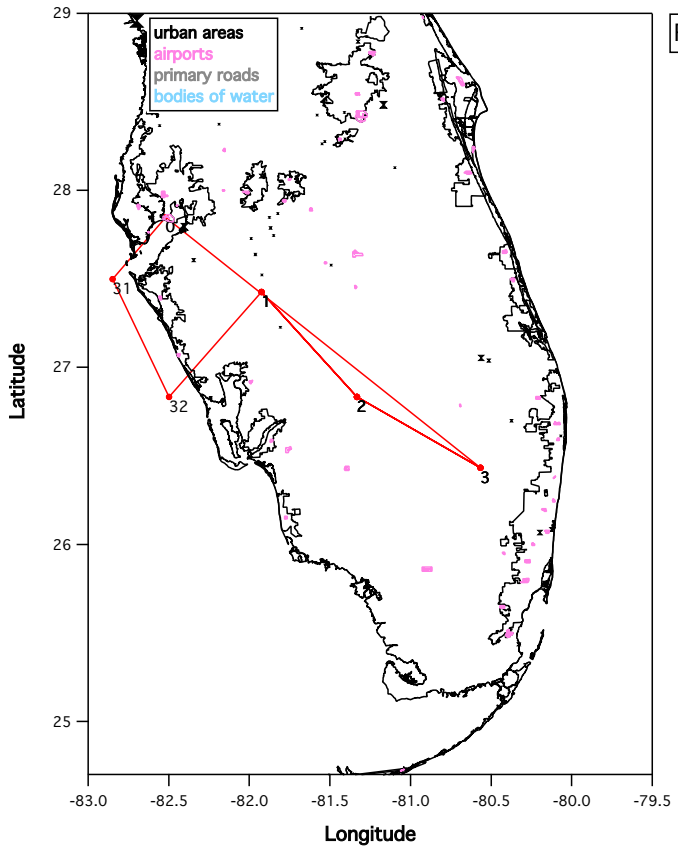
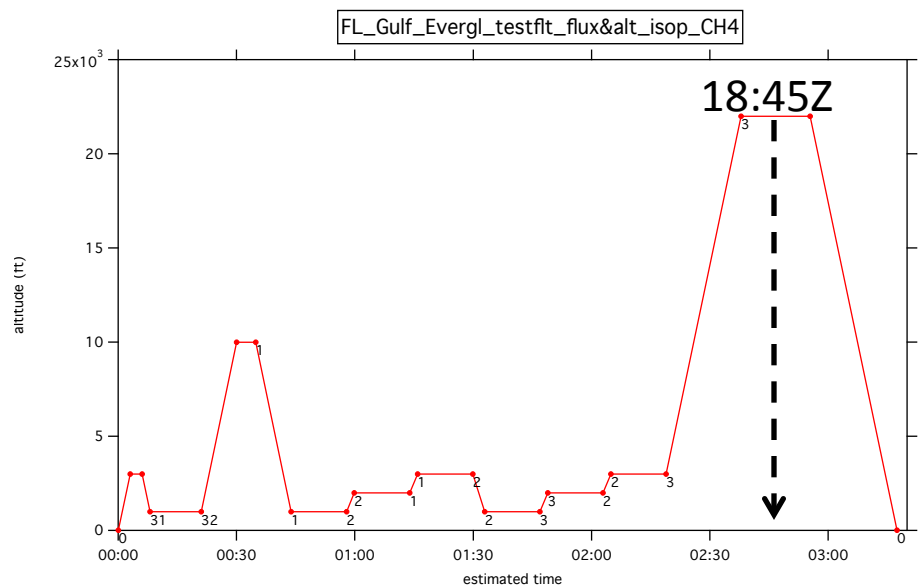
RAQMS 20150318 SONGNEX 54hr Forecast for 18Z March 19, 2015
2 hours after 16Z (12pm Eastern) takeoff for test/science

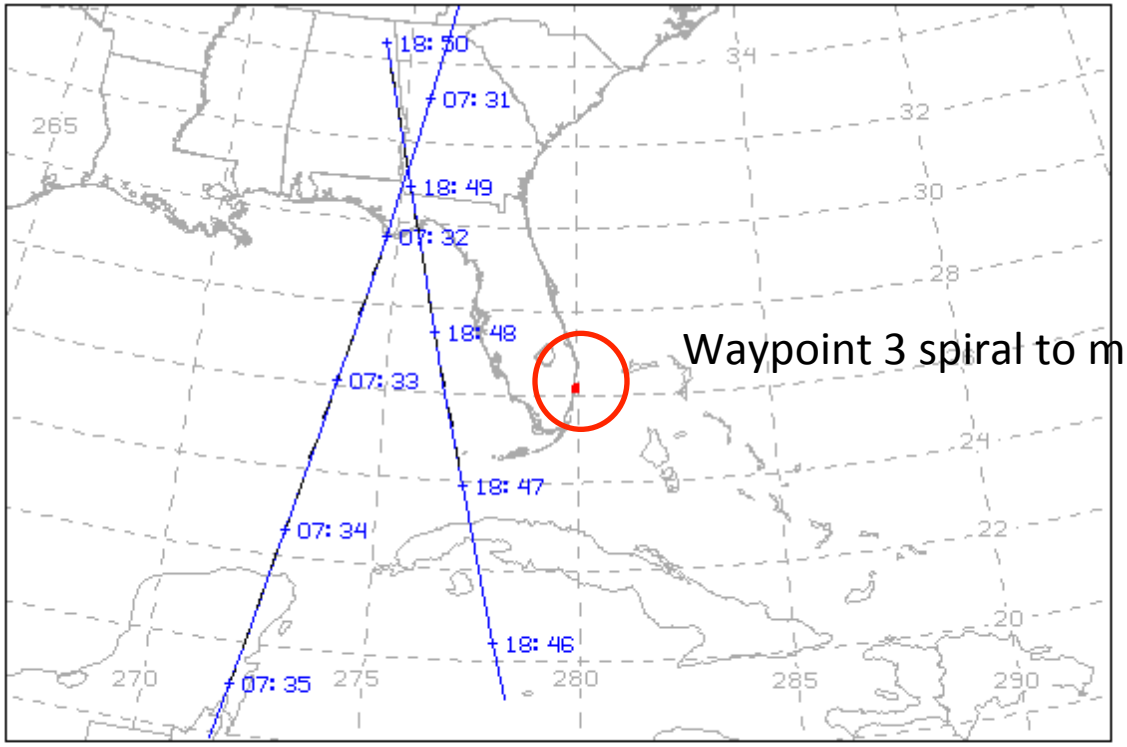


FL_Gulf_Evergl_testflt_flux&alt_isop_CH4

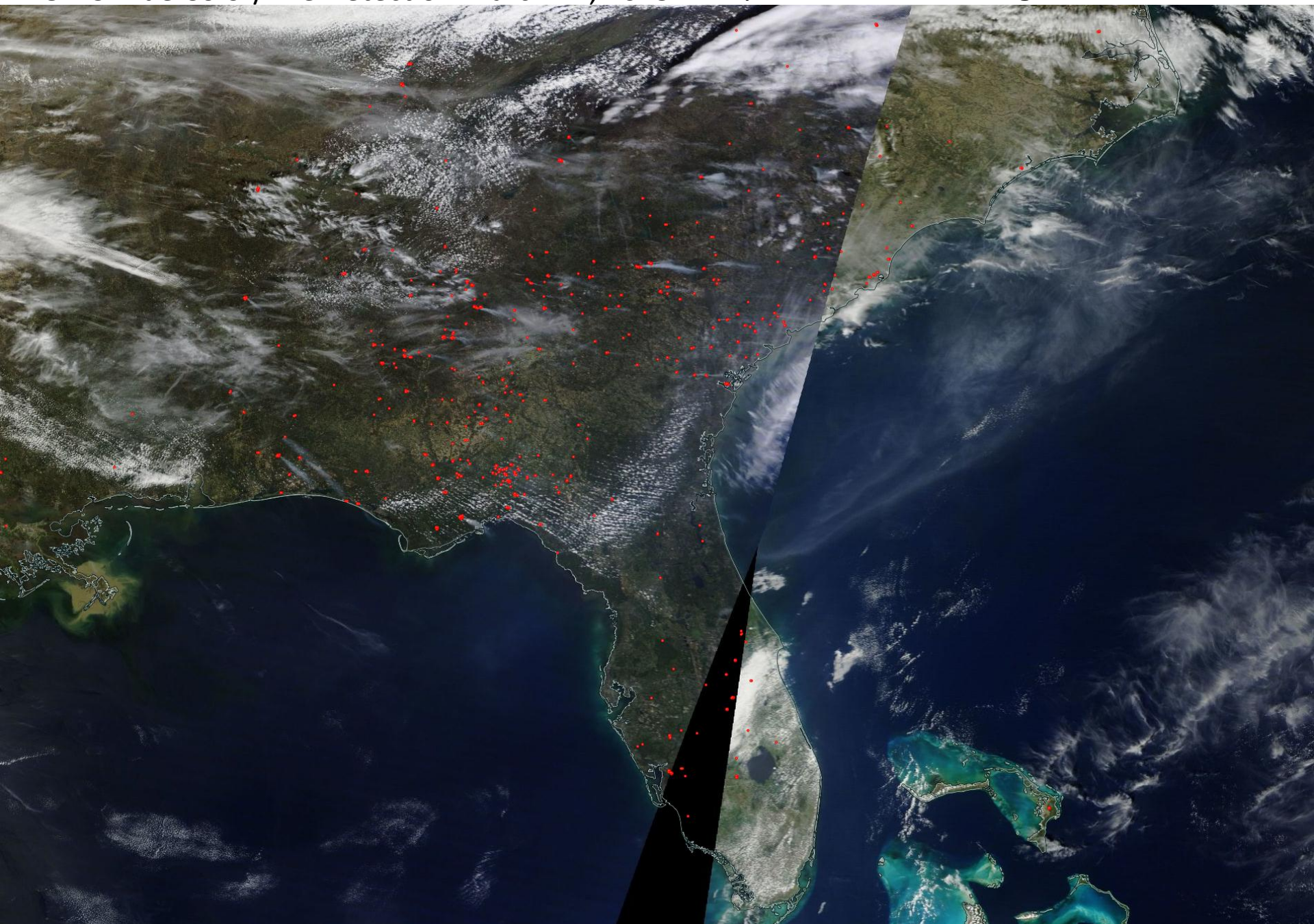


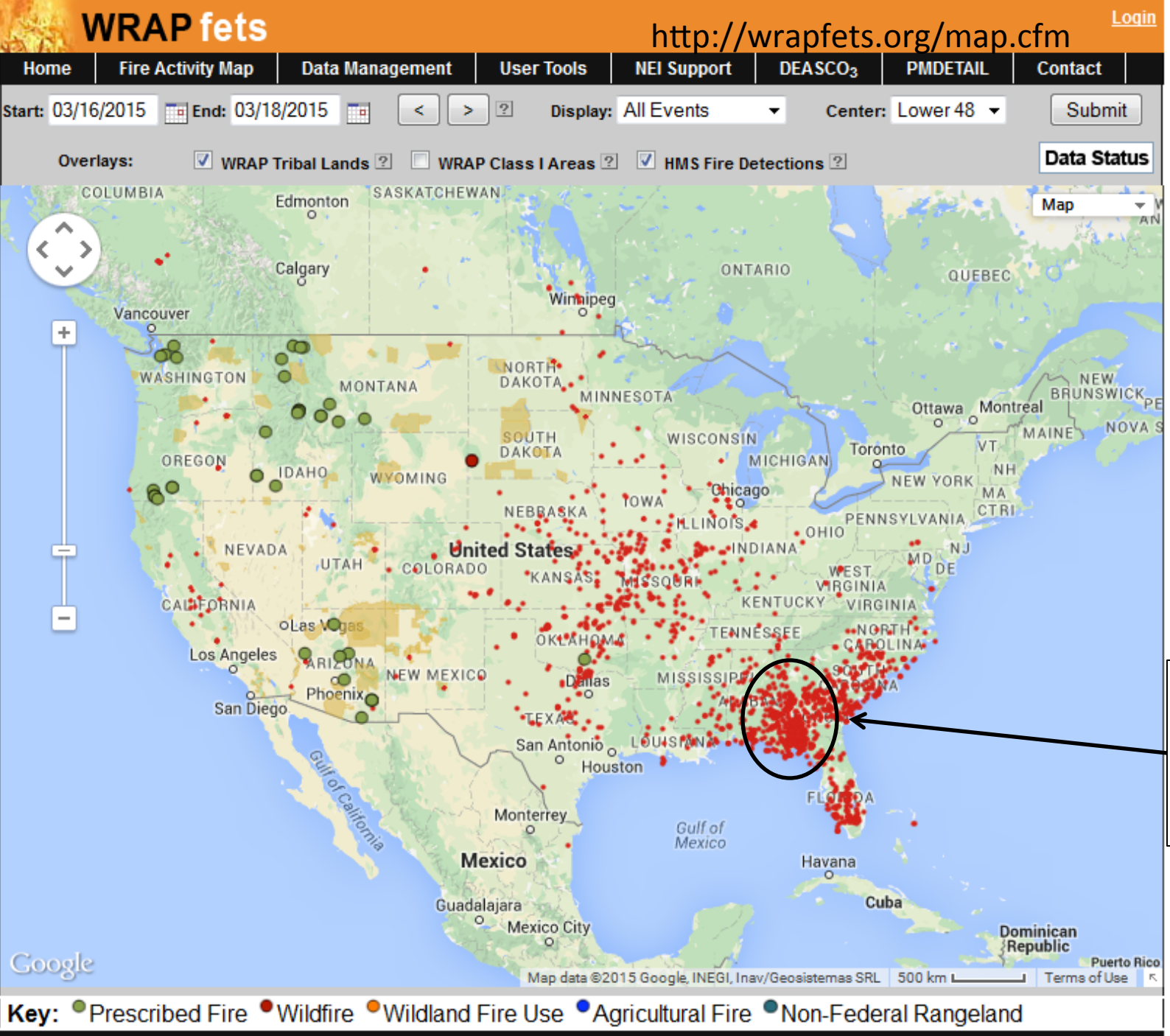
In the descent spirals at Pt1 note the PBL height zi.
Choose the heights of the flux legs, for example .25*zi, .5*zi, .75*zi.

S-NPP (CrIS) overpass on 2015/03/19
NUCAPS CO2, O3, CO, CH4 Validation Opportunity

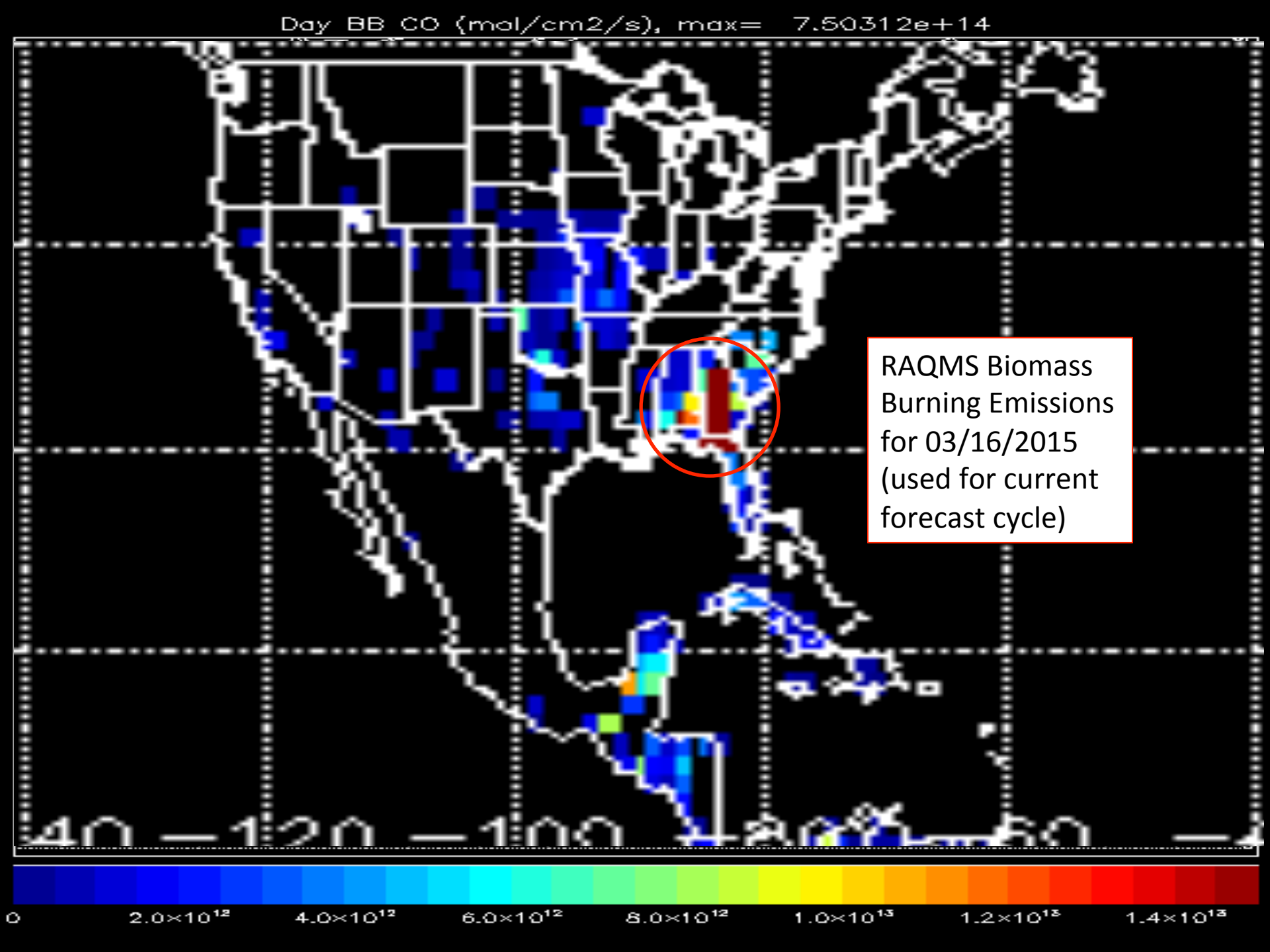


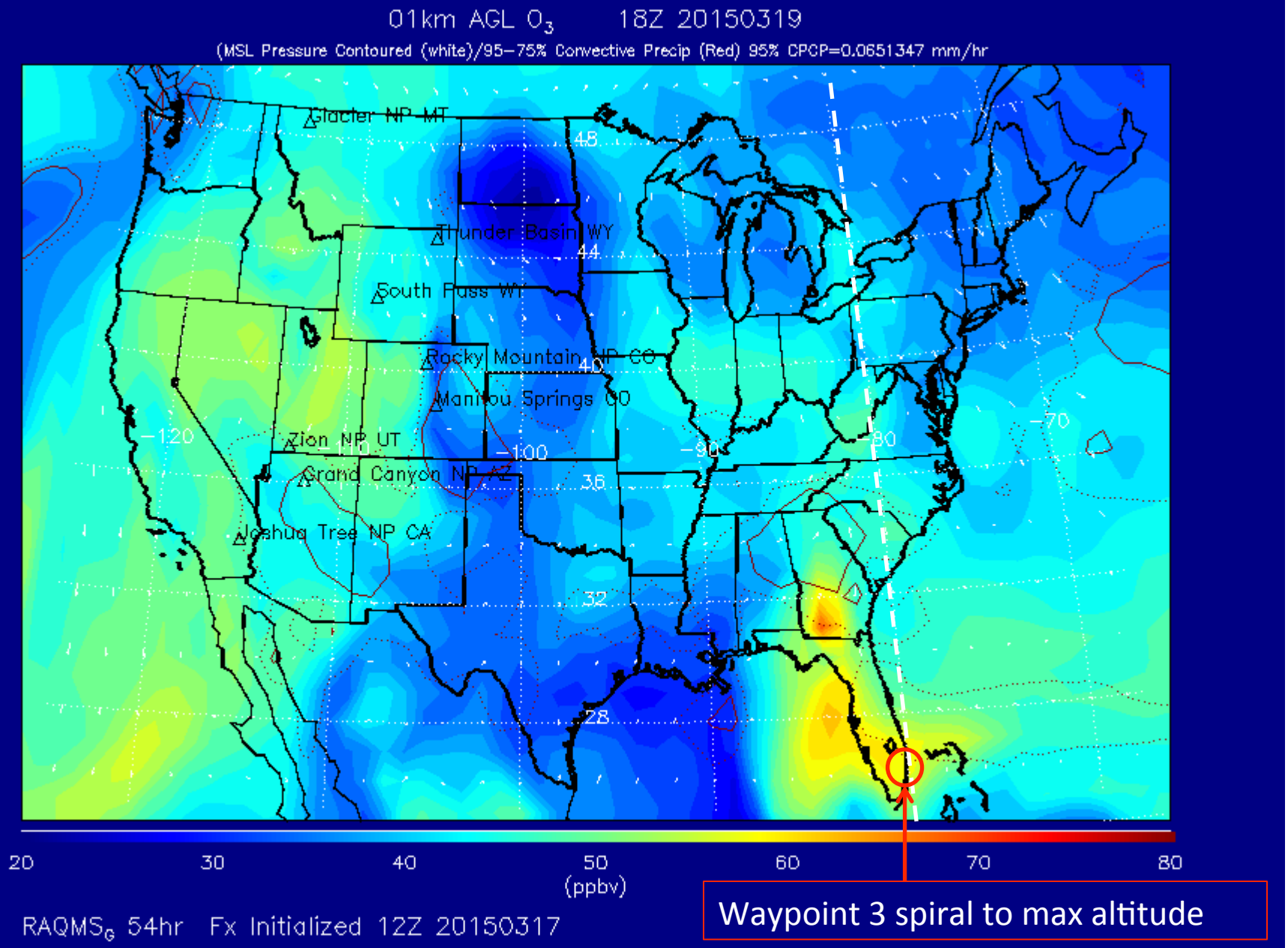
MODIS True Color/Fire Detection March 17, 2015 https://earthdata.nasa.gov/labs/worldview/



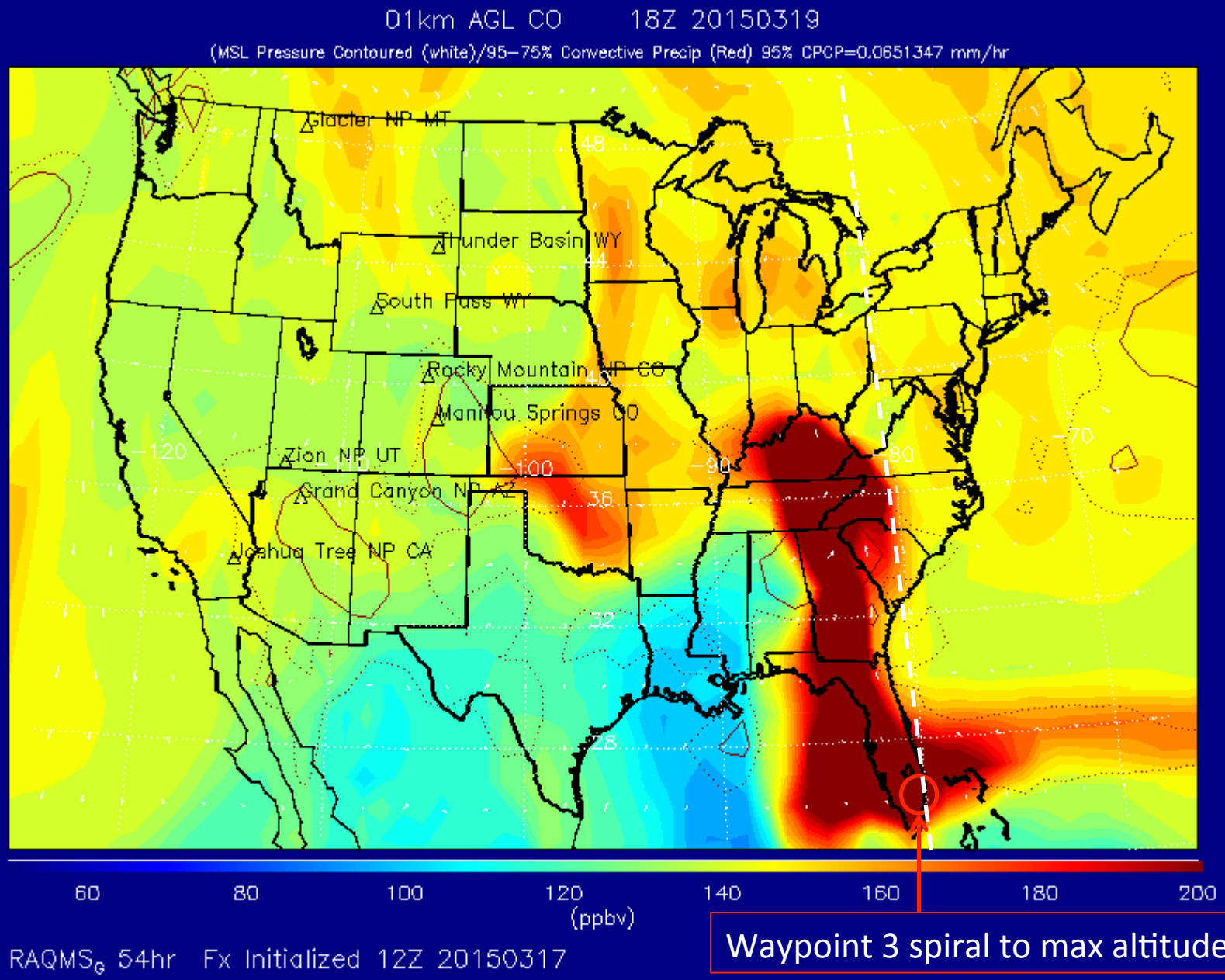


Significant HMS fire detection in SW Georgia

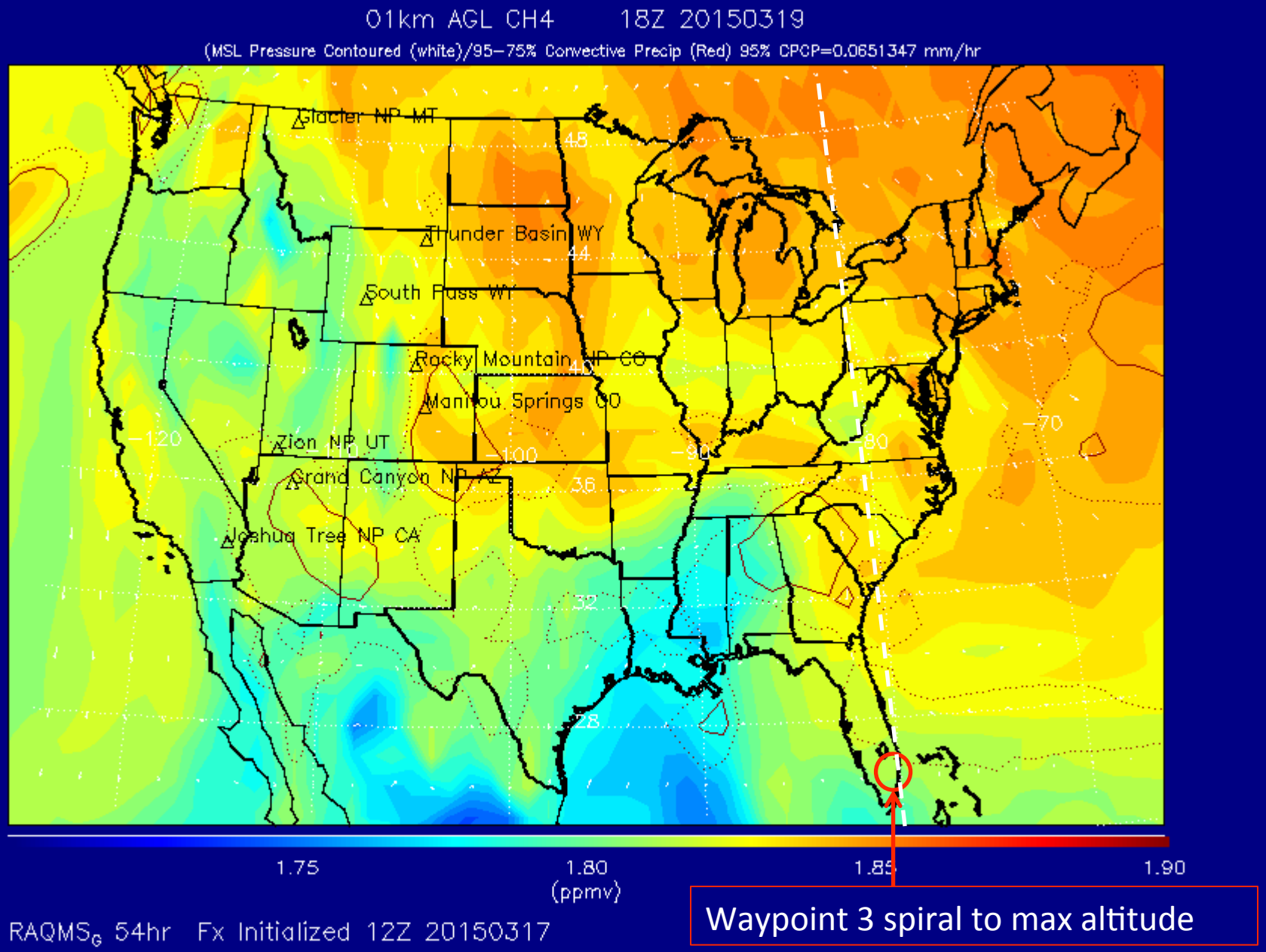

Day BB CO (mol/cm2/s), max= 7.50312e+14
RAQMS Biomass Burning Emissions for 03/16/2015 (used for current forecast cycle)
0
2.0×10¹²
4.0×10¹²
6.0×10¹²
8.0×10¹²
1.0×10¹³
1.2×10¹³
1.4×10¹³



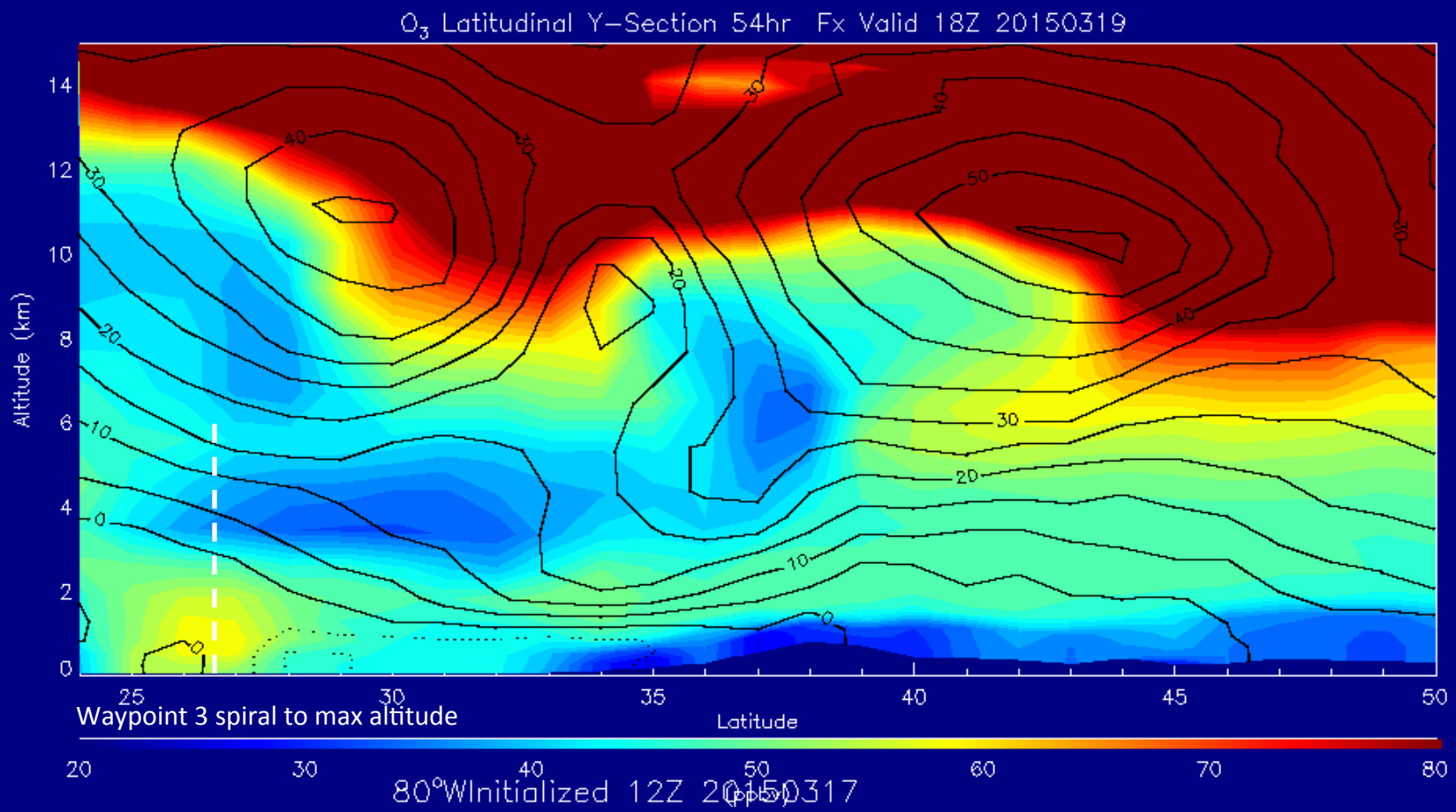
Waypoint 3 spiral to max altitude



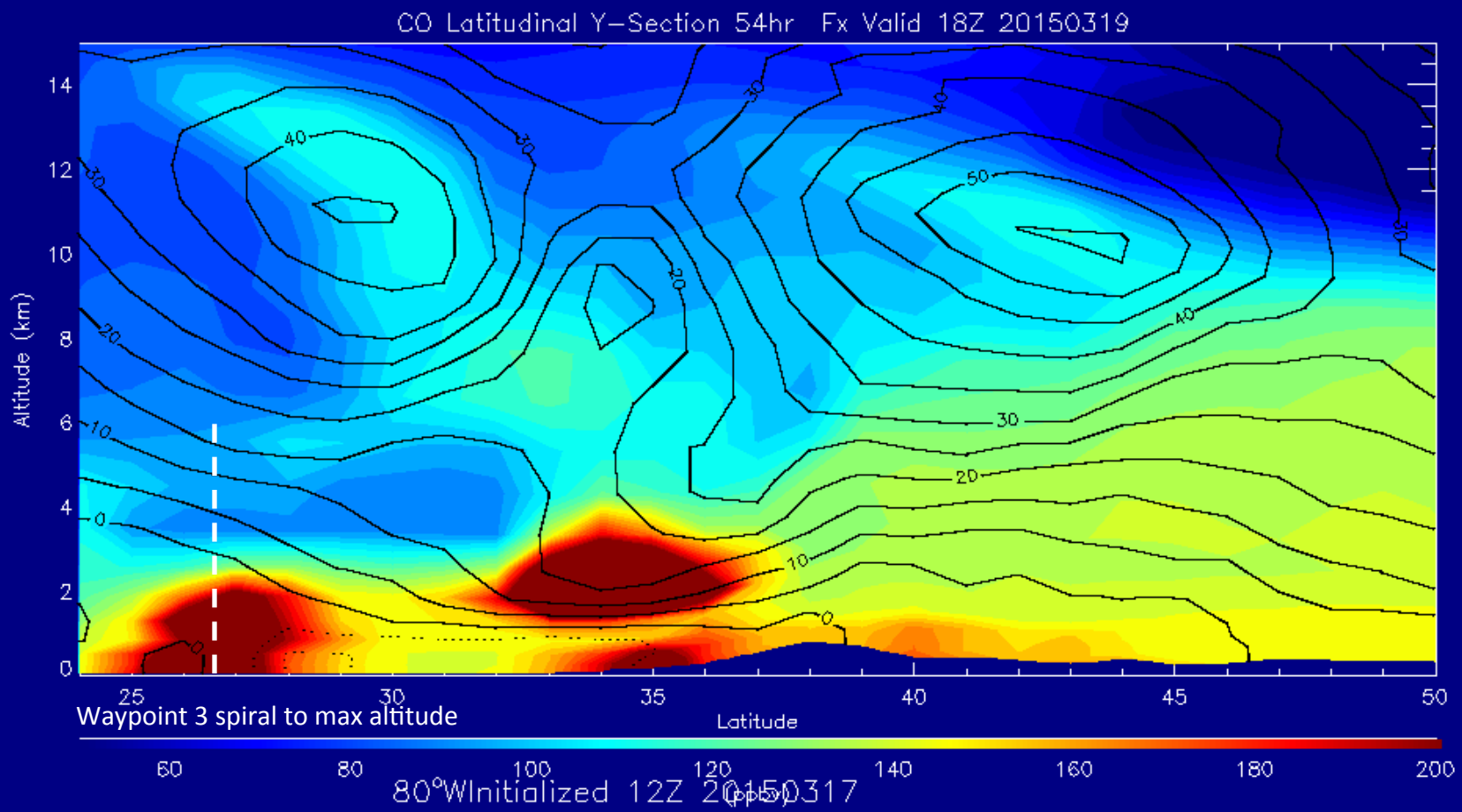
Waypoint 3 spiral to max altitude

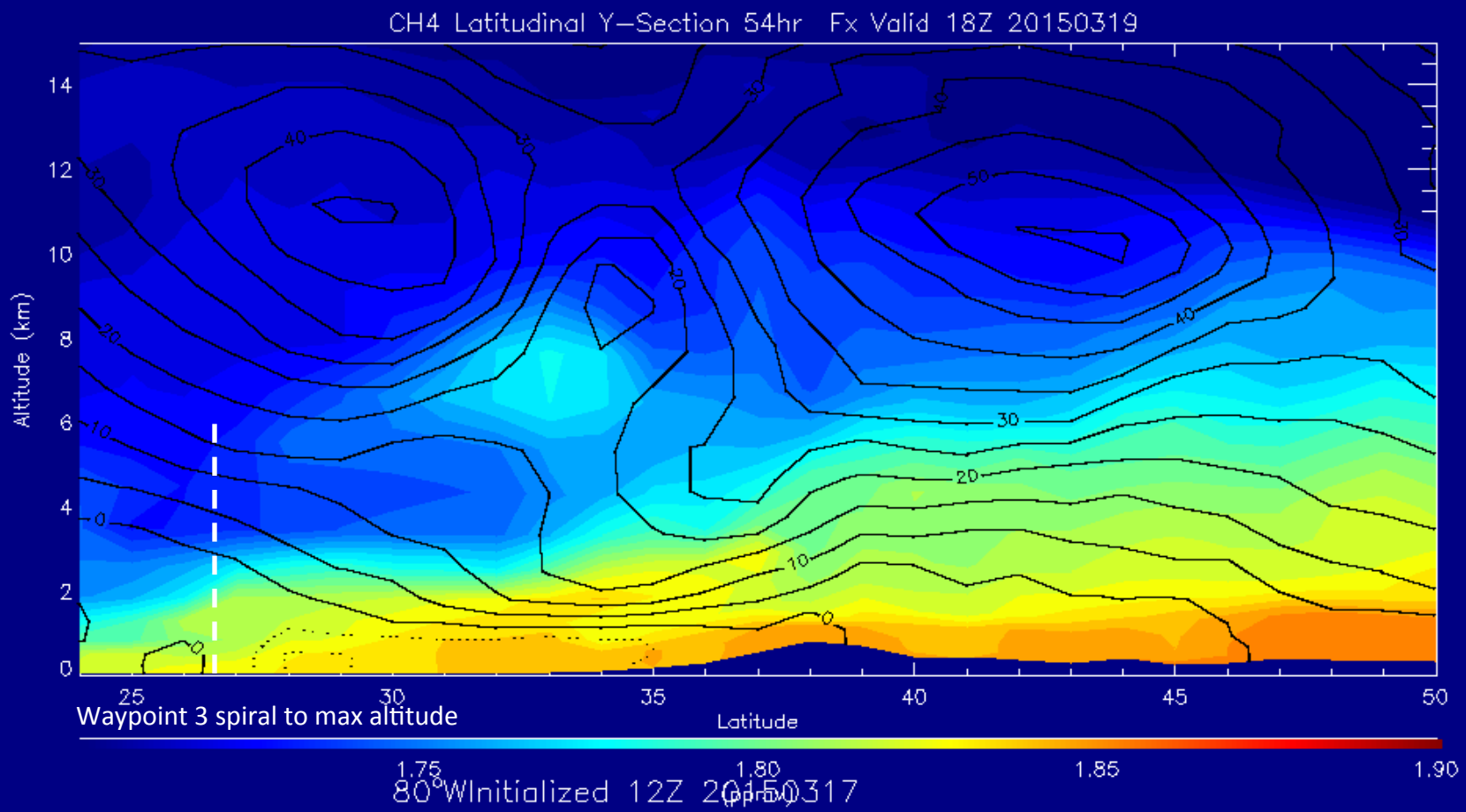


RAQMS surface CH4 constrained with 1990 mixing ratio – introduces ~0.1ppmv low bias



Waypoint 3 spiral to max altitude


CO Latitudinal Y-Section 54hr Fx Valid 18Z 20150319
Altitude (km)
Latitude
Waypoint 3 spiral to max altitude
80°WInitialized 12Z 20150317
(ppbv)


CH4 Latitudinal Y–Section 54hr Fx Valid 18Z 20150319
Altitude (km)
Latitude
Waypoint 3 spiral to max altitude
80°WInitialized 12Z 20150317
(ppm)
1.75
1.80
1.85
1.90