

# ORACLES Forecast Briefing

Aerosols  
18 August 2017

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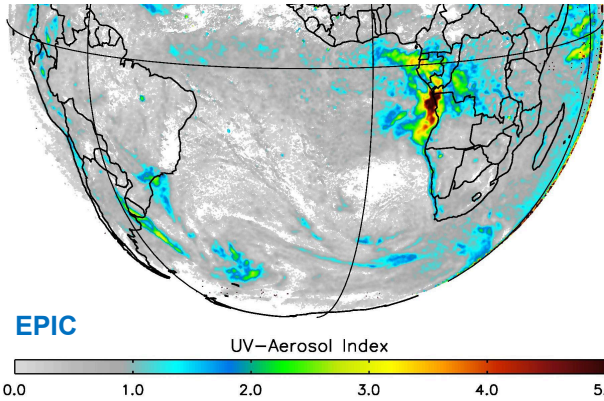


# MODEL EVALUATION

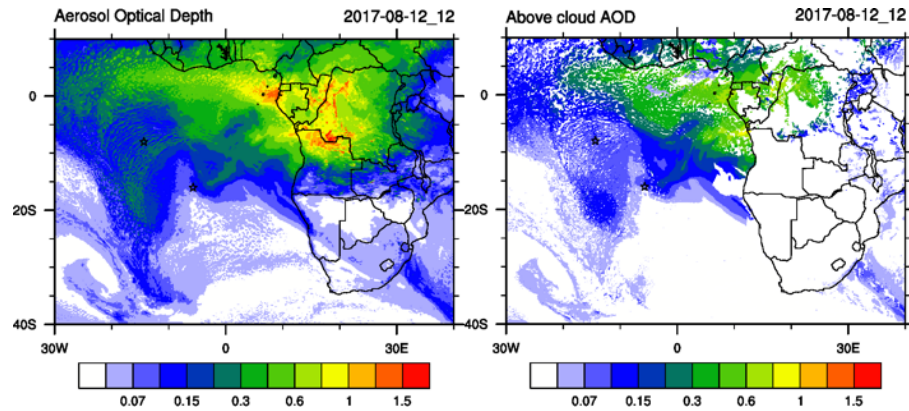
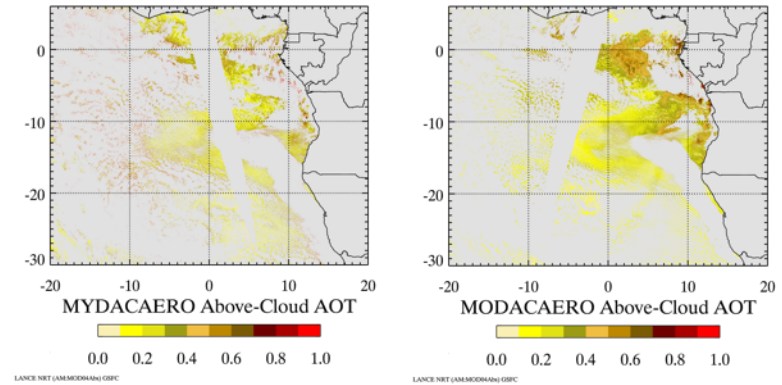


# Models evaluation

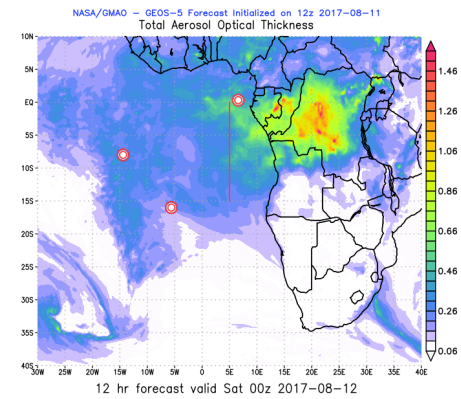
August 12<sup>th</sup> 12Z



## MODIS Aqua & Terra ACAOD



**WRF-Chem 24 h forecast**

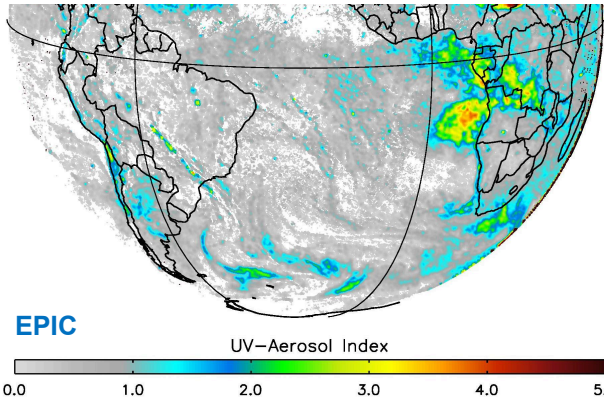


**GEOS-5  
24 h forecast**

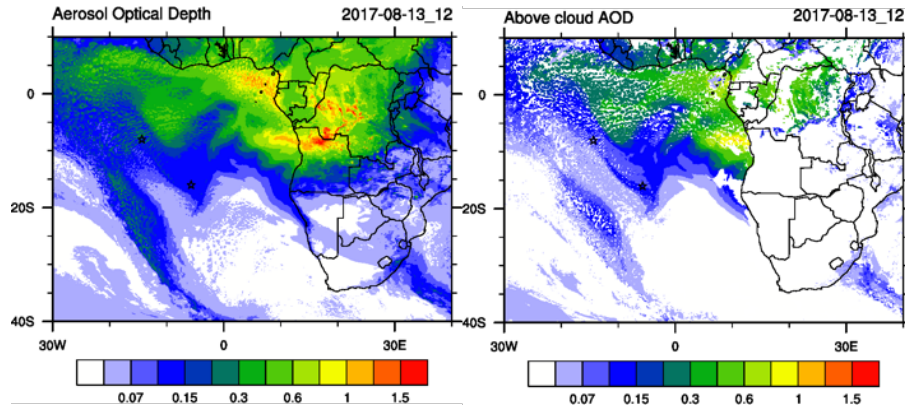
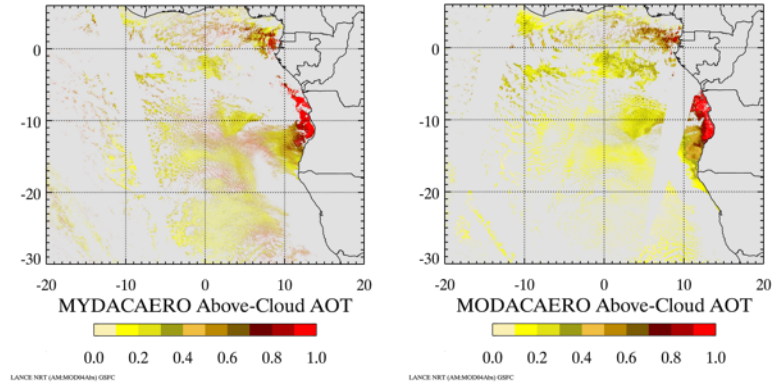


# Models evaluation

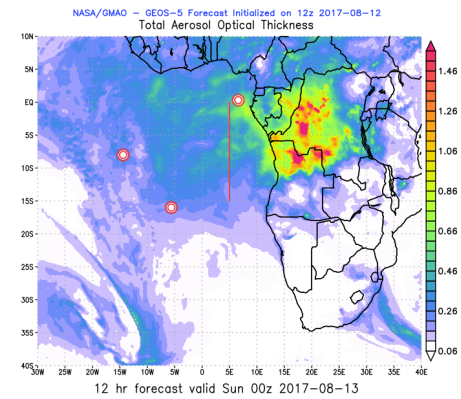
August 13<sup>th</sup> 12Z



## MODIS Aqua & Terra ACAOD



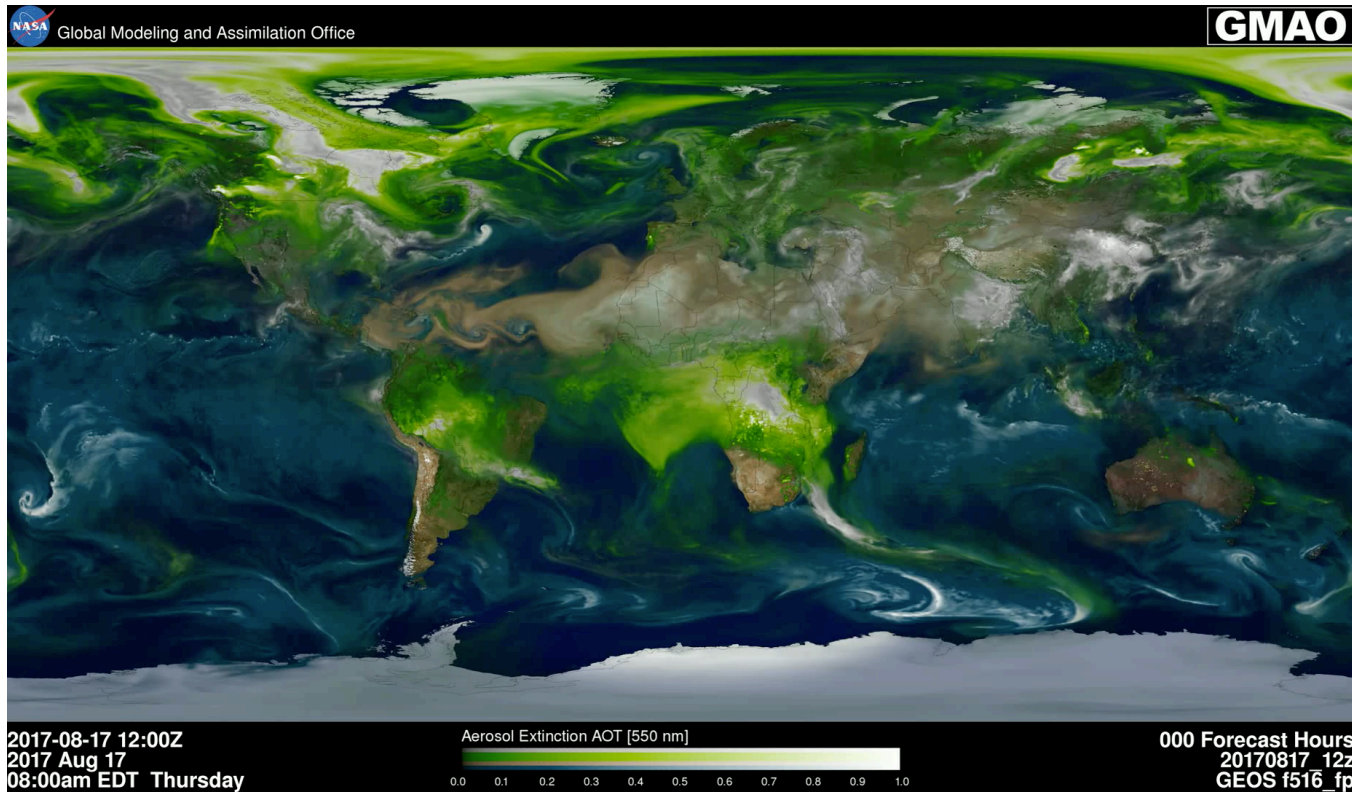
**WRF-Chem 24 h forecast**



**GEOS-5  
24 h forecast**

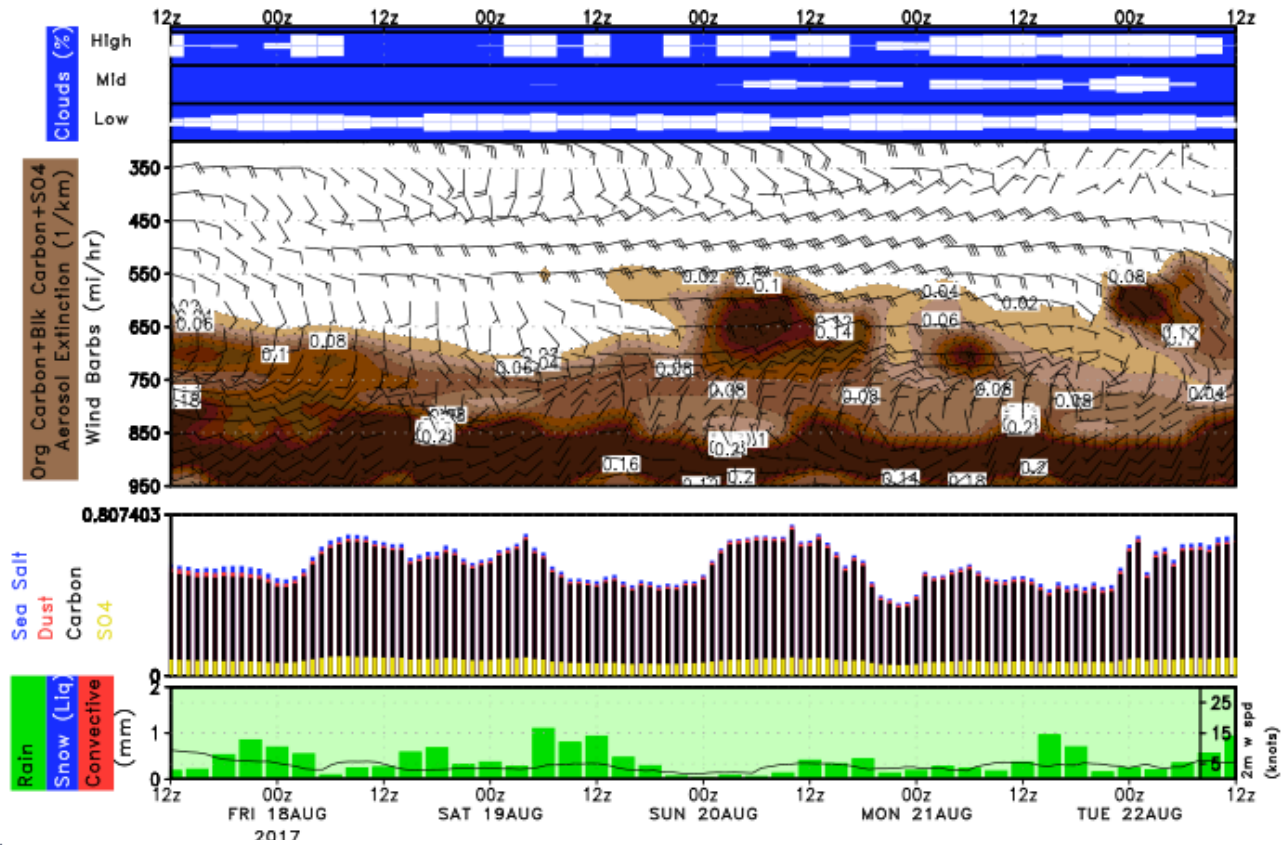


# The Aerosol Week



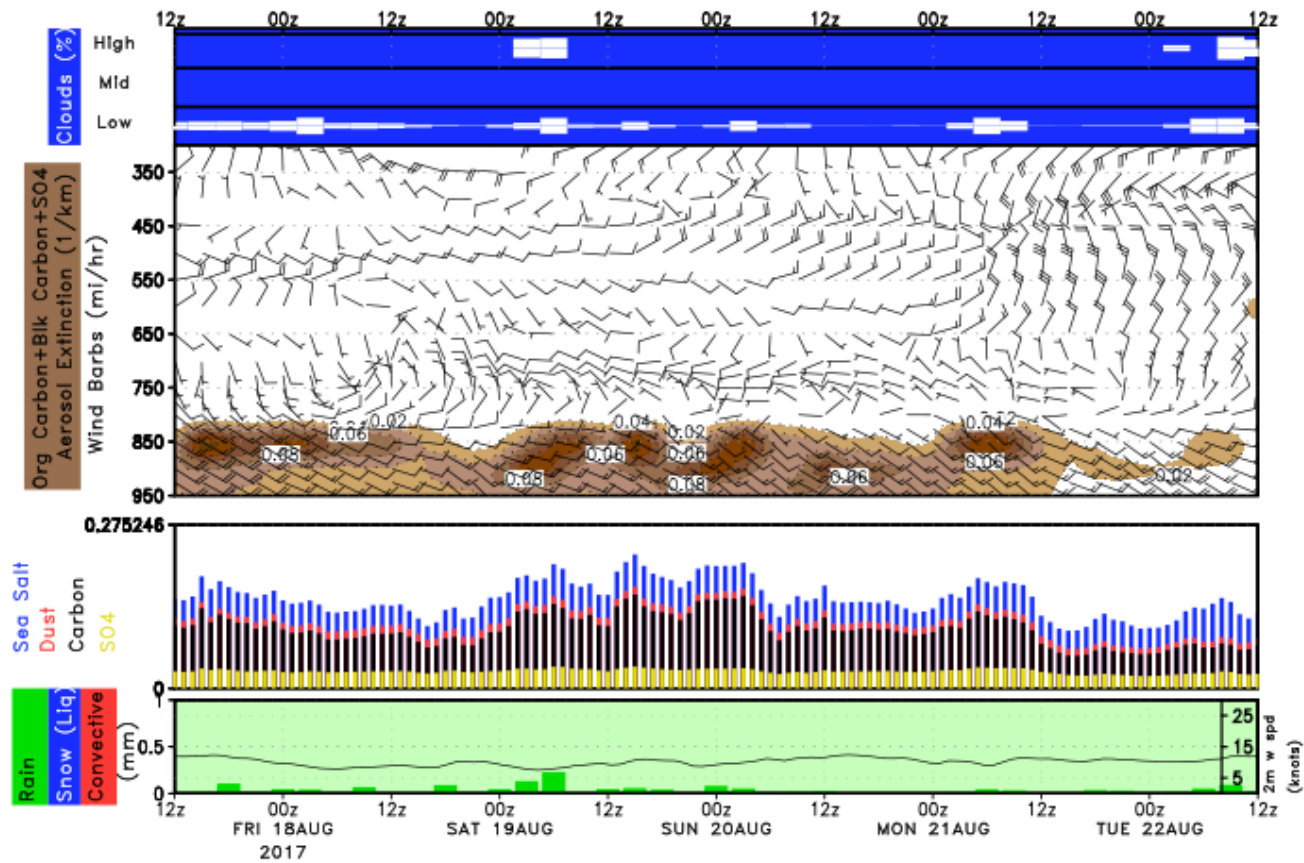


# São Tomé (OC+BC+SO<sub>4</sub>)





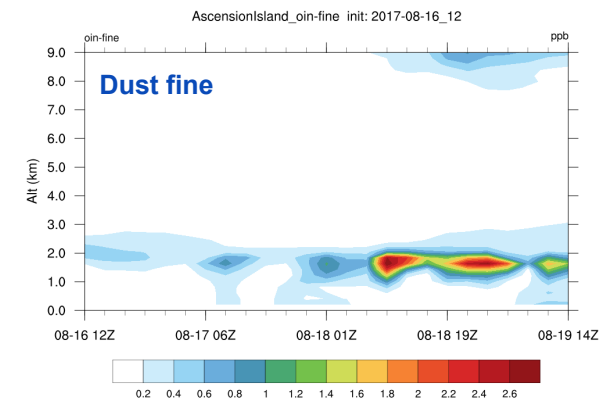
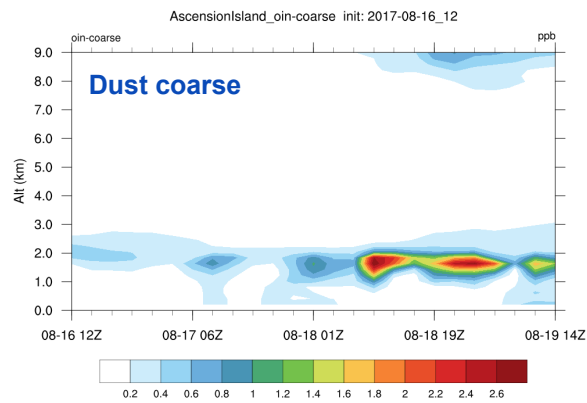
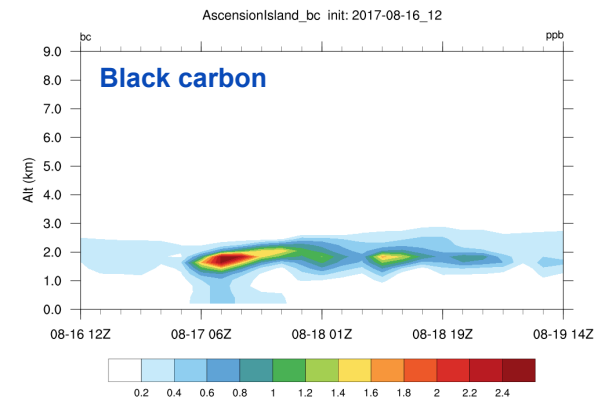
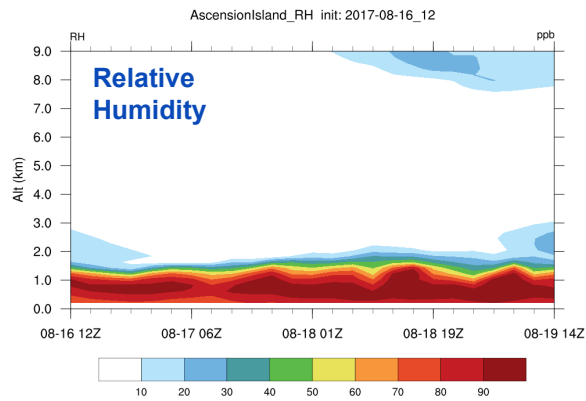
# Ascension (OC+BC+SO<sub>4</sub>)

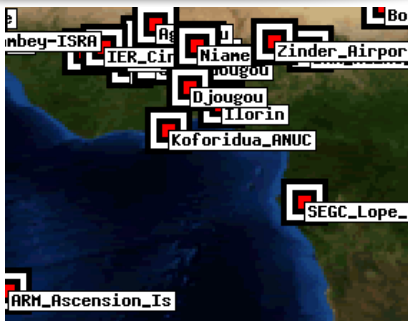




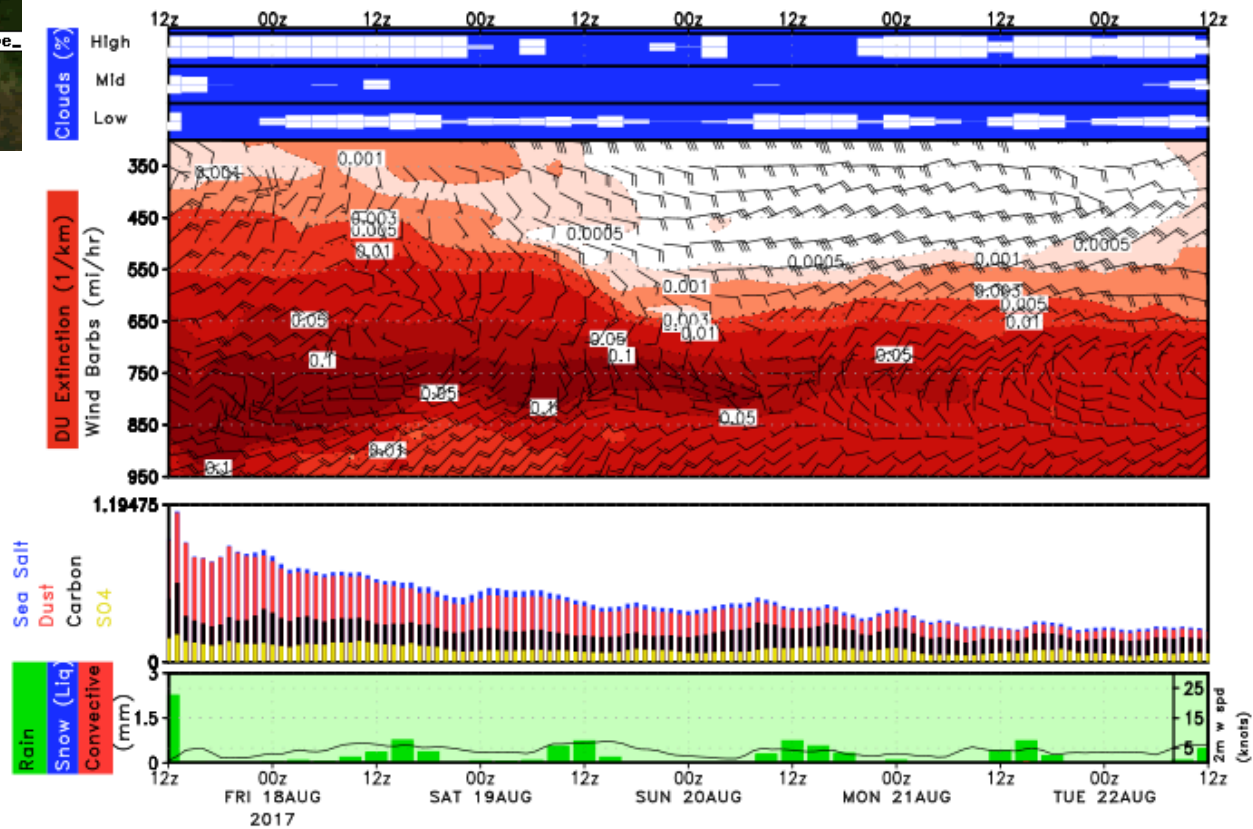


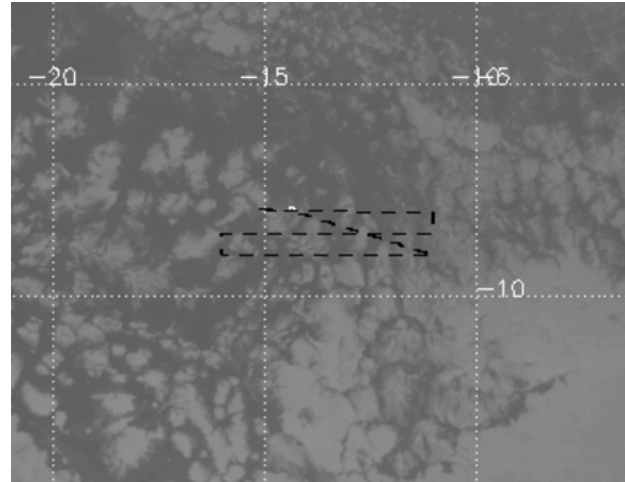
# Curtains: Ascension Island





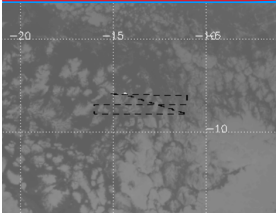
# Koforidua ANUC





**Flight Day (Clarify Coordination near Ascension)**

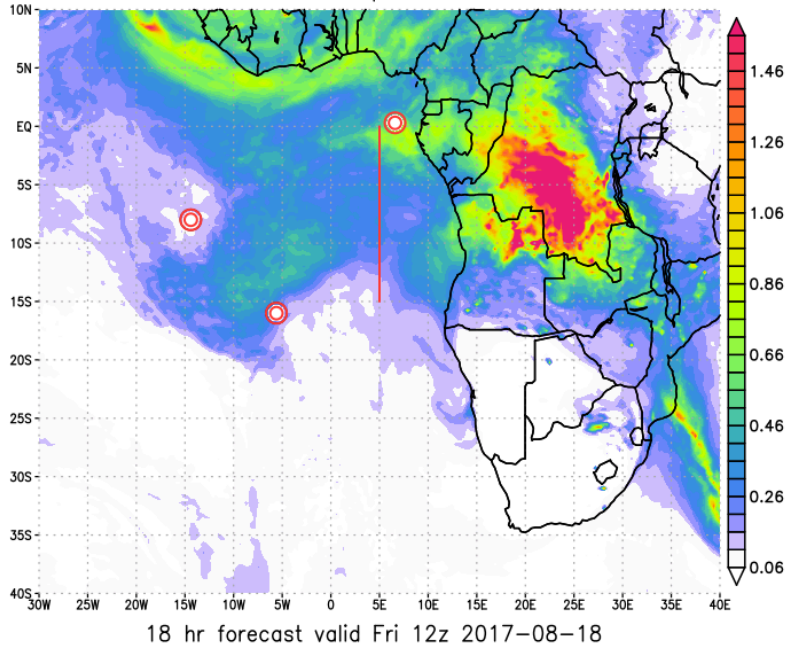
**FRIDAY 18 AUGUST 2017**



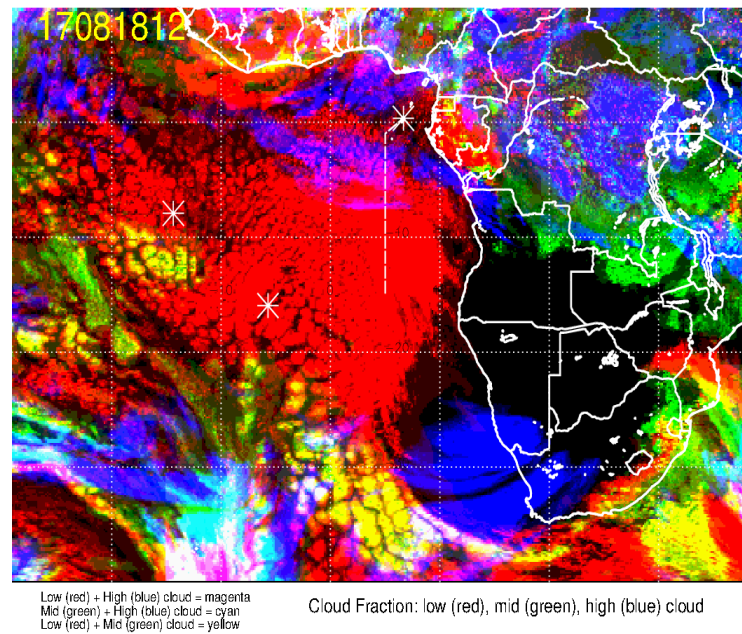
# Friday 18 Aug 2017 12Z

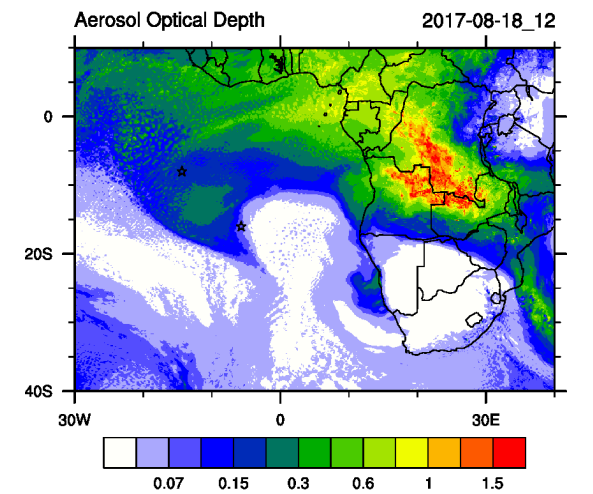
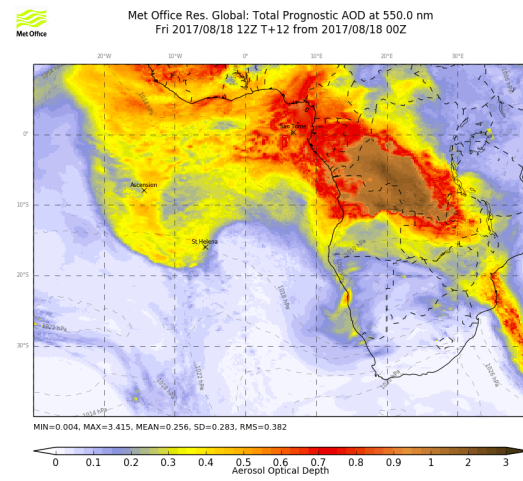
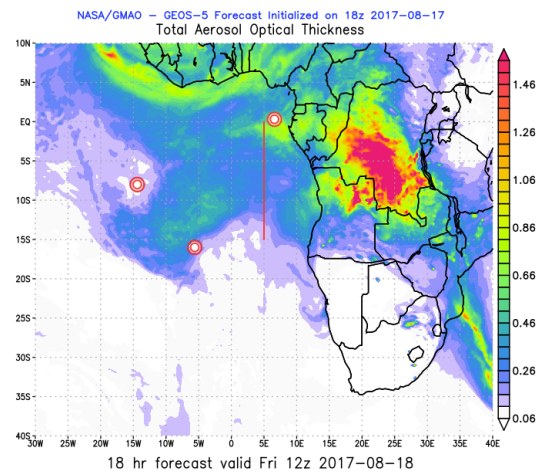
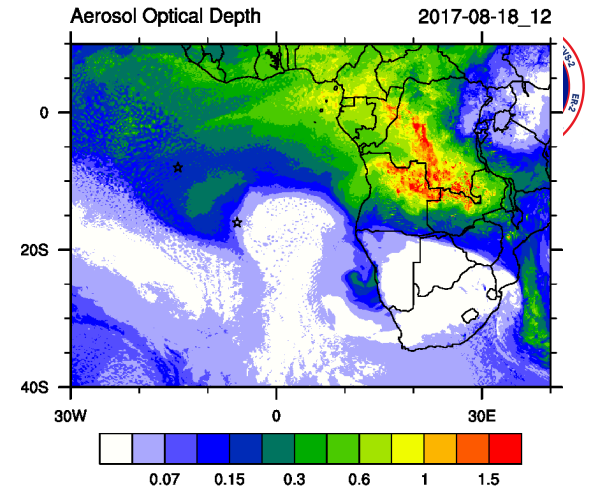
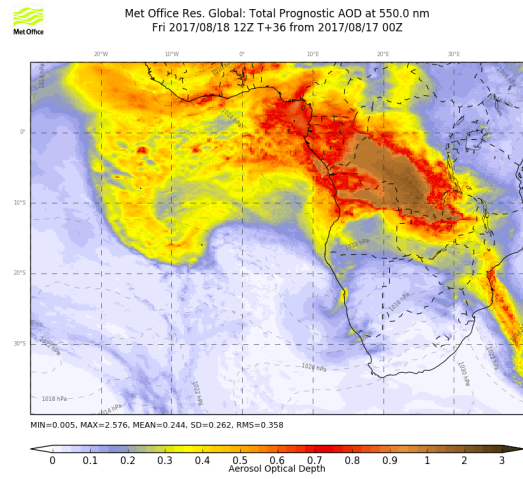
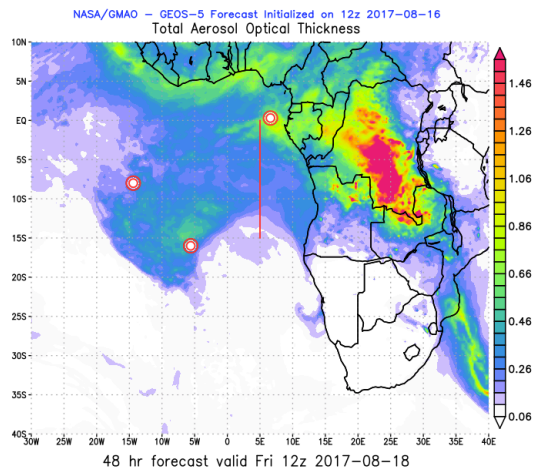


NASA/GMAO – GEOS-5 Forecast Initialized on 18z 2017-08-17  
Total Aerosol Optical Thickness



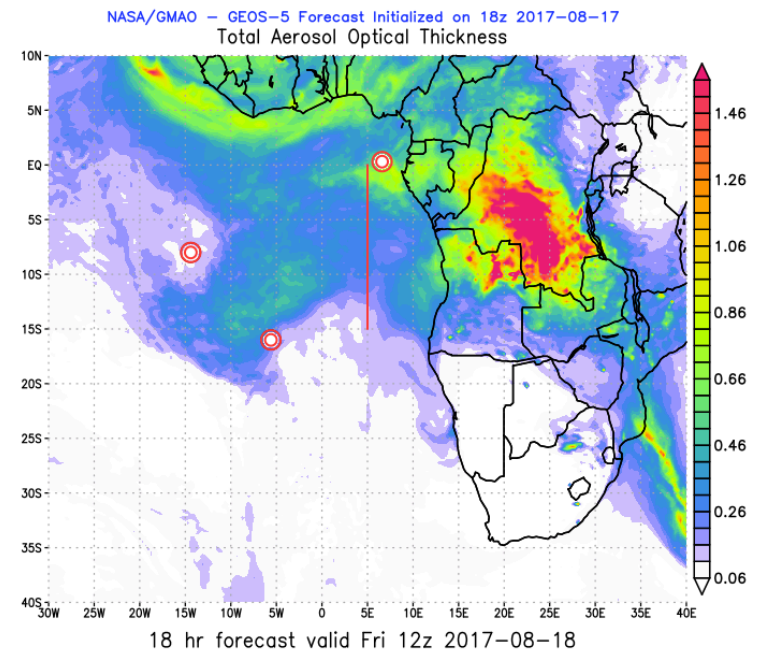
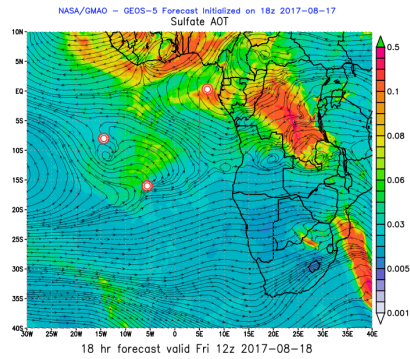
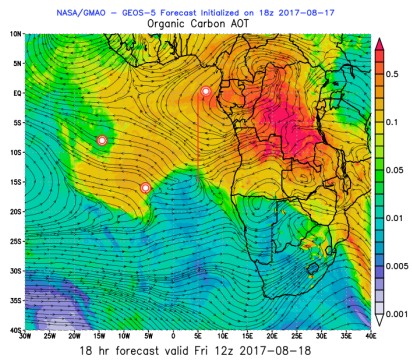
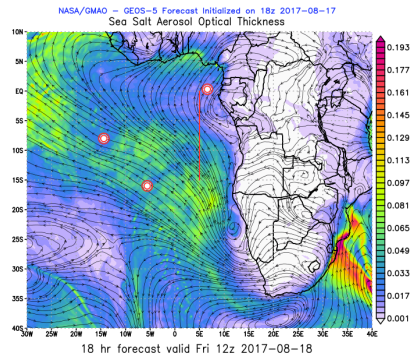
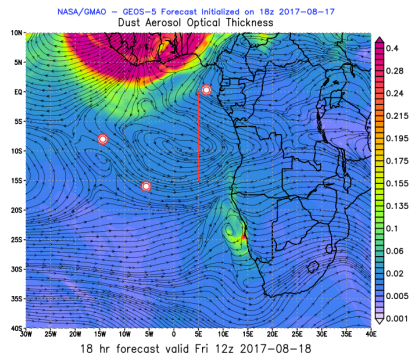
17081812, 024 hour forecast for Cloud Fraction (low, mid, and high cloud) -- ECMWF





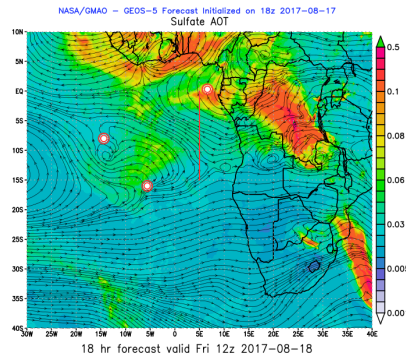
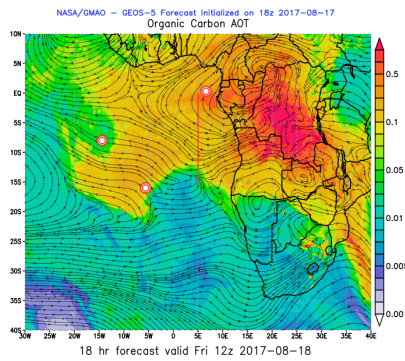
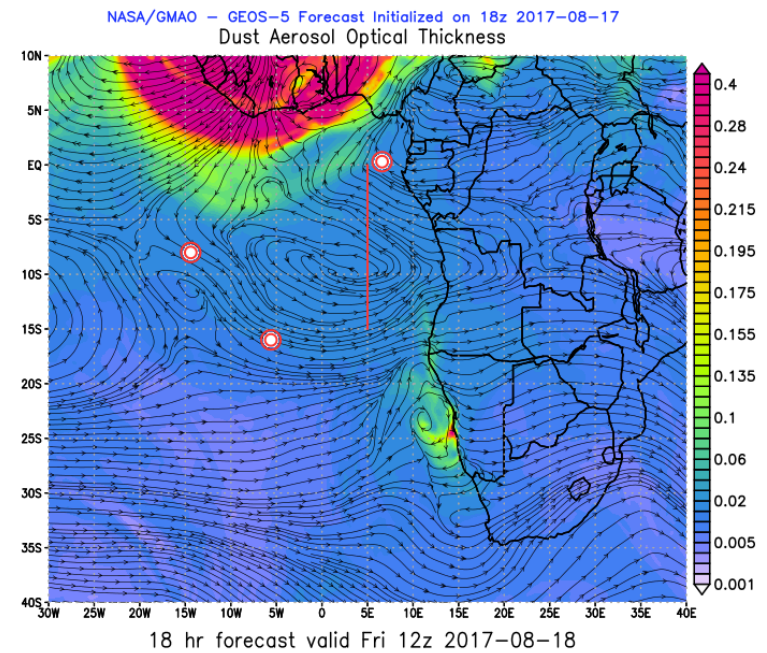
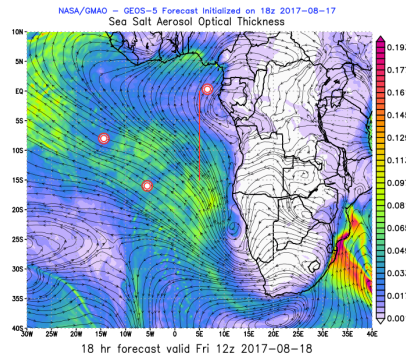
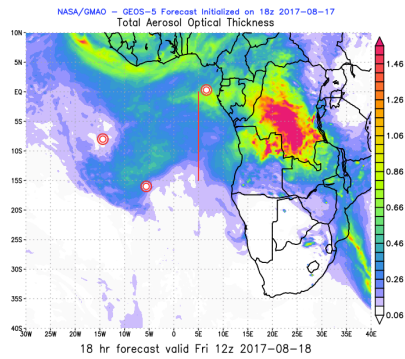


# Friday 18 Aug 2017 12Z



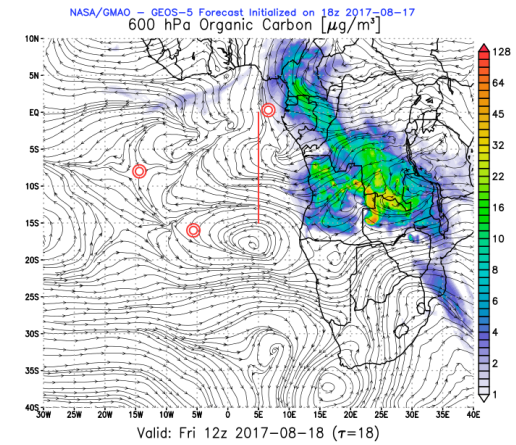
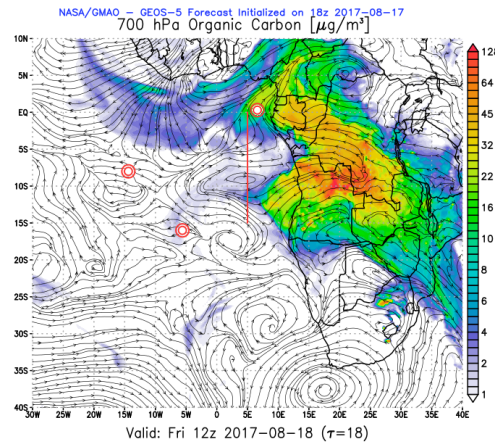
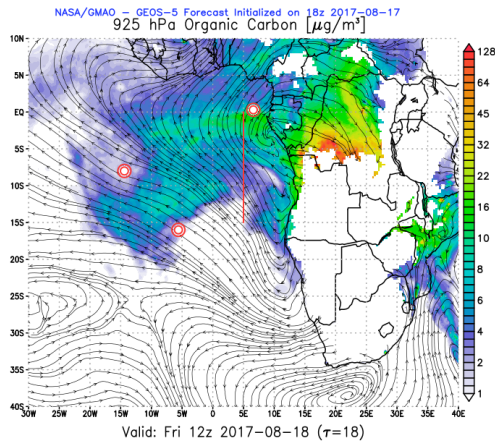


# Friday 18 Aug 2017 12Z

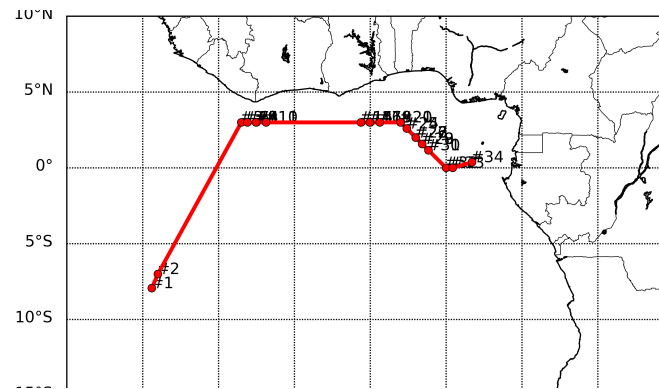
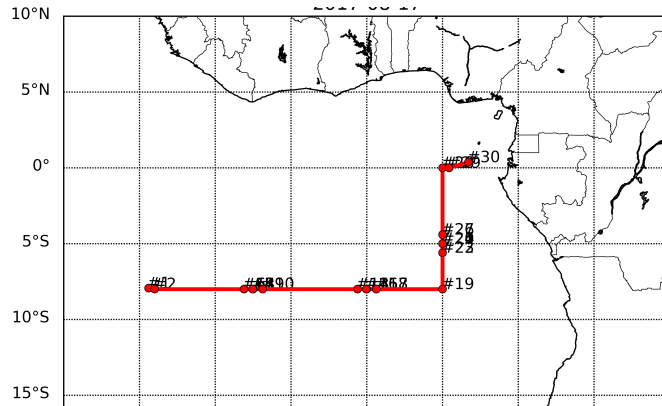




# Organic Carbon Friday 18 Aug 2017 9Z





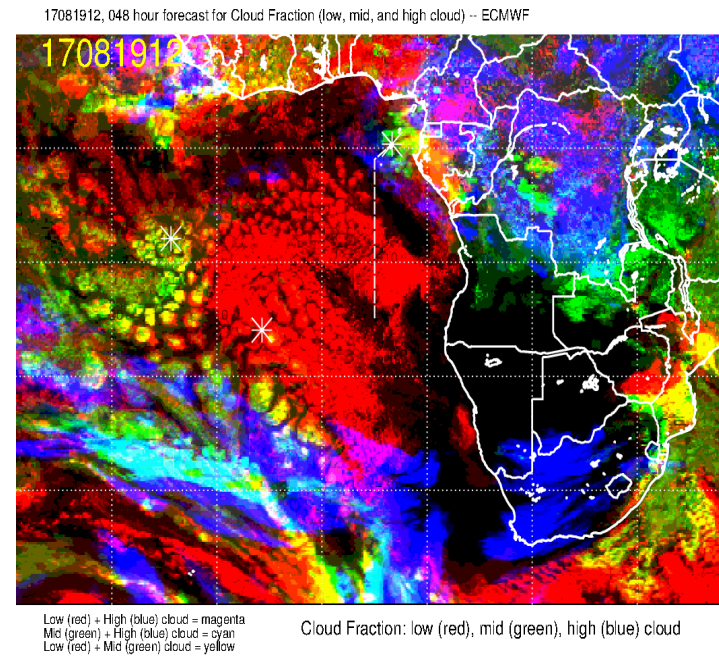
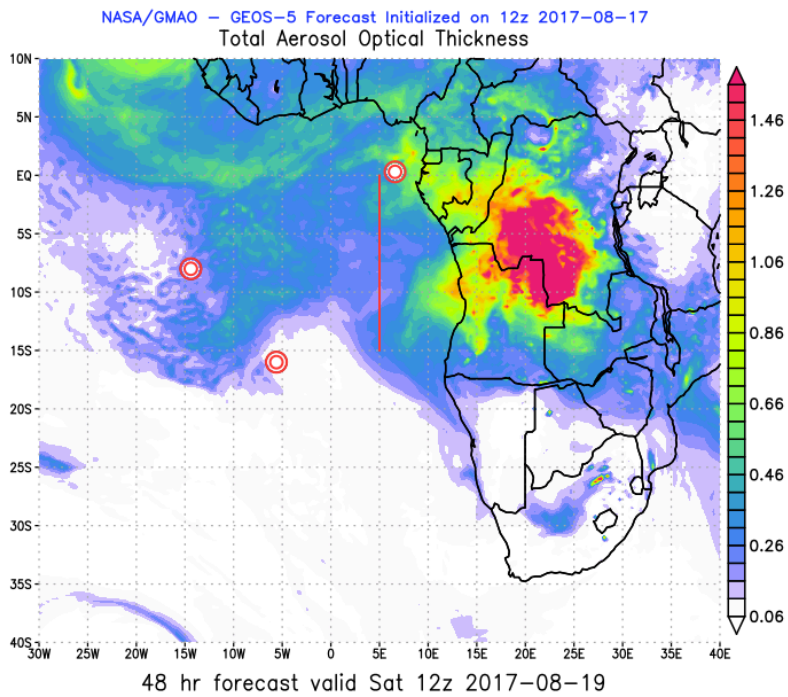


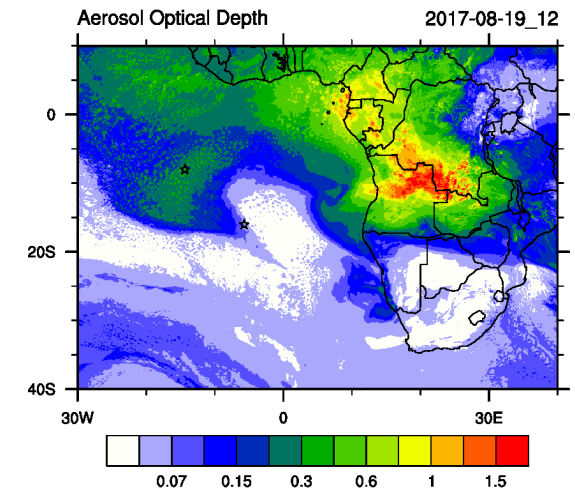
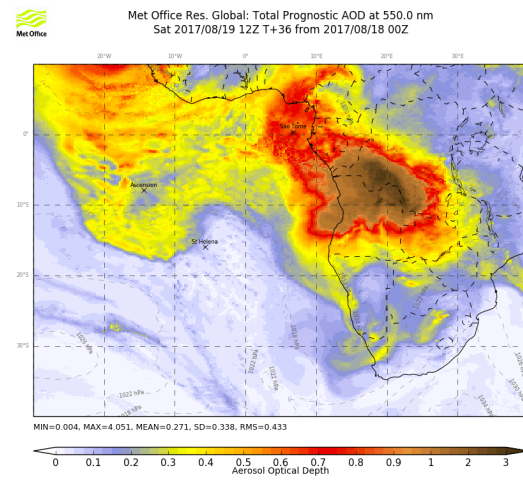
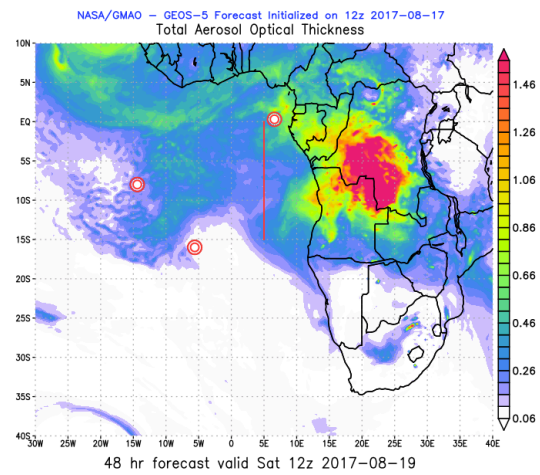
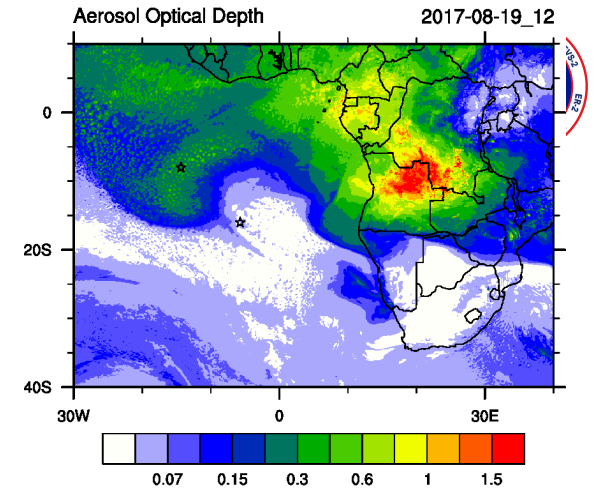
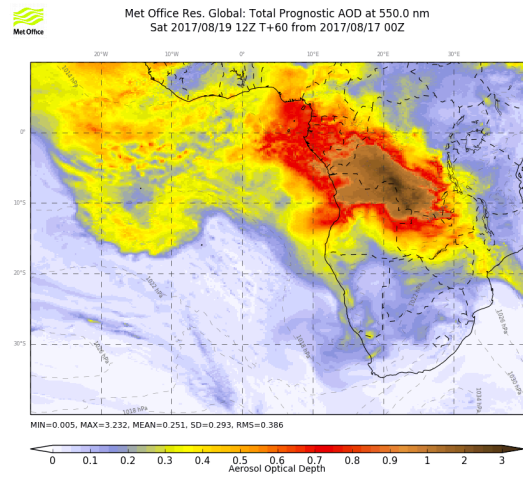
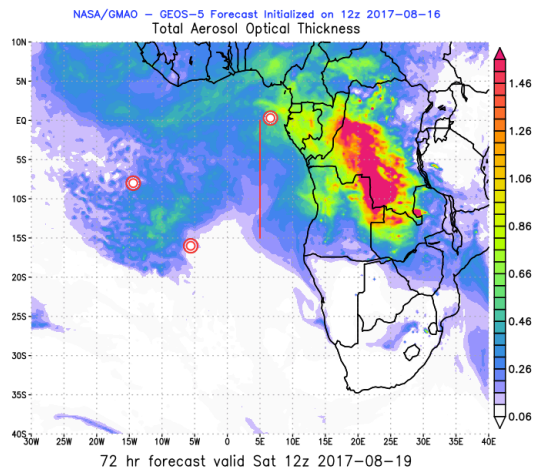
Flight Day (Return from Ascension)

**SATURDAY, 19 AUGUST 2017**



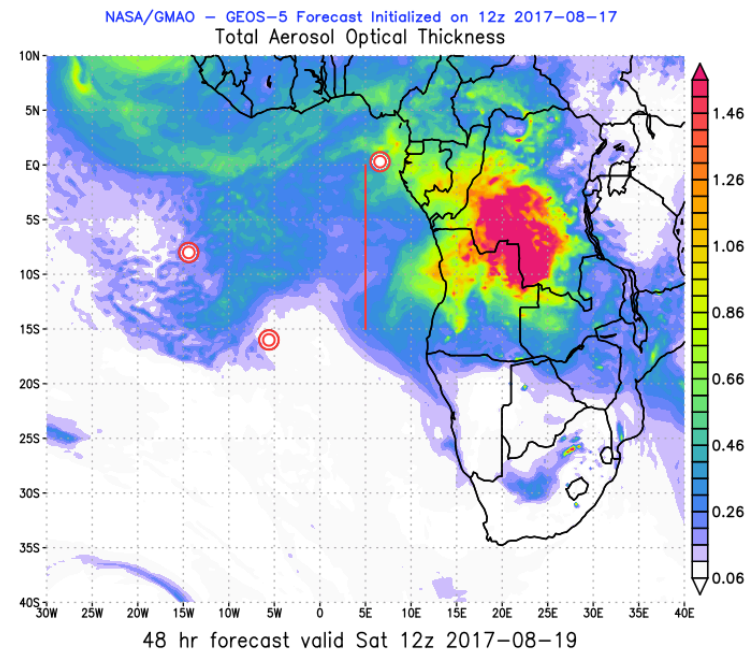
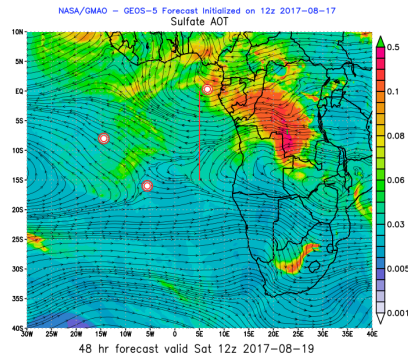
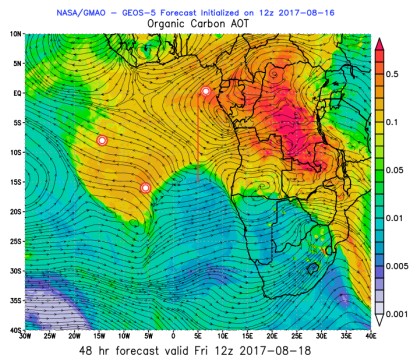
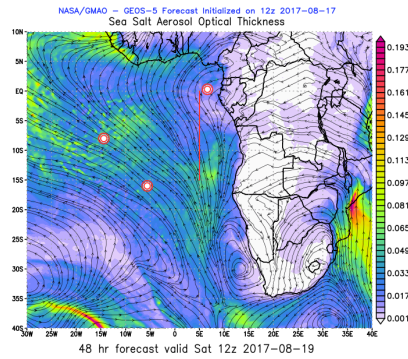
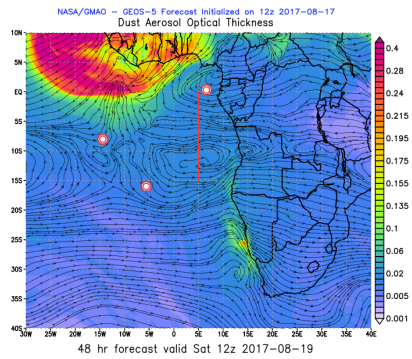
# Sat 19 Aug 2017 12Z





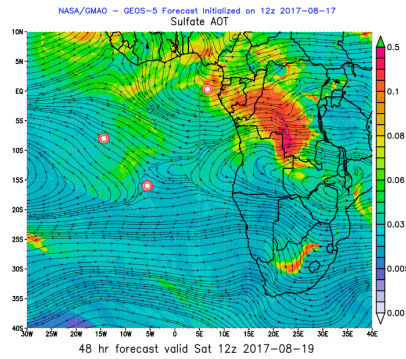
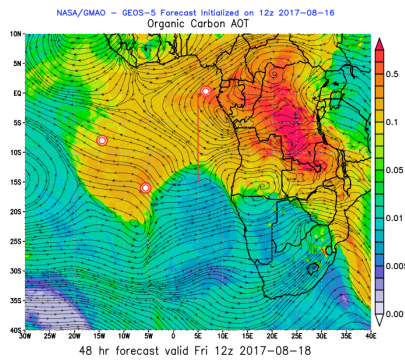
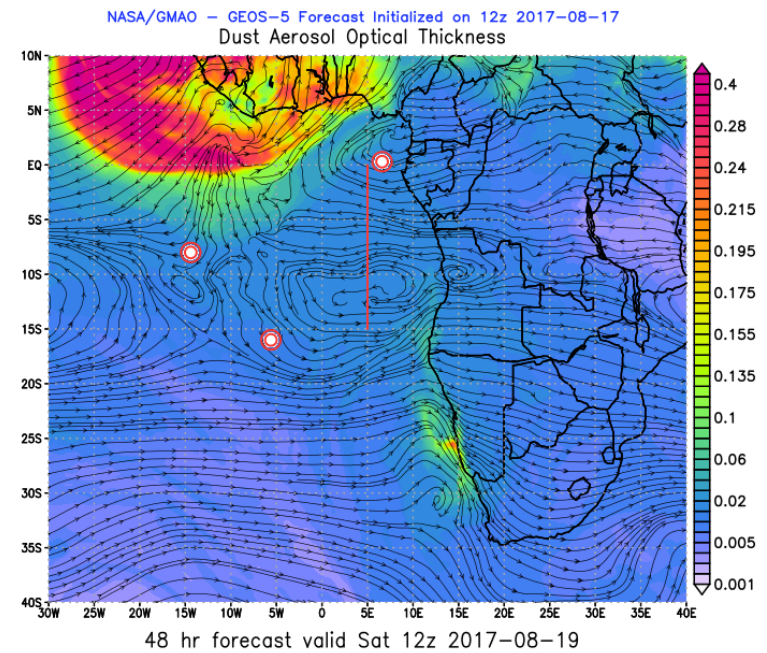
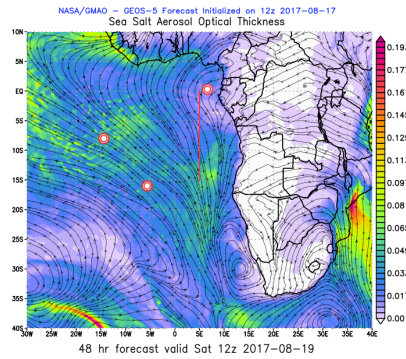
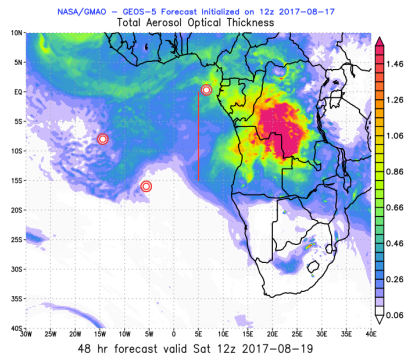


# Sat 19 Aug 2017 12Z



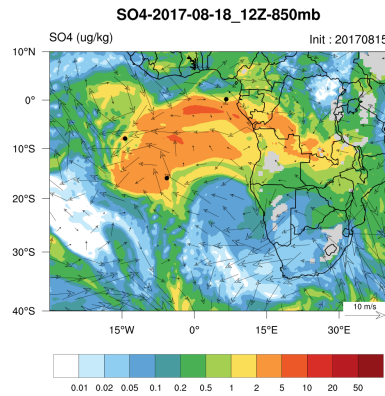
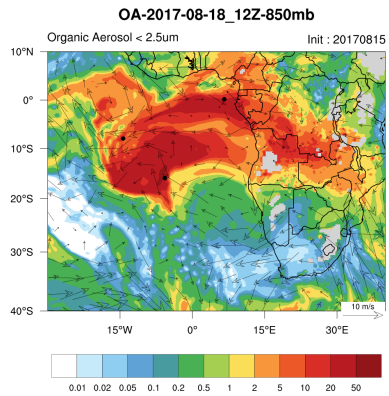
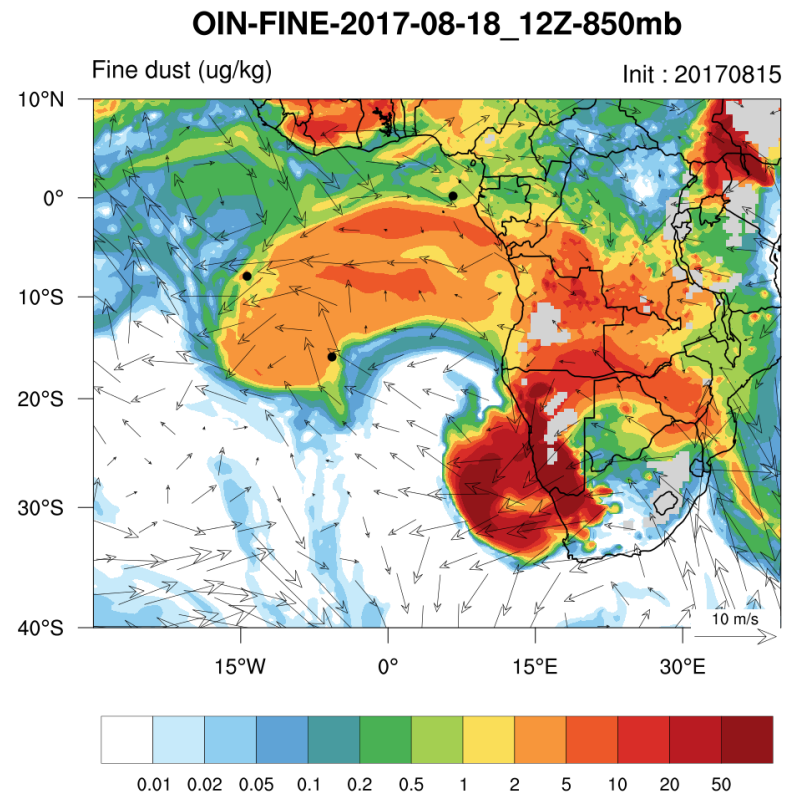
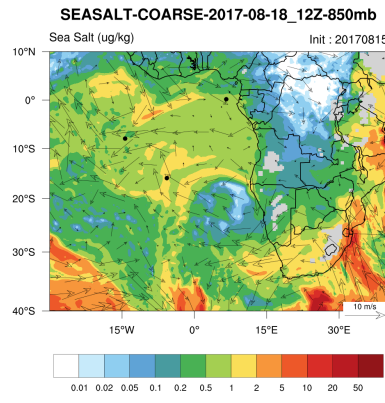
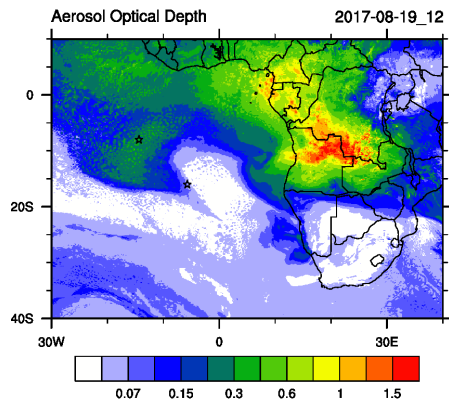


# Sat 19 Aug 2017 12Z





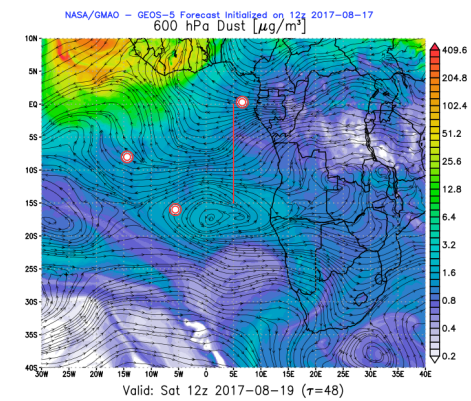
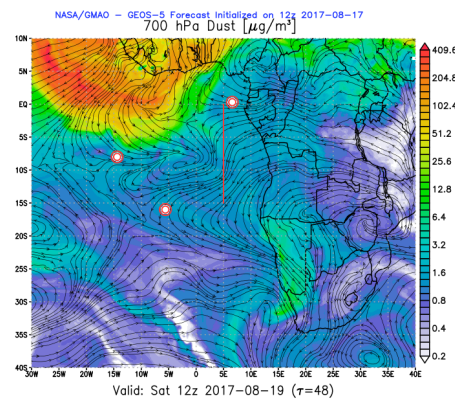
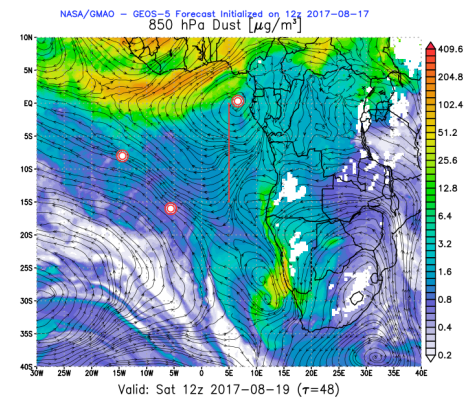
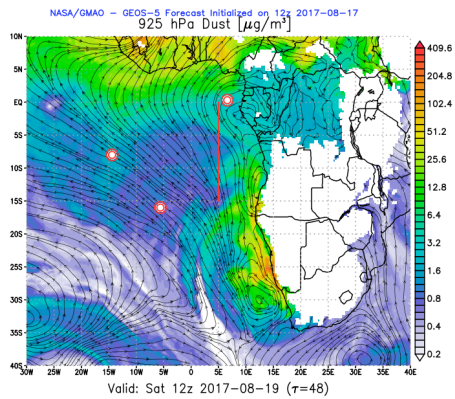
# Sat 19 Aug 2017 12Z





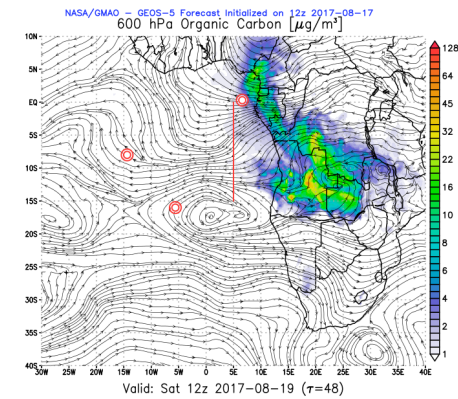
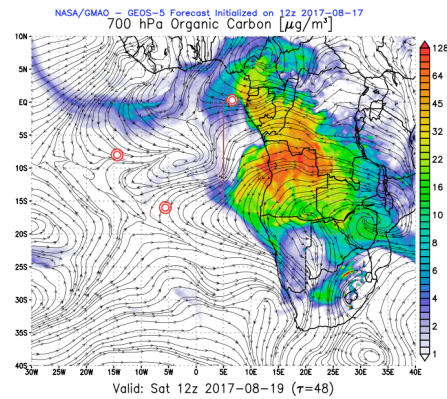
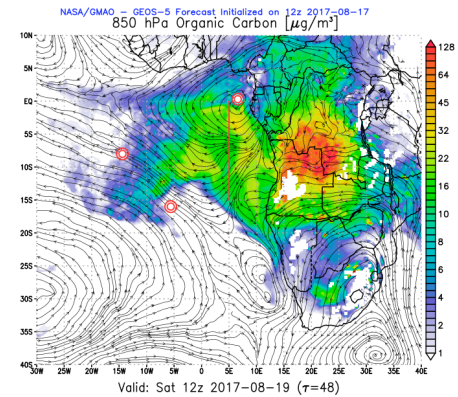
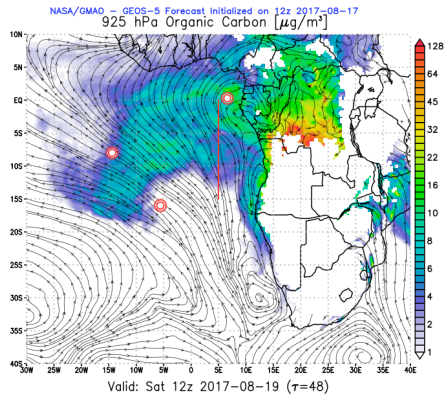
# Dust

## Saturday 19 Aug 2017 9Z

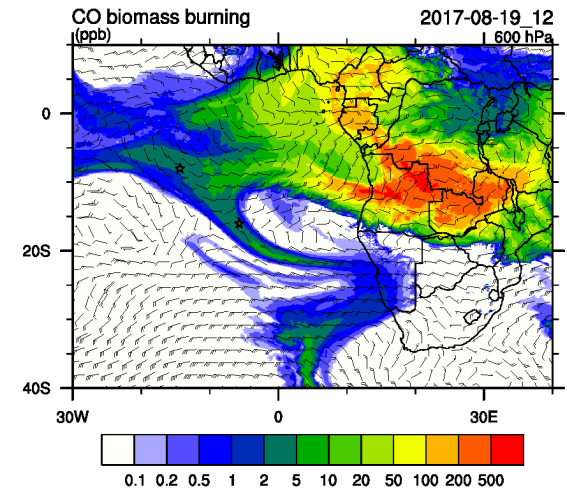
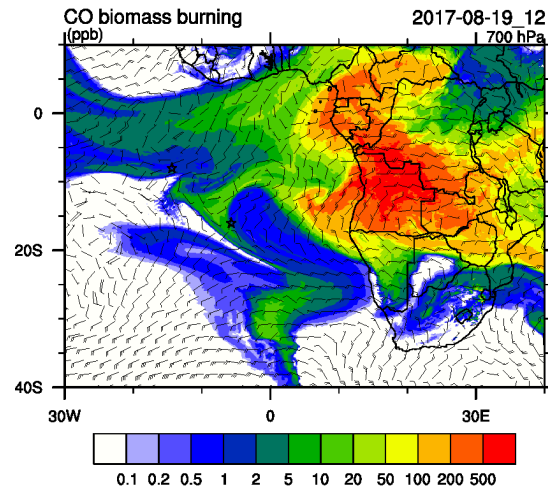
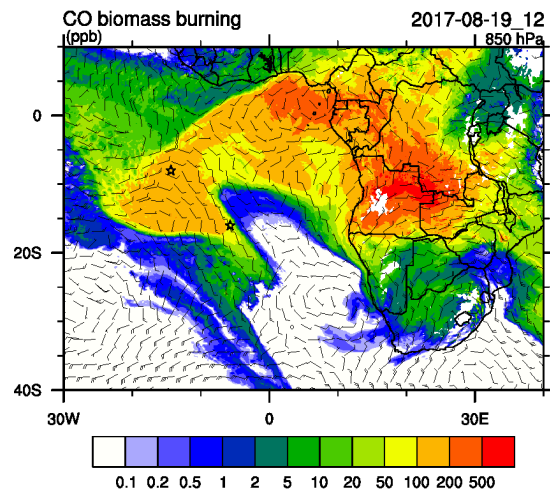
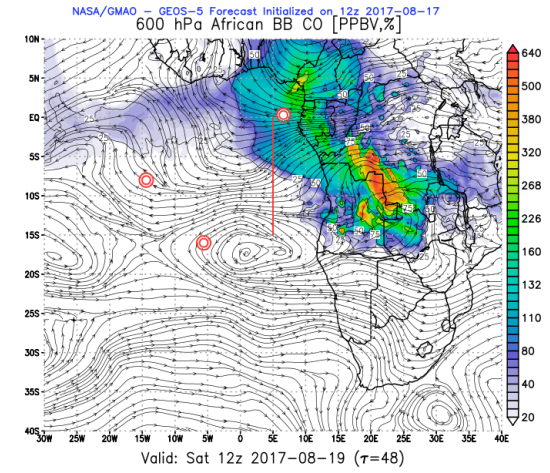
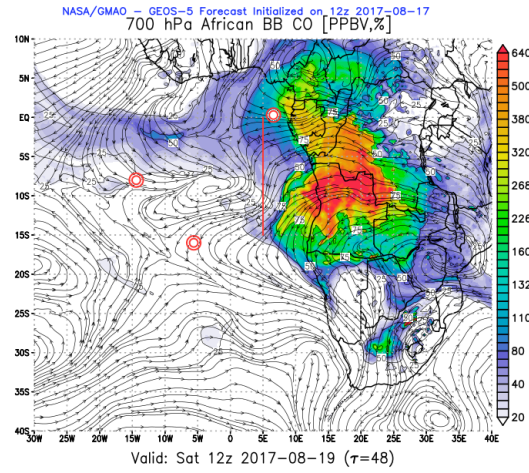
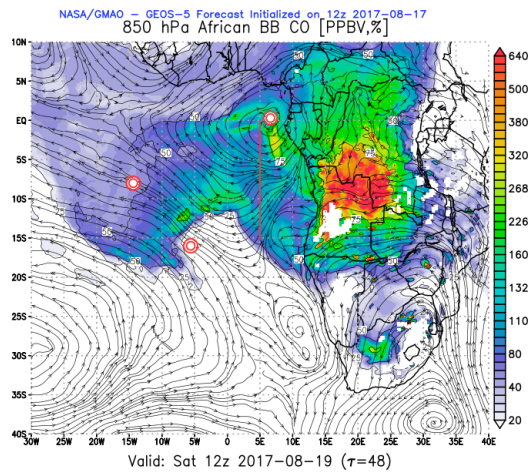


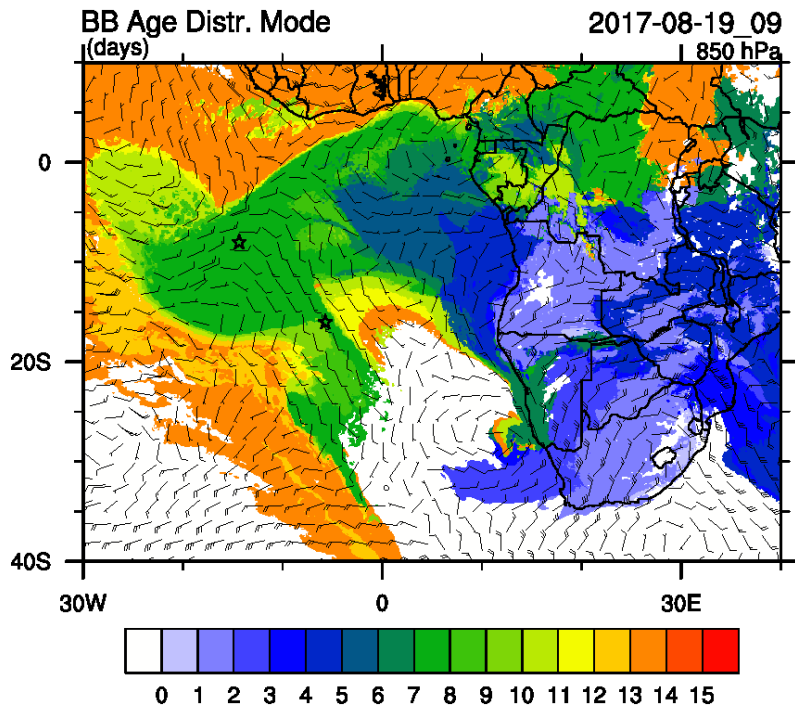


# Organic Carbon Saturday 19 Aug 2017 9Z

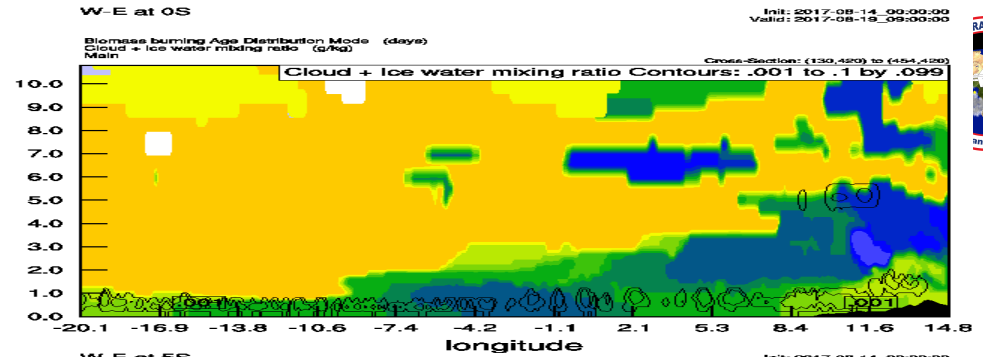




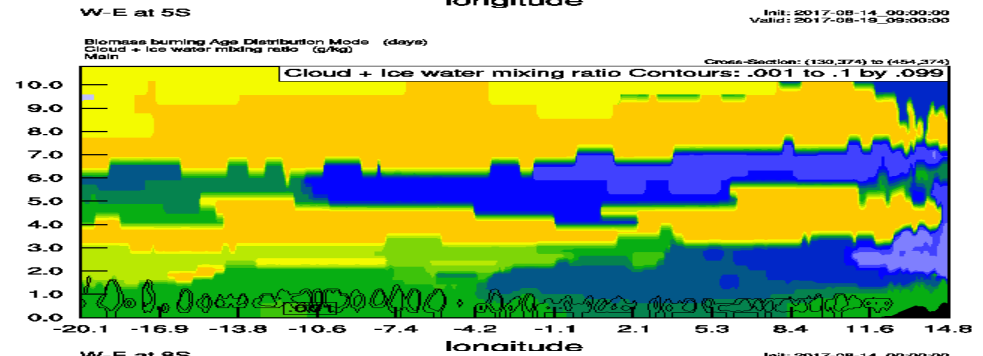




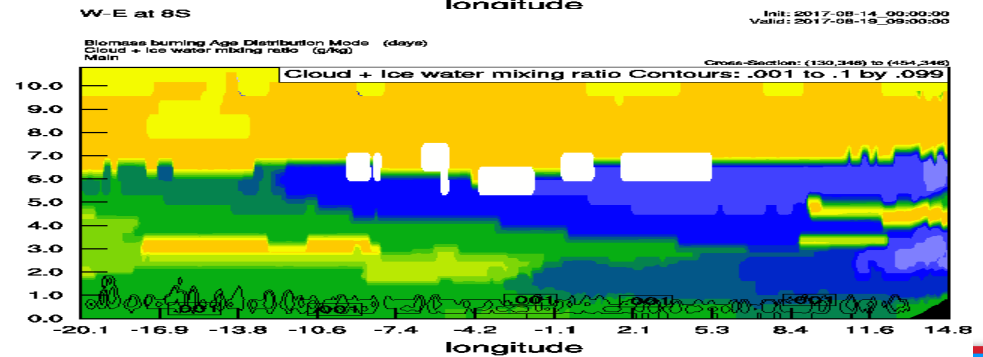
W-E at 0S



W-E at 5S



W-E at 8S





No Fly Day

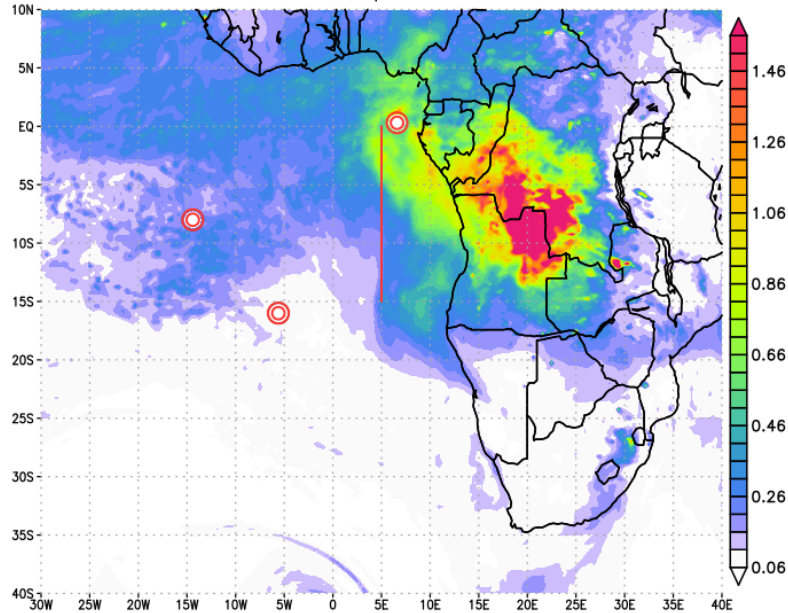
**SUNDAY, 20 AUGUST 2017**



# Sun 20 Aug 2017 12Z

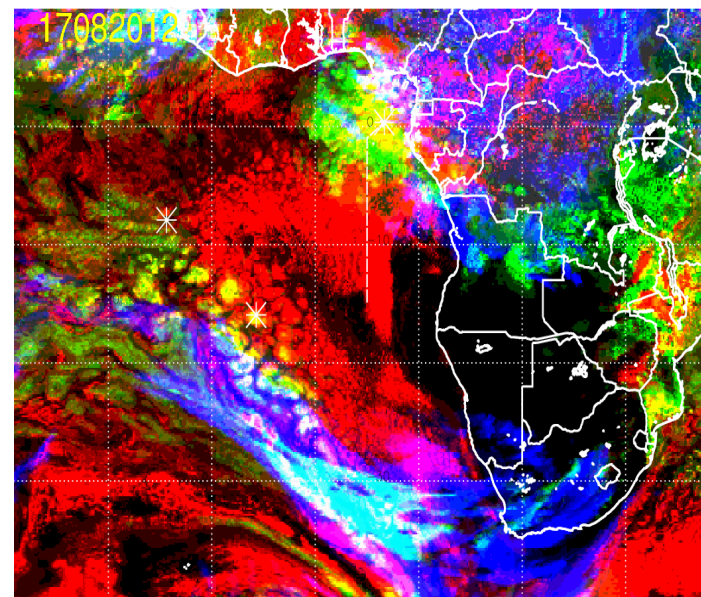


NASA/GMAO – GEOS-5 Forecast Initialized on 12z 2017-08-16  
Total Aerosol Optical Thickness



96 hr forecast valid Sun 12z 2017-08-20

17082012\_072 hour forecast for Cloud Fraction (low, mid, and high cloud) -- ECMWF

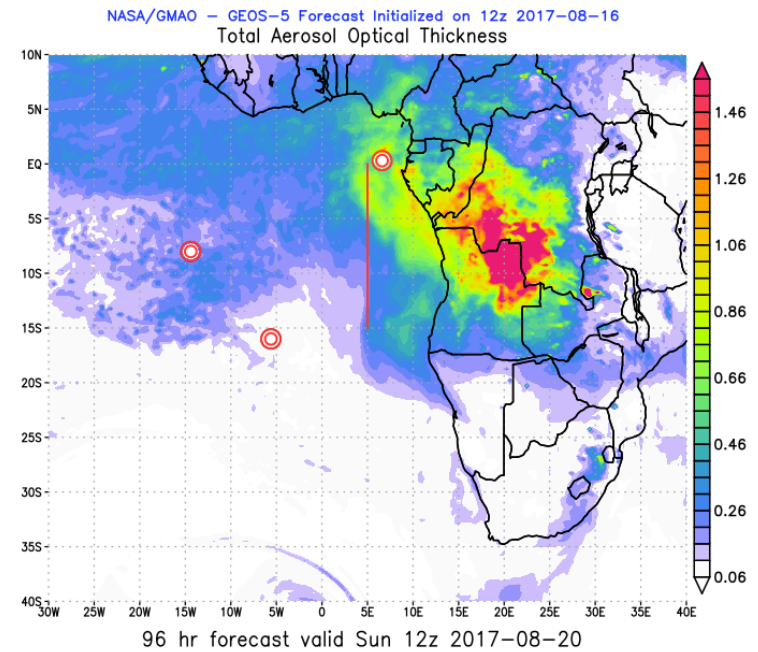
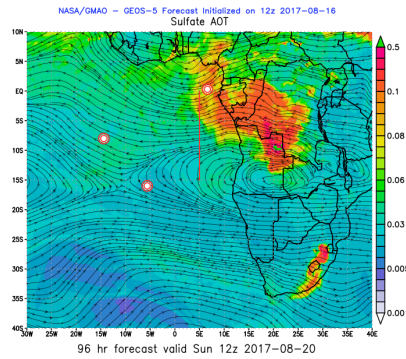
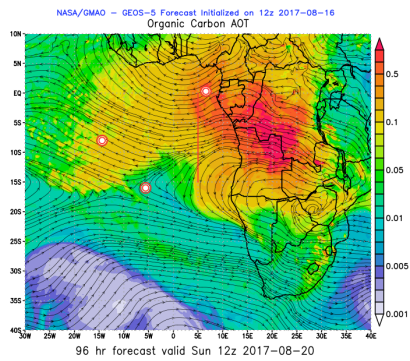
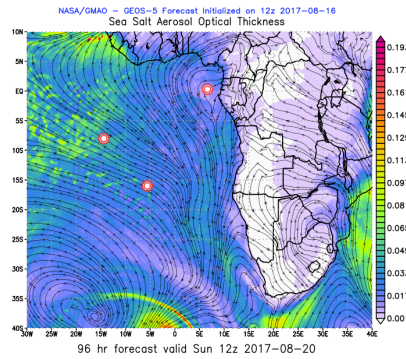
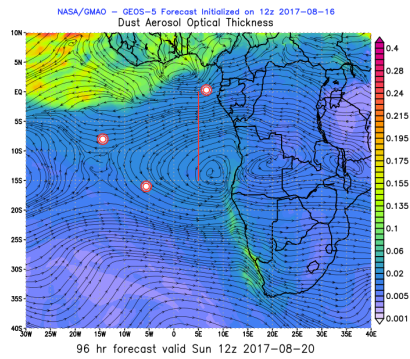


Low (red) + High (blue) cloud = magenta  
Mid (green) + High (blue) cloud = cyan  
Low (red) + Mid (green) cloud = yellow

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



# Sunday 20 Aug 2017 12Z



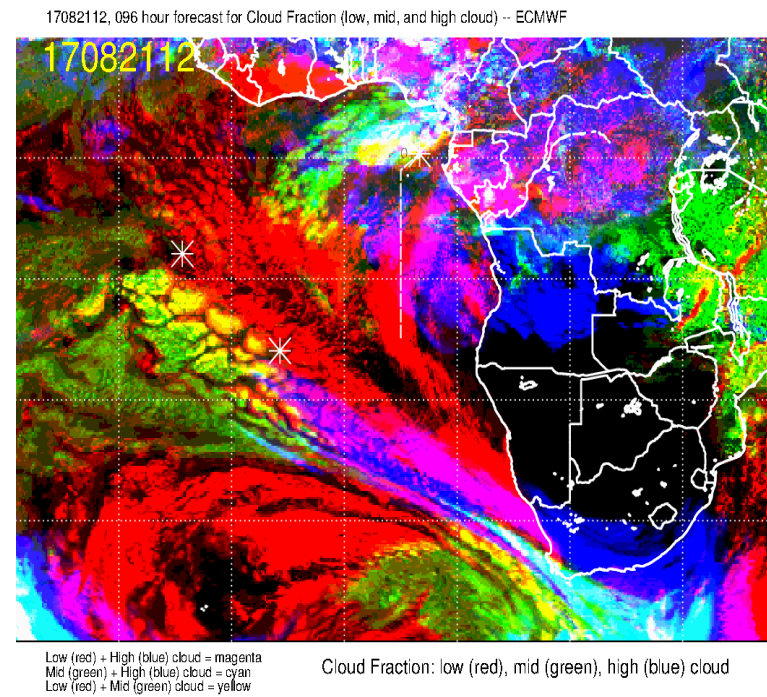
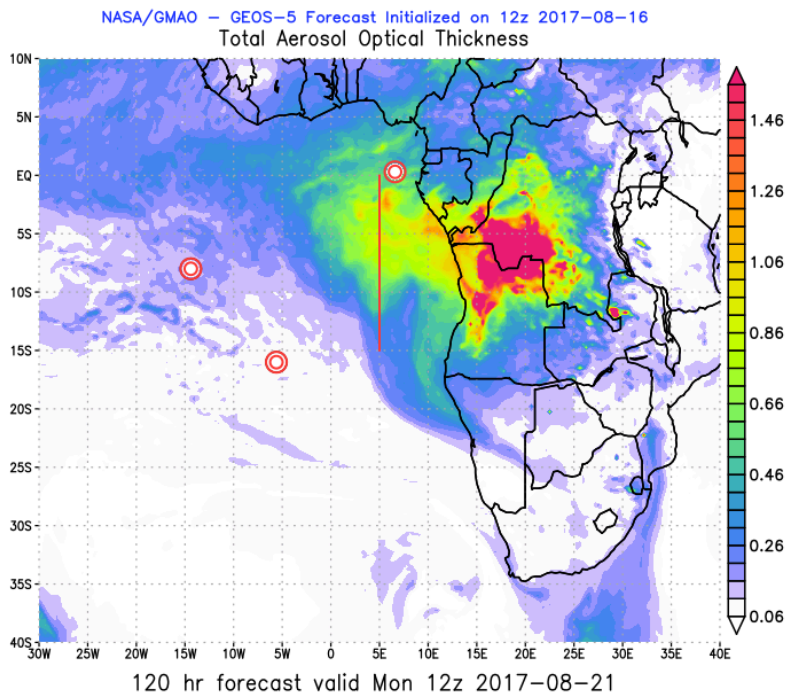


Flight Day (Routine Flight, planned)

**MONDAY 21 AUGUST 2017**



# Monday, 21 August 2017 12Z





# Monday, 21 August 2017 12Z

