

## **Weather Report (2010/03/08)**

In March 8<sup>th</sup>, the observations made at Meteorological Facilities of CLA showed few clouds above Alcântara, approximately 3/8 at 10hrs (UTC). Just three kinds of clouds were observed during this day. These types of clouds like cumulus, cirrus, and stratocumulus were associated to good weather. The stratocumulus, cumulus, and cirrus base height was about 450, 600, and 9000 m, respectively. The wind direction was predominantly from Northeast – NE (Fig. 1). Fig. 2 shows that the afternoon was the part of the day that presented the greatest wind speed values, and during the morning the wind was near to zero. Hourly variations of the air temperature and mixing ratio are presented in Fig. 3. A minimum and a maximum of air temperature were observed, computing 5 °C difference between each one, with minimum along the morning and maximum in the afternoon. It can be noted in Fig. 3 that the mixing ratio showed a decrease tendency in large part of the day. The sea level pressure variation is shown in Fig. 4. No rain records were made by any instruments of the GPM field campaign in the CLA area. However, the CLA RADAR observed a precipitating system in the main line of the measurements with a distance of 20 km at 12:54 UTC (Fig. 5). The Skew T – log P diagram obtained by the radiosondes at the Meteorological Facilities of CLA can be seen at Fig. 6.

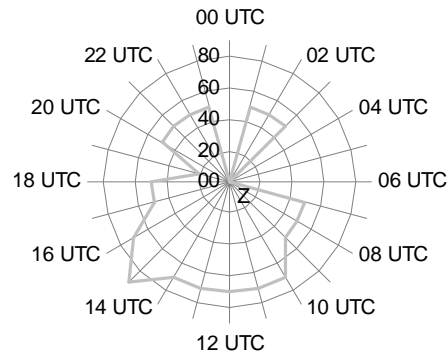


Figure 1 – Hourly wind direction for 2010/03/08.

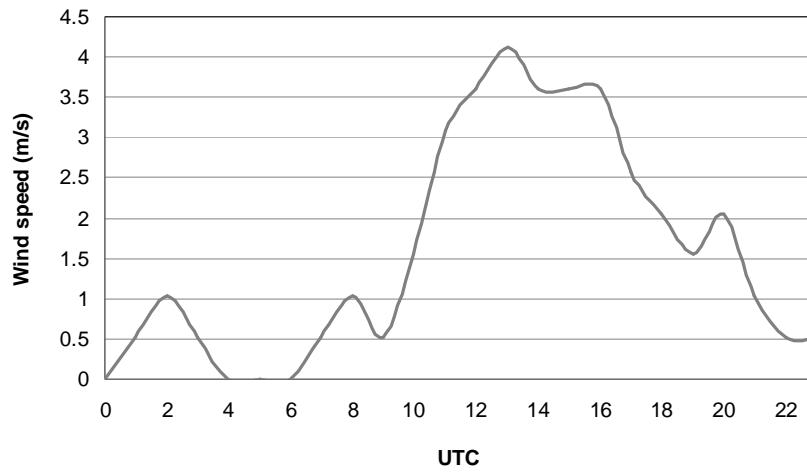


Figure 2 – Hourly wind speed for 2010/03/08.

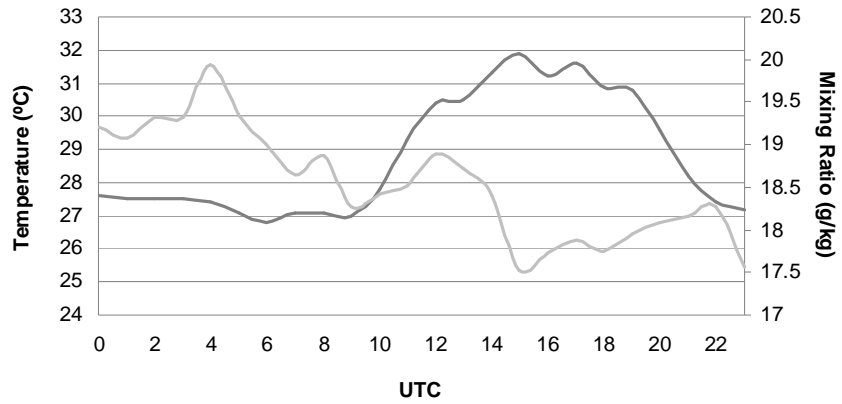


Figure 3 – Hourly temperature (black) and mixing ratio (gray) for 2010/03/08.

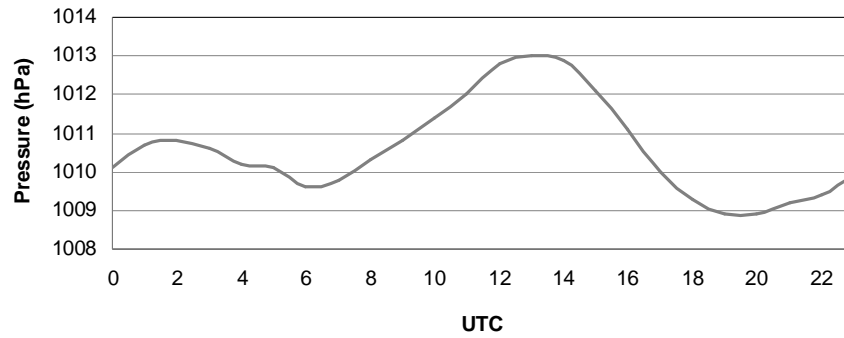


Figure 4 – Hourly sea level pressure for 2010/03/08.

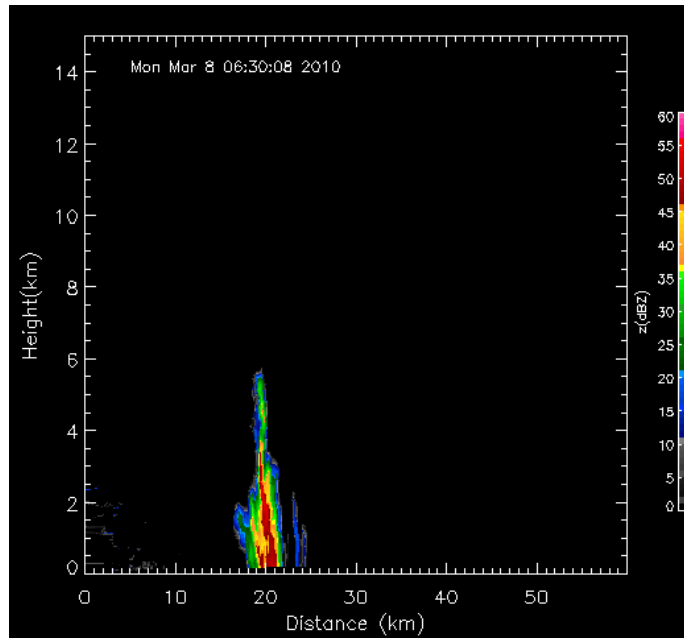


Figure 5 – RHI at 141.2 ° azimuth from CLA RADAR.

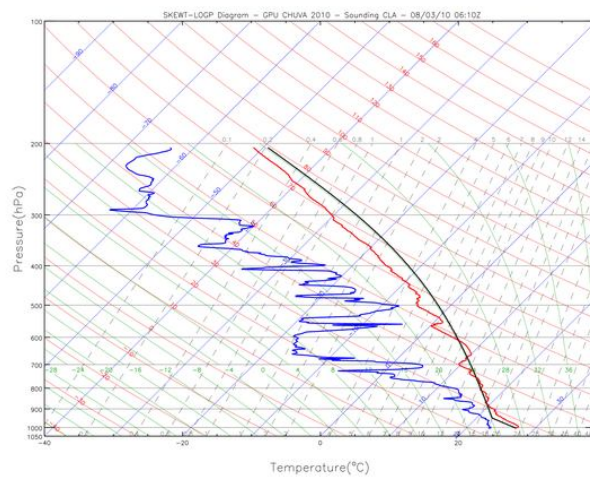


Figure 6 – Sequence of SkewT LogP diagrams. Continue.

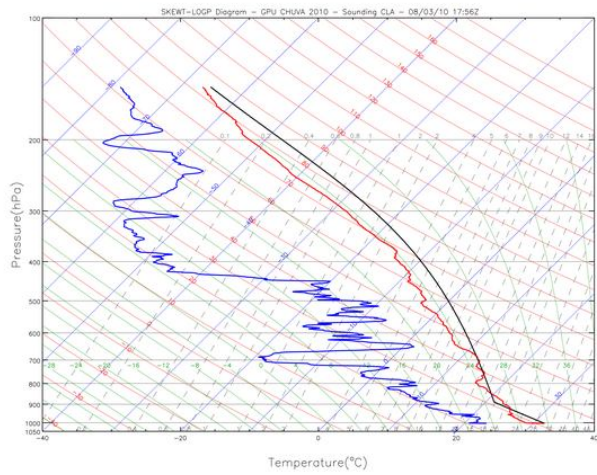
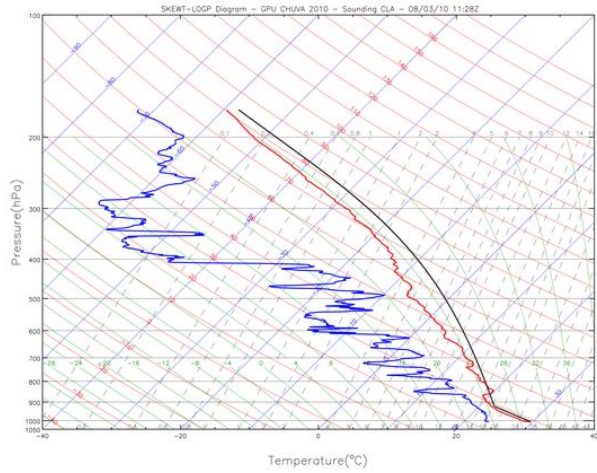


Figure 6 – Conclusion.