Seagrasses from above - drones and satellites

Example images from Lesbos, Greece. 39°09'30.6"N 26°32'01.8"E

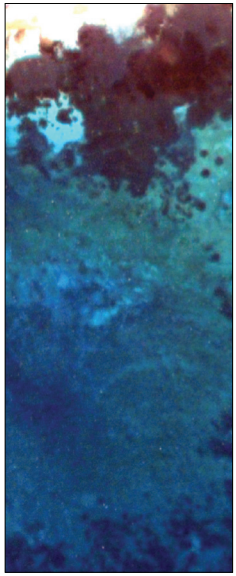
Drone



resolution: 4 cm

- ⊕ Very high spatial resolution, Low cost of acquisition, High flexibility of deployment
- ⊖ Small ground area coverage, Limited optical bands, Required laborious image pre-processing

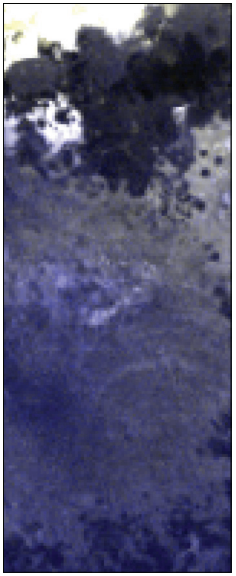
WVII PAN



resolution: 50 cm

- ⊕ Very high spatial resolution, High spectral information, Direct and flexible sensor tasking
- ⊖ Commercial imagery, Very high cost of imagery

WVII MUL



resolution: 2 m

- ⊕ Very high spatial resolution, High spectral information, Direct and flexible sensor tasking
- ⊖ Commercial imagery, Very high cost of imagery

PlanetScope



resolution: 3 m

- ⊕ High spatial resolution, High temporal resolution, Free under a scientific license
- ⊖ Radiometric differences betweem, Low spectral information

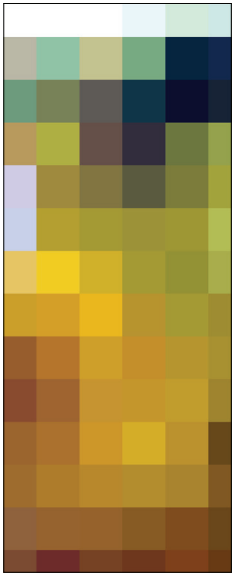
Sentinel-2



resolution: 10 m

- ⊕ High spatio-temporal resolution, Open, free and public datasets, Archive between 2015-2029
- ⊖ Multiple spatial bands, Spectral technological-related artifacts over seagrass areas

Landsat-8



resolution: 30 m

- ⊕ Large area coverage, Free datasets, Historical archive back to 1972
- ⊖ Low spatial resolution, Low temporal resolution

Sources: Topouzelis, K. University of Aegean (2018); Digital Globe (2018); PlanetScope (2018); Copernicus Sentinel data (2018); Lansdat-8 (2018) U.S. Geological Survey.