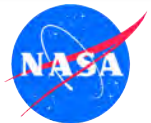




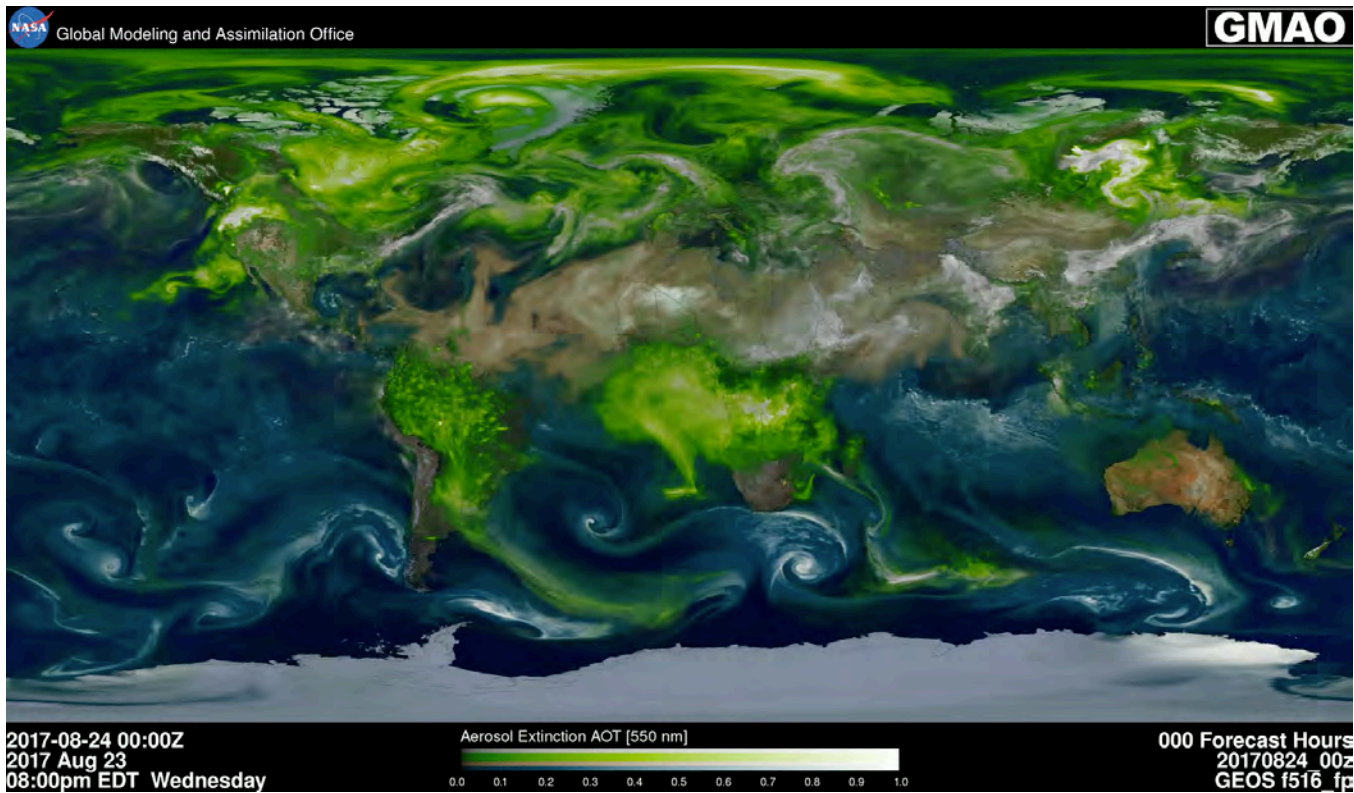
# ORACLES Forecast Briefing

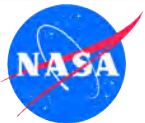
Aerosols

Thursday, 25 August 2017

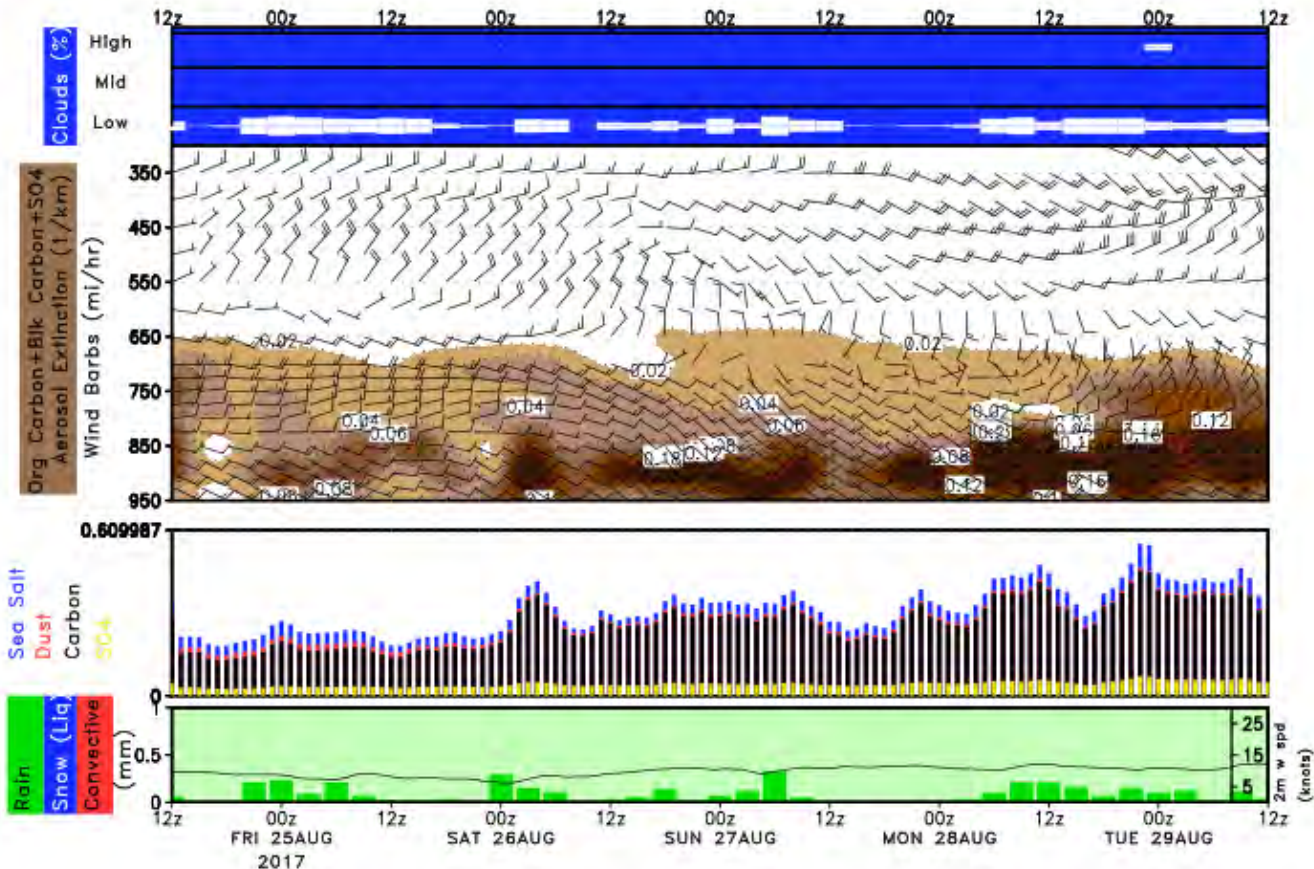


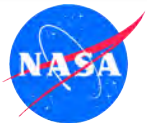
# The Aerosol Week



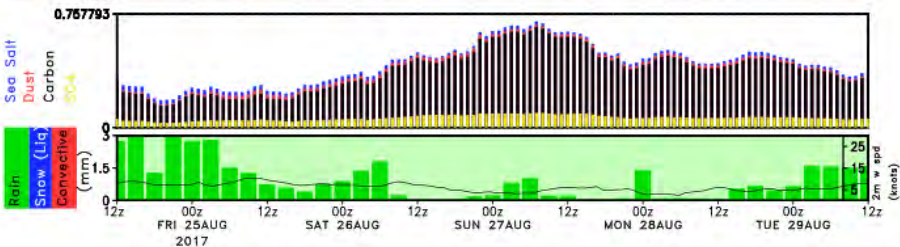
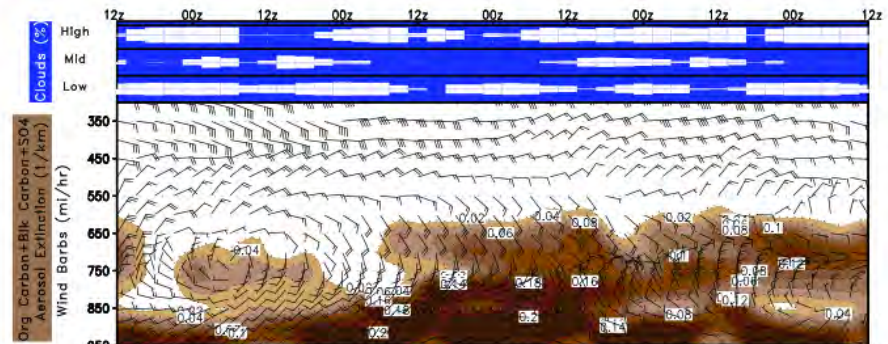


# Ascension (OC+BC+SO4)

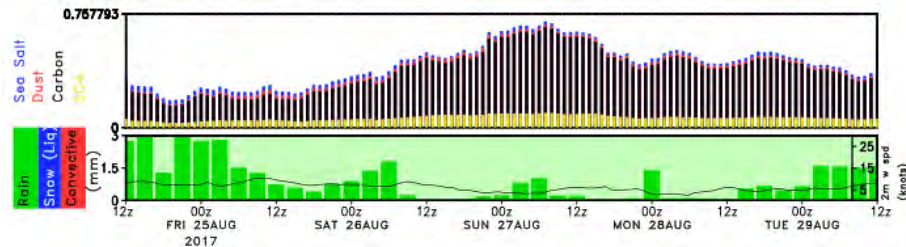
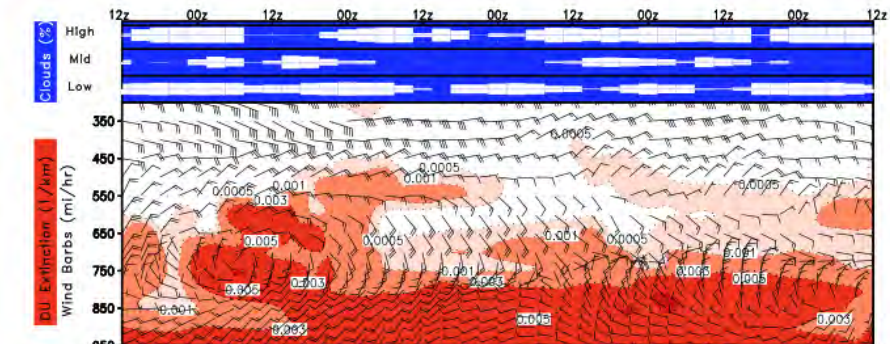




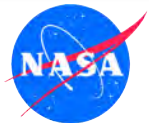
# São Tomé (OC+BC+SO4 & Dust)



LAT = 0.3 , LON = 6.6, Location = ORACLES\_Sao\_Tome\_e\_Principe, Fcst\_init = 20170824

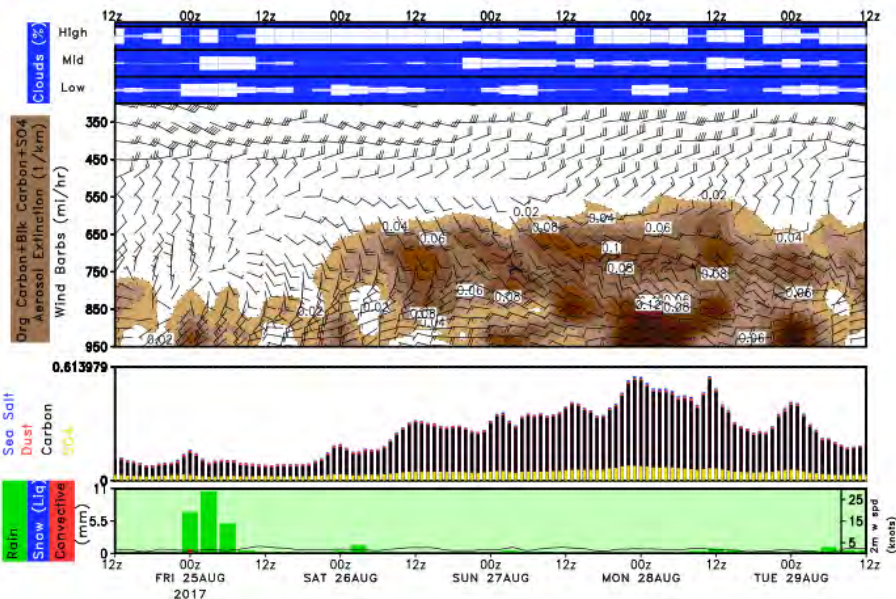


LAT = 0.3 , LON = 6.6, Location = ORACLES\_Sao\_Tome\_e\_Principe, Fcst\_init = 20170824

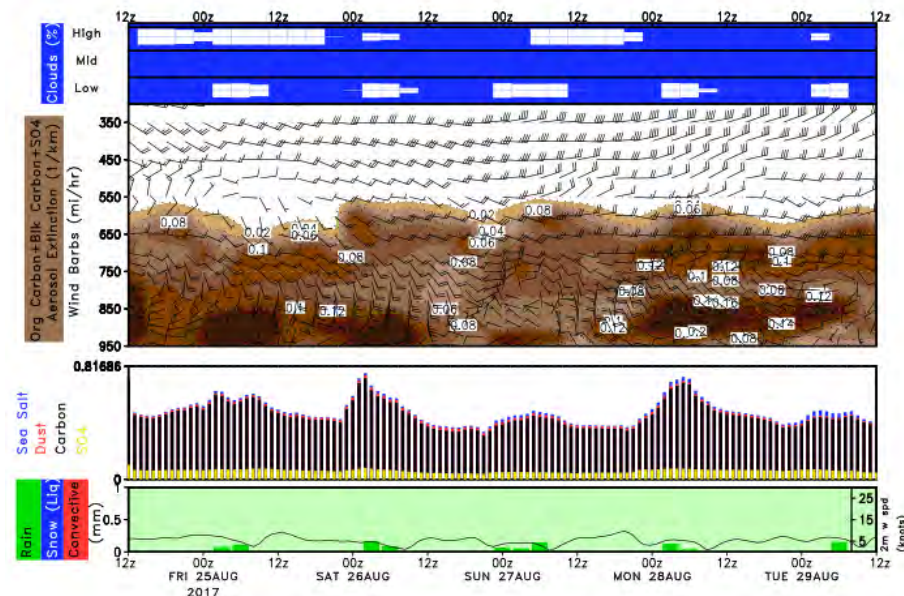


# Lope Gabon 0.2S

# Luanda 8.8S



LAT = -0.2 , LON = 11.6, Location = ORACLES\_SEGC\_Lope\_Gabon, Fcst\_Init = 20170824



LAT = -8.8 , LON = 13.2, Location = ORACLES\_Luanda, Fcst\_Init = 20170824



No Fly Day

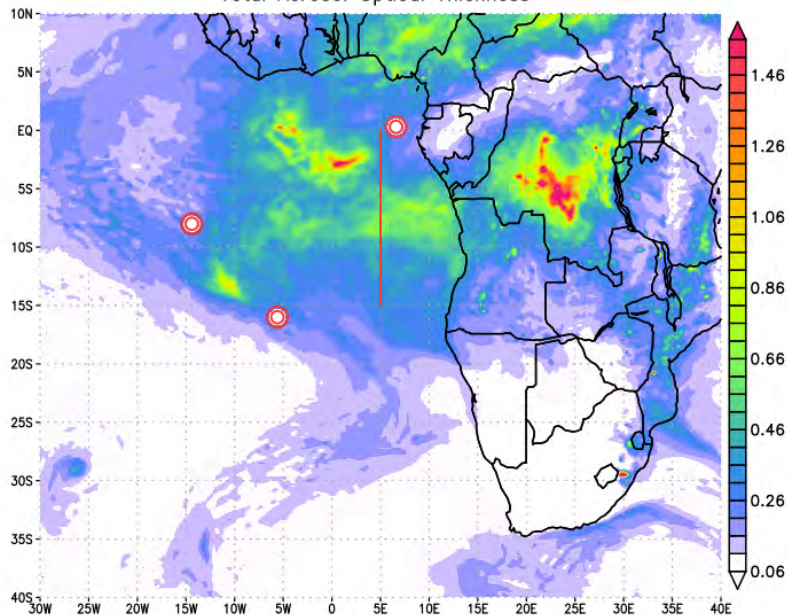
**FRIDAY, 25 AUGUST 2017**



# Friday 25 Aug 2017 12Z

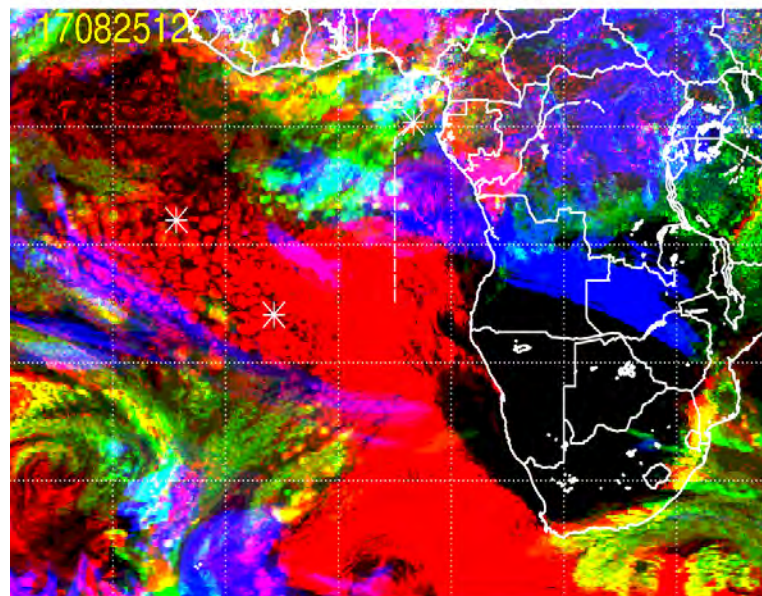


NASA/GMAO - GEOS-5 Forecast Initialized on 18z 2017-08-24  
Total Aerosol Optical Thickness



18 hr forecast valid Fri 12z 2017-08-25

17082512, 024 hour forecast for Cloud Fraction (low, mid, and high cloud) -- ECMWF

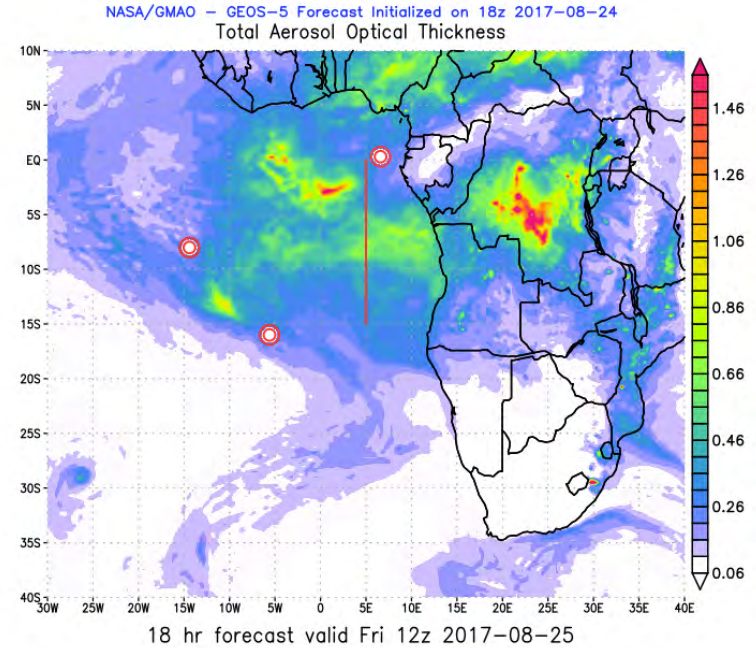
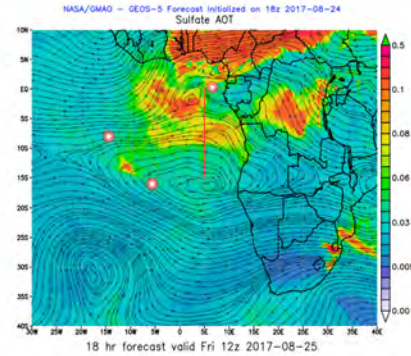
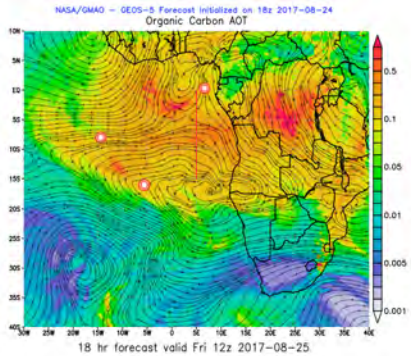
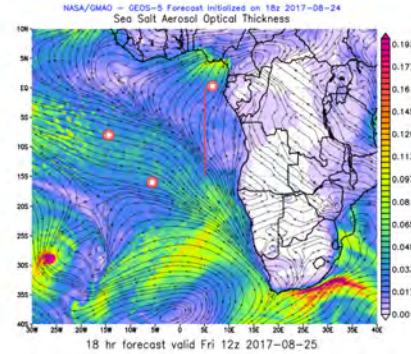
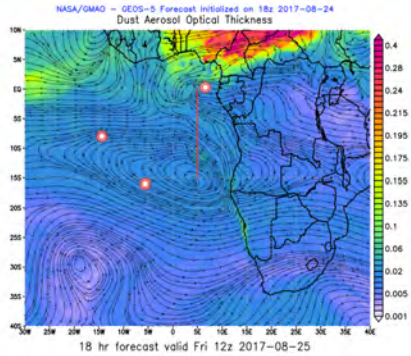


Low (red) + High (blue) cloud = magenta  
Mid (green) + High (blue) cloud = cyan  
Low (red) + Mid (green) cloud = yellow

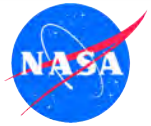
Cloud Fraction: low (red), mid (green), high (blue) cloud



# Friday 25 Aug 2017 12Z



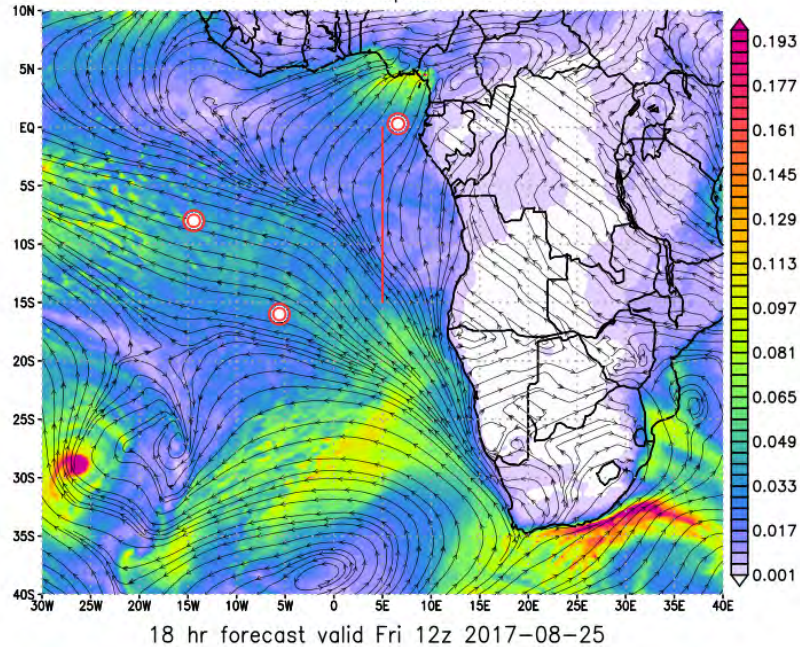




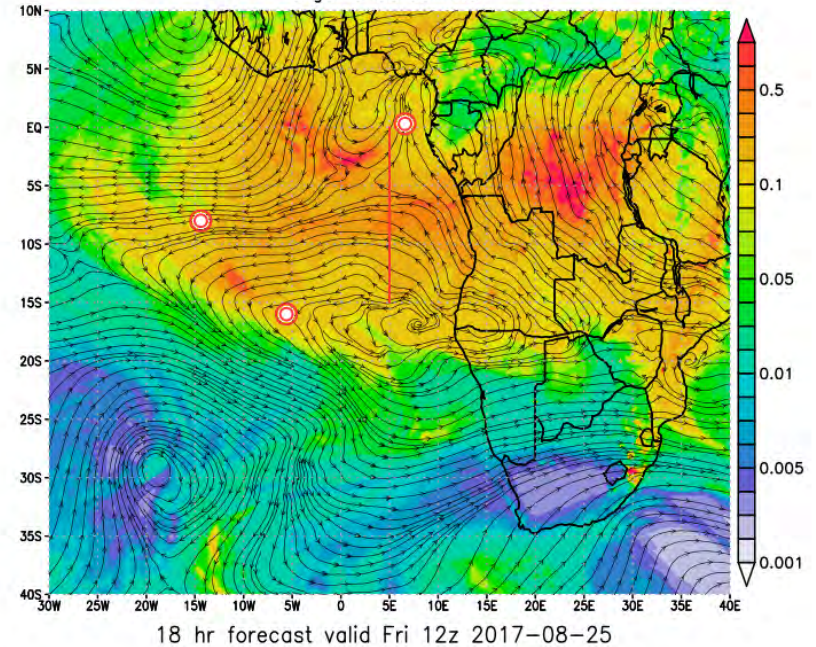
# Friday 25 Aug 2017 12Z

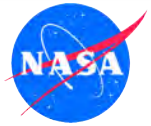


NASA/GMAO – GEOS-5 Forecast Initialized on 18z 2017-08-24  
Sea Salt Aerosol Optical Thickness



NASA/GMAO – GEOS-5 Forecast Initialized on 18z 2017-08-24  
Organic Carbon AOT

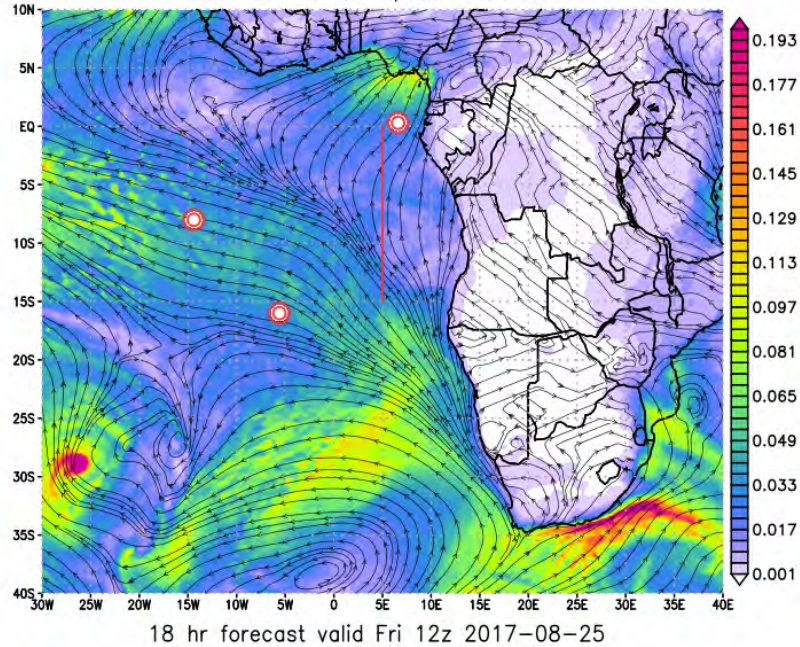




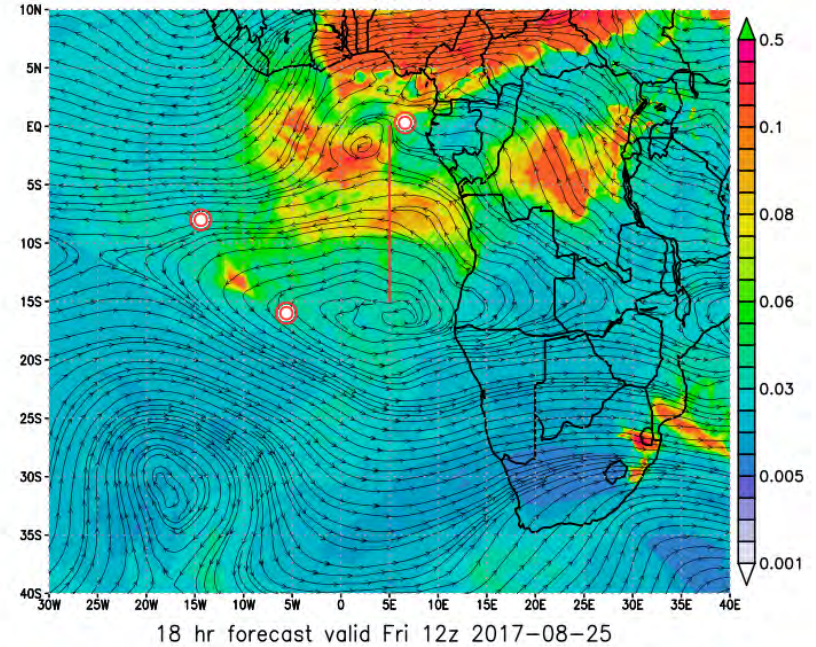
# Friday 25 Aug 2017 12Z

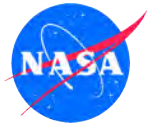


NASA/GMAO – GEOS-5 Forecast Initialized on 18z 2017-08-24  
Sea Salt Aerosol Optical Thickness



NASA/GMAO – GEOS-5 Forecast Initialized on 18z 2017-08-24  
Sulfate AOT

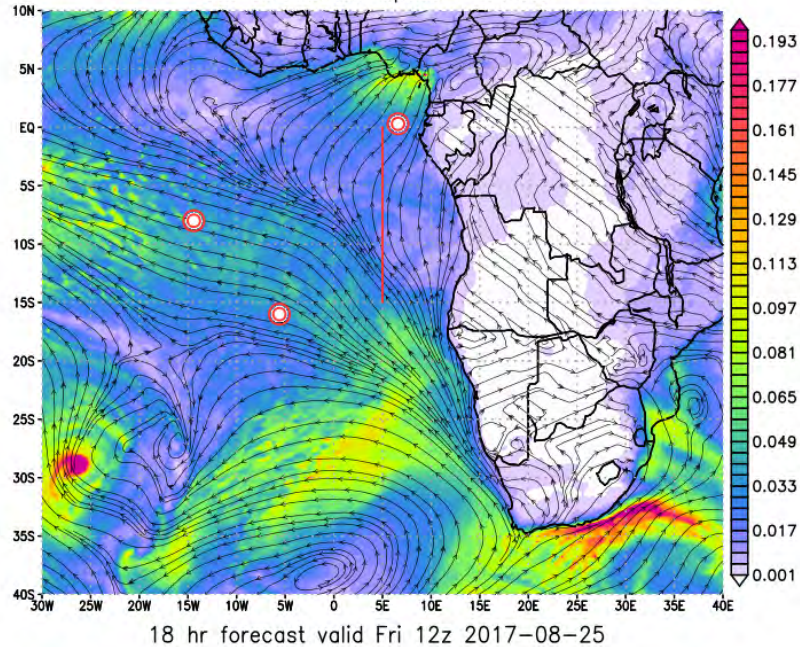




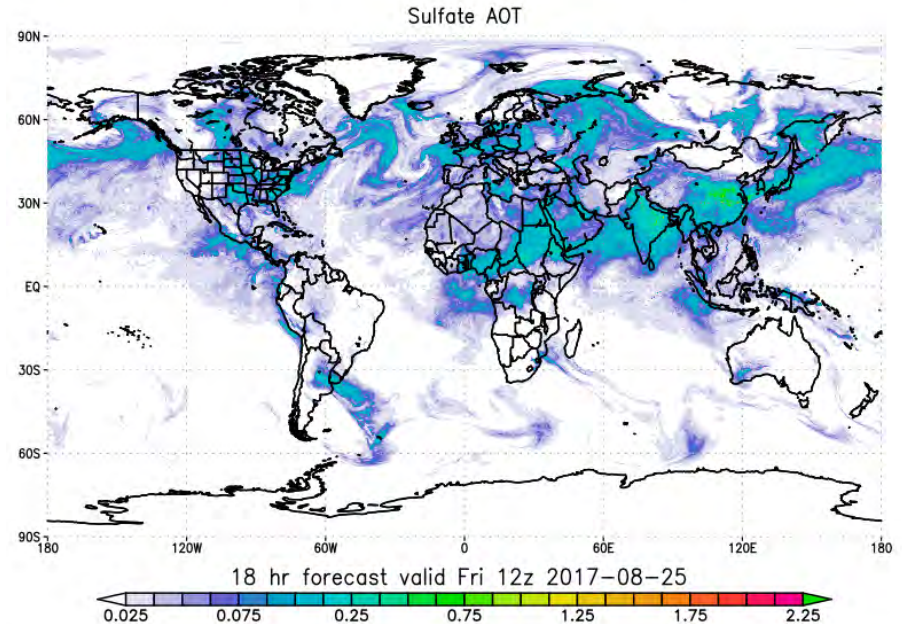
# Friday 25 Aug 2017 12Z

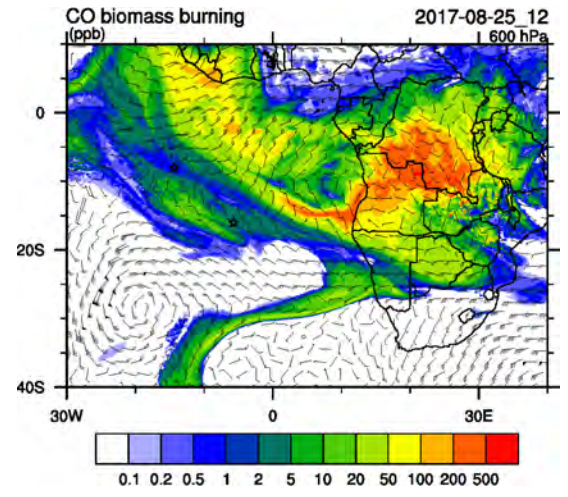
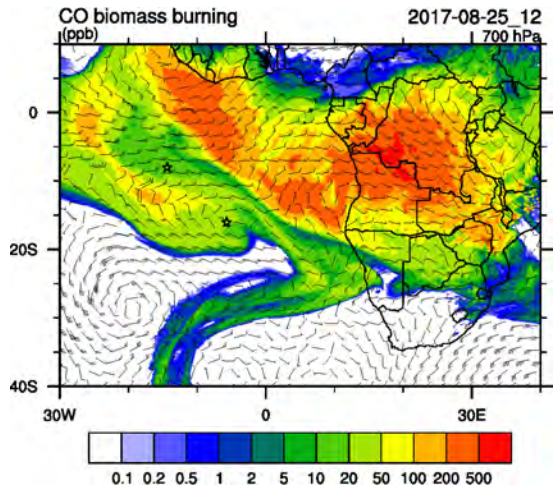
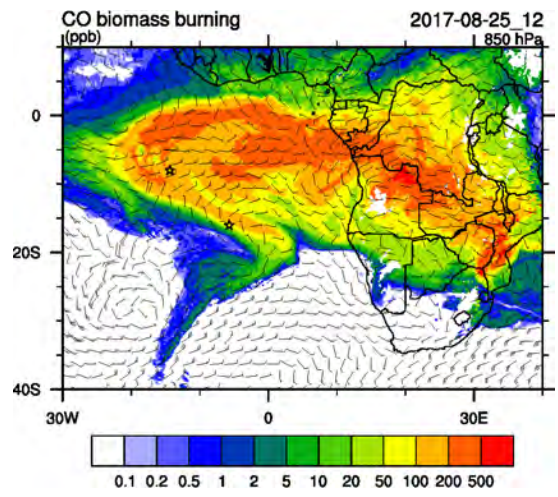
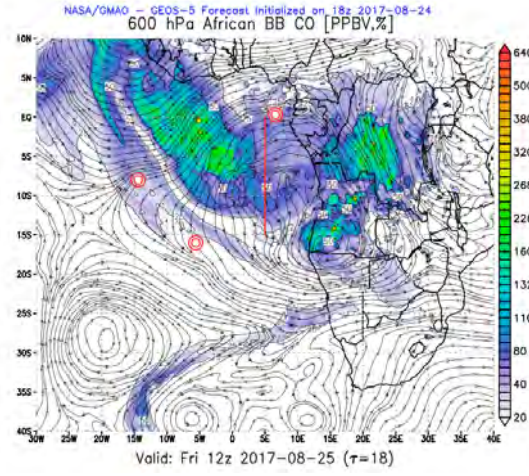
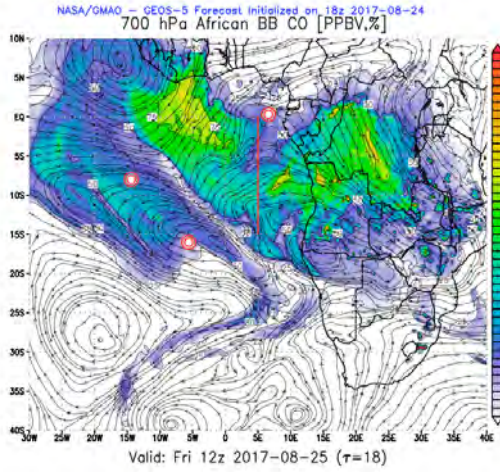
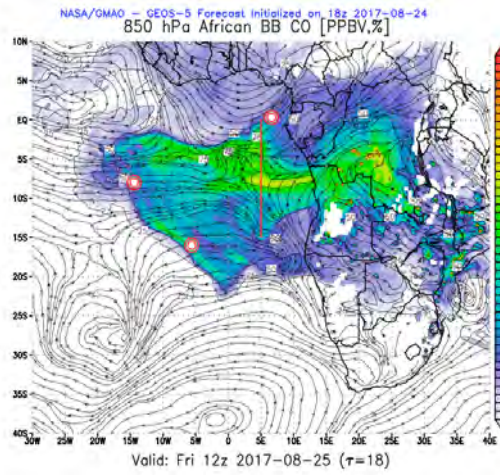


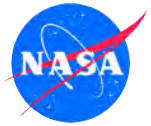
NASA/GMAO – GEOS-5 Forecast Initialized on 18z 2017-08-24  
Sea Salt Aerosol Optical Thickness



NASA/GMAO – GEOS-5 Forecast Initialized on 18z 2017-08-24

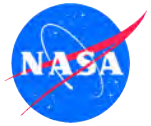






Fly Day (TBD)

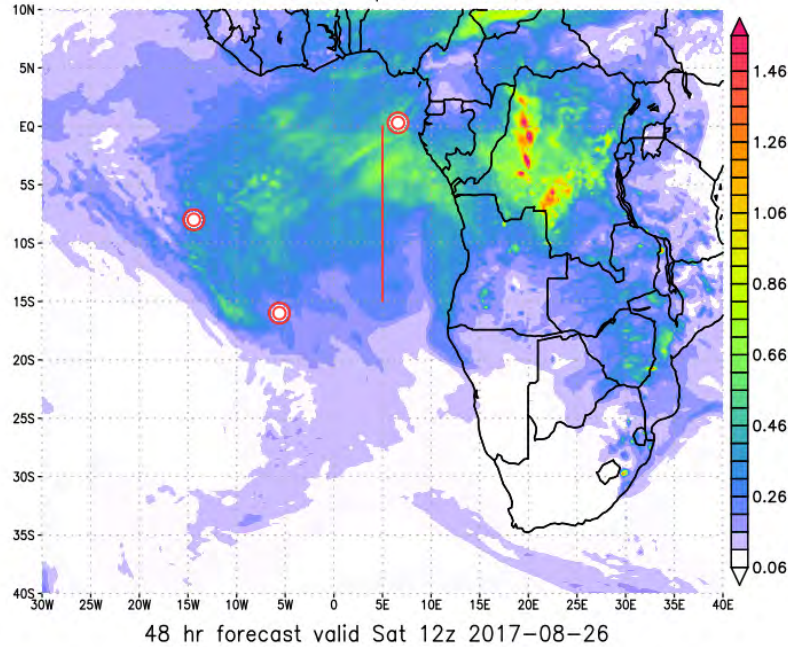
**SATURDAY, 26 AUGUST 2017**



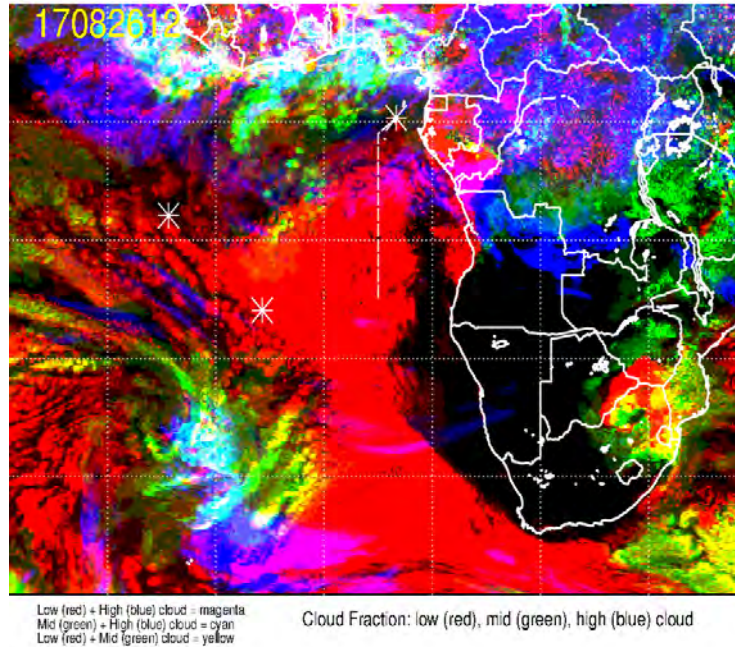
# Saturday, 26 Aug 2017 12Z

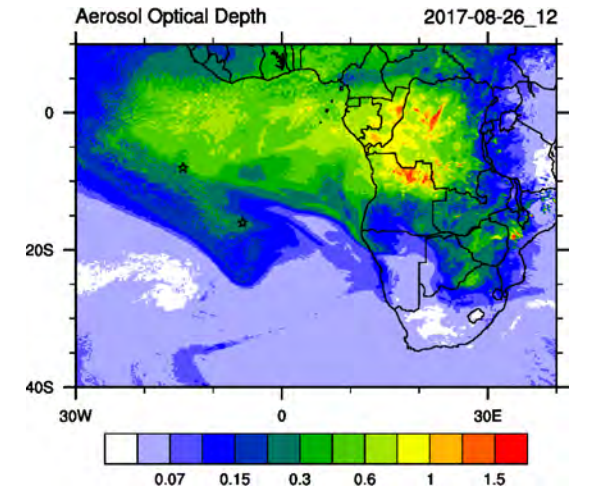
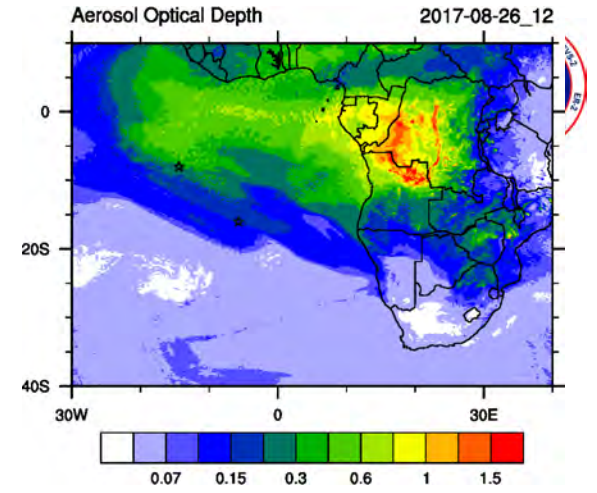
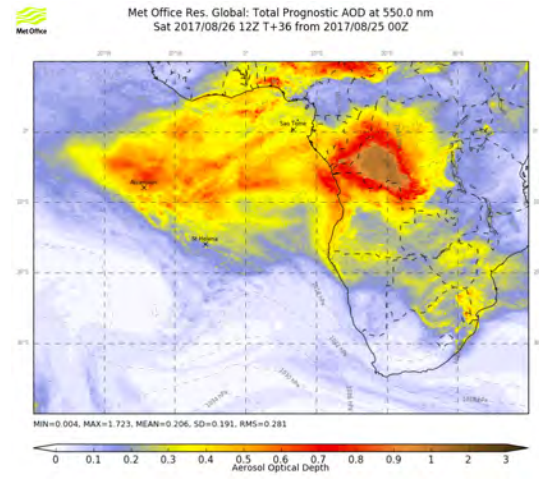
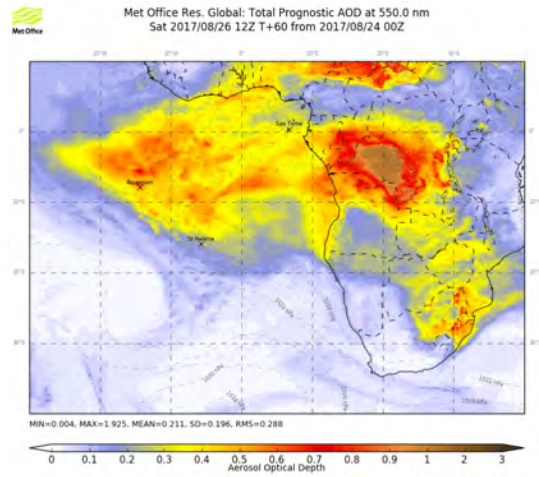
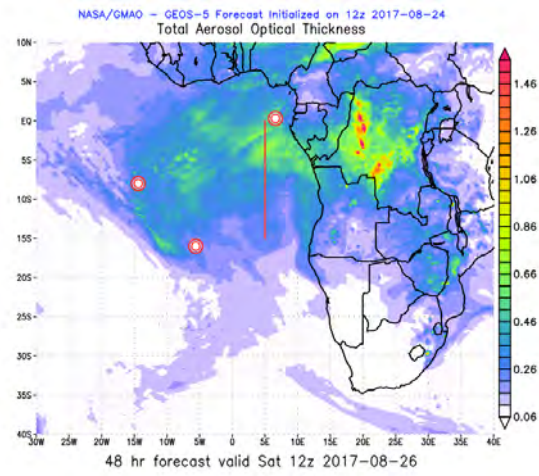
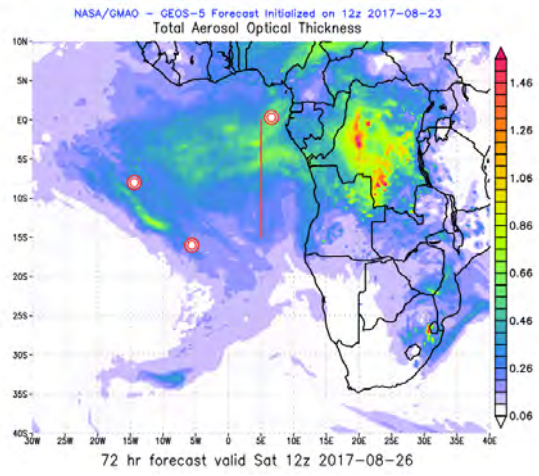


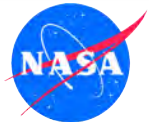
NASA/GMAO – GEOS-5 Forecast Initialized on 12z 2017-08-24  
Total Aerosol Optical Thickness



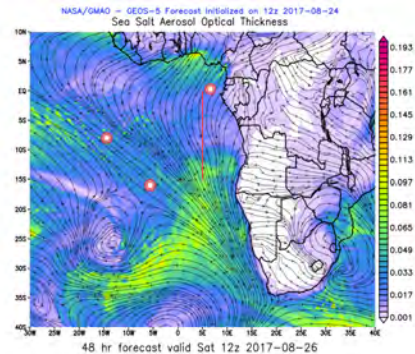
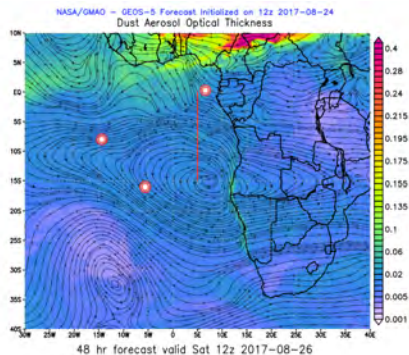
17082612, 048 hour forecast for Cloud Fraction (low, mid, and high cloud) -- ECMWF



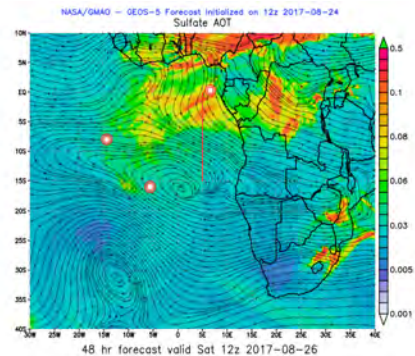
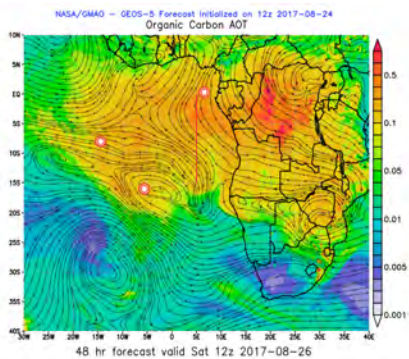
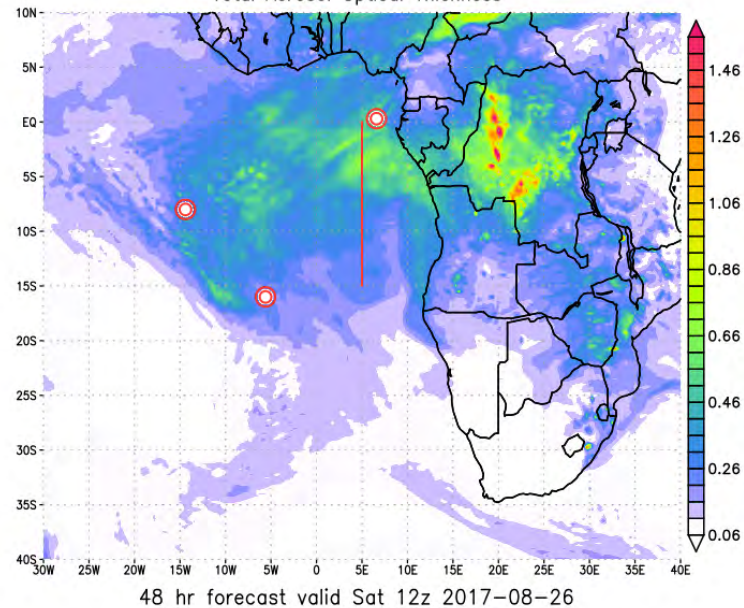




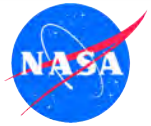
# Saturday, 26 Aug 2017 12Z



NASA/GMAO - GEOS-5 Forecast Initialized on 12z 2017-08-24  
Total Aerosol Optical Thickness



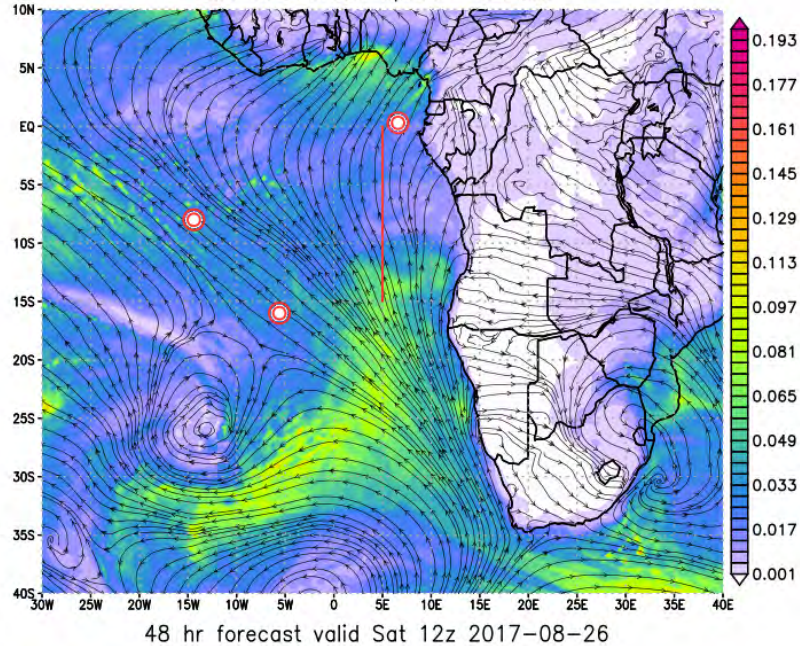




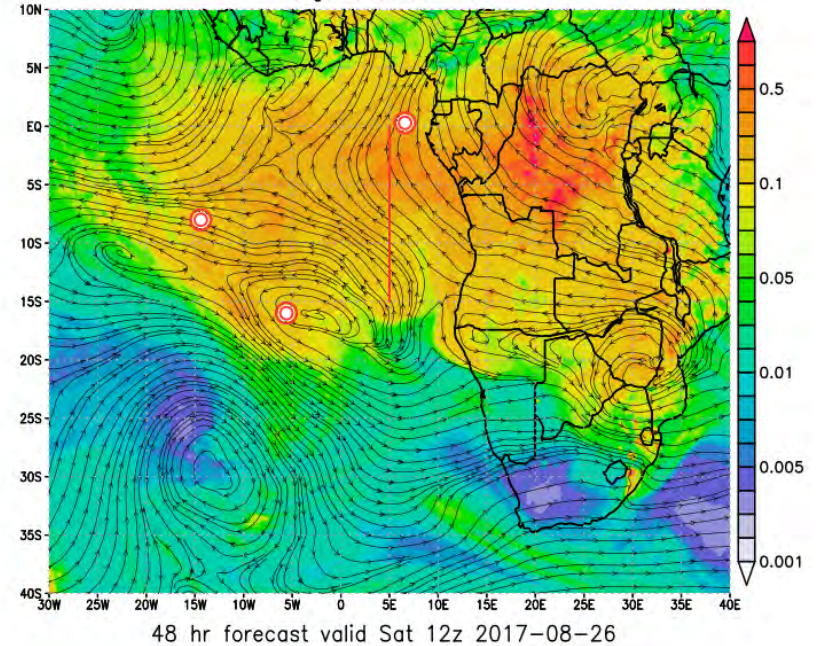
# Saturday, 26 Aug 2017 12Z

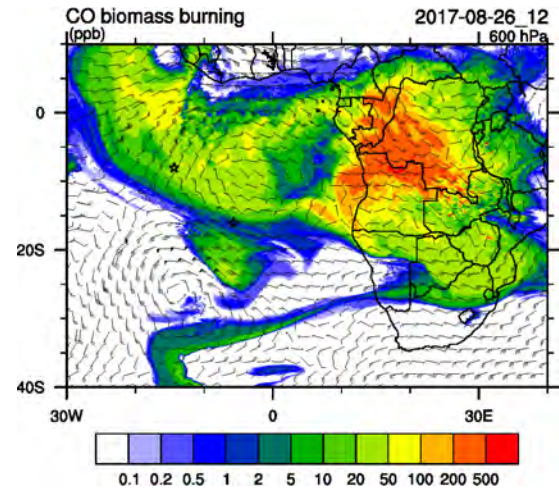
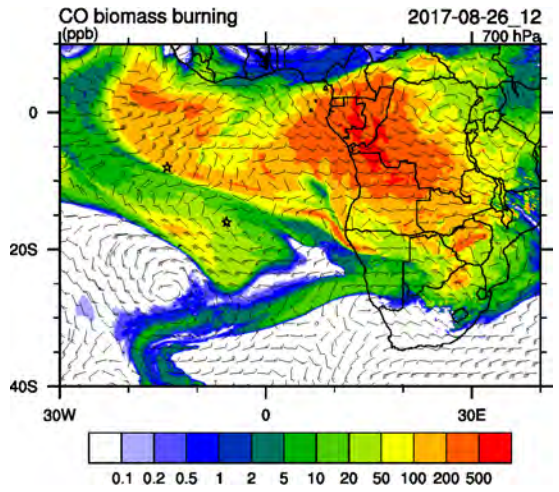
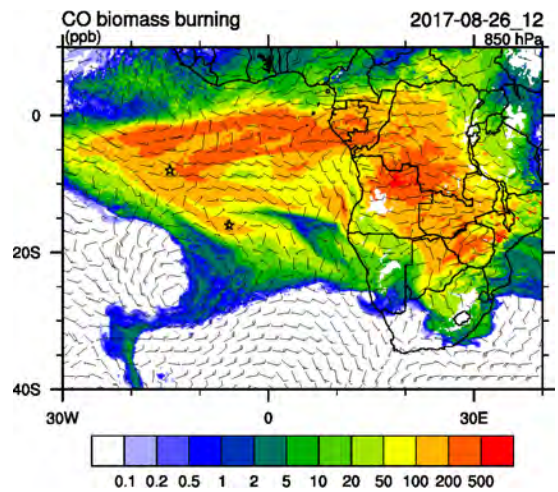
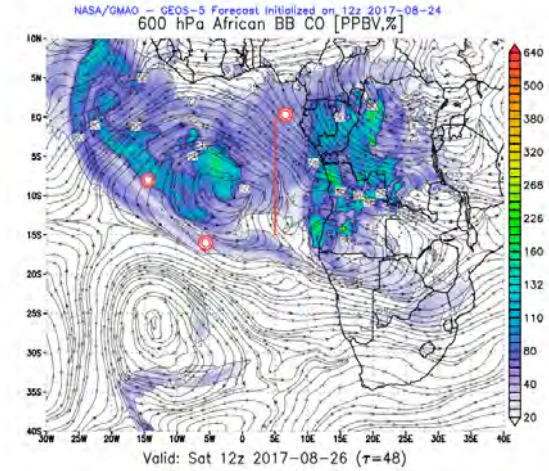
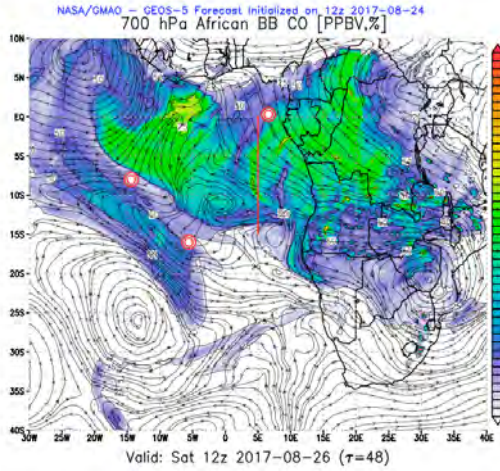
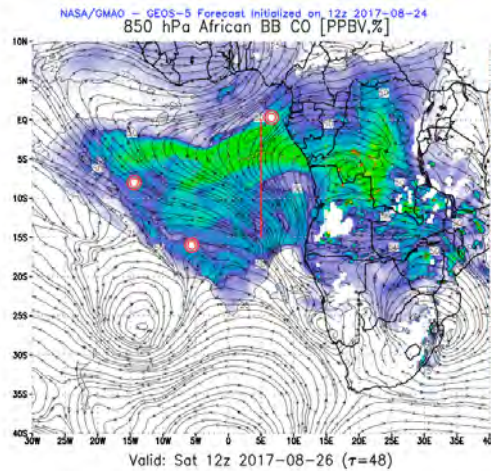


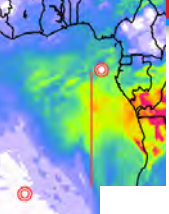
NASA/GMAO – GEOS-5 Forecast Initialized on 12z 2017-08-24  
Sea Salt Aerosol Optical Thickness



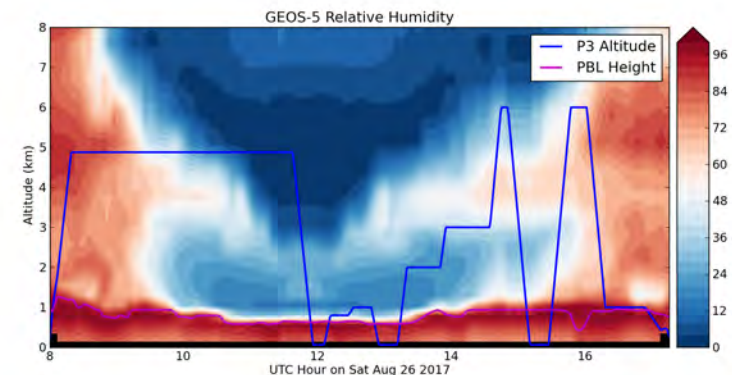
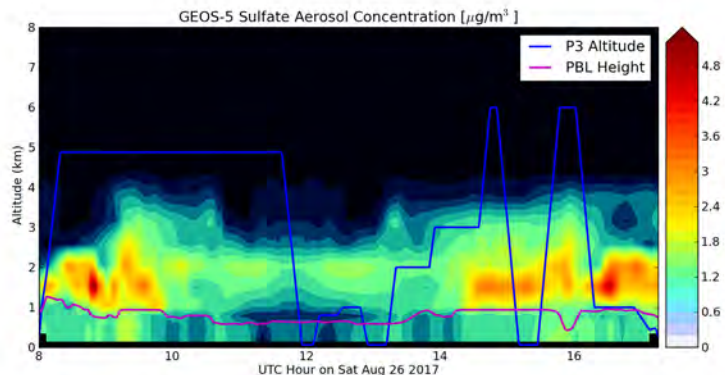
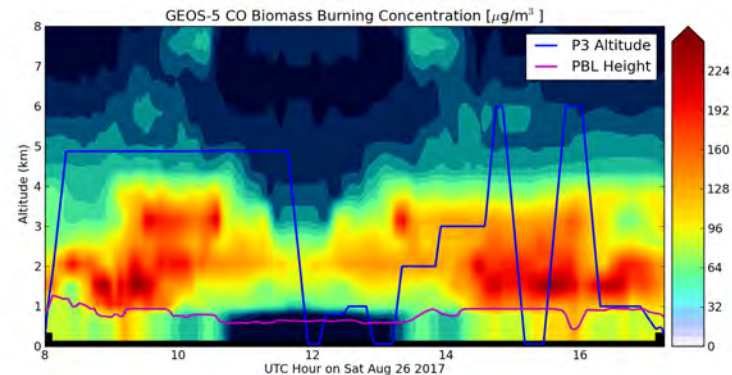
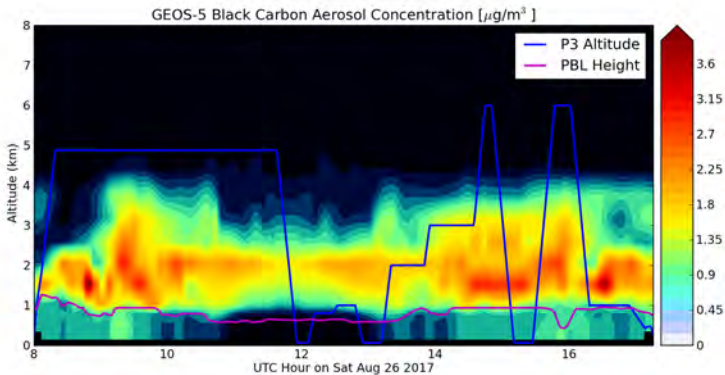
NASA/GMAO – GEOS-5 Forecast Initialized on 12z 2017-08-24  
Organic Carbon AOT

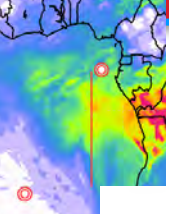




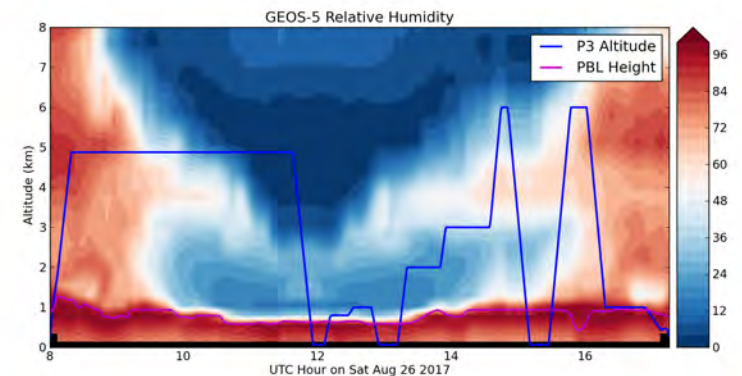
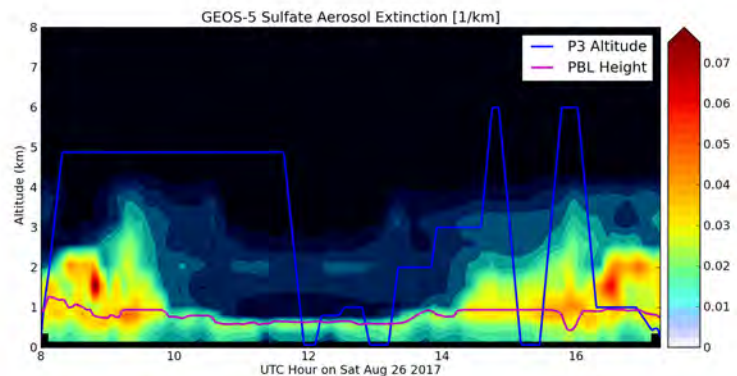
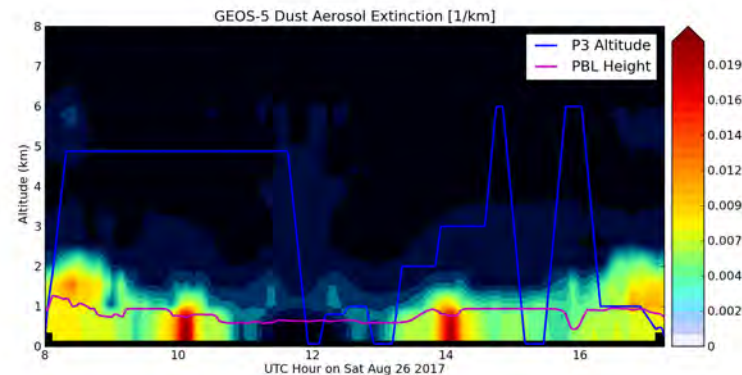
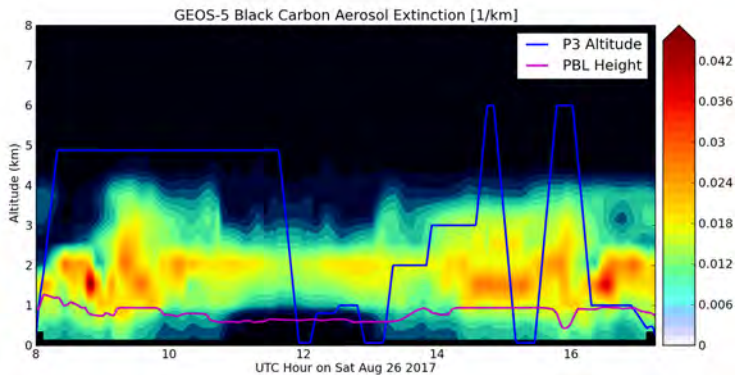


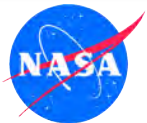
# Sat 26 August 2017 12Z (Concentration)





# Sat 26 August 2017 12Z (Extinction)

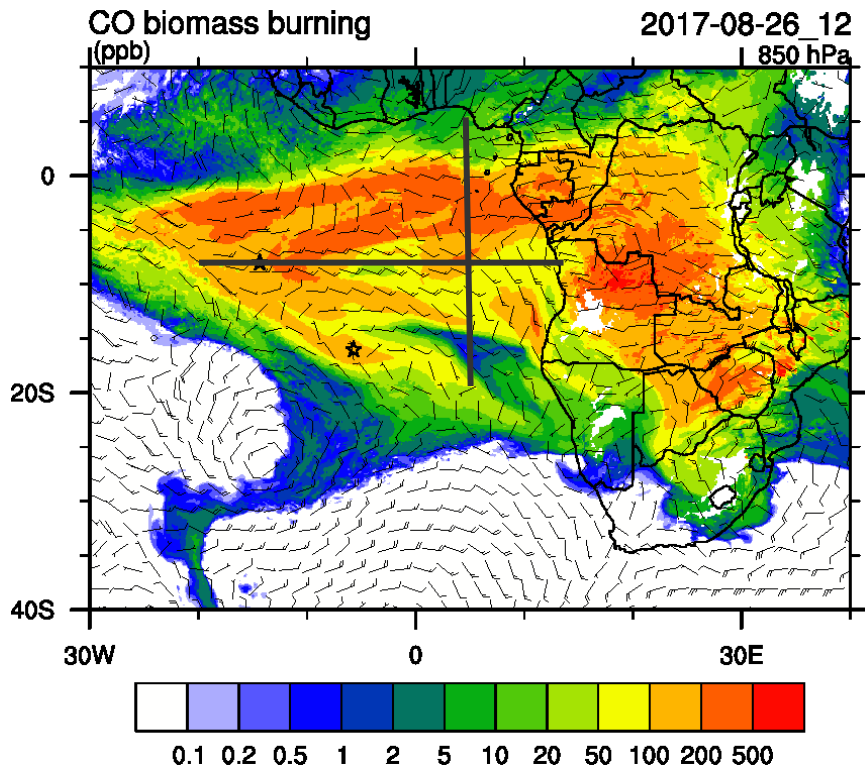




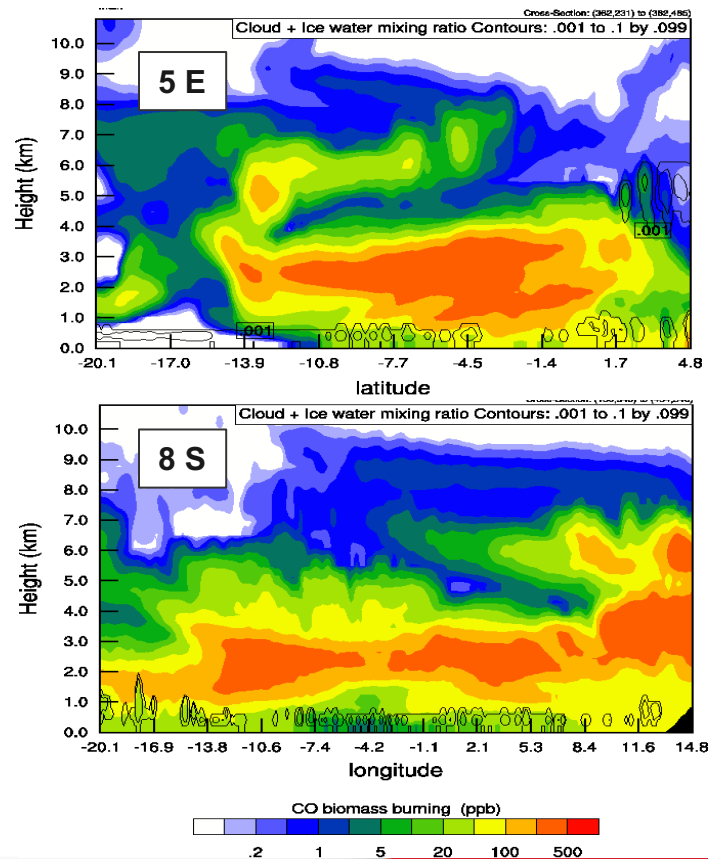
# Cross sections – 5 E and 8 S at 12 Z

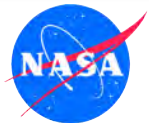


## CO from BB at 850 mb



## CO from BB

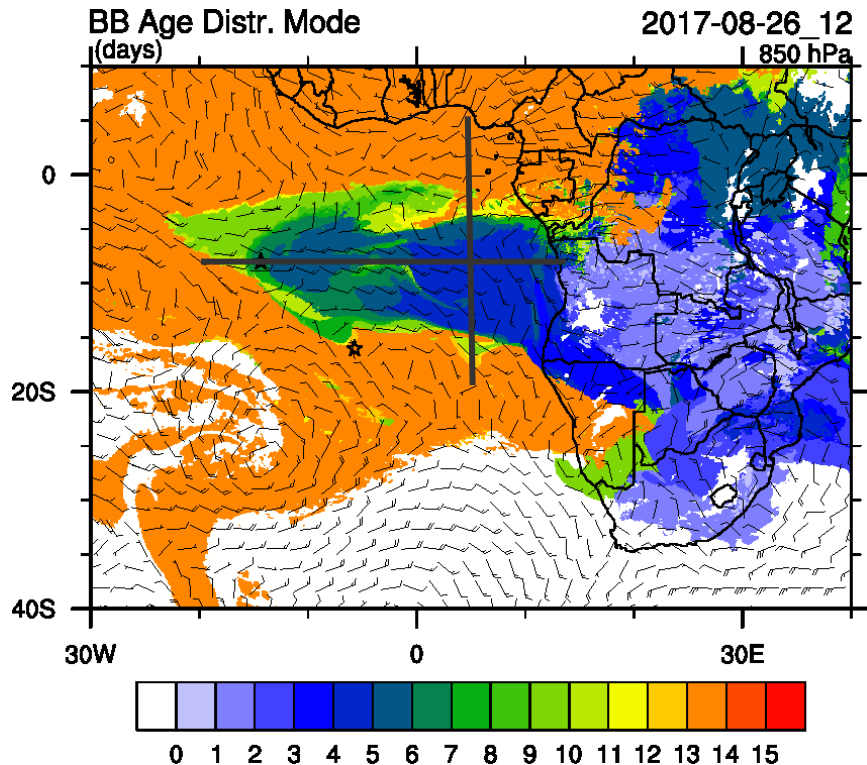




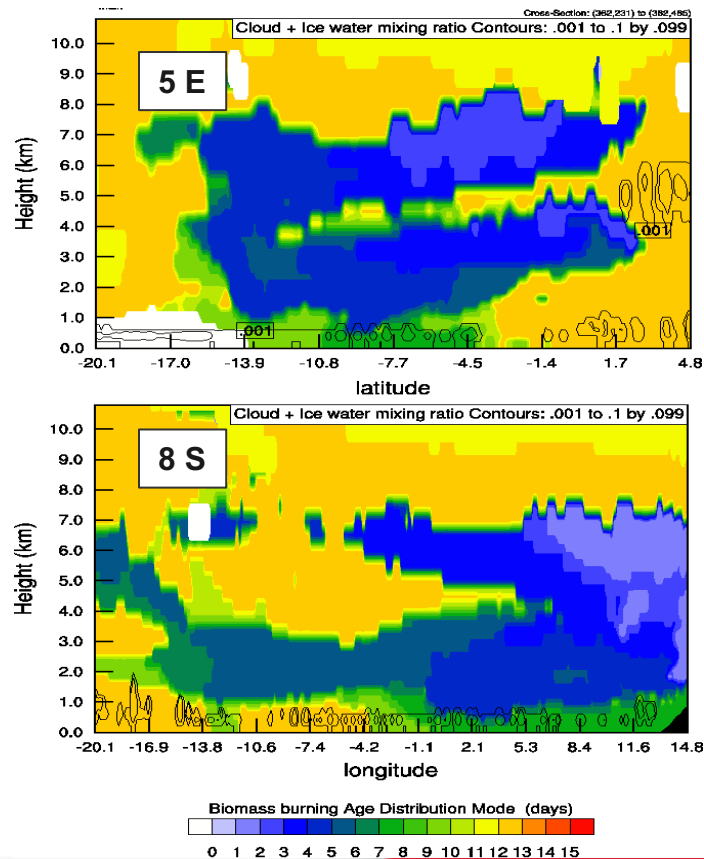
# Cross sections – 5 E and 8 S at 12 Z

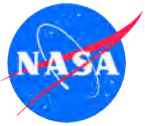


## Aerosol age mode at 850 mb

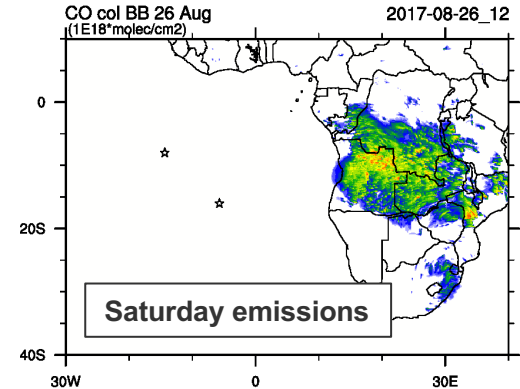
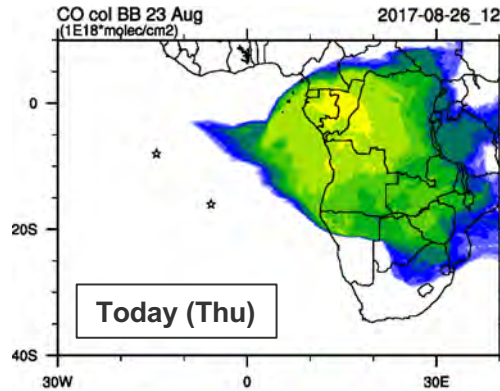
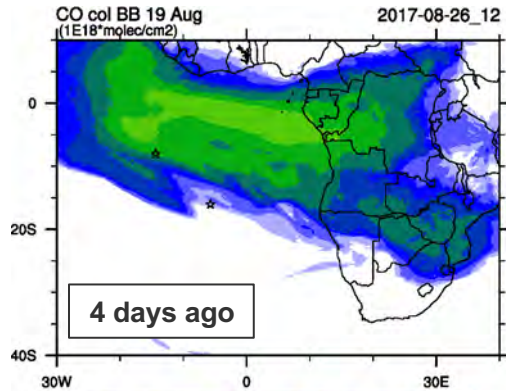
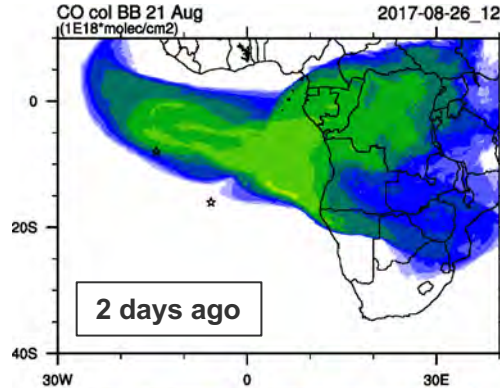
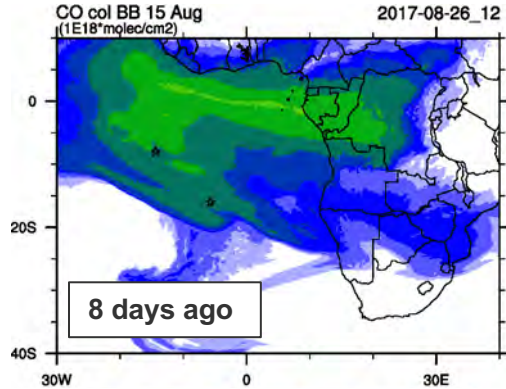


## Aerosol age mode



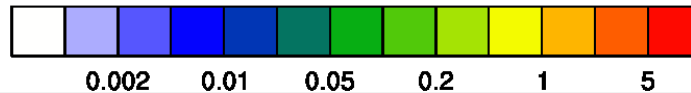


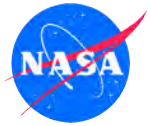
# Following BB aerosols – 12 Z



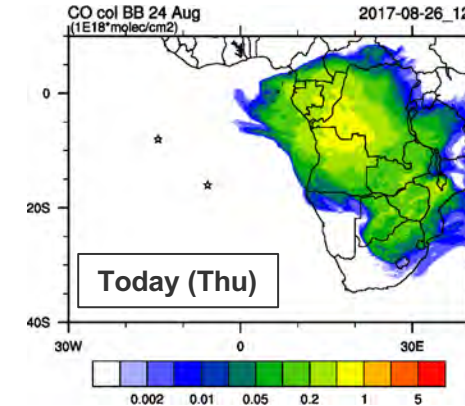
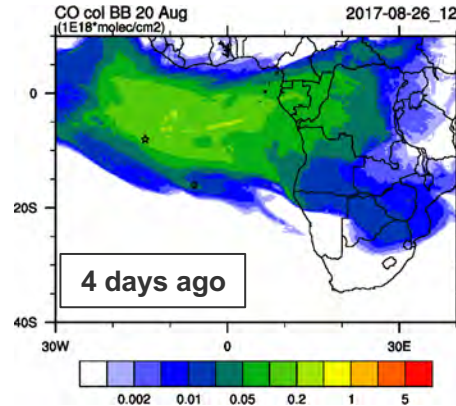
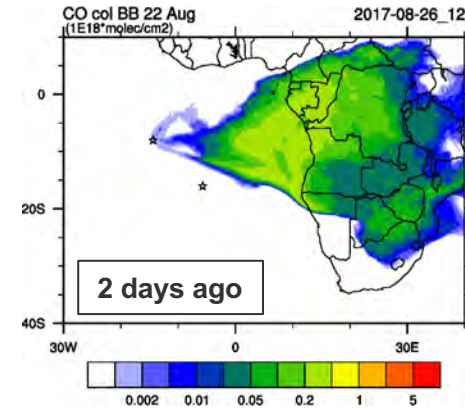
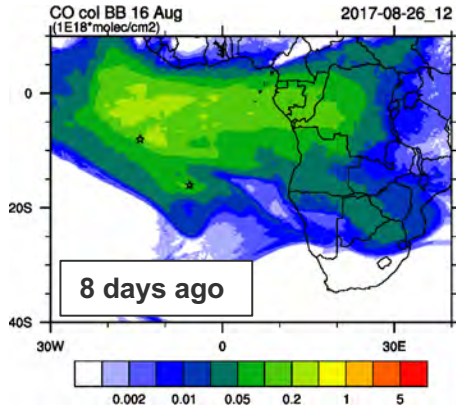
Maps show the **location** and **concentration** of BB aerosols on Sat 26<sup>th</sup> 12 Z emitted in different days.

There is no addition of aerosols emitted in other days in this maps

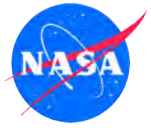




# Following BB emissions

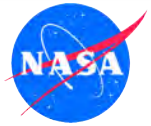






No Fly Day

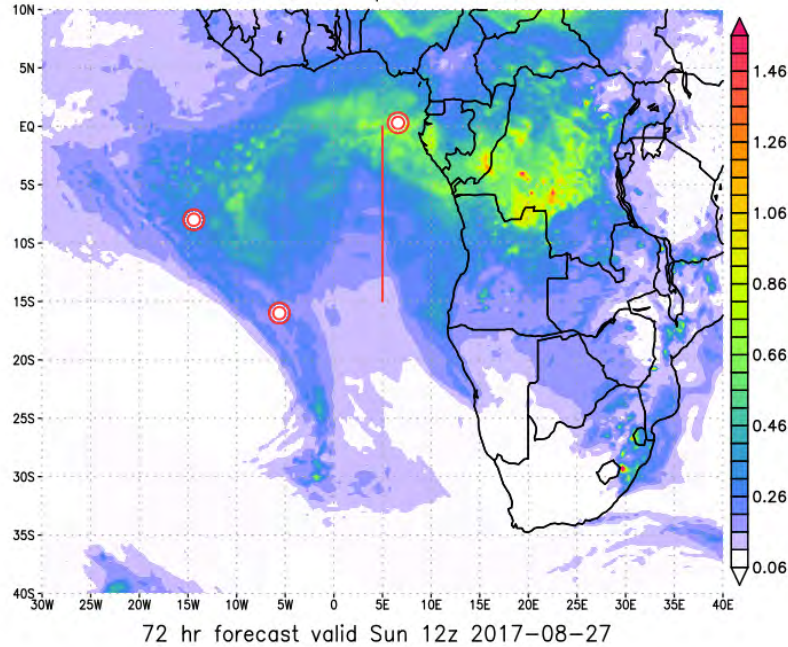
**SUNDAY, 27 AUGUST 2017**



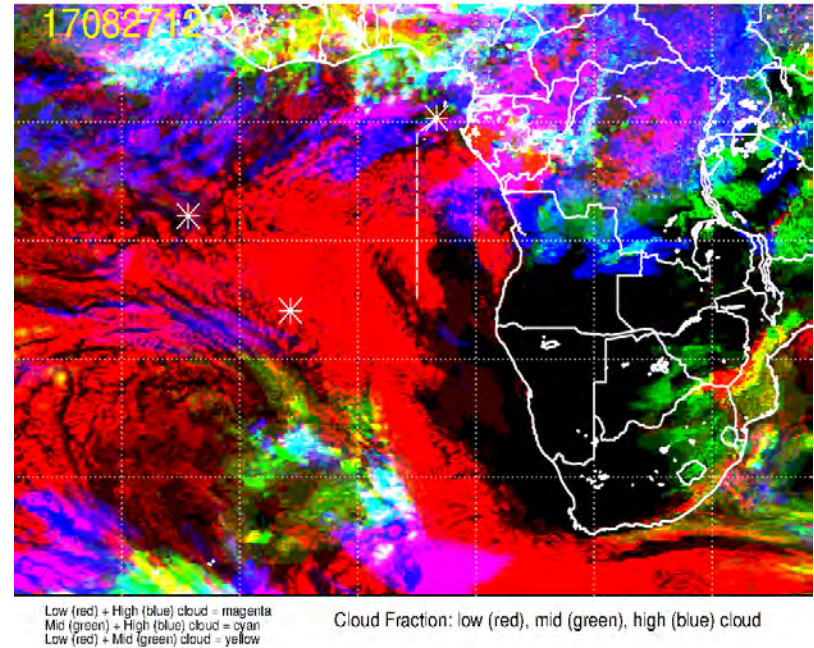
# Sunday 27 August 2017 12Z

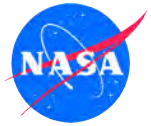


NASA/GMAO - GEOS-5 Forecast Initialized on 12z 2017-08-24  
Total Aerosol Optical Thickness

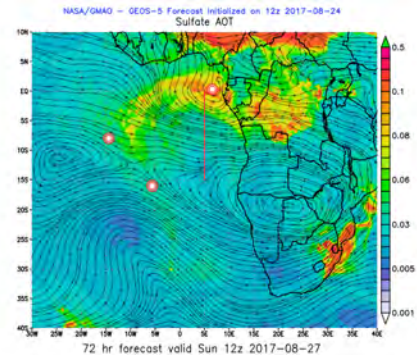
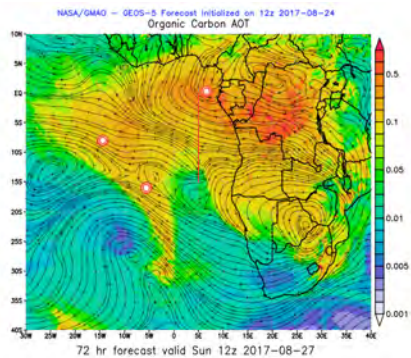
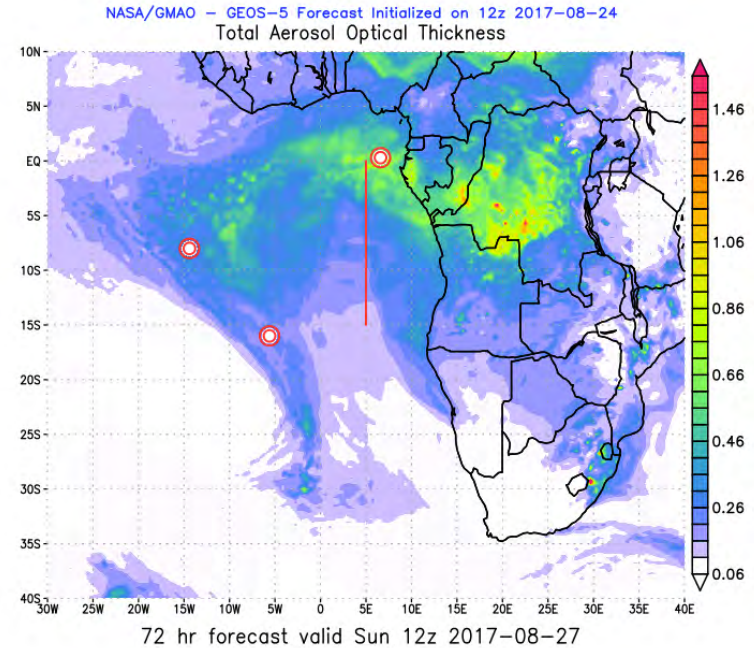
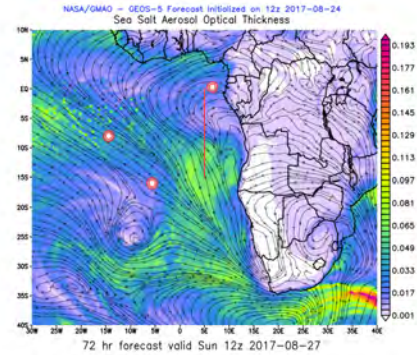
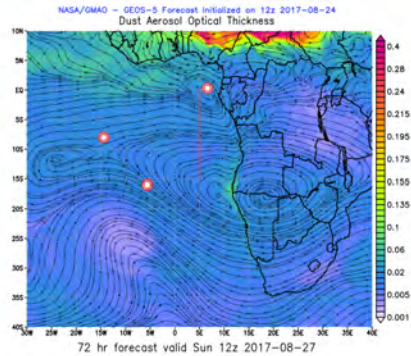


17082712, 072 hour forecast for Cloud Fraction (low, mid, and high cloud) -- ECMWF





# Sunday 27 August 2017 12Z

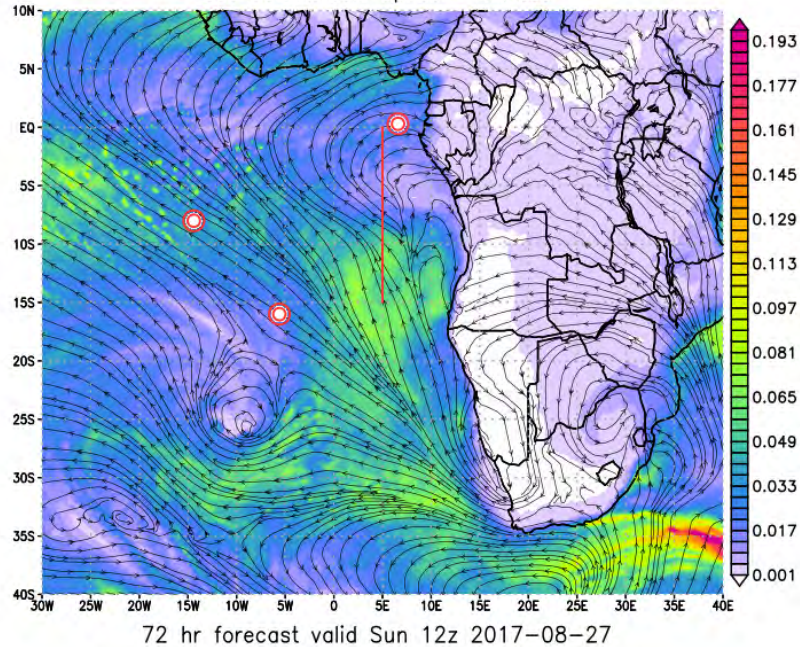




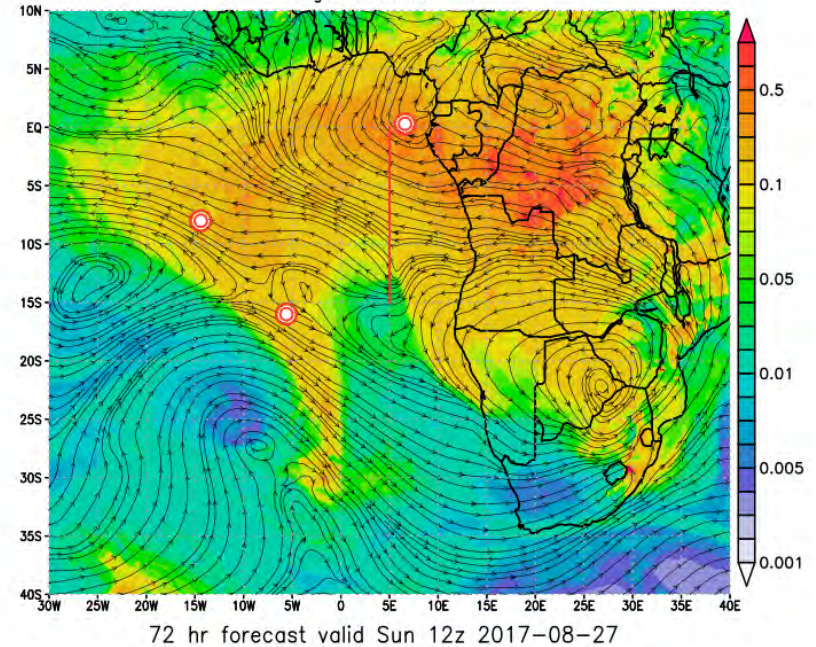
# Sunday 27 August 2017 12Z

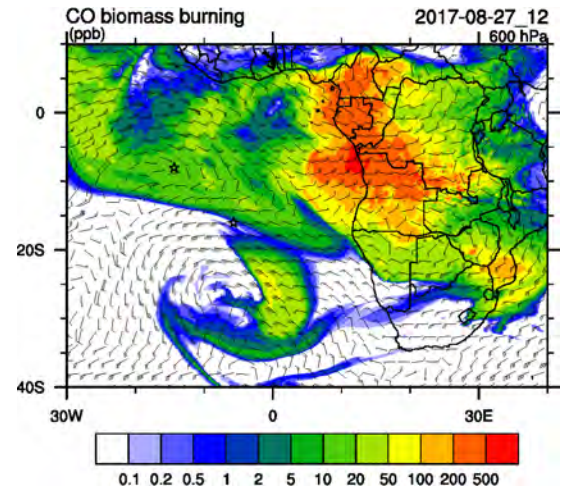
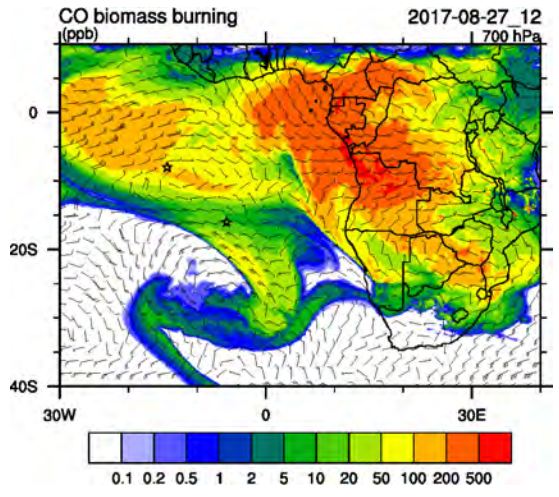
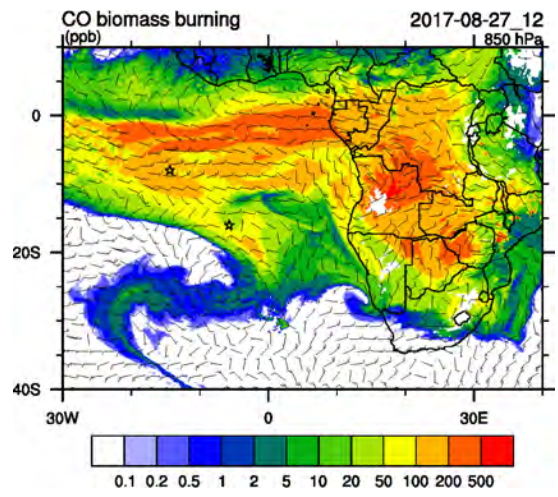
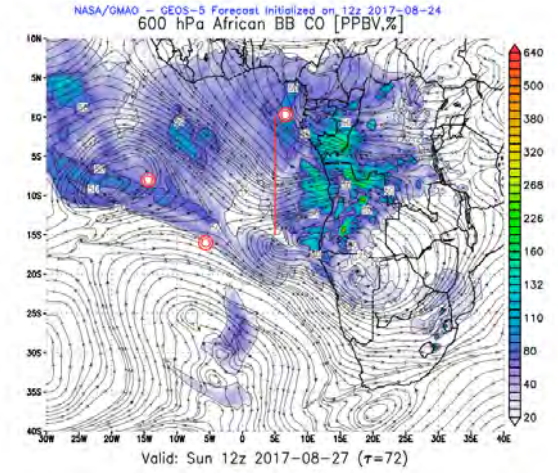
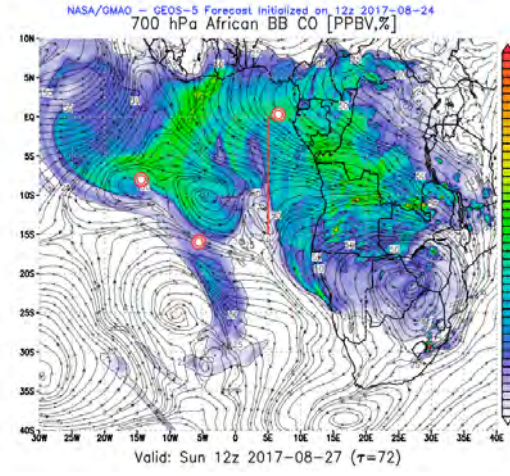
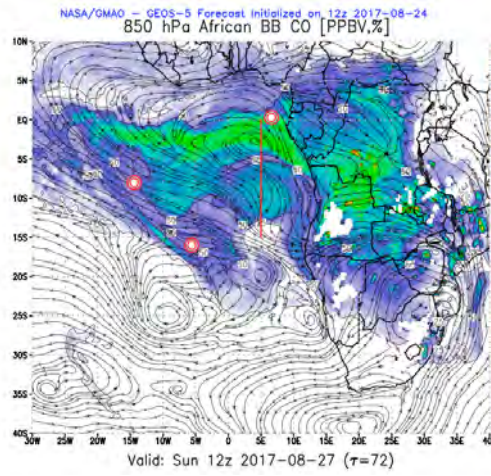


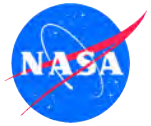
NASA/GMAO – GEOS-5 Forecast Initialized on 12z 2017-08-24  
Sea Salt Aerosol Optical Thickness



NASA/GMAO – GEOS-5 Forecast Initialized on 12z 2017-08-24  
Organic Carbon AOT

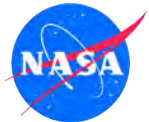






Fly Day (TBD)

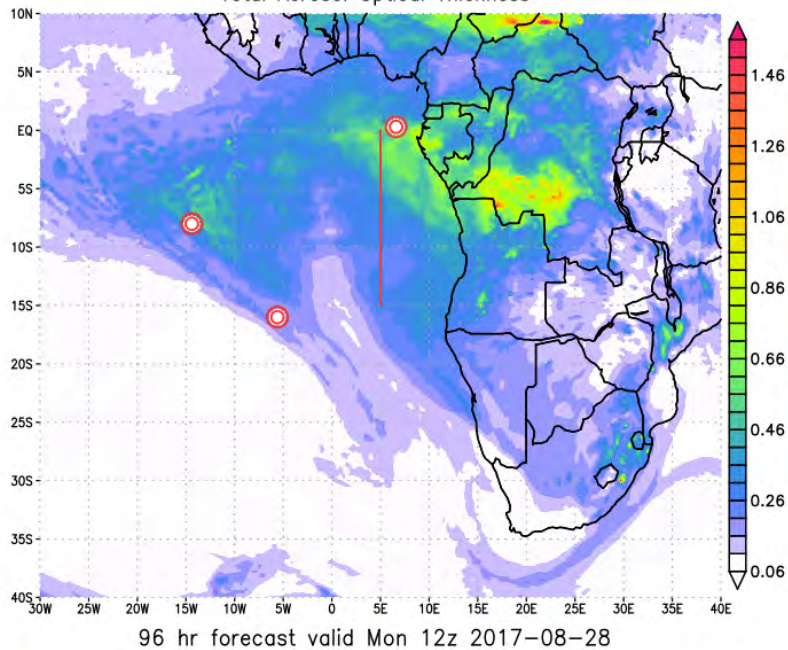
**MONDAY, 28 AUGUST 2017**



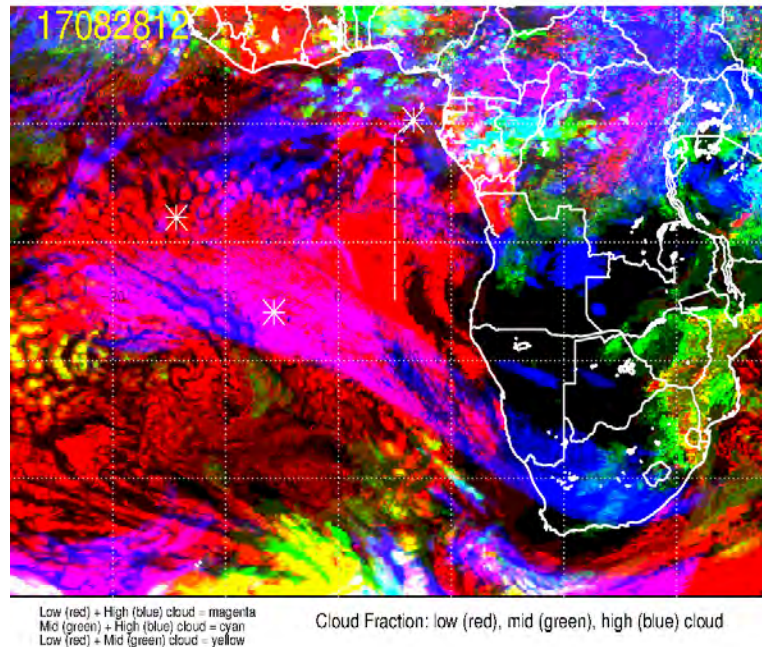
# Monday 28 August 2017 12Z

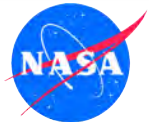


NASA/GMAO - GEOS-5 Forecast Initialized on 12z 2017-08-24  
Total Aerosol Optical Thickness

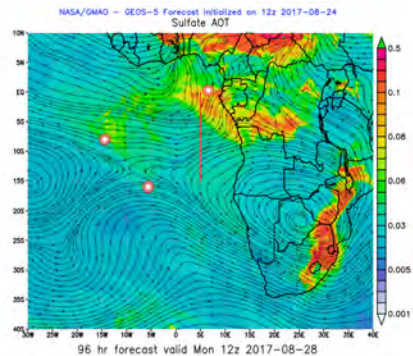
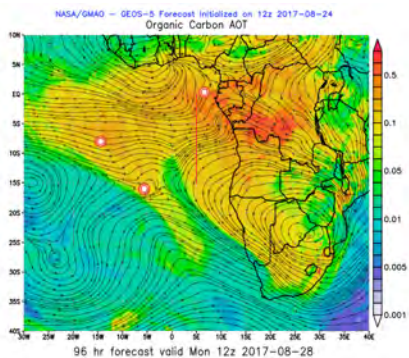
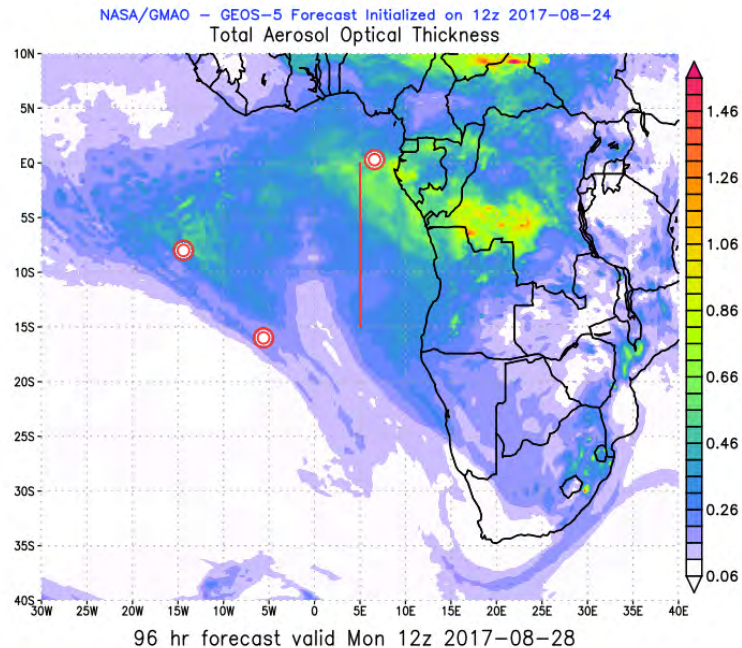
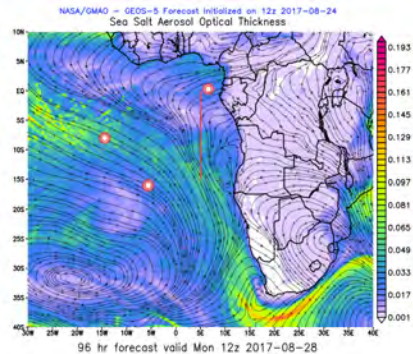
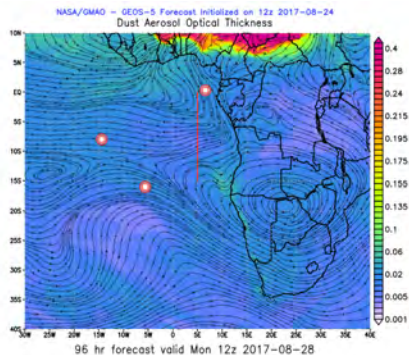


17082812, 096 hour forecast for Cloud Fraction (low, mid, and high cloud) -- ECMWF

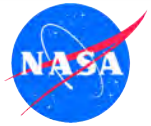




# Monday 28 August 2017 12Z



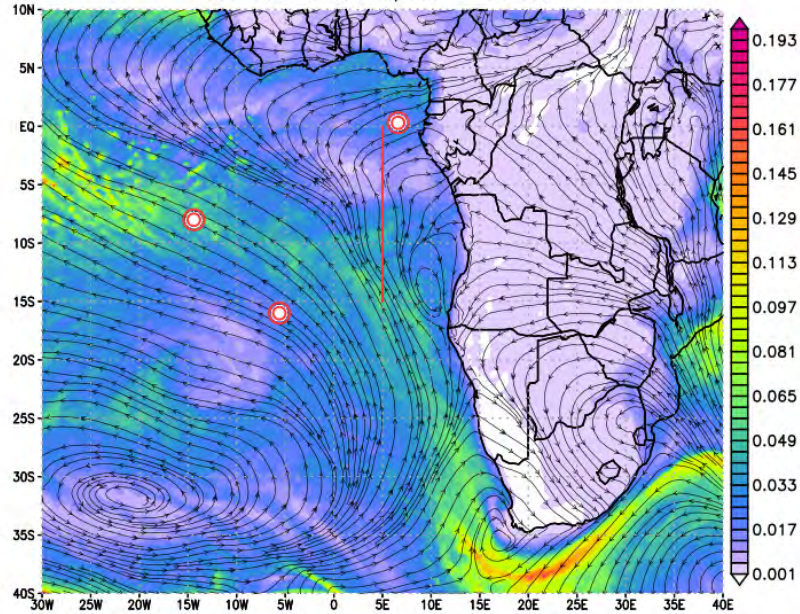




# Monday 28 August 2017 12Z

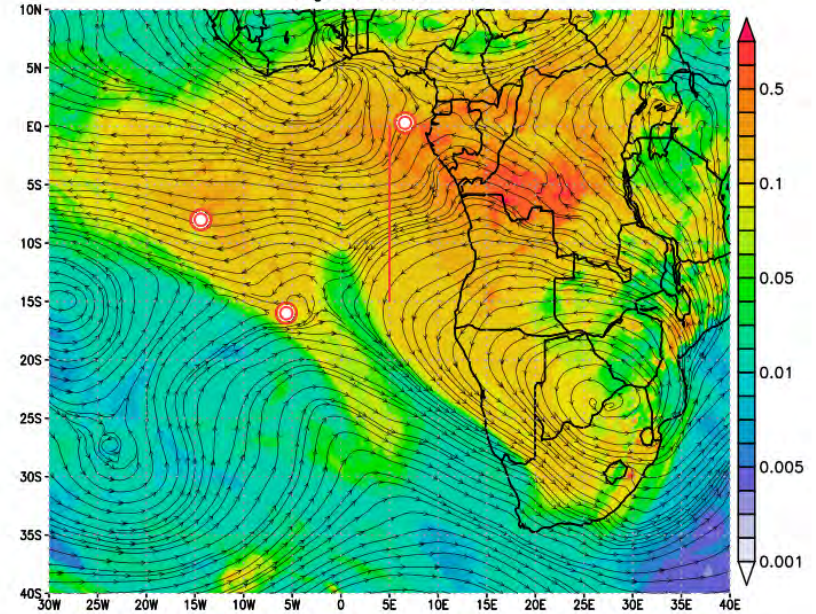


NASA/GMAO - GEOS-5 Forecast Initialized on 12z 2017-08-24  
Sea Salt Aerosol Optical Thickness

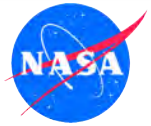


96 hr forecast valid Mon 12z 2017-08-28

NASA/GMAO - GEOS-5 Forecast Initialized on 12z 2017-08-24  
Organic Carbon AOT

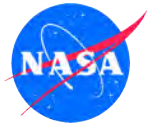


96 hr forecast valid Mon 12z 2017-08-28



**Fly/No Fly Day (Who Knows?)**

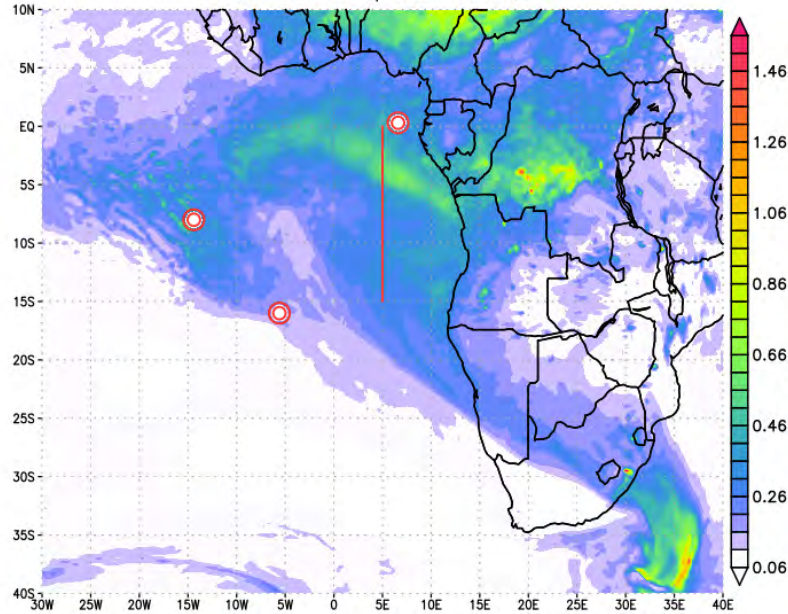
**TUESDAY, 29 AUGUST 2017**



# Tuesday 29 August 2017 12Z

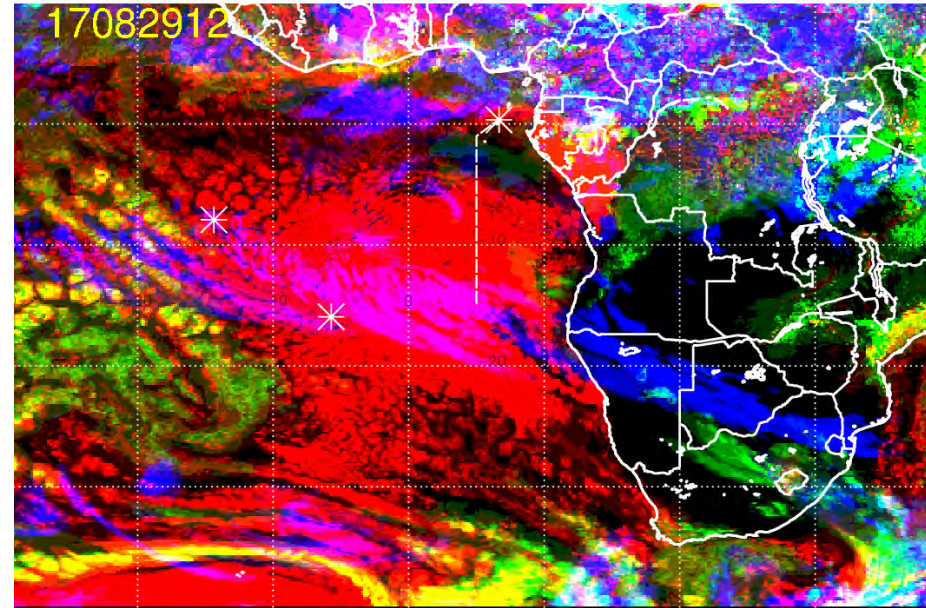


NASA/GMAO - GEOS-5 Forecast Initialized on 12z 2017-08-24  
Total Aerosol Optical Thickness



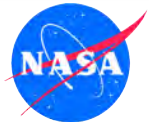
120 hr forecast valid Tue 12z 2017-08-29

17082912, 120 hour forecast for Cloud Fraction (low, mid, and high cloud) -- ECMWF

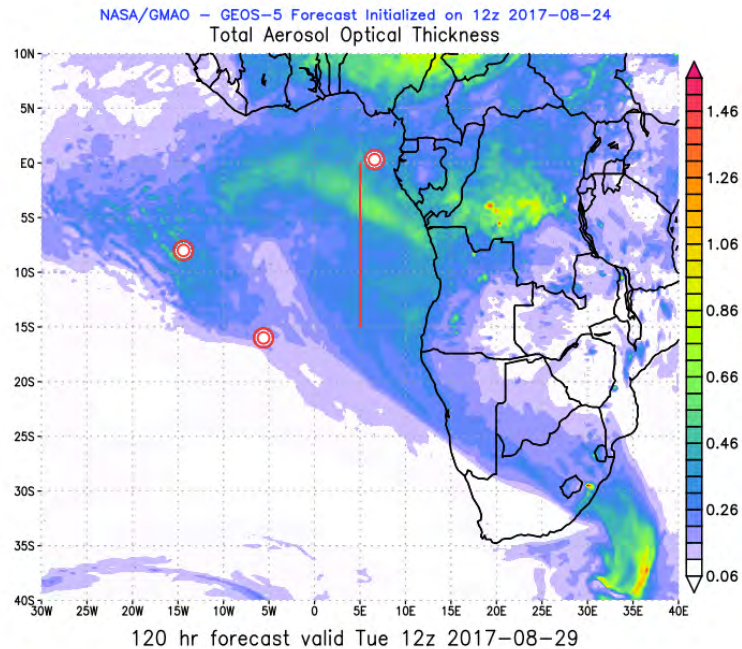
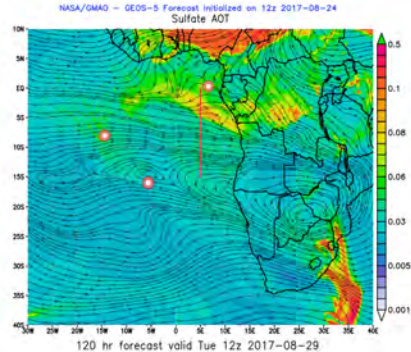
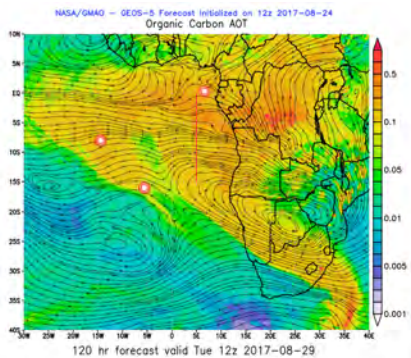
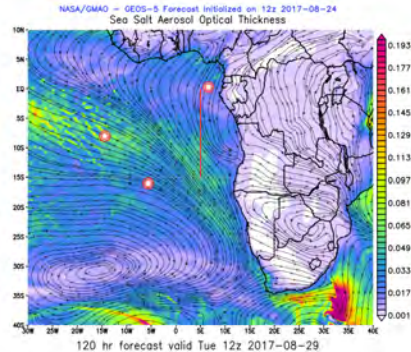
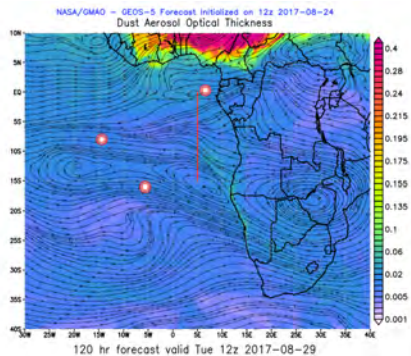


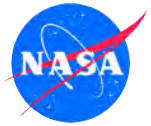
Low (red) + High (blue) cloud = magenta  
Mid (green) + High (blue) cloud = cyan  
Low (red) + Mid (green) cloud = yellow

Cloud Fraction: low (red), mid (green), high (blue) cloud



# Tuesday 29 August 2017 12Z

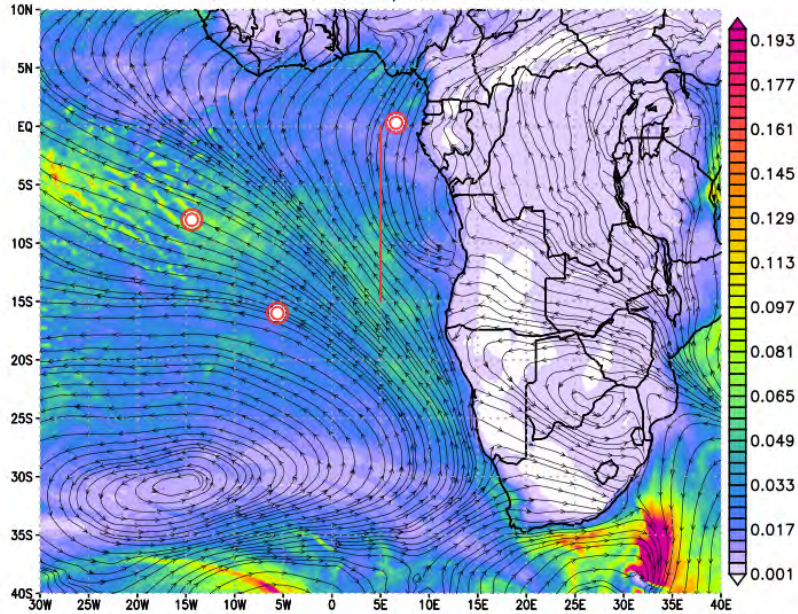




# Tuesday 29 August 2017 12Z

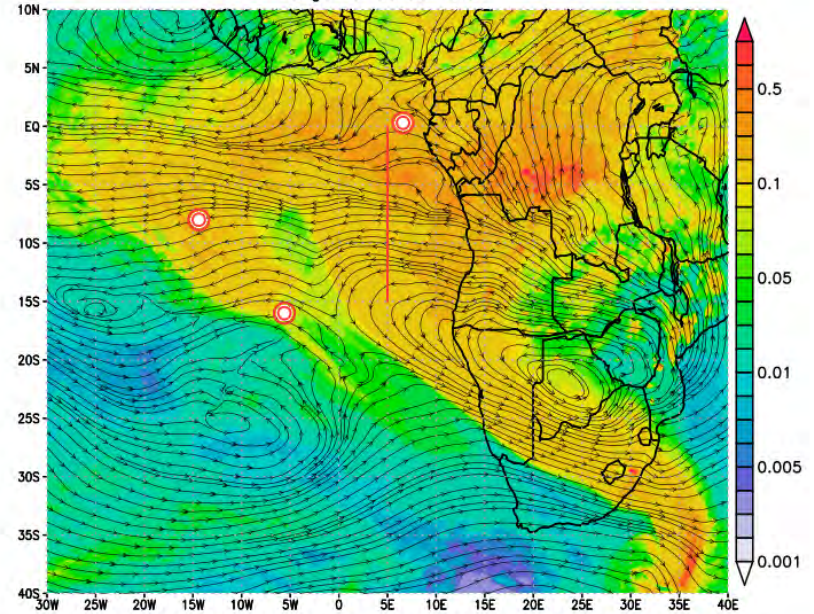


NASA/GMAO - GEOS-5 Forecast Initialized on 12z 2017-08-24  
Sea Salt Aerosol Optical Thickness



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

NASA/GMAO - GEOS-5 Forecast Initialized on 12z 2017-08-24  
Organic Carbon AOT



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