Presented by

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# HAIC-HIWC flight campaign Cayenne 2015

## Forecasting and Nowcasting

# HAIC/HIWC Cayenne Field Campaign
## Forecasting and Nowcasting

- Forecasting & Nowcasting

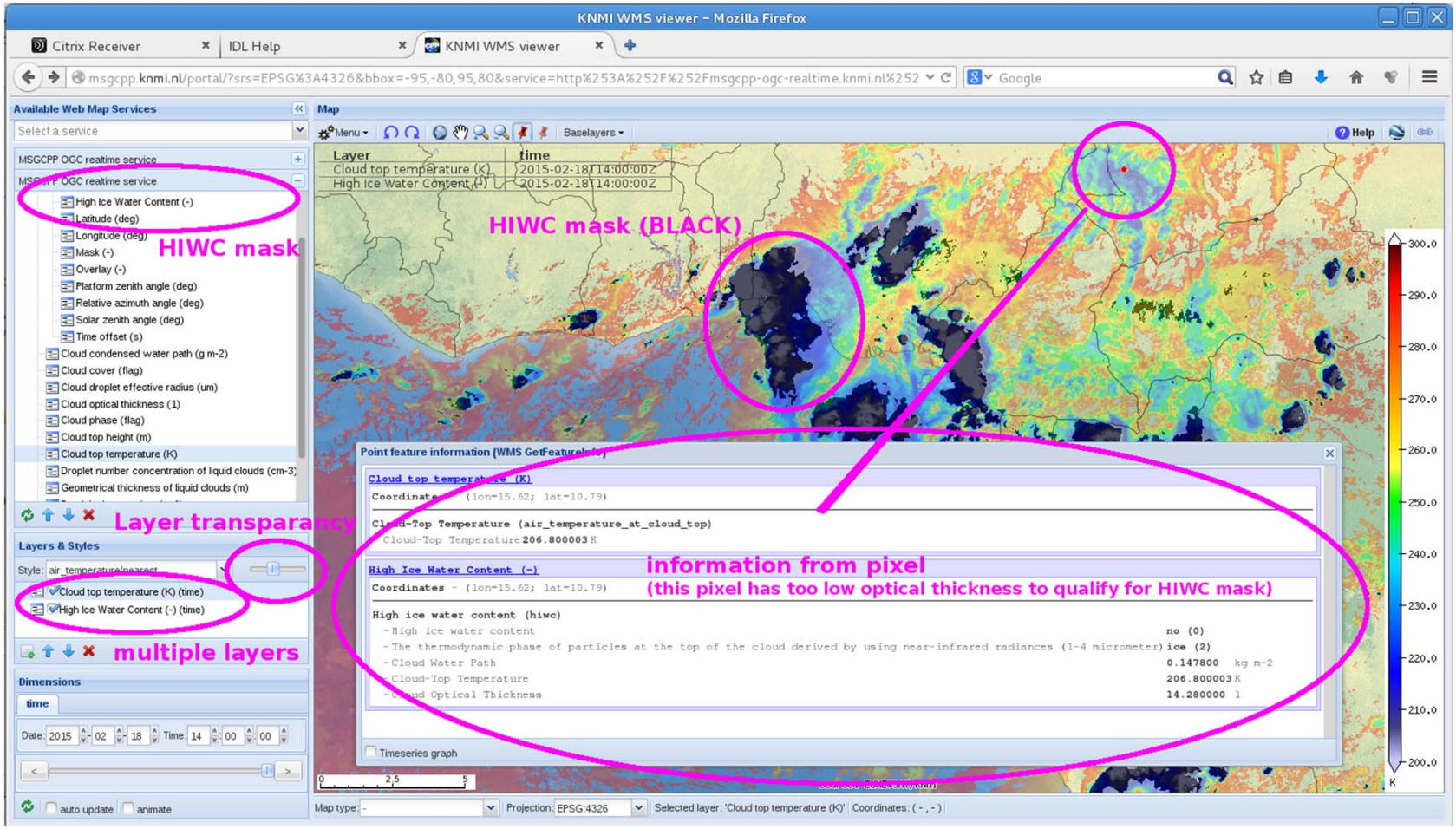
  - MET-FR support on site:
    - HAIC official request distributed on 30/01/2015
    - **Confirmation received from Meteo-France = 1 dedicated forecaster for the whole campaign**

  - Other forecasters support from HIWC:
    - Boeing (OK for 3 weeks, schedule TBD),
    - Pat King (OK)
    - BOM (OK)

# HAIC/HIWC Cayenne Field Campaign
## Forecasting and Nowcasting

- Nowcasting

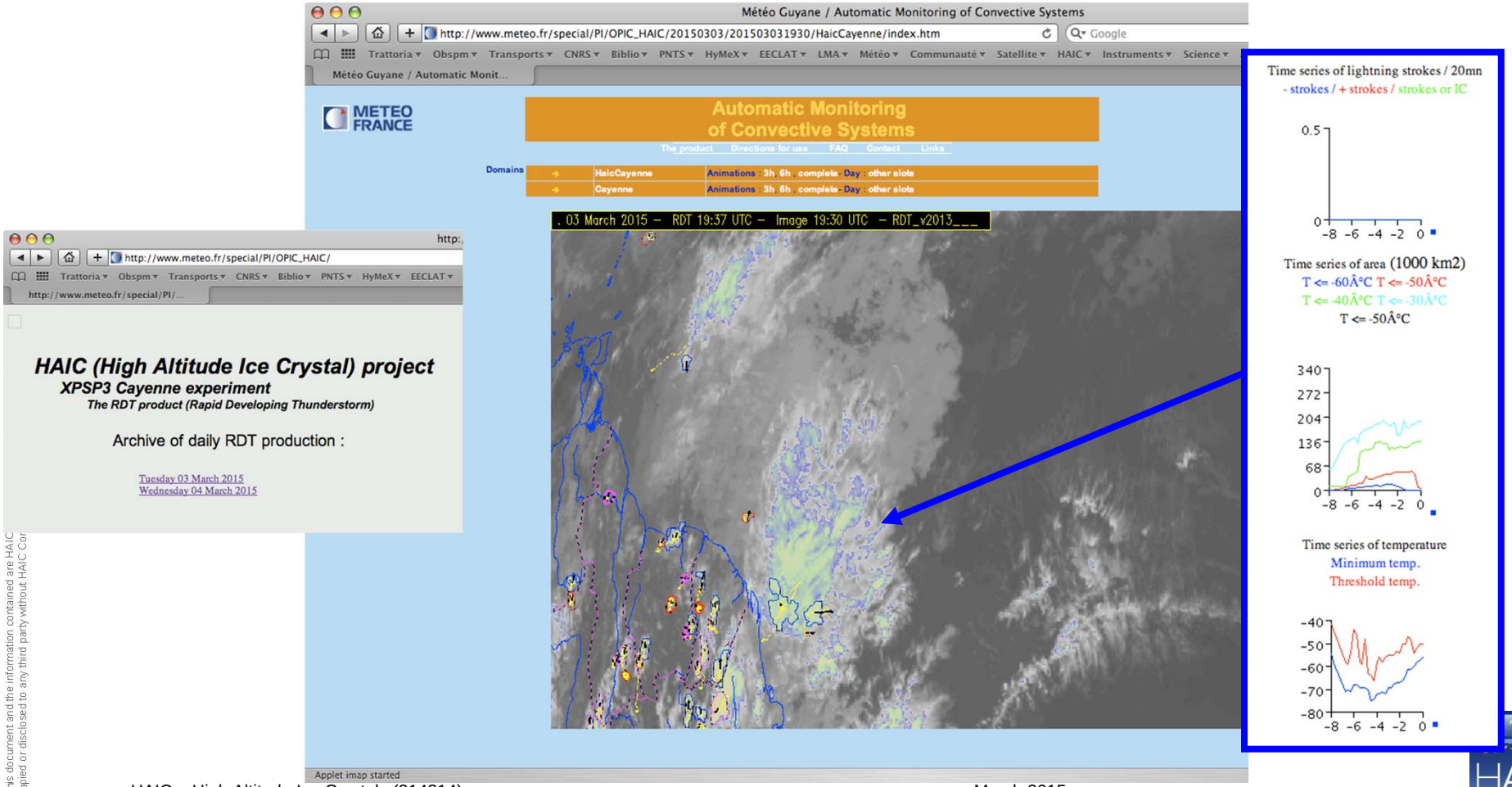
KNMI High IWC Mask [Link]



# HAIC/HIWC Cayenne Field Campaign
## Forecasting and Nowcasting

- Nowcasting

Meteo-France RDT Product [Link]



# HAIC/HIWC Cayenne Field Campaign
## Forecasting and Nowcasting

- <u>Nowcasting tools in PLANET</u>

Weather Polygons Object Products

- KNMI High IWC Mask
  - File size < 20 Kb (only reduced area)
  - 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, 8 min TBC for data process, and 2 min for data transfer to the aircraft).*

- Meteo-France RDT
  - File size < 20 Kb (only reduced area)
  - Product frequency = 15 minutes.
  - Total delay between the observation and the display in the cockpit =~ 22 min.

  *(10 min TBC for scan and data transfer to the data center, 10 min TBC for data process, and 2 min for data transfer to the aircraft).*

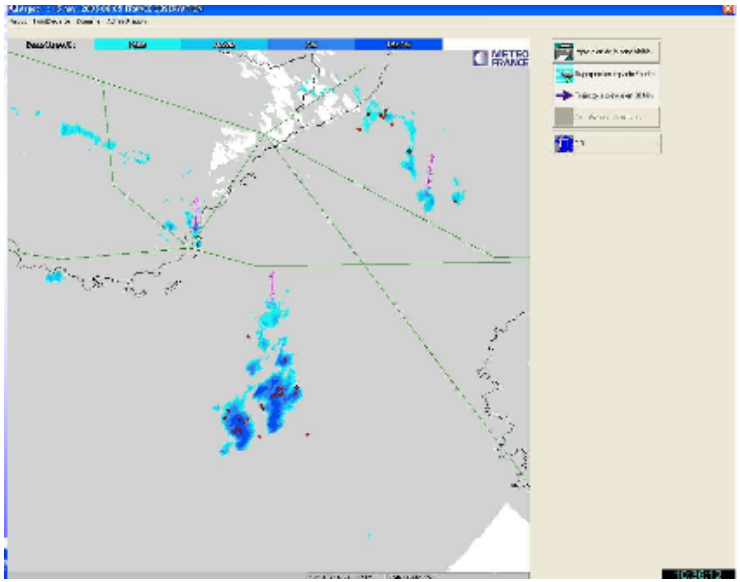
# HAIC/HIWC Cayenne Field Campaign
## Forecasting and Nowcasting

- <u>Nowcasting tools in PLANET (cont'd)</u>

Weather Polygons Object Products

- Meteo-France ASPOC 3D Product
  - File size < 20 Kb (only reduced area)
  - 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, 6 min TBC for data process, and 2 min for data transfer to the aircraft).*

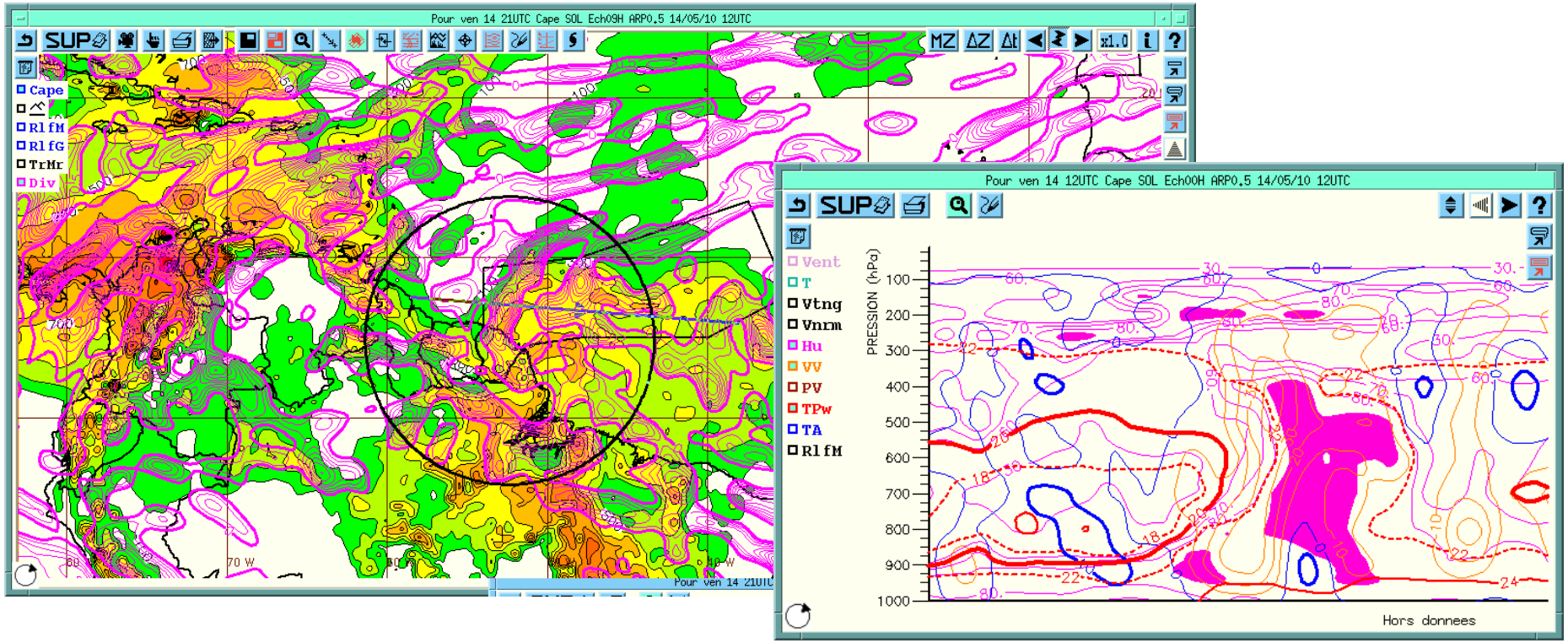


- *Convection monitoring based on weather radar and lightning data*
- *4 intensity (dBZ) levels relevant to ATC operations.*
- *30-min forecast*
- *Trial ASPOC-3D, based on wx radar, lightning data and satellite imagery (cloud top, Zmax)*

# HAIC/HIWC Cayenne Field Campaign
## Forecasting and Nowcasting

- Forecasting

  - MET-FR support on site: Possible use of ARPEGE models for CAPE Prediction




Training on site prior to the campaign to learn how to use tools.

High Altitude Ice Crystals (HAIC, 314314)



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