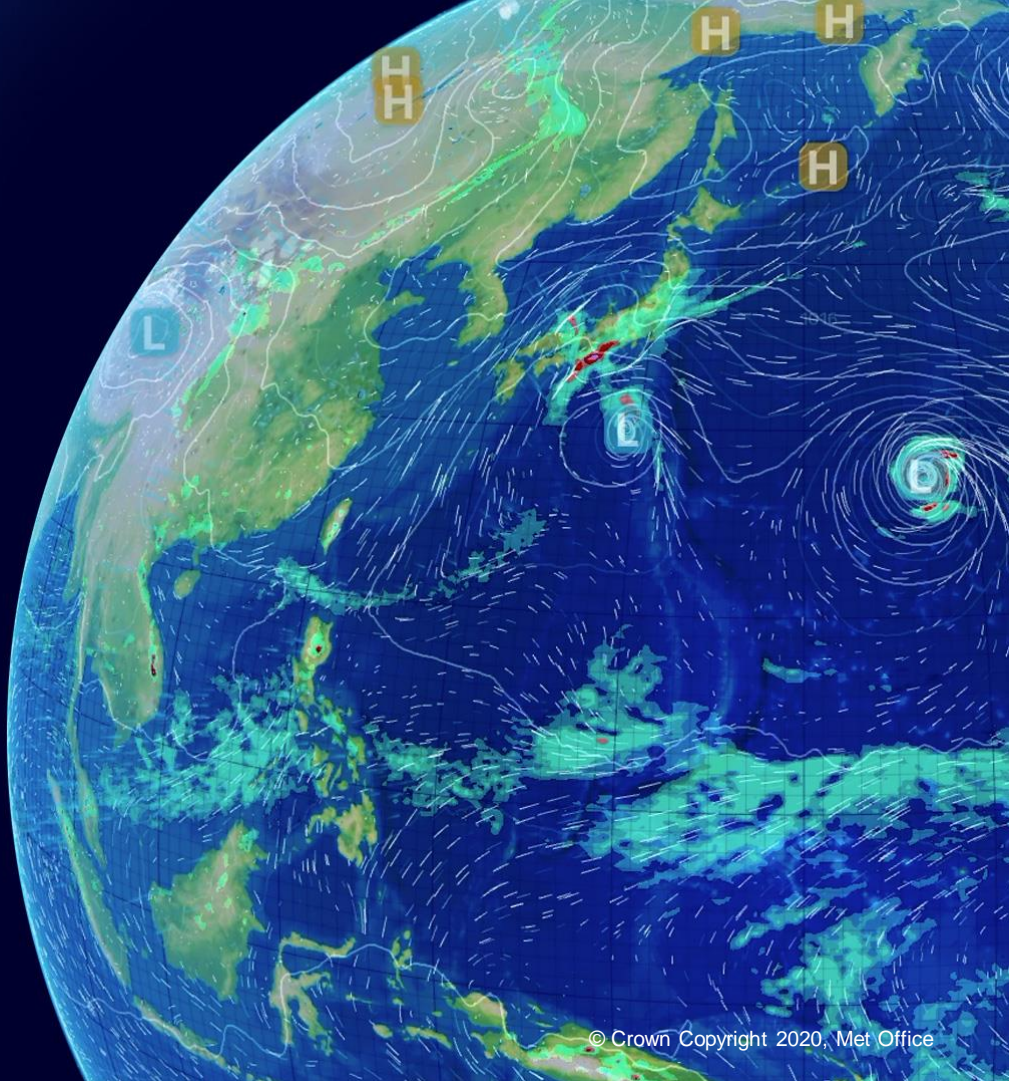


7-24 GHz in the Met Office

Kirsty McBeath, Spectrum Policy
Manager

1 December 2022



A photograph of a flood defense construction site. In the foreground, there is a large, sloping structure made of interlocking metal or plastic panels, reinforced with yellow and blue straps. Three workers in orange high-visibility jackets and hard hats are standing on the right side of the structure, looking towards the water. In the background, a body of water is visible, with trees and buildings on the far bank. The sky is overcast.

**Helping you make better decisions
to stay safe and thrive**

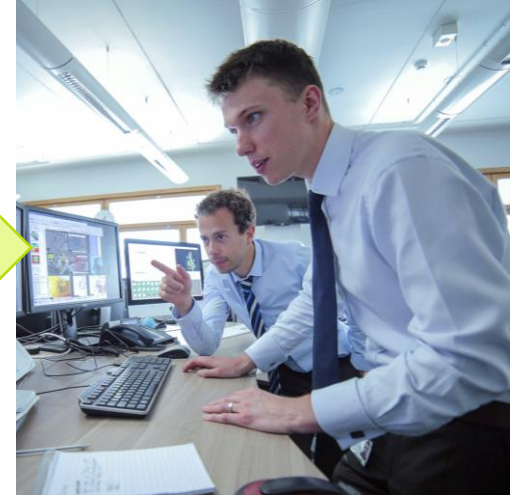
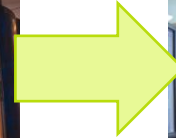
Weather forecast ingredients



Observations

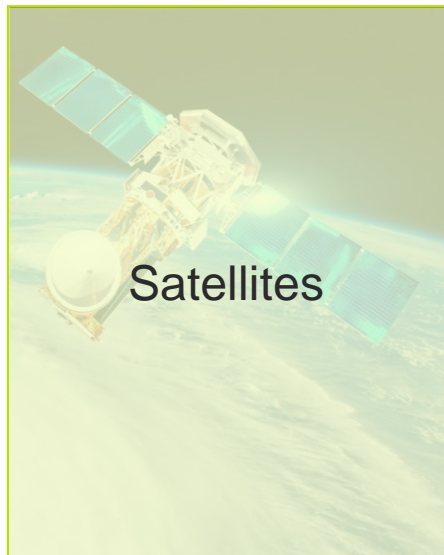


**Modelling &
Computing**



Meteorologists

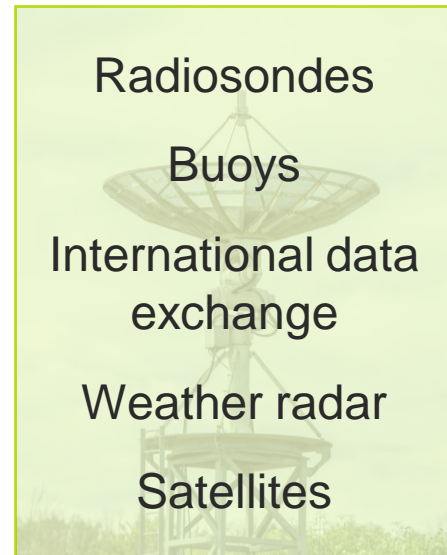
How we use Spectrum in the Met Office



Passive Sensing
(EESS (passive))



Active Sensing
(EESS (active))



Communications
(MetSat/FSS)

Applications in 7-24 GHz

Frequency	Application
6.425-7.075 GHz	Passive Sensing: Sea surface temperature
10.6-10.7 GHz	Passive Sensing: wind, humidity, surface rainfall rate
13.4-13.75 GHz	Active sensing: Scatterometer wind speeds and radar altimeters
18.6-18.8 GHz	Passive sensing: temperature, humidity, cloud water content
22.21-22.5 GHz	Passive sensing: atmospheric water content
23.6-24 GHz	Passive sensing: atmospheric water content, sea ice

Frequency	Application
7.45-7.55 GHz	Communications: meteorological satellite data reception
7.75-7.9 GHz	Communications: meteorological satellite data reception
8.025-8.4 GHz	Communications: meteorological satellite data reception
10.7-12.5 GHz	Communications: international data sharing

Full details provided in **UK Frequency Allocation Table** and **Space science and meteorology spectrum allocations in the UK:**

<https://www.ofcom.org.uk/spectrum/information/uk-fat>



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Questions

For more information please contact



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