RAQMS 24 hr FX
Valid 12Z 01/20

- overestimates westward extent of convective outflow
- underestimates equatorward extension of strat/trop folding event
Weak N/S gradient in CO at 3Km near 15S associated with mid-level (6km) transport of polluted convective outflow to west

Polluted continental convective outflow moving South at 12km

Large STE at 80W/40S at 12km
Weak N/S gradient in CO at 3Km moving North

Mid-level (6km) transport of polluted convective outflow weakens

Polluted continental convective outflow continues moving South at 12km

Large STE at 75W/40S at 12km
Weak N/S gradient in CO at 3Km remaining stationary

Mid-level (6km) transport of polluted convective outflow weakens

Polluted continental convective outflow continues moving South at 12km

Large STE at 70W/40S at 12km
RAQMS 120hr CO FX
Valid 12Z 01/24

Weaker N/S gradient CO at 3Km

Mid-level (6km) transport of polluted convective outflow weakens

Polluted continental convective outflow continues moving South at 12km

STE sheared out to East of S. America
South of 20S: Continental HCHO at ~0.2 ppbv below 5km

North of 20S: Continental HCHO at ~0.4-0.6 ppbv below 5km with larger values within deep convective outflow above 10km
O3 minimum within deep convective outflow above 10km
Marine boundary layer O3 <20ppbv
STE influenced (higher O3) airmass extends down to top of marine PBL
Near 30S