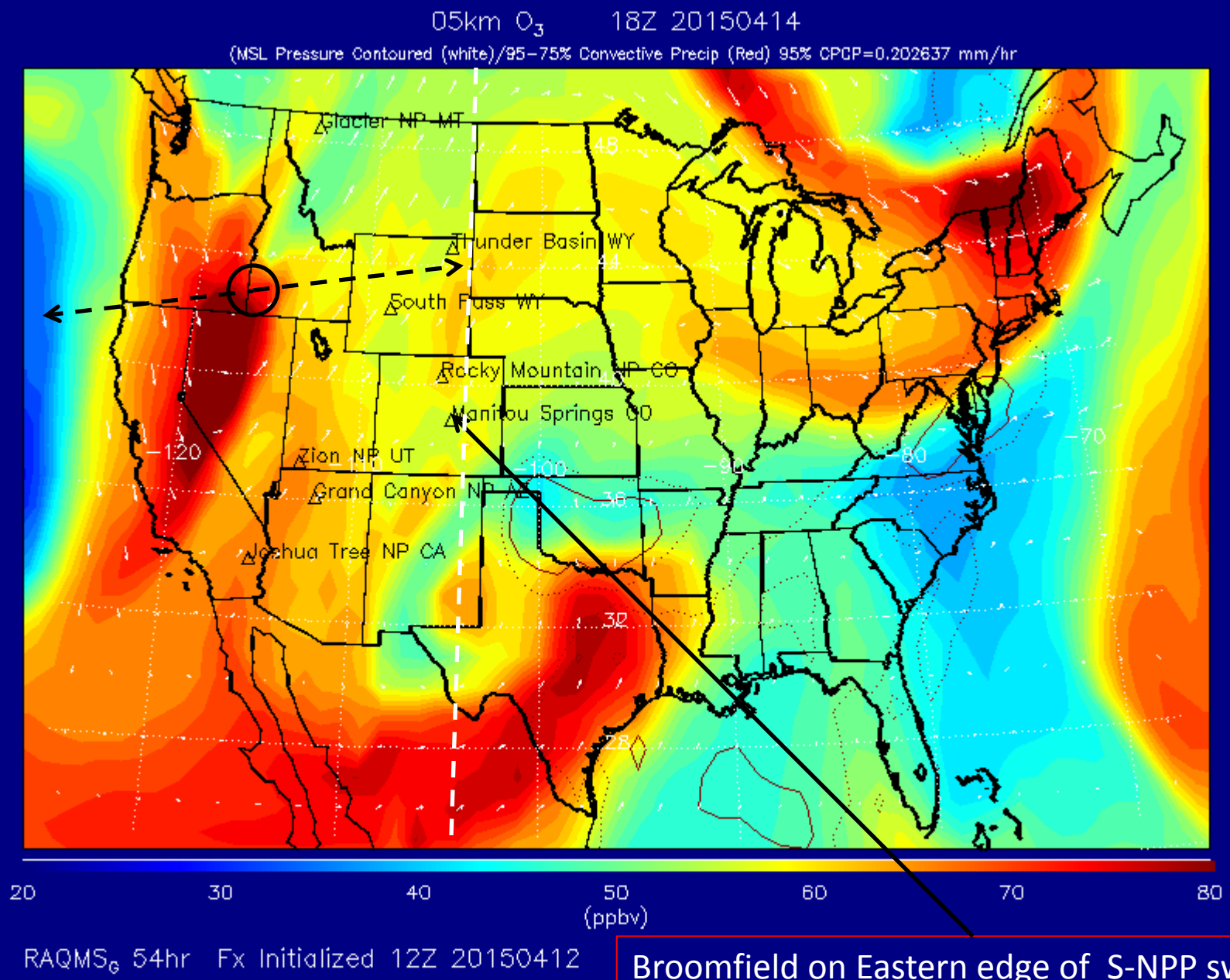
RAQMS surface CH4 constrained with 1990 mixing ratio – introduces ~0.1ppmv low bias

36hr NCEP/WPC forecast valid 12Z 04/14/2015



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

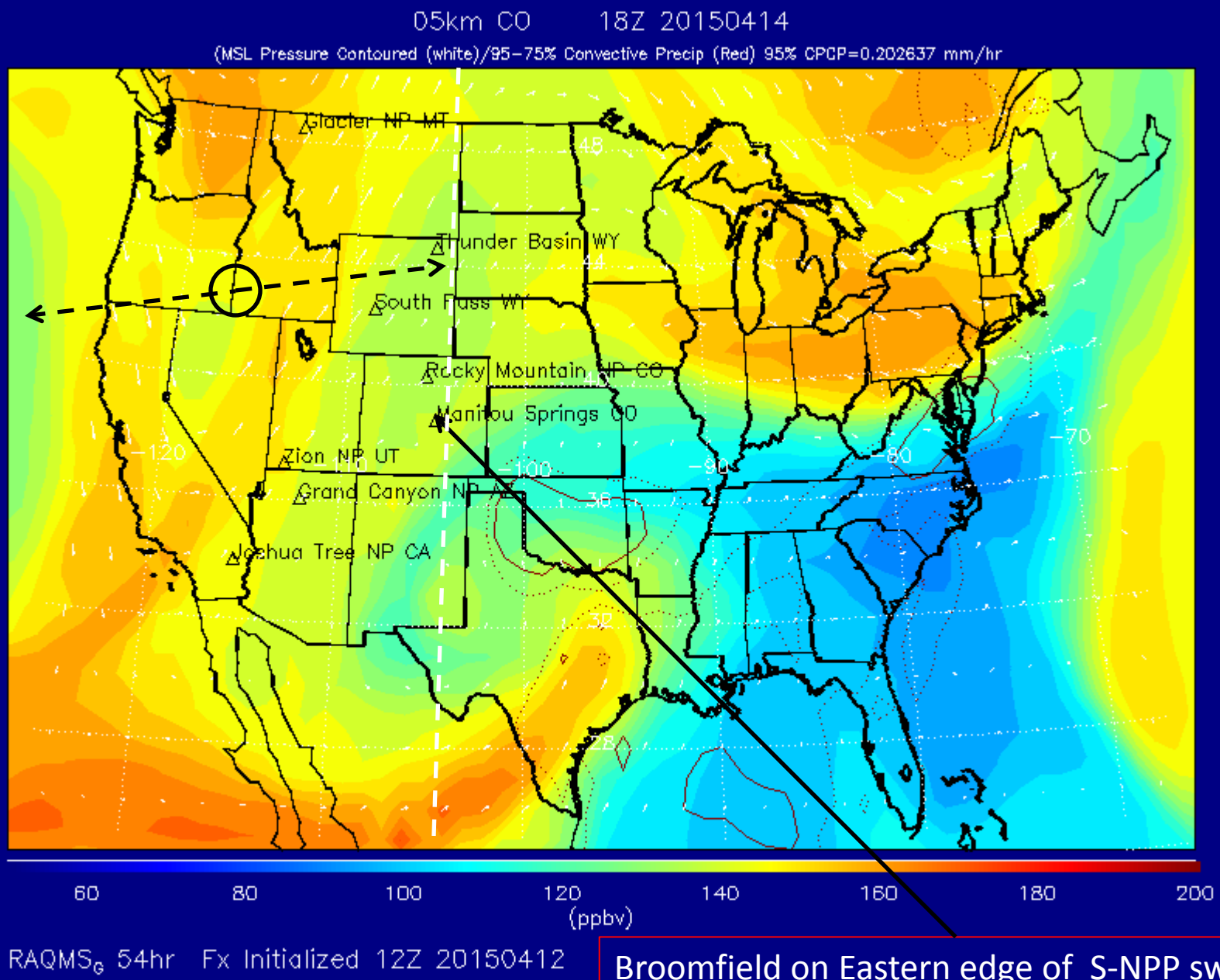
http://raqms.ssec.wisc.edu/forecast/view/20150412



Broomfield on Eastern edge of S-NPP swath

Approximate swath width

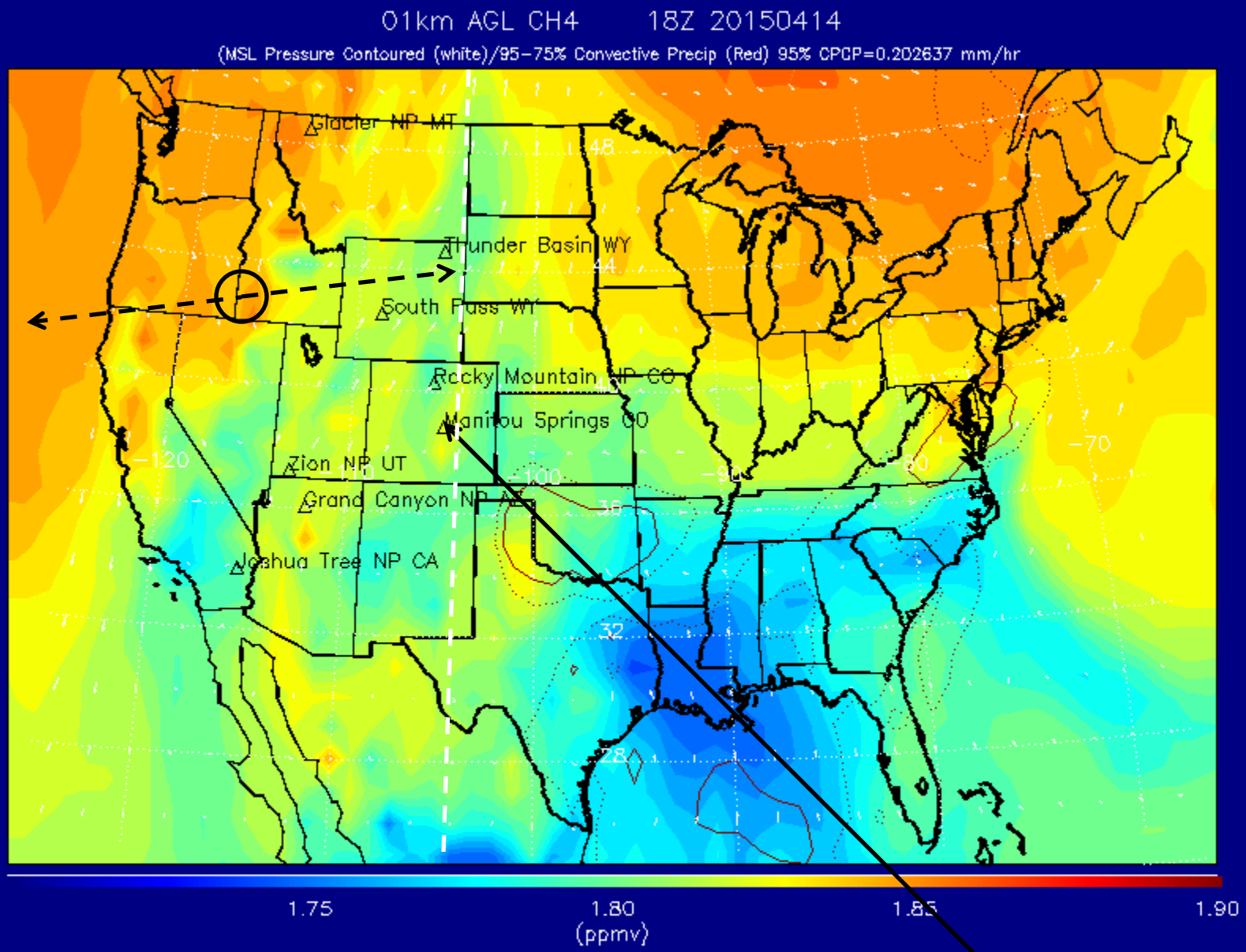
http://raqms.ssec.wisc.edu/forecast/view/20150412



Broomfield on Eastern edge of S-NPP swath

Approximate swath width

http://raqms.ssec.wisc.edu/forecast/view/20150412

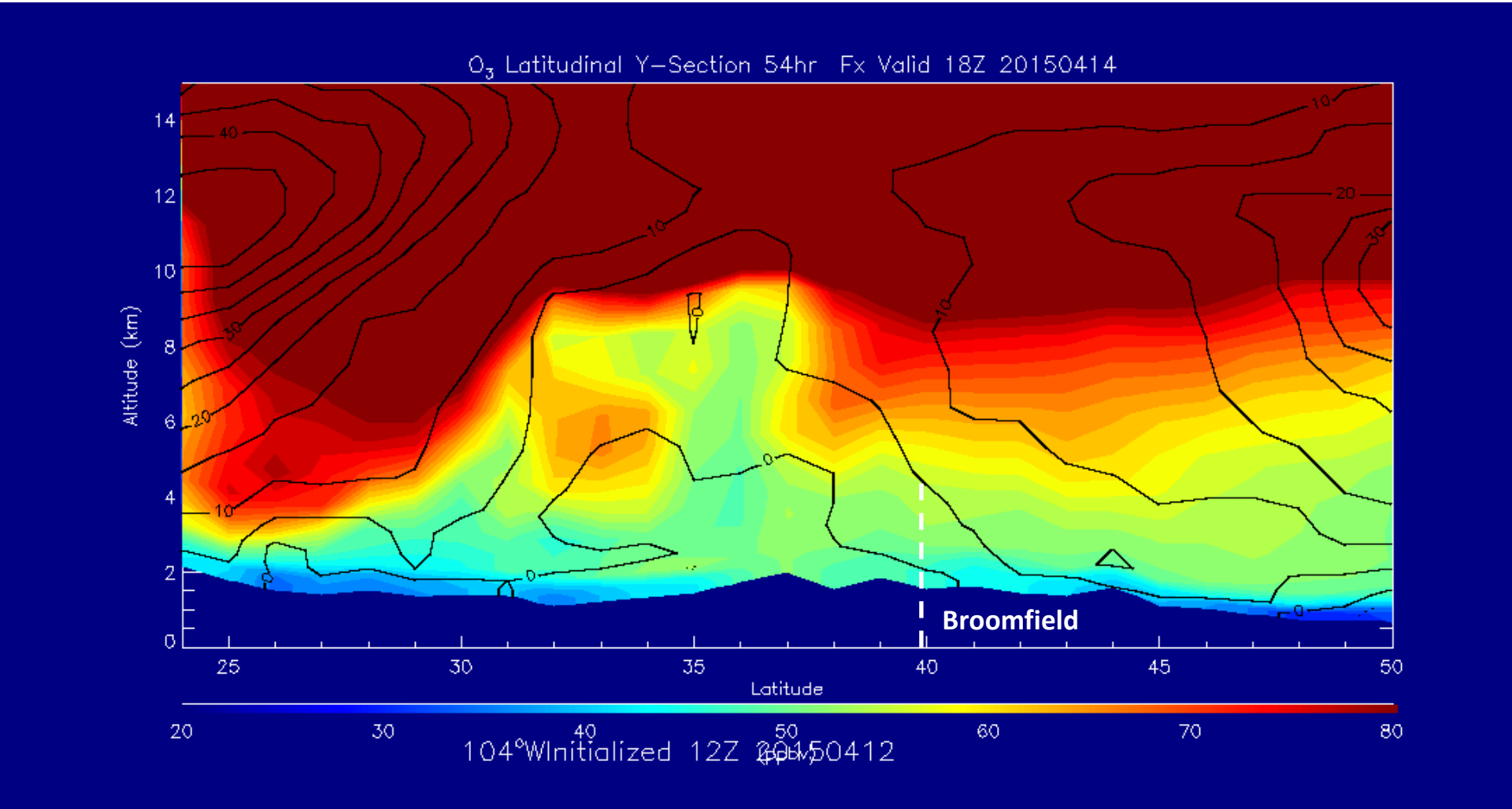


Broomfield on Eastern edge of S-NPP swath

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

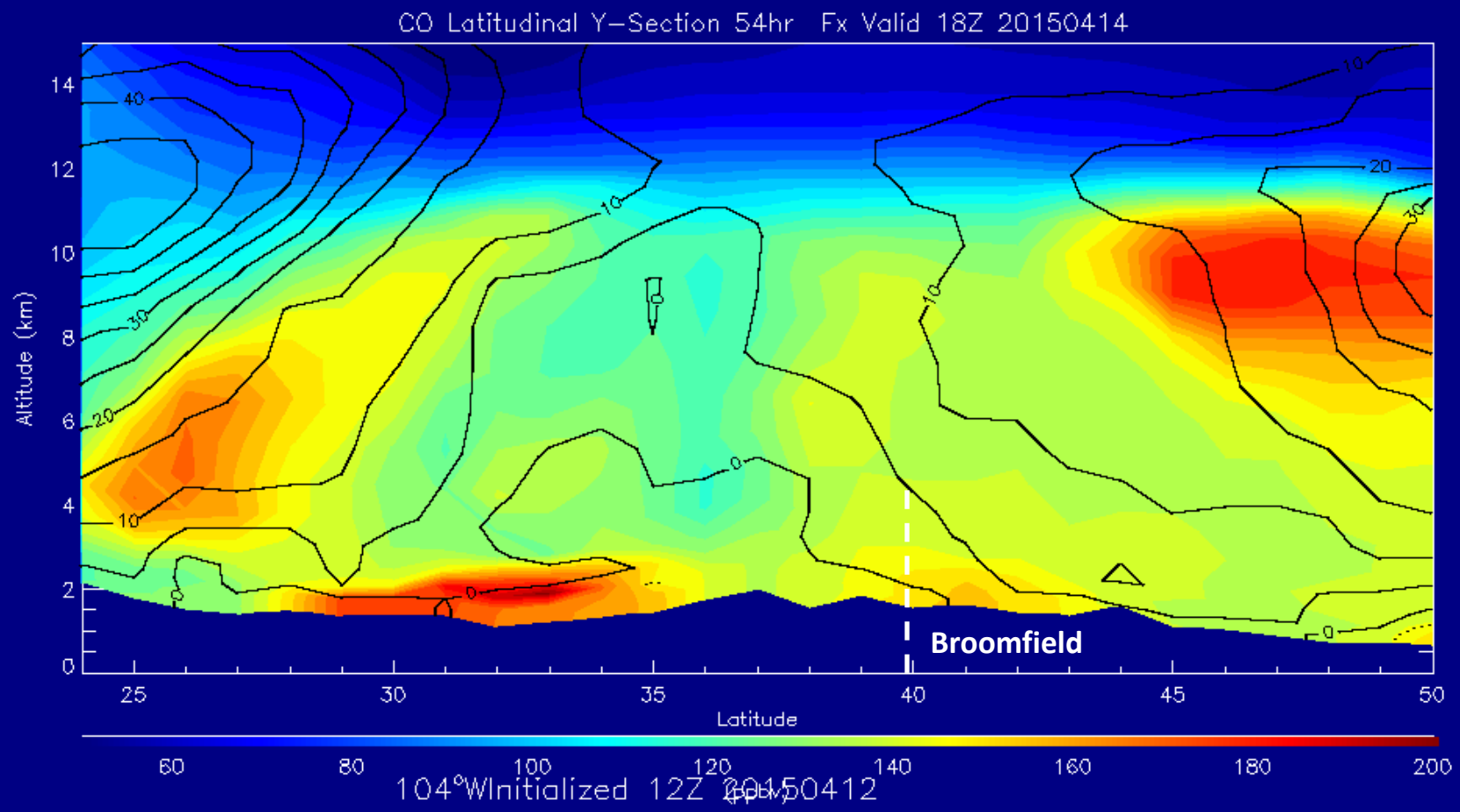
http://raqms.ssec.wisc.edu/forecast/view/20150412

RAQMS 54hr FX O3 Cross-section at 104W (Broomfield)



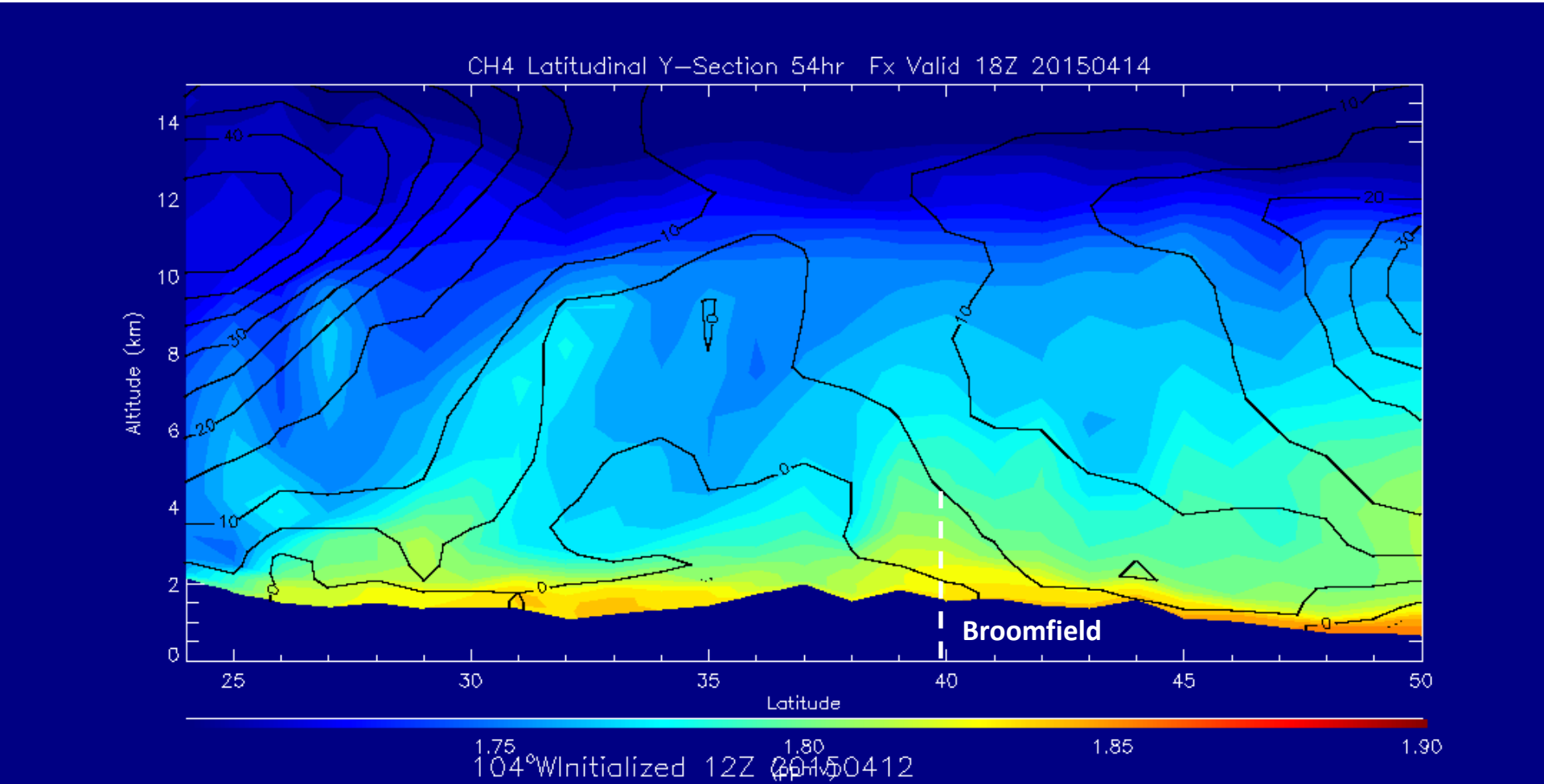
http://raqms.ssec.wisc.edu/forecast/view/20150412

RAQMS 54hr FX CO Cross-section at 104W (Broomfield)



http://raqms.ssec.wisc.edu/forecast/view/20150412

RAQMS 54hr FX CH4 Cross-section at 104W (Broomfield)



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