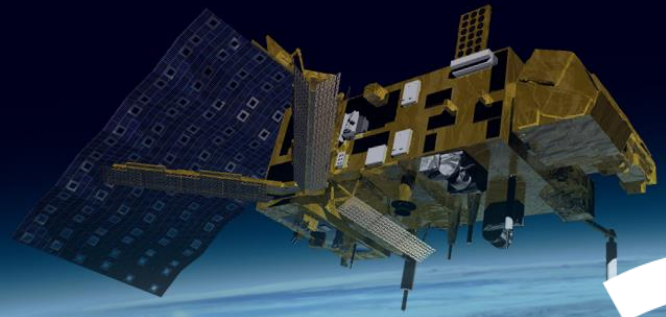


MTG-IRS Test Data Status and outlook

Thomas August + HSIR and User Prep Teams
EUMETSAT

MTG-IRS MAG, 24/01/2022, online





Status recap' after MAG-10

Readily actionable material and plans

Studying big applicative questions

Local spatio-temporal density, PC products...

Outlook on User Prep datasets

Realistic proxy with actual weather scenarii



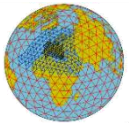
- 👍 Fundamental scientific questions identified and addressed
- 👍 User needs for preparation well covered
- 👍 Existing and planned datasets sufficient to the above
- 👍 A number of results presented to past MAGs and datasets made available to users already



Functional dev. & test



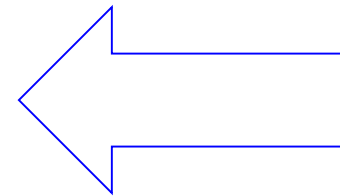
System tests



Scientific studies



User awareness & preparation



Simulated



Emulated

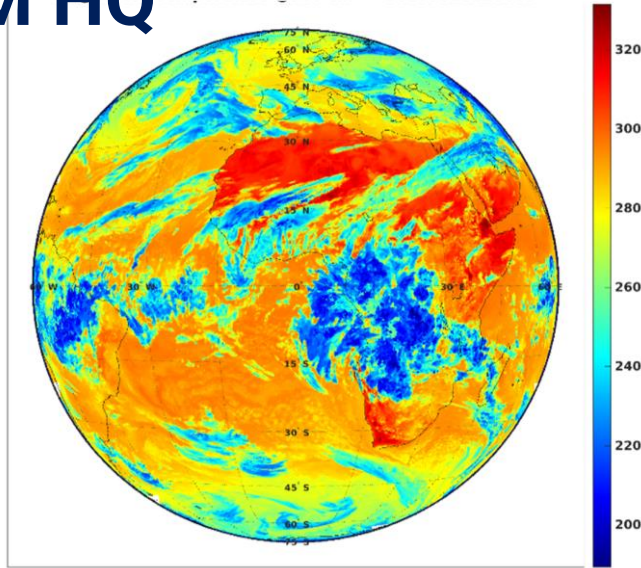


Proxies



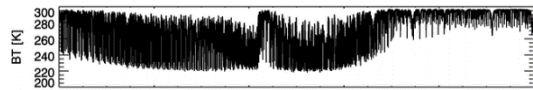


EUM HQ



- ✓ Hourly disks, 24h
 - ✓ Formatted as per specs
 - ✓ In radiances and PCs
- ✓ New spectral grid & apodisation (*until next?*)
 - ✓ RTTOV
 - ✓ Updated disk → release mid-2022

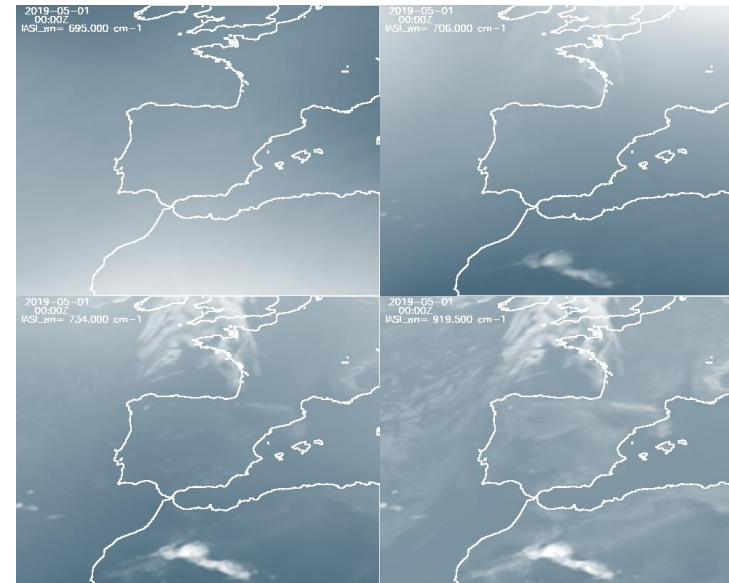
Already released
 ? Links
 ? User feed-back








High spectral
 resolution
 dwell



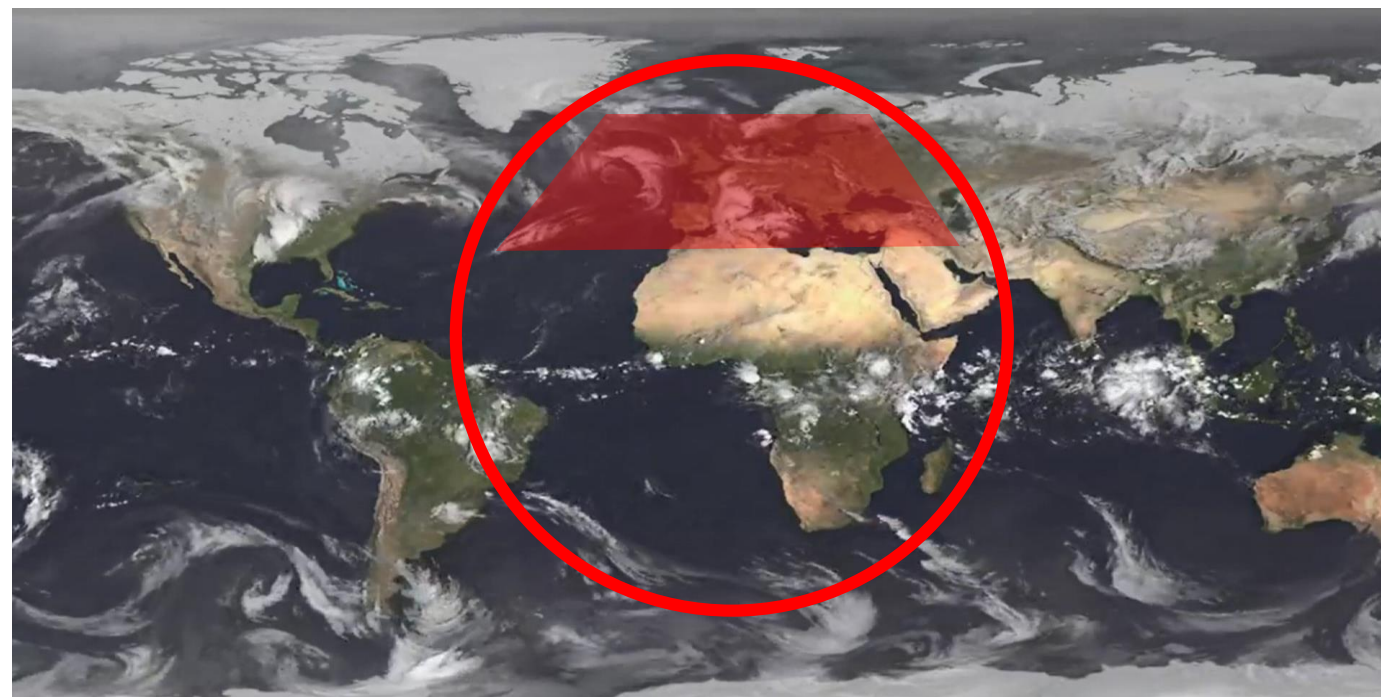
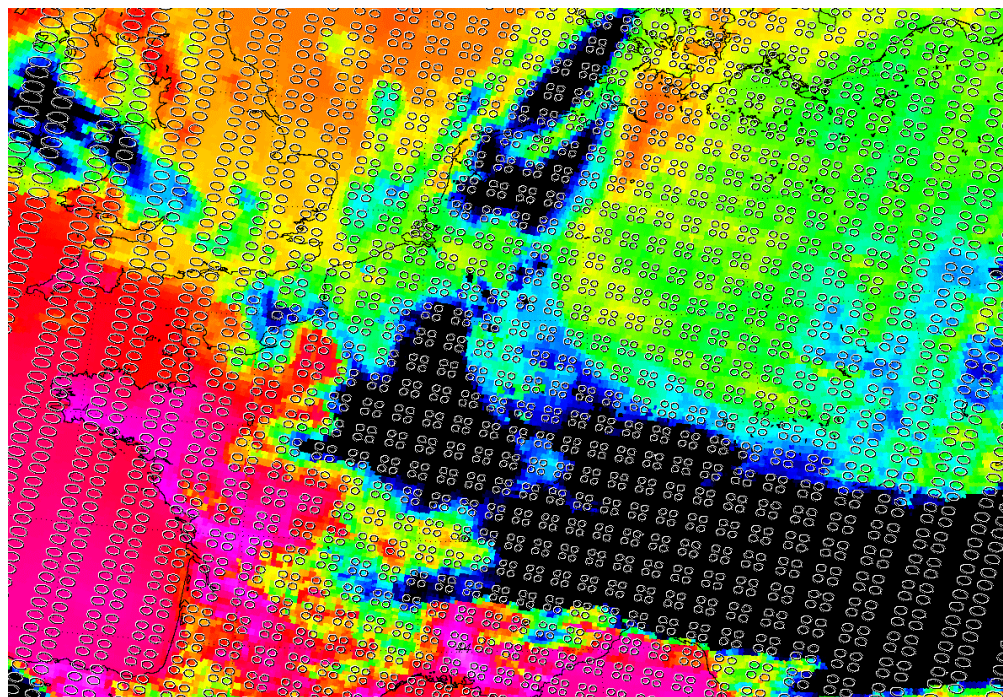
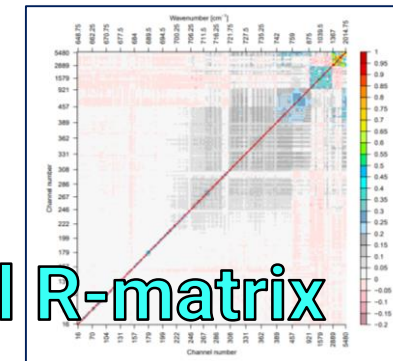
NWC SAF



- ✓ FCI/IRS
 - ✓ Full day, regional
 - ✓ SEVIRI and IASI
 - ✓ Resampled and geolocated






-  **100x more observations than with IASI**
-  **L1 distributed in PCs**
-  **Spatial density → horizontal error correlations**
-  **Temporal density (*IRS: every 30min vs IASI: 2/day over Europe*)**
-  **Imbalance with other data, esp. in a global model**

+ the eternal R-matrix

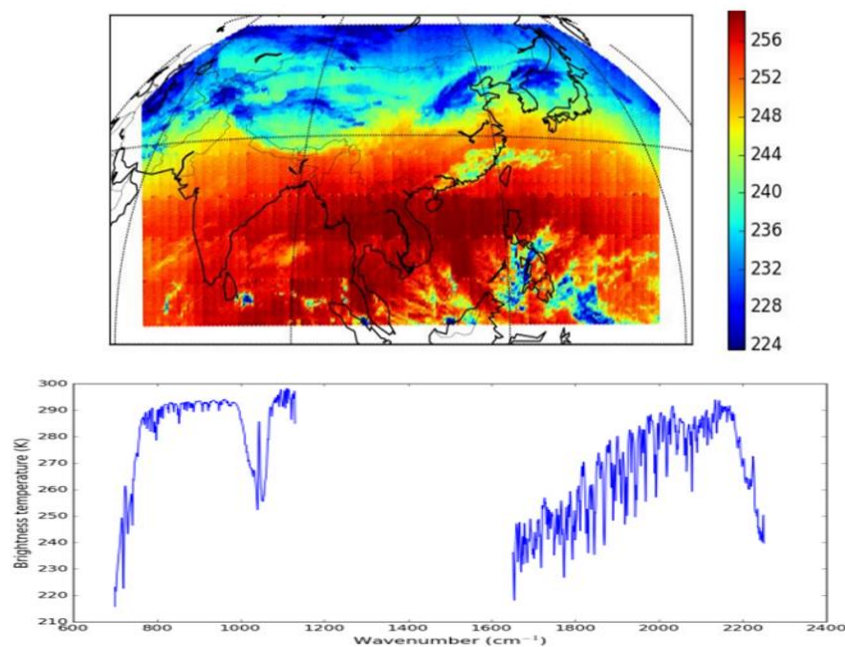




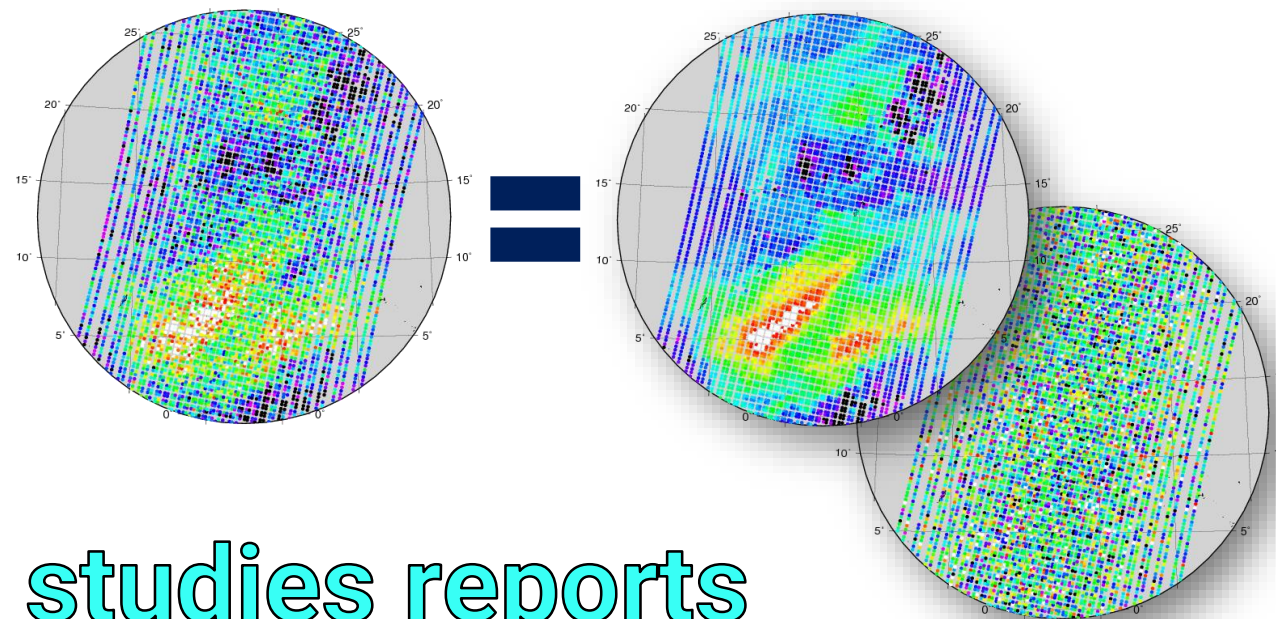
IRS specific questions in NWP and AC/AQ – Real proxy observations

-  **100x more observations than with IASI**
-  **L1 distributed in PCs**
-  **Spatial density → horizontal error correlations**
-  **Temporal density (*IRS: every 30min vs IASI: 2/day over Europe*)**
-  **Imbalance with other data, esp. in a global model**

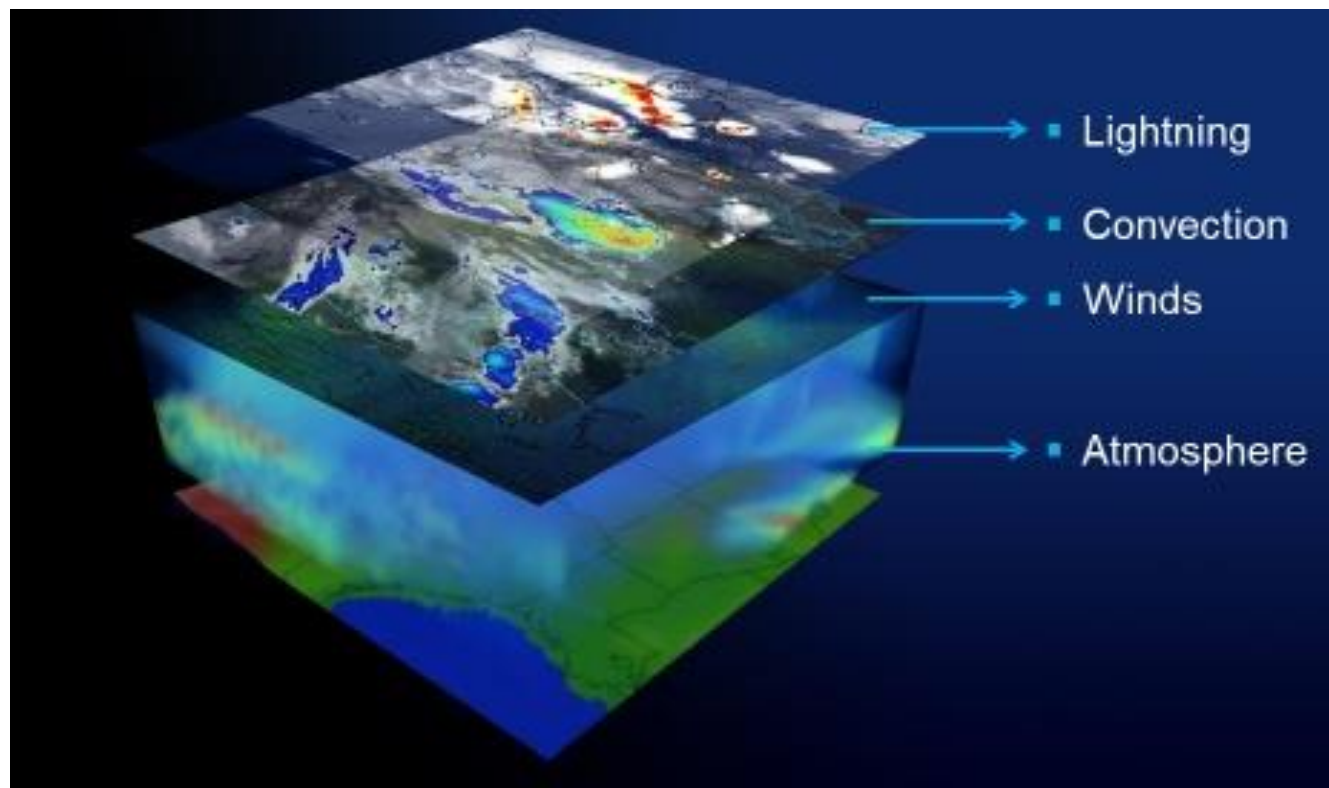
GIIRS



IASI recRad



→ studies reports



To support a procurement in preparation:

MAG members contributions?

- **High resolution model data**
- **Suggest cases of interest**

Coordination with NWC SAF for complementarity and synergy

- **4D-weather data cubes with consistent data representative of FCI, LI and IRS**
- **A few selected relevant meteorological situations*:
limited area, time series spanning the events**
- **Emulated from real observations as much as possible:
e.g. ABI/GLM, later FCI/LI + simulated IRS**



IRS Test data status & outlook - Thank you!

