CLS, FOR MARINE PROTECTED AREAS

ECOSYSTEMS

Protecting habitats, understanding population dynamics, monitoring and predicting key phenomenon (Sargassums), are important to the management of MPA. CLS provides modelling and forecasting services to support ecosystem protection and manage interactions between fisheries and marine wildlife.

HUMAN ACTIVITIES

Finding a balance between conservation of marine ecosystems and human activities is a key challenge for MPA managers. From fisheries management to illegal fishing activities, maritime transportation, pollution (plastic debris, chemical, oil) and tourism, CLS provides a range of monitoring, control and surveillance solutions to ensure remote and cost-effective monitoring of key areas of interest.

MARINE BIODIVERSITY

CLS

Implementing a Marine Protected Area requires good knowledge about behavior, abundance, interactions, migration corridors and repartition of species within a specific zone. CLS helps advise, set up and support scientists during their Argos animal tracking project and can provide a range of services on biodiversity from habitat modeling to soundscaping and analysis for all phases of the MPA life cycle.

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MARINE ENVIRONMENT & CHANGES

Constant monitoring and reporting of the physical health of the ocean is crucial. From currents, temperature, sea level to biomass and micronekton content, CLS can provide a range of in-situ and satellitebased observations as well as expertise to contribute to reporting and studies of marine environment.

MULTI-SOURCE DATA Modeling Cision Making Tools

ATA SATELLITE TRACKING (ARGOS - AIS - IRRIDIUM) • ACOUSTIC SOUNDING • LIGHT BASED GEOLOCATION • SATELLITE EARTH OBSERVATION DATA (RADAR, OPTIC AND INFRA RED) • IN-SITU DATA

DECISION MAKING TOOLS 🕨 DATA VISUALISATION SOFTWARE • ANALYTICS • BIG DATA PROCESSING • PLATFORMS





30+ YEARS OF EXPERIENCE PROTECTING AND CONSERVING **MARINE BIODIVERSITY**

Implementing or managing a Marine Protected Area is a monumental task that requires an interdisciplinary, inter-agency and sometimes international approach, as well as reliable scientific data and observations. CLS, a subsidiary of CNES, ARDIAN & IFREMER is a worldwide company and pioneer provider of satellite-based data and monitoring solutions. Since 1986, our mission is to work with our clients to understand and protect our planet, and to manage its resources sustainably.

As exclusive operator of the Argos satellite system. CLS has worked hand-in-hand with scientists. governments and international organizations to protect and conserve marine ecosystems/biodiversity via wildlife tracking and monitoring projects. CLS has also worked actively with fishermen and fisheries administrations to develop and implement Vessel Monitoring Systems (VMS) & catch reporting solutions to monitor and control fisheries and manage them sustainably. In parallel, our team of 100+ in-house oceanographers works daily to characterize and understand the global oceans.

From the implementation phase, to daily management, monitoring, and long-term evaluation, CLS's interdisciplinary expertise can be mobilized in support of Marine Protected Areas.





KEY FACTS



+5% OF WORLD'S OCEANS RRE PROTECTED IN MPRS



ANIMALS TRACKED BY ARGOS EVERY MONTH







COLLECTE LOCALISATION SATELLITES





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argos-science@cls.fr 0033561394700



60+ COUNTRIES

RELY ON CLS SOLUTIONS FOR FISHERIES MANAGEMENT



THE PROTECTION OF OUR PLANET

150

PENGUINS TRACKED WITH ARGOS BY CCAMLR ON THE ANTARCTIC PENINSULA



MARINE RESERVE

CLS SERVICES FOR MARINE **PROTECTED AREAS**

