

**07/18/2017 15:20 UTC**

The following graphs represent the coordinated launch for Langley Research Center (LaRC; 37.1024, -76.3929) and the Chesapeake Bay Bridge Tunnel 3<sup>rd</sup> Island (CBBT; 37.0366, -76.0767) on 07/18/2017 at approximately 15:20 UTC. Wind conditions for both sites were moderately calm with winds generally coming from the southwest. This launched coordinated with the SERC water measurements. Preliminary analysis suggests a probable boundary layer around 300 m at CBBT and a poorly defined but possible boundary layer capped around 500 m at LaRC. Potential temperature is in close agreement between CBBT and LaRC throughout the profile, with both sites showing similar profiles from 500 m to 5000 m, with CBBT showing slightly lower potential temperature in the first 200 m (maximum 1 K difference).

Preliminary observations suggest similar ozone mixing ratio profiles above CBBT and LaRC with slight variations. LaRC appears to have a slightly higher ozone mixing ratio compared to CBBT throughout the profile with a maximum disagreement of about 5 ppbv. Ozone mixing ratio above both CBBT and LaRC appears to have generally increased from surface measurements of about 35 ppbv to 65 ppbv near 3000 m. From 3000 m to 4500 m ozone mixing ratio for both sites fluctuates near 65-70 ppbv. In the 4500-5000 m range CBBT and LaRC appear to have a slight increase in ozone mixing ratio.

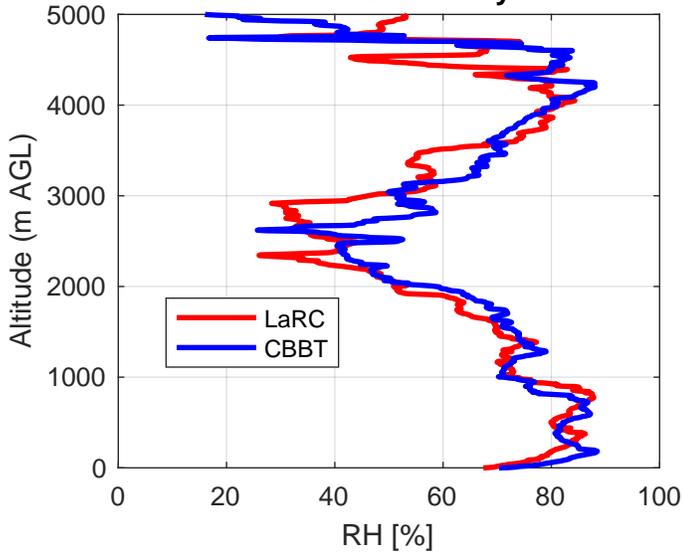
**PLEASE NOTE:** This data is preliminary and should not be used for official business until certified by NASA technical staff.

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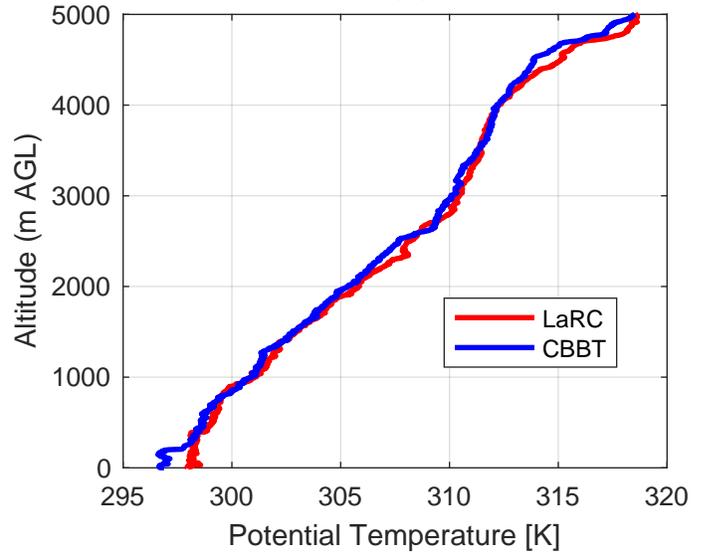
CBBT Sonde POC: Travis Knepp ([travis.n.knepp@nasa.gov](mailto:travis.n.knepp@nasa.gov))

Sonde Data: 07/18/2017 15:34 UTC (LaRC) and 15:19 UTC (CBBT)

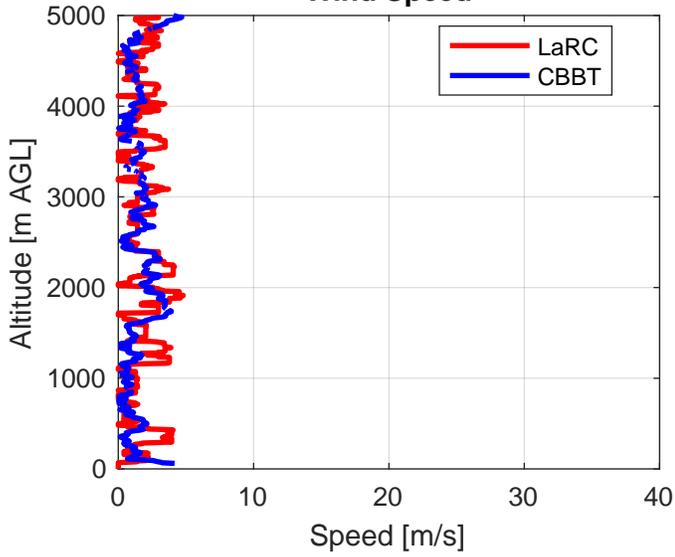
Relative Humidity



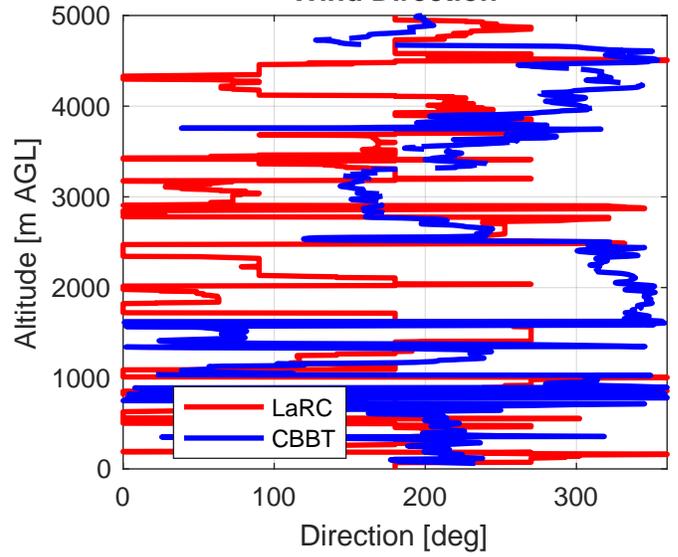
Theta



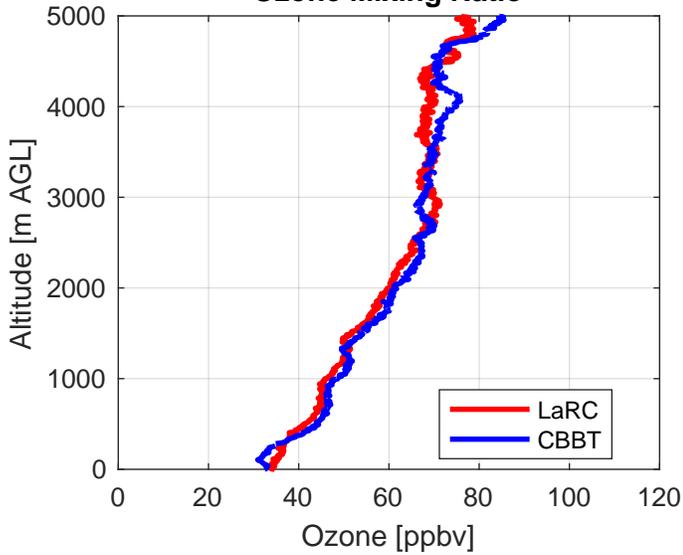
Wind Speed



Wind Direction



Ozone Mixing Ratio



Ozonesonde Map [ppbv]

