NOAA Support to UN Sustainable Development Goals

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Our View of the Planet Has Changed

70 Years Ago: March 1947

The first images ever returned from space were taken by an American V2 rocket fired from New Mexico. Visible in the image are 1—Mexico, 2—The Gulf of California, and 3—Baja California. New Mexico. Some number tags were inserted artistically in Photoshop.

Taken by the Applied Science Laboratory of The Johns Hopkins University for the U.S. Navy.
49 years ago: Earth from Apollo 8
Today: Earth from GOES-16
Our Changing Planet
Environmental understanding
UN Sustainable Development Goals

[Image of the Sustainable Development Goals icons and logos]
Why the SDGs are Important
Environmental Process Understanding
GEO: Connecting data to decisions

SNAPSHOT  VERIFY  ANALYZE  PACKAGE  SOCIETY
Conserve and sustainably use the oceans, seas and marine resources for sustainable development
Marine Biodiversity Observation Network
MBON Components

Environmental Conditions
pH, T, Sal, O₂, CO₂, etc

Data Analysis And Modeling

Biodiversity
Species & Abundance

Information Systems
Data archiving, standardization

PRODUCTS
Biodiversity Indicators, Indices and relationships

Stakeholders, Communication & Management

Ecosystem Function
Trophic Structure, etc
MBON Seascapes

- Inter-disciplinary approach based on landscape ecology
- Merges ecology, geography, and ocean dynamics to observe species embedded in a dynamic seascape, where boundaries, extent, and location of features change with time

Kavanaugh et al (2016) Seascapes as a new vernacular for pelagic ocean monitoring, management and conservation. ICES
Snapshots: Temperature, Anomalies, Deviations

Global Sea Surface Currents and Temperature
Credit: NASA/GSFC Scientific Visualization Studio

NOAA Coral Reef Watch 2015

Credit: NASA/GSFC Scientific Visualization Studio
Verify, Analyze, Package, Society
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GEO Blue Planet Initiative

Why are oceans relevant to you?

- Ocean resources
- Marine transportation
- Disaster warning and mitigation
- Water quality
- Sustainable coastal urban development
- Oceans and human health
- Marine biodiversity and ecosystems
- Seafood sustainability
- Climate
GEO Blue Planet Initiative

THE OCEAN CONFERENCE

OUR OCEANS, OUR FUTURE: PARTNERING FOR THE IMPLEMENTATION OF SUSTAINABLE DEVELOPMENT GOAL 14
5 - 9 JUNE, 2017, NEW YORK

- NOAA-CSIRO develop inundation forecast in the Pacific to provide the people living on Pacific Islands with warnings of impending inundation events.
- Lead times of between hours and possibly as long as a week.
- PISIFIC supports SDG 13 and 11
“A Blue Web”