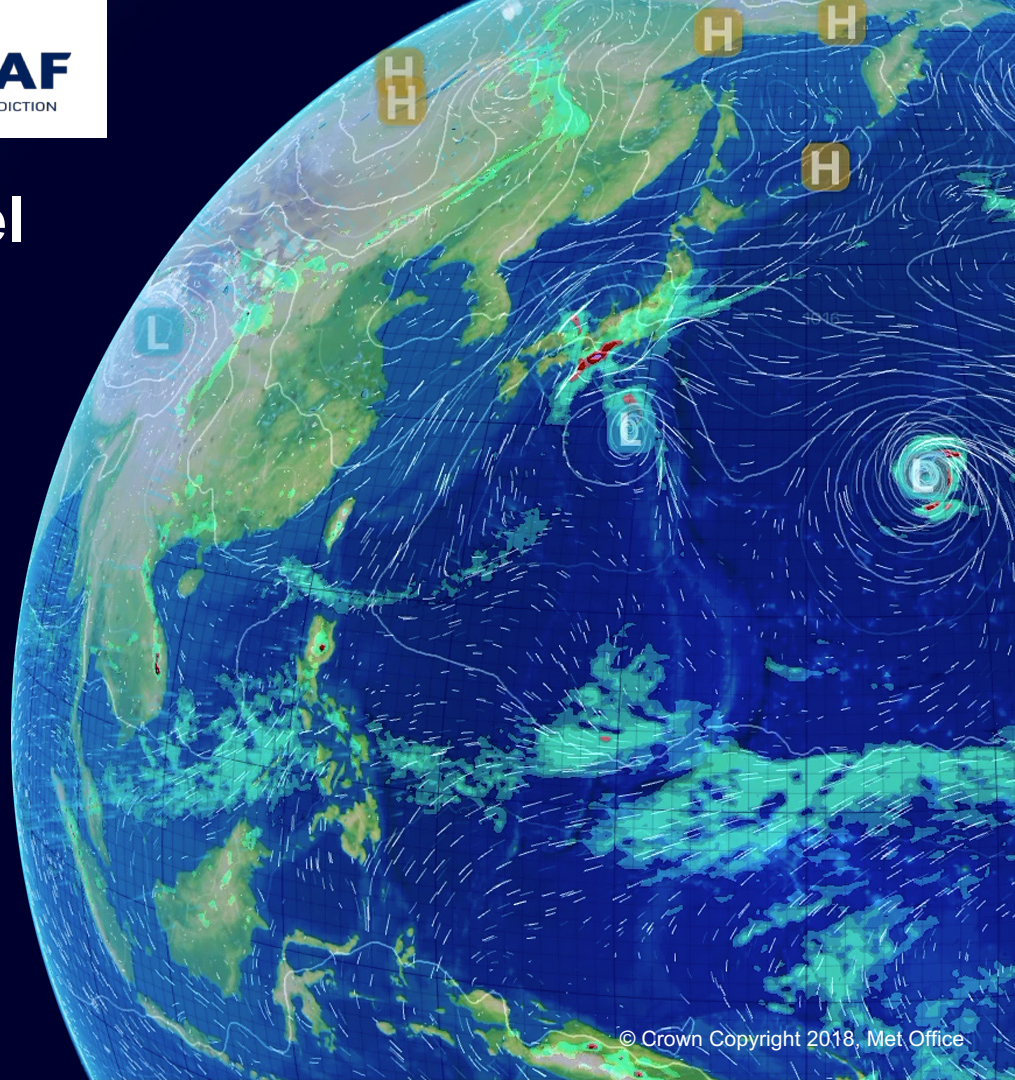


Services evolution – channel selections and PCs

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CrIS FSR or NSR?

- The CrIS instrument data can be either Normal Spectral Resolution (NSR) or Full Spectral Resolution (FSR)
- Currently, DBNet uses NSR for data from S-NPP, for which there is a defined subset of 399 channels
- The NOAA default for NOAA-20 is FSR – with a subset of 431 channels
- CSPP and AAPP can support either mode, but the default is FSR for NOAA-20

	Band 1	Band 2	Band 3
NSR sampling (cm ⁻¹)	0.625	1.25	2.5
FSR sampling (cm ⁻¹)	0.625	0.625	0.625

CrIS FSR or NSR?

- This issue was discussed at [ITSC-21 \(NWP working group\)](#)
- Recommended to use FSR for NOAA-20 from the start (subsequently implemented in EARS)
- When all centres are ready, switch to FSR for [S-NPP](#) also
- The readiness date was originally estimated to be ~6 months after NOAA-20 global data are publically available, but now expected sometime in 2019.
- This will require coordination

Note: FSR processing in CSPP takes longer than NSR ...

- e.g. 9 min FSR versus 3 min NSR at Met Office, with CSPPv3.1 (4 processors)
- Any prospects of further improvement? (I note that v3.1 seems to run significantly faster than v3.0)

Other instruments

- IASI
 - Our understanding is that everybody is happy with the current situation – 500 channels and 300 PC scores, defined by EUMETSAT (as recommended in the DBNet Guide)
 - A NOAA product exists (616 channels, different BUFR sequence) but not widely used outside NOAA
- HIRAS on FY-3D
 - Too early to make detailed plans, as data and software package are not yet released
 - Likely that at some point a channel selection will be needed

Note that ITWG has recommended that NWP centres get experience with use of PC products, in preparation for MTG-IRS. This is happening at several centres (using IASI data).