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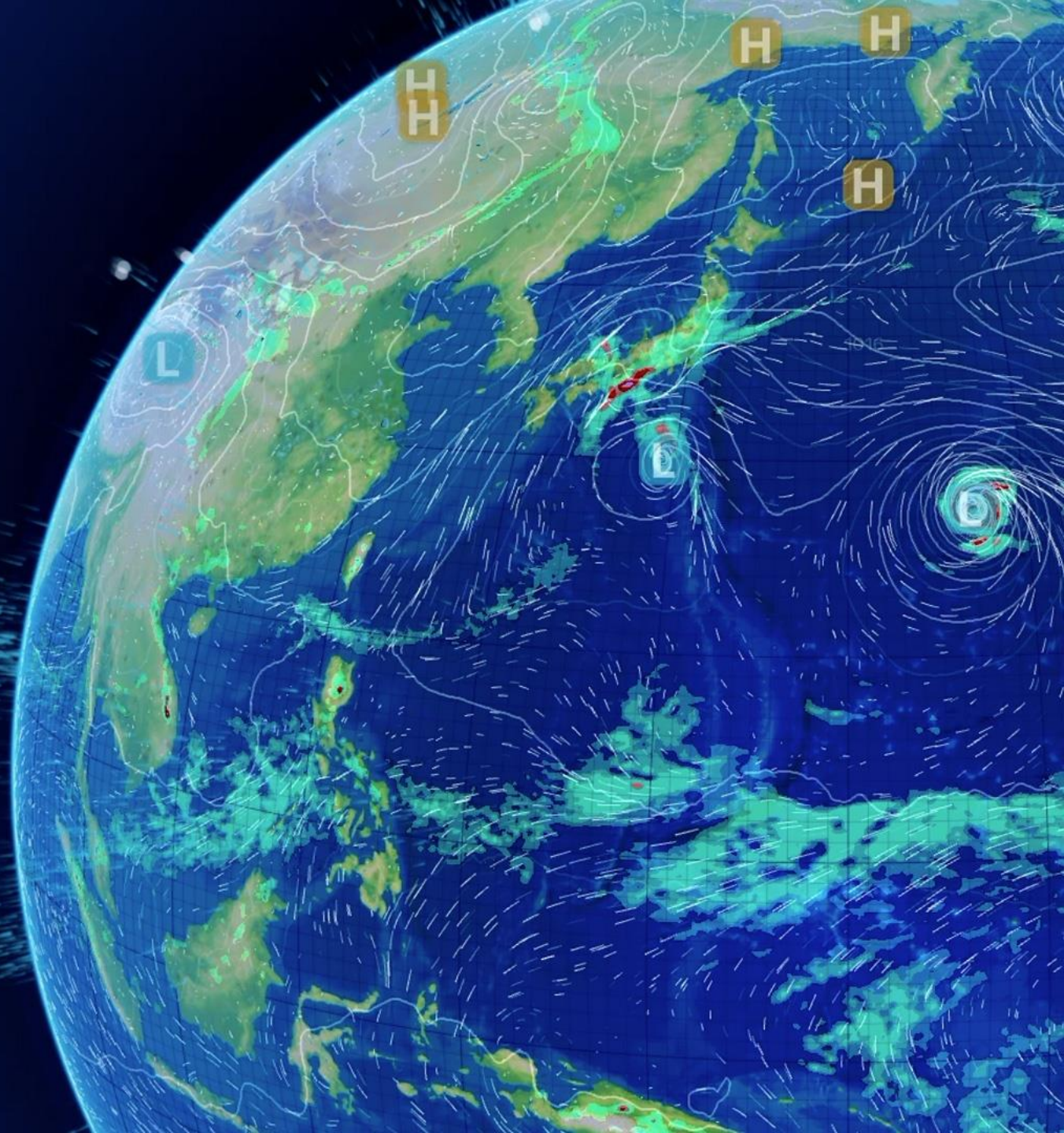
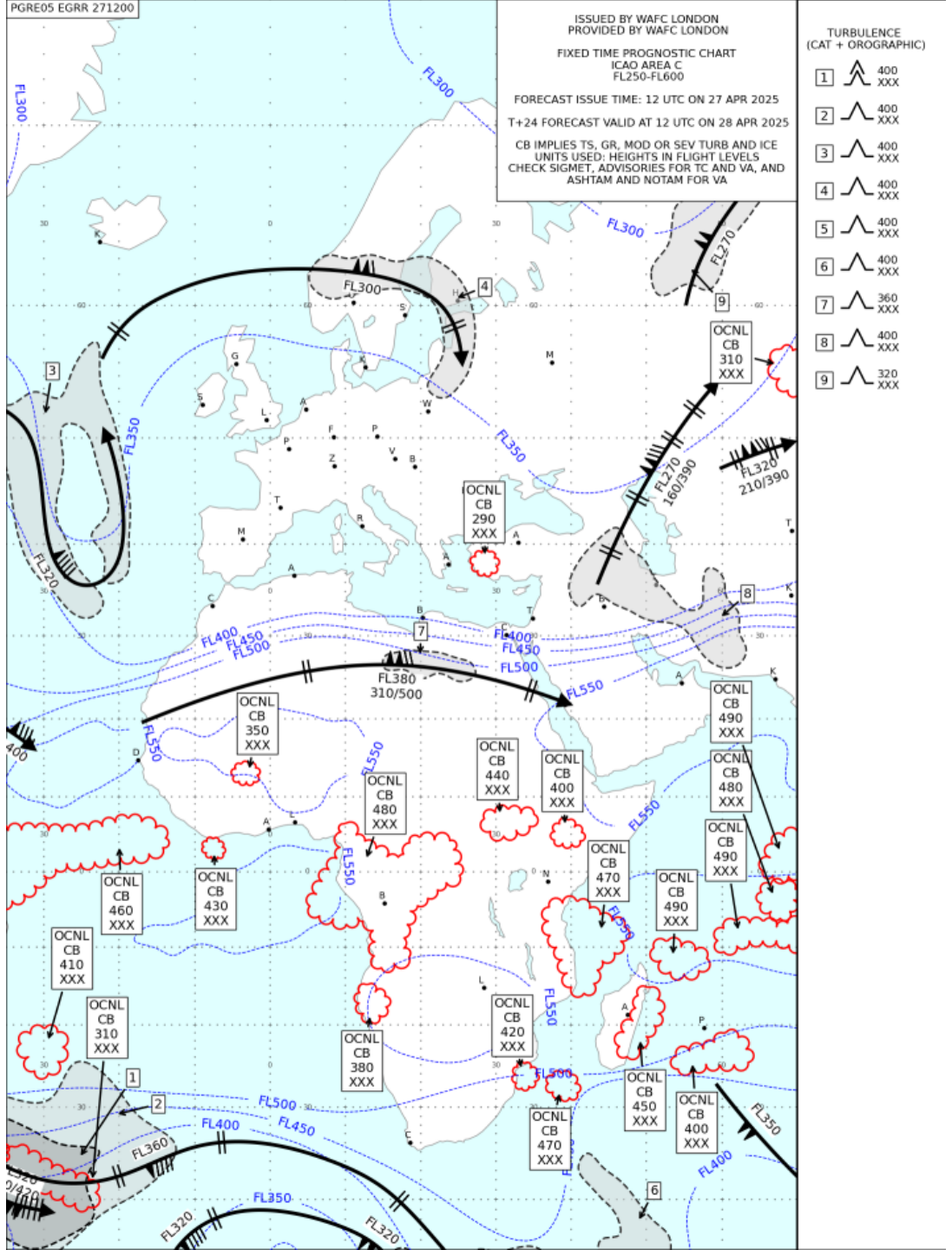
WAFS SIGWX forecasts



SIGWX ON SADIS FTP

- 18 fixed charts (14 high level SIGWX, and 4 medium level SIGWX)
- T+24 only
- A BUFR digital data set



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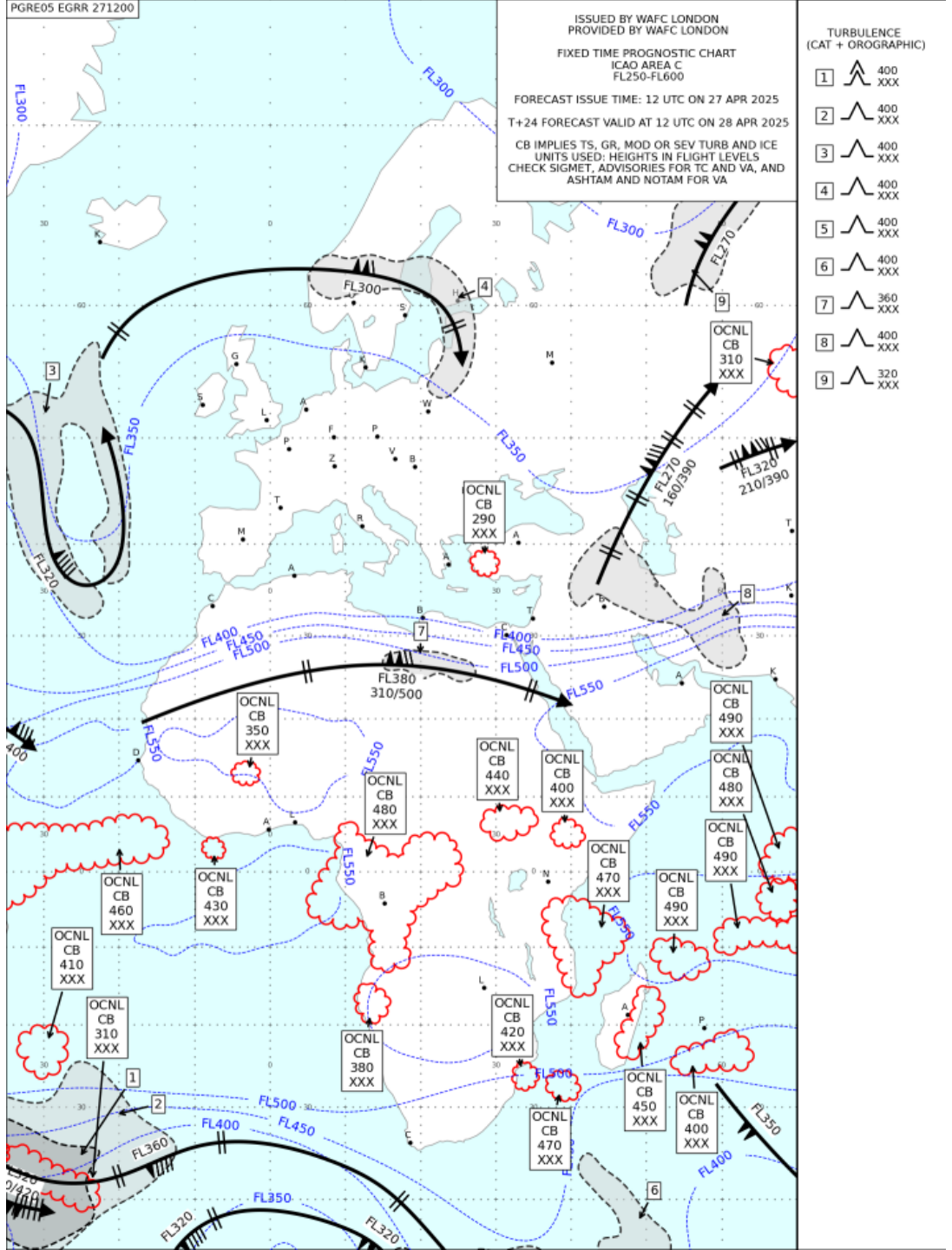
SIGWX ON SADIS FTP

SIGWX forecasts contains information on:

- Jet Stream
- Cumulonimbus clouds
- Icing and turbulence
- Tropopause height
- Erupting Volcanoes
- Tropical Cyclones
- Radioactive releases

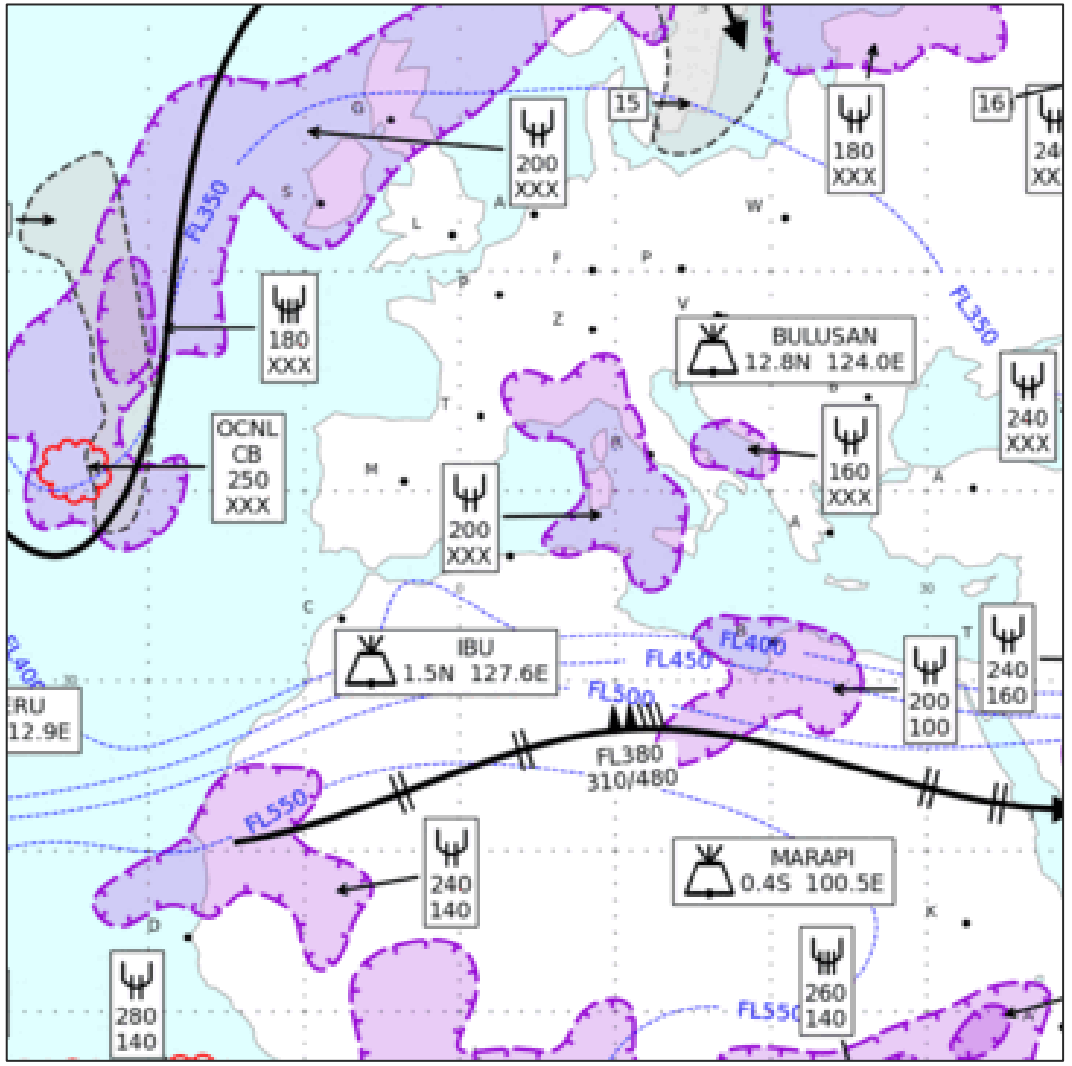


SIGWX ON SADIS API

- Multi-timestep SIGWX forecasts:
  T+6 to T+48 at 3-hourly intervals
- Covers FL100 to FL600
- New IWXXM format, same parameters

Cross checking charts (not briefing quality):

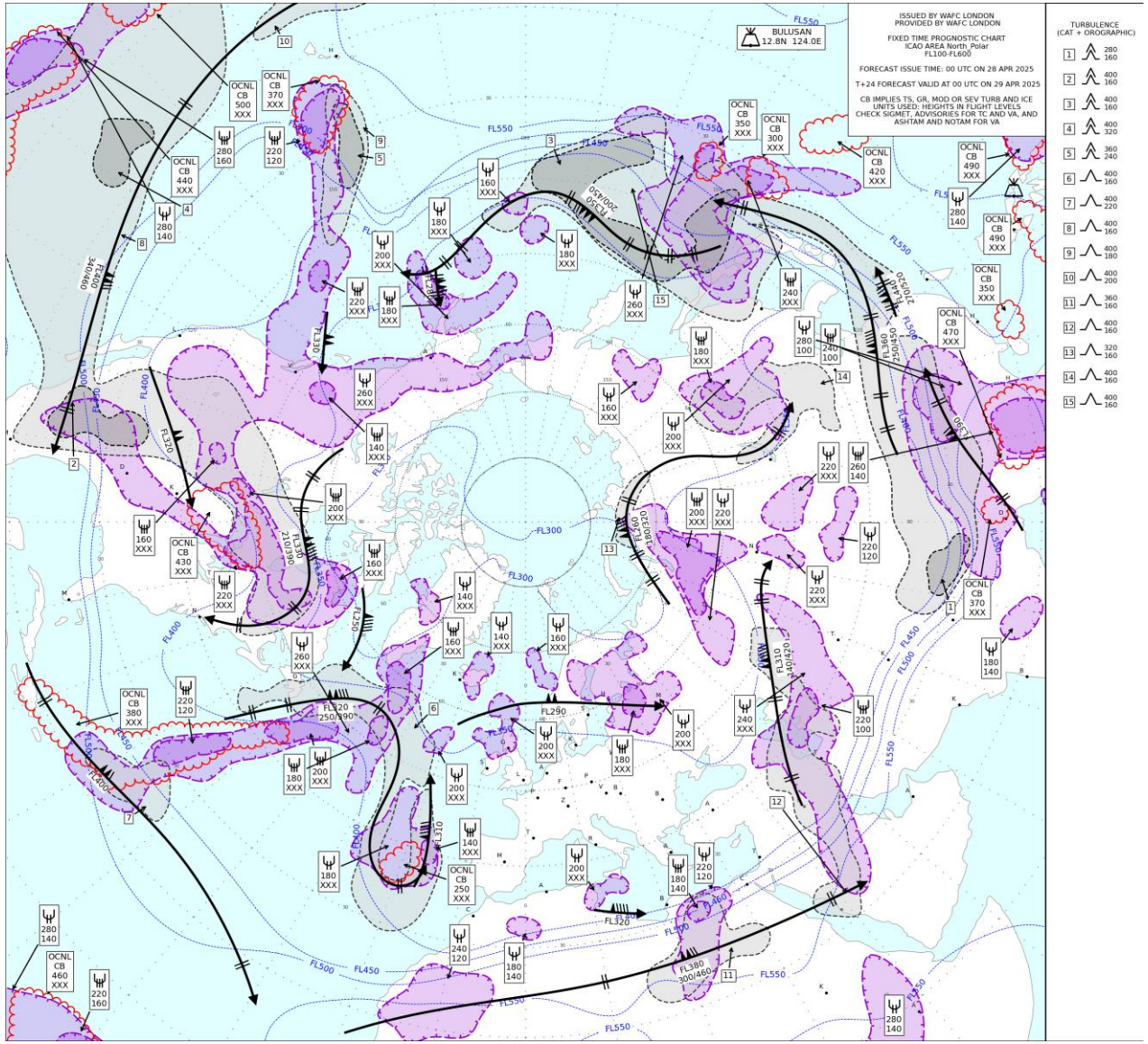
- Mercator chart spanning globe
- N. Polar chart
- S. Polar Chart



SIGWX CREATION

SIGWX is automatically generated from:

- WAFS gridded wind, tropopause, cumulonimbus, icing and turbulence data
- Volcanic Ash Advisory messages and VA SIGMETS
- Tropical Cyclone Advisory messages and TC SIGMETS
- Nuclear Emergency messages



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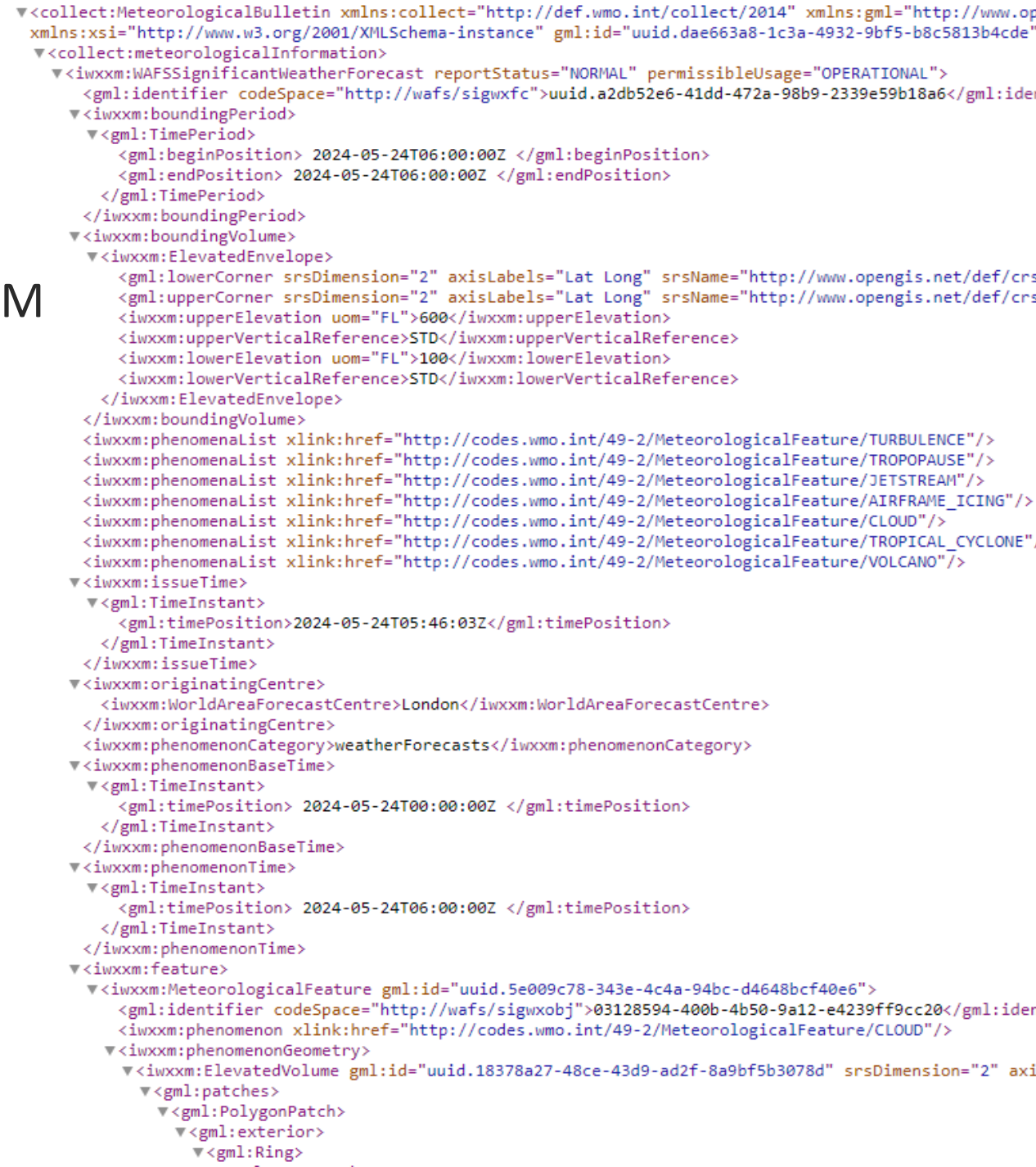
IWXXM DATA

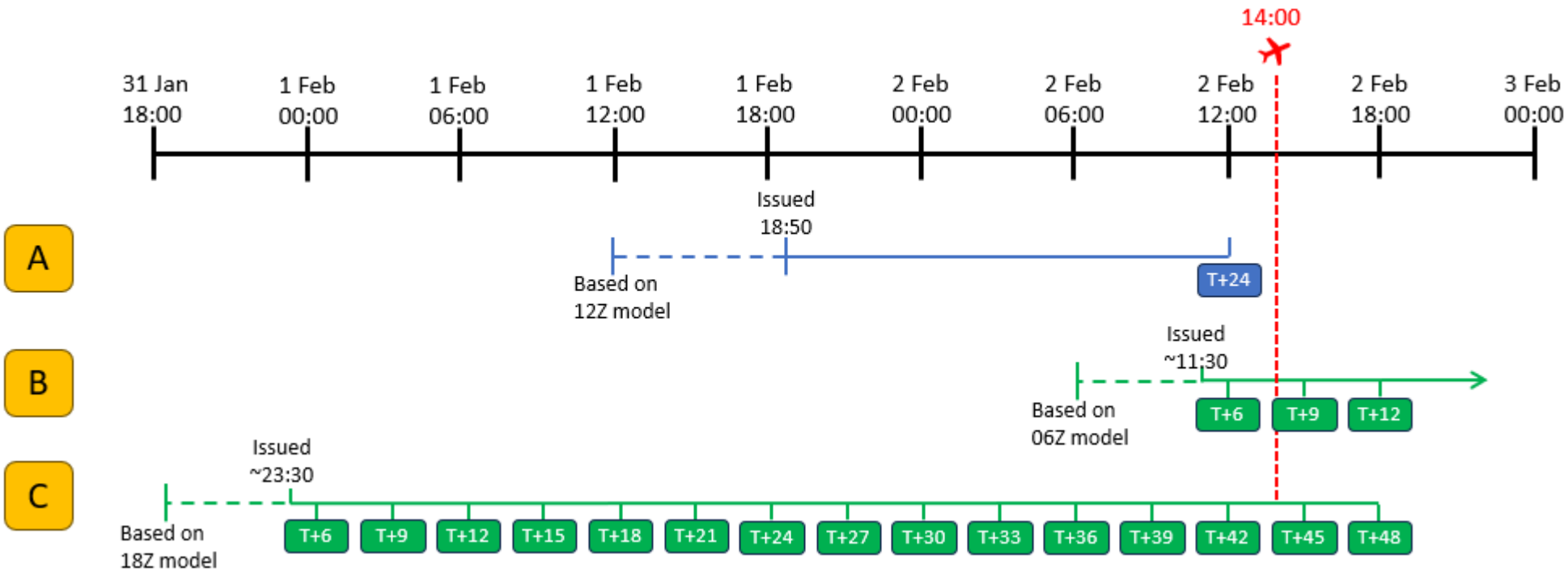
The new SIGWX data will be provided in IWXXM format. The schema has been developed and approved by WMO

https://schemas.wmo.int/iwxxm/2023-1/WAFSSigWxFC.xsd



BENEFITS OF MULTI-TIMESTEP SIGWX

SIGWX forecasts for a particular validity time will be available with a longer lead time and using more up to date model data.



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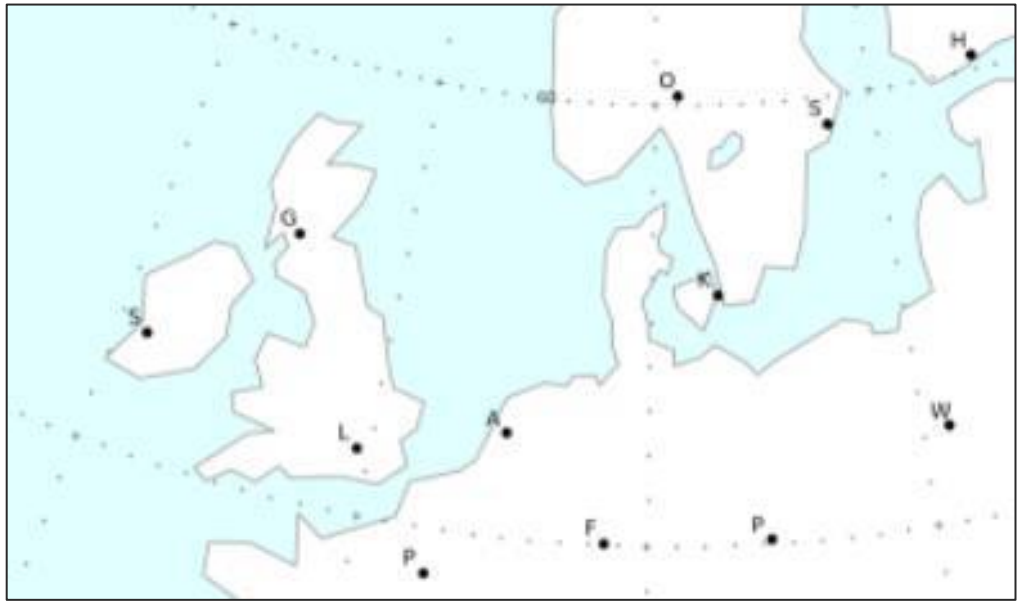
VISUALISING SIGWX DATA

- Visualisation of the IWXXM data needs to be done by the user' system
- Some SIGWX visualisation information is given in ICAO Annex 3, but colour schemes are not specified.

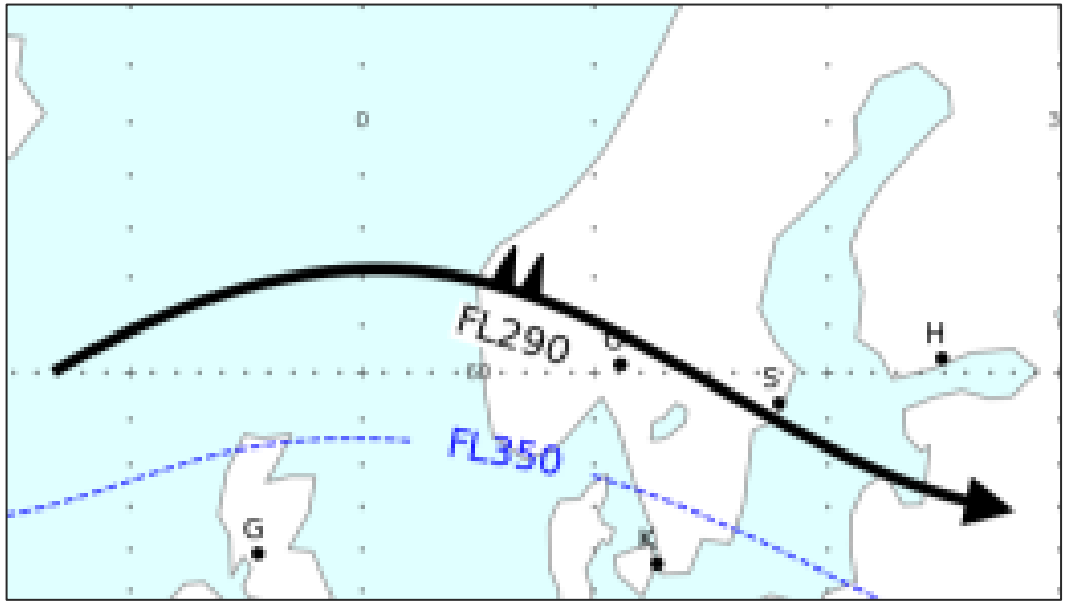
Benefit of visualising the digital data:

- You can use your chosen colour scheme
- You can pan and zoom the map to the area you are interested in
- You could switch individual SIGWX layers on and off
- You could overlay other information onto the SIGWX.

VISUALISING SIGWX DATA - IDEAS

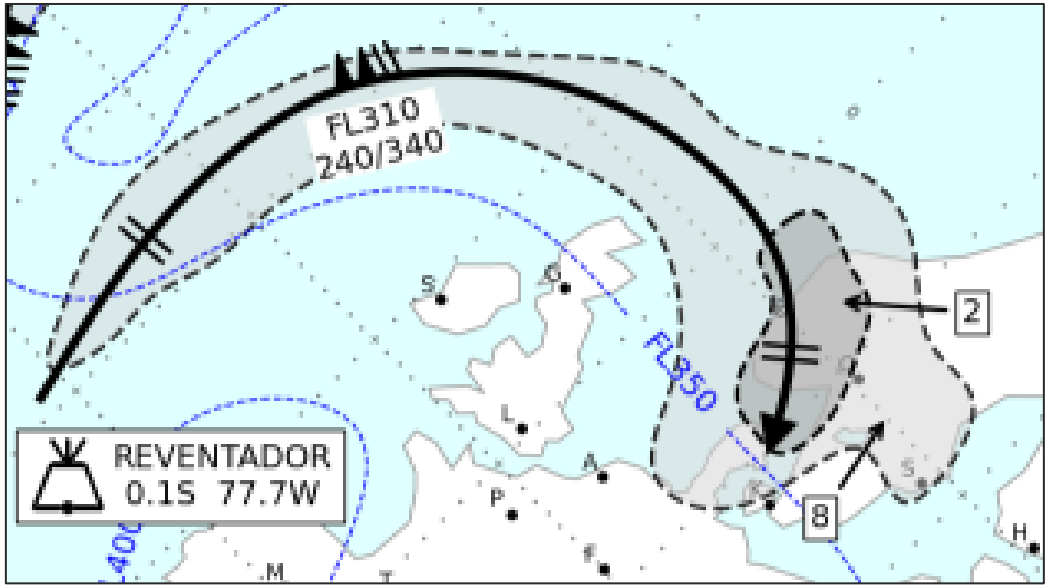


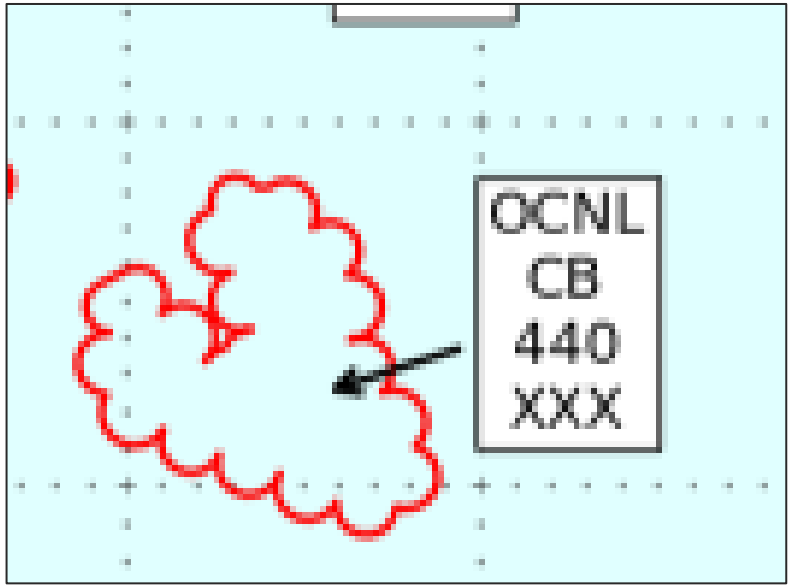
Background – blue ocean, major city markers



Jet Stream – black with wind fletches and height info

VISUALISING SIGWX DATA - IDEAS

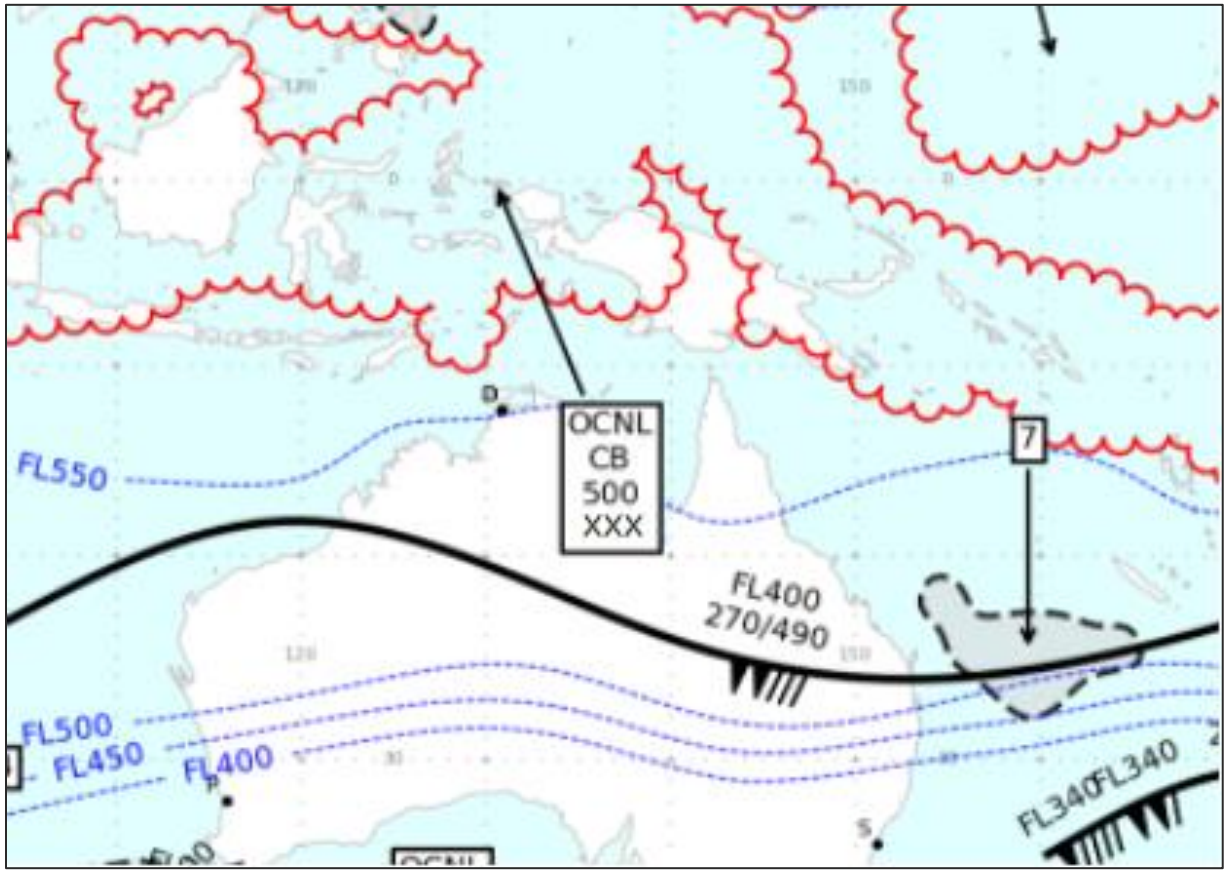




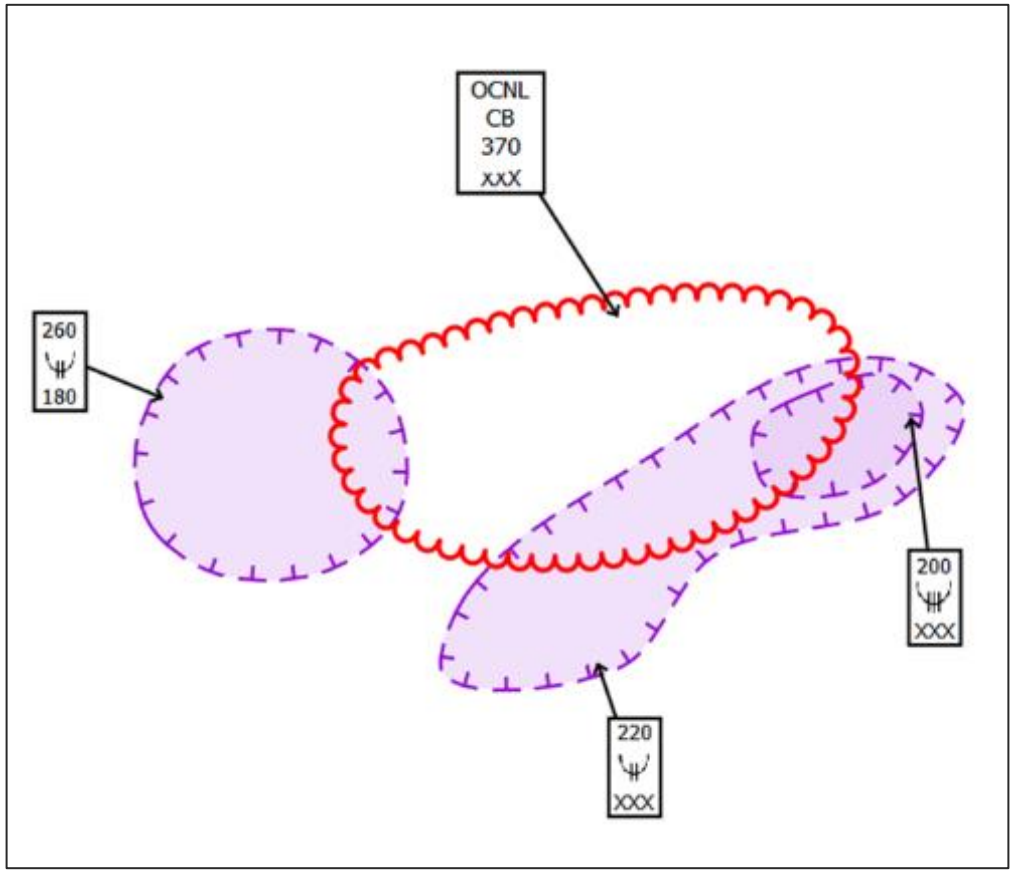
Turbulence areas – two tone grey shading.
Darker grey indicates SEV TURB

Cumulonimbus areas – red scalloped areas

VISUALISING SIGWX DATA - IDEAS



Blue tropopause contours



Purple shaded icing areas with a different line style to CB.

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Thank you for listening