## Presentació de projectes començats el 2018-19 a l'ICM:

# Challenge #2: Conservation and Sustainable Use of Marine Life and Ecosystems

## García-Ladona (AERONET-OC), Garrabou (MPA-Engage, HEATMED), Olivar (SUMMER), Demestre (CriMa)

Divendres, 28 de febrer de 2020

#### Bioptical Survey of the Ebro's Shelf (AERONET-OC) - Marco Talone, Emili García Ladona

AERONET-OC is an international network of instrumented sites to faciliate automatic calibration of satellite onboard radiometers in visible and near-infrared bands (e.g. MODIS, VIIRS, OLCI). These are used, among others applications, to derive satellite based information on Chla concentration, yellow substance, surface suspended sediment, etc. In spring 2019, the JRC deployed an AERONET-OC node in the Casablanca oil platform and set up a collaboration with the ICM (through 2 tenders) to perform node maintenance operations and carry in situ measurements. In May 2020 there will be a cruise onboard the R/V Garcia del Cid to characterize the bioptical water properties around the Ebro's Delta and its surrounding shelf area.

### Engaging Mediterranean key actors in Ecosystem Approach to manage Marine Protected Areas to face Climate change (MPA-Engage) - Joaquim Garrabou

#### Mediterranean coastal ecosystems in the Anthropocene: how marine heat waves are transforming marine benthic habitats? (HEATMED) - Cristina Linares, Joaquim Garrabou

The Mediterranean Sea is one of the worst-affected areas by climate change in the world since warming occurs at a rate 20% faster than the world's average. The projects MPA-Engage (Interreg MED) and HeatMed (Ministry Science, Innovation and Universities) aim to contribute to our understanding on the ongoing and future climate change impacts in coastal rocky habitats and develop solutions to adapt and mitigate the expected impacts. The research will be focus on the impacts of marine heatwaves using different approaches such as the analysis of unique ecological series, literature reviews and meta-analysis using innovative quantitative ecological tools as well as novel modelling approaches. Regarding the solutions, MPA-Engage is devoted to put Marine Protected Areas in the frontline for climate change adaptation. The project MPA-Engage will monitor in a harmonized way the climate change impacts including citizen science initiatives and will elaborate vulnerability assessments on ecological and socio-economic settings in order to develop climate change adaptation action plans in 7 Marine Protected Areas located in 6 Mediterranean countries. The main expected outcome is to ensure the delivery of well-targeted, effective and applicable measures on climate change adaptation in marine protected areas at Mediterranean level.