ORACLES Forecast Briefing

Aerosols
Saturday, 26 August 2017
Ascension (OC+BC+SO4)
São Tomé (OC+BC+SO4 & Dust)
Fly Day

SATURDAY, 26 AUGUST 2017
Saturday, 26 Aug 2017 12Z

NASA/GMAO – GEOS-5 Forecast Initialized on 18z 2017-08-25
Total Aerosol Optical Thickness

18 hr forecast valid Sat 12z 2017-08-26

Cloud Fraction: low (red), mid (green), high (blue) cloud
Saturday, 26 Aug 2017 12Z

Sea Salt Aerosol Optical Thickness

18 hr forecast valid Sat 12z 2017-08-26

Organic Carbon AOT

18 hr forecast valid Sat 12z 2017-08-26
Cross sections at 5 E – Sat 26 Aug 15 Z

- **Relative humidity (%):**
  - Cloud + ice water mixing ratio
  - Contours: 0.01 to 1 by 0.099

- **550nm extinction (1/mm):**
  - Cloud + ice water mixing ratio
  - Contours: 0.01 to 1 by 0.099

- **CO from BB (ppb):**
  - Cloud + ice water mixing ratio
  - Contours: 0.01 to 1 by 0.099

- **BB age mode:**
  - Cloud + ice water mixing ratio
  - Contours: 0.01 to 1 by 0.099

**Legend:**
- Relative Humidity (%): 10 20 30 40 50 60 70 80 90 95 98
- 550nm Extinction (1/mm): 2 10 50 200 400 600
- CO biomass burning (ppb): 2 5 10 20 100 500
- Biomass burning age distribution mode (days): 0 1 2 3 4 5 7 8 9 10 11 12 13 14 15

**Source:** ORACLES Forecast Briefing
Cross sections at 5 S – Sat 26 Aug 15 Z

Relative humidity (%)

CO from BB (ppb)

550nm extinction (1/mm)

BB age mode
Curtains along flight track

Relative humidity (%)

550nm Extinction (1/mm)

PM2.5 (ug/kg)
Radiation Flight (Simplified)
Sat 26 August 2017  (Concentration)
Sat 26 August 2017 (Extinction)
No Fly Day

SUNDAY, 27 AUGUST 2017
Sunday 27 August 2017 12Z

NASA/GMAO – GEOS-5 Forecast Initialized on 12z 2017-08-25
Sea Salt Aerosol Optical Thickness

NASA/GMAO – GEOS-5 Forecast Initialized on 12z 2017-08-25
Organic Carbon AOT
Fly Day

MONDAY, 28 AUGUST 2017
Monday 28 August 2017 12Z
Cross sections – Mon 28 Aug 12 Z

CO from BB (ppb)

BB age mode (days)
Fly Day (TBD)

TUESDAY, 29 AUGUST 2017
Tuesday 29 August 2017 12Z
Tuesday 29 August 2017 12Z

NASA/GMAO – GEOS-5 Forecast Initialized on 12z 2017-08-25

Sea Salt Aerosol Optical Thickness

96 hr forecast valid Tue 12z 2017-08-29

NASA/GMAO – GEOS-5 Forecast Initialized on 12z 2017-08-25

Organic Carbon AOT

96 hr forecast valid Tue 12z 2017-08-29
Tuesday 29 August 2017 12Z
Cross sections – Tue 29 Aug 12 Z

CO from BB (ppb)

BB age mode (days)
Fly/No Day (TBD)

WEDNESDAY, 30 AUGUST 2017
Wed 30 August 2017 12Z

NASA/GMAO - GEOS-5 Forecast Initialized on 12z 2017-08-25
Total Aerosol Optical Thickness

120 hr forecast valid Wed 12z 2017-08-30