# AniBOS
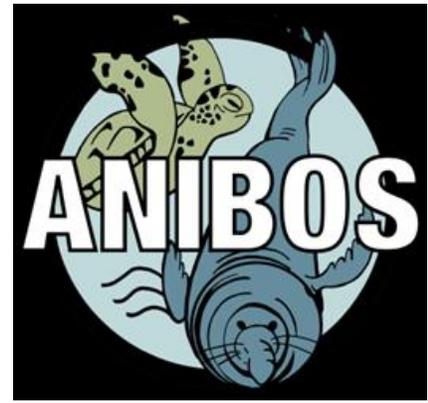## The GOOS ANIMAL BORNE OCEAN SENSOR NETWORK



## Collecting and Freely Exchanging Oceanographic Observations from the Globe's Most Inaccessible Seas
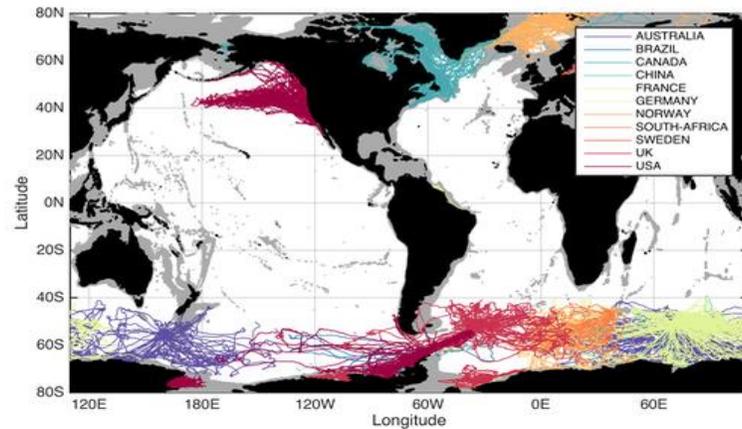


- Oceanographic sensors attached to animals collect data to help understand their behavior and spatial ecology and to assist in their conservation

- These observations are also critical for understanding global climate and ocean variability

- Tagged animals fill the gaps in global data coverage by traveling into ocean regions that are difficult for traditional sampling platforms to penetrate

# AniBOS is a global network of marine animals with oceanographic sensors that:
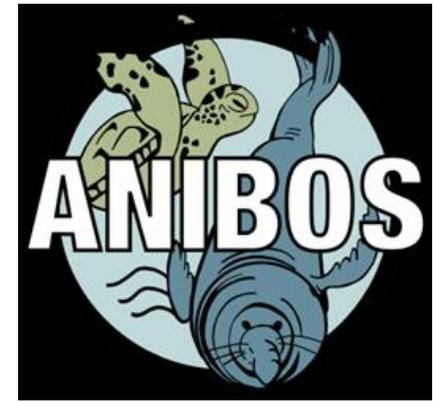
- **Is a cost-effective and complementary capability for GOOS to fill critical observation gaps**
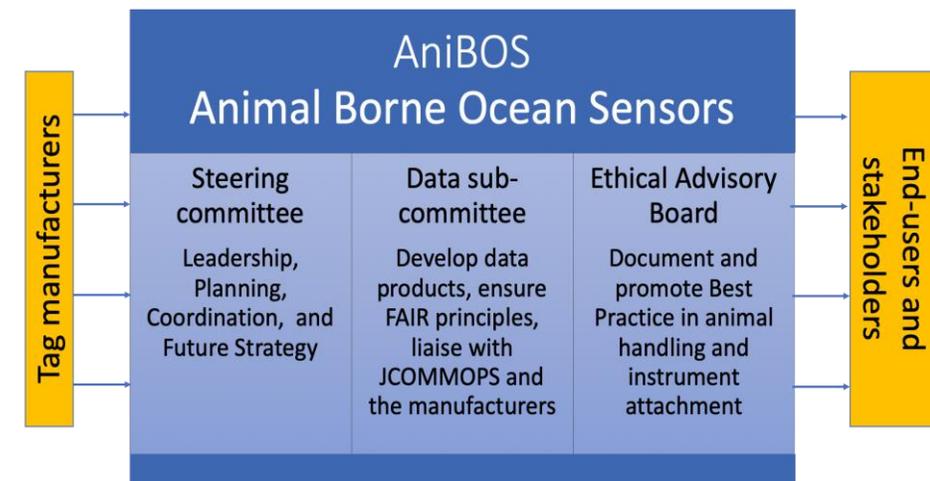


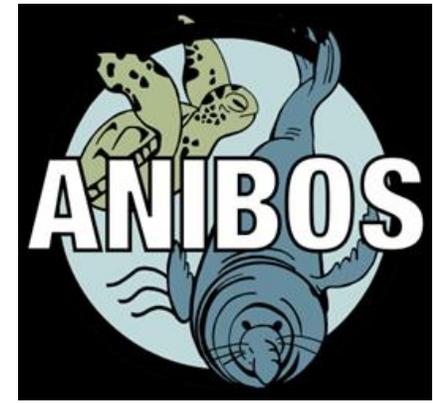MEOP-CTD public dataset : 486682 profiles, 155 deployments, 1130 tags

Legend: AUSTRALIA, BRAZIL, CANADA, CHINA, FRANCE, GERMANY, NORWAY, SOUTH-AFRICA, SWEDEN, UK, USA

http://www.meop.net/

- **Builds on 15 years of community experience in collecting, managing and delivering > 500,000 animal-borne ocean profiles**

- **Will coordinate and expand existing capabilities and implement streamlined data management processes to freely exchange the data in real-time via the WMO-GTS and in delayed mode**



**AniBOS Animal Borne Ocean Sensors**

Tag manufacturers

| Steering committee | Data sub-committee | Ethical Advisory Board |
|---|---|---|
| Leadership, Planning, Coordination, and Future Strategy | Develop data products, ensure FAIR principles, liaise with JCOMMOPS and the manufacturers | Document and promote Best Practice in animal handling and instrument attachment |

End-users and stakeholders

# Filling the Global Data Coverge Gaps

- A recent review [1] assessed the gaps in oceanographic monitoring at a global scale…… and determined that Animal-borne sensors can contribute in marginal seas, upwelling areas, the upper 10 m of the water column, shelf regions and polewards of 60° latitude. **March et al., 2019**

- See[2] for an implementation plan for AniBOS over the next decade
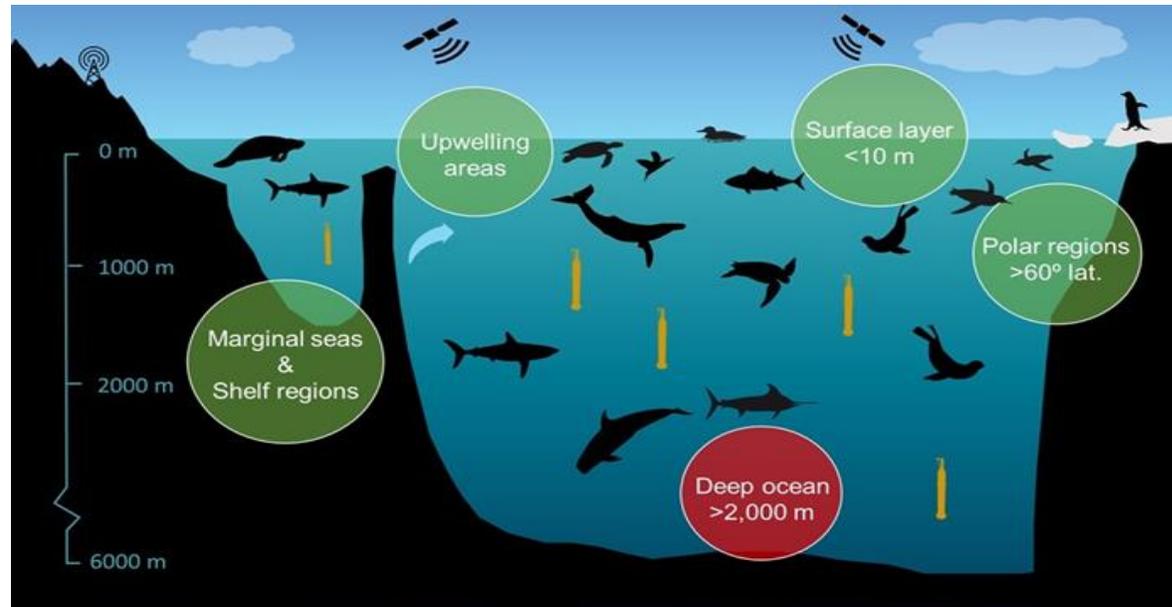
[1]*March, D., L. Boehme, J. Tintore, P. J. Velez-Belchi, and B. J. Godley. 2019. Towards the integration of animal-borne instruments into global ocean observing systems.* Global Change Biology.

[2]*Harcourt, R. et al, 2019. Animal-Borne Telemetry: an integral component of the ocean observing toolkit. Frontiers in Marine Science* **6**:*Article 326.*