

Presented by

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HAIC-HIWC flight campaign Cayenne 2015

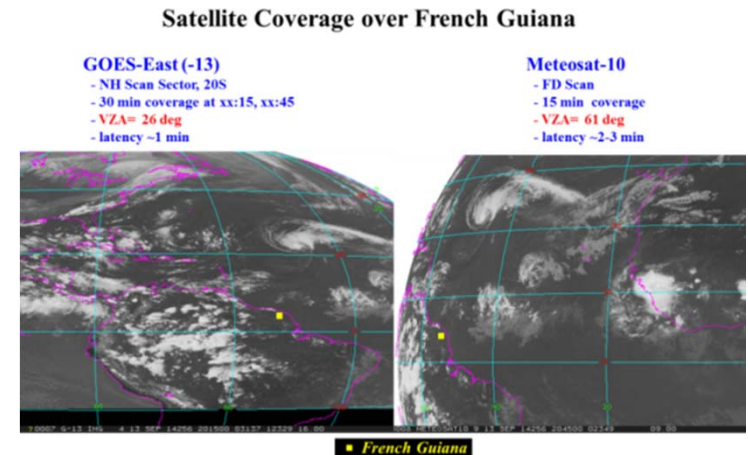
Real Time Data Set – Observation Network

HAIC/HIWC Cayenne Field Campaign

Real Time Data Set – Observation Network

• Satellites

- MSG with 15min scan
 - EUMETSAT Agreement
- GOES-E with 30min scan



PLANET Information:

- Enhanced IR satellite images (compressed in a very small size (< 50 Kb),
- from data received from the French Space Weather Center (CMS Lannion) of Meteo France, with the EUMETSAT agreement.
- Product frequency = 15 minutes.
- Total delay between the observation and the display in the cockpit = ~20 min. (10 min [TBC] for scan and data transfer to the data center, 5 min [TBC] for data process, and 5 min for data transfer to the aircraft).

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Real Time Data Set – Observation Network

- Lightning strike

- ▶ SP3 / STARNET lightning data, range: 1500km (www.zeus.uag.usp.br)
- ▶ FTP site available with daily data

PLANET Information:

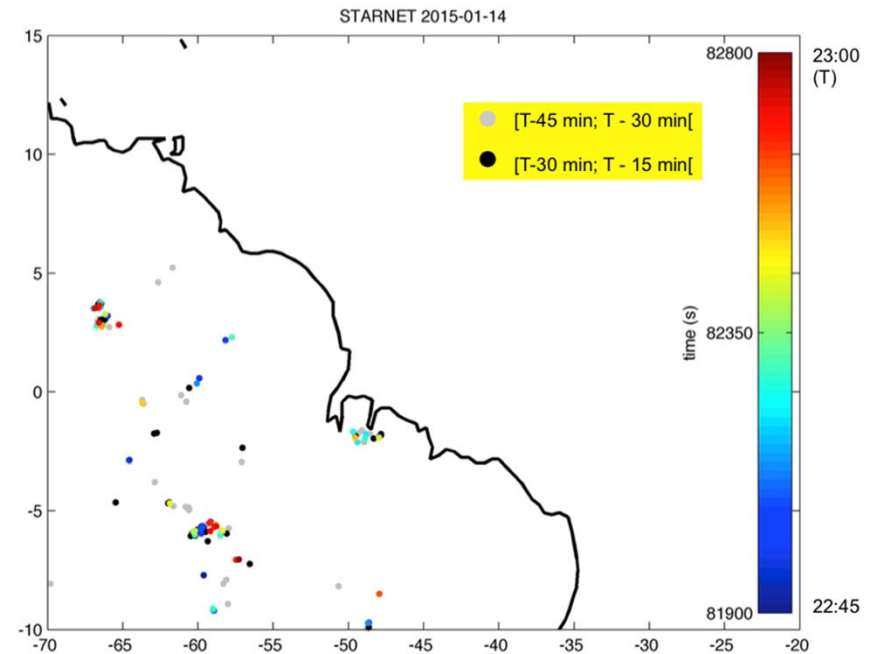
➔ Lightning images (compressed in a very small size (< 50 Kb),

➔ From data received from the STATNET (Sferics Timing And Ranging NETwork), with the agreement of Carlos Augusto Morales Rodrigues (University of Sao Paulo), with the support of Eric Defer (LERMA).

➔ Product frequency = 5 minutes.

➔ Total delay between the observation and the display in the cockpit = ~5 min.

(1 min [TBC] for data transfer to the data center, 2 min [TBC] for data process, and 2 min for data transfer to the aircraft).



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- Radar

- ▶ Only one ground weather radar: Grand Leblond (ROMUALD C-Band, Range: 100km for good quality dataset)
- ▶ Broken / Uncertainty on availability

PLANET Information:

- ➔ Radar images (compressed in a very small size (< 50 Kb),
- ➔ from data received from Meteo France (Toulouse), with the agreement of the French Space Agency (CNES).
- ➔ Product frequency = 5 minutes.
- ➔ Total delay between the observation and the display in the cockpit = ~10 min. *(2 min [TBC] for scan and data transfer to the data center, 5 min [TBC] for data process, and 3 min for data transfer to the aircraft).*

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Real Time Data Set – Observation Network

- Radio Soundings (MET-FR)

| | | |
|------------------|----------------|--------------|
| ▶ Grantley Adams | 13.06N -59.48W | 12UTC |
| ▶ Rochambeau | 4.82N -52.36W | 00 et 12 UTC |
| ▶ Tirios | 2.48N -55.98W | 00 et 12 UTC |
| ▶ Macapa | 0.05N -51.06W | 00 et 12 UTC |
| ▶ Belem | -1.38S -48.48W | 00 et 12 UTC |
| ▶ Santarem | -2.43S -54.72W | 00 et 12 UTC |
| ▶ Manaus | -3.15S -59.98W | 00 et 12 UTC |
| ▶ Fortaleza | -3.77S -38.60W | 12UTC |

High Altitude Ice Crystals (HAIC, 314314)

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