

Training session run by Plymouth Marine Laboratory for JNCC as part of a workshop on Using Earth Observation for Water Quality Monitoring 13-14 October 2020. The training was delivered by Lauren Biermann and Oliver Clements at PML.

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### Match the data to the application – question sheet

Application	Data	Match!
1. Ameera has been reading about how the Thwaites and Pine Island Glaciers have been breaking apart, and she is interested in observing the resulting sea ice.	a) CMEMS – L4 SSH above geoid and L2 Sentinel-3 SLSTR SST	
2. Nicola wants to measure water hyacinth across Lake Caohai in China, using an atmospheric correction tuned for Landsat-8 / Sentinel-2 data over inland and coastal waters (ACOLITE).	b) L1 Sentinel-2 NDVI, plus L2 Sentinel-3 SLSTR SST and OLCI TSM	
3. Dan has been following the recent news closely, and wants to map active forest fires in Oregon and California, USA.	c) L2 Sentinel-2 Bottom-of-Atmosphere (atmospherically corrected) reflectance data	
4. Giulia is trying to relate 2 years of high resolution turtle tracking data to the presence of cold-core or warm-core eddies in the Mediterranean.	d) L2 Sentinel-2 False Colour / L2 Sentinel 3 SLSTR Fire Radiative Power (FRP) product	
5. Maya wants to map palm oil plantations in Brazil to determine if tropical forests were recently cut down to create them.	e) L1C Sentinel-2 Top-of-Atmosphere (TOA) reflectance data	
6. Following significant rainfall over Lincolnshire, Alex is tasked with (i) checking flood extent and (ii) confirming that wheat farms claiming GOV support grew crops there the previous year.	f) L1 Sentinel-1 Synthetic Aperture Radar (SAR)	
7. Tambo thinks they may be able to relate changes in intertidal seagrass distribution to increased sea surface temperature and improved water clarity around the SW of England.	g) L1 Sentinel-1 Synthetic Aperture Radar (SAR) plus L2 Sentinel-2 NDVI or Scene Classification (SC)	