Witnessed by a number of atmospheric correction and product retrieval algorithms; satellites have finite life-spans, so data from individual sensors from late 1997-date, with differing sensor characteristics, need to be merged without introducing artefacts. ESA's Ocean Colour Climate Change Initiative is undertaking research addressing these requirements, with support from NOAA, NASA and a large community of global climate researchers, marine ecosystem modellers and remote sensing scientists. Products are validated against fiducial reference measurements; uncertainty characteristics, quantified on a pixel-by-pixel basis, facilitate applications and interpretations consistent with the quality of the data. Continuity in ocean-colour ECV production is vital to support continued use by the scientific community and will be sustained through the European Copernicus Climate Change Service programme. This presentation will discuss the prospects to develop the ocean-colour ECV through: addition of new sensors, notably the Sentinel-3 OLCI series; potential increases in data resolution (e.g. spatially global 300m from OLCI and temporally though geostationary missions); and integration with in situ observing systems, notably the BioArgo programme to investigate the 3D structure of the ocean.

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