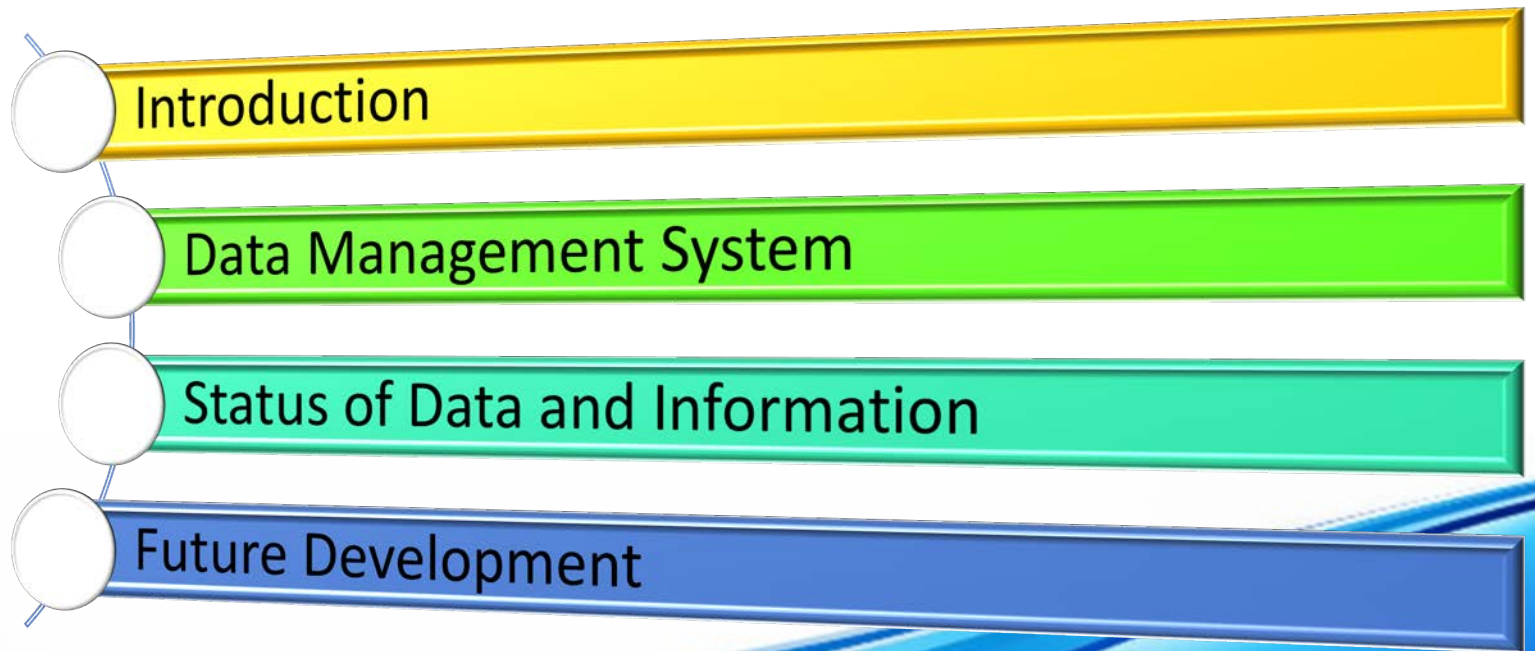


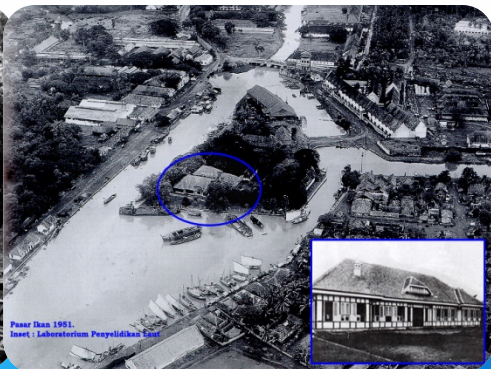
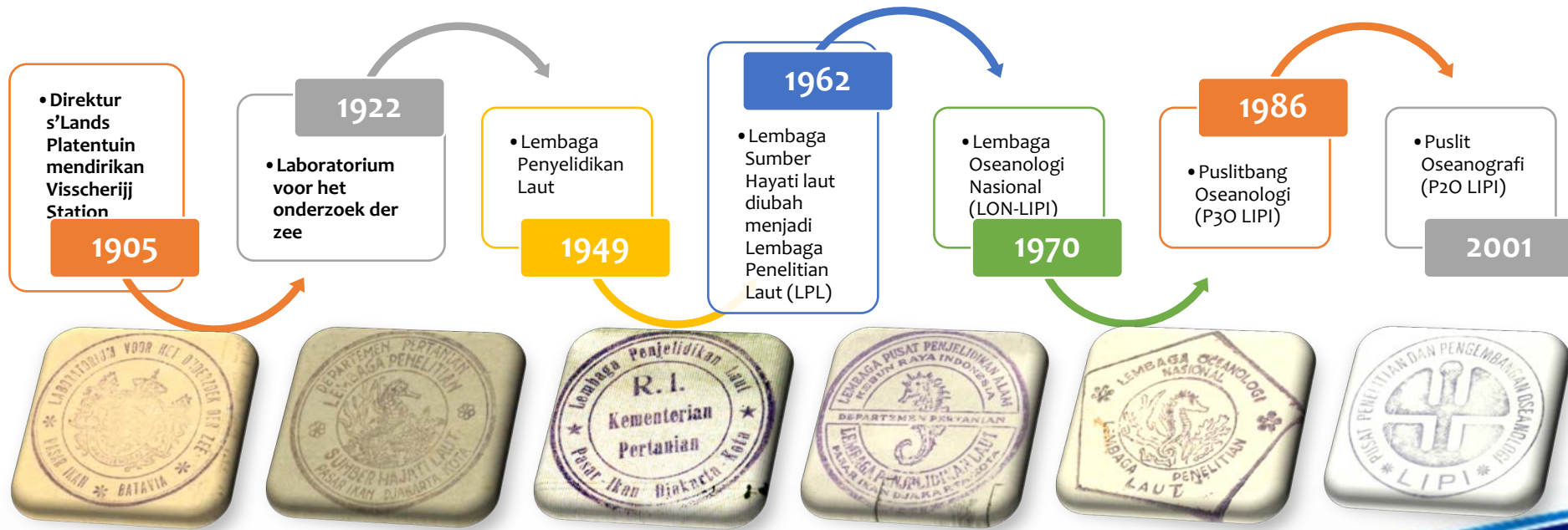
# Status of Data Management

Research Center for Oceanography – Indonesian  
Institute of Sciences





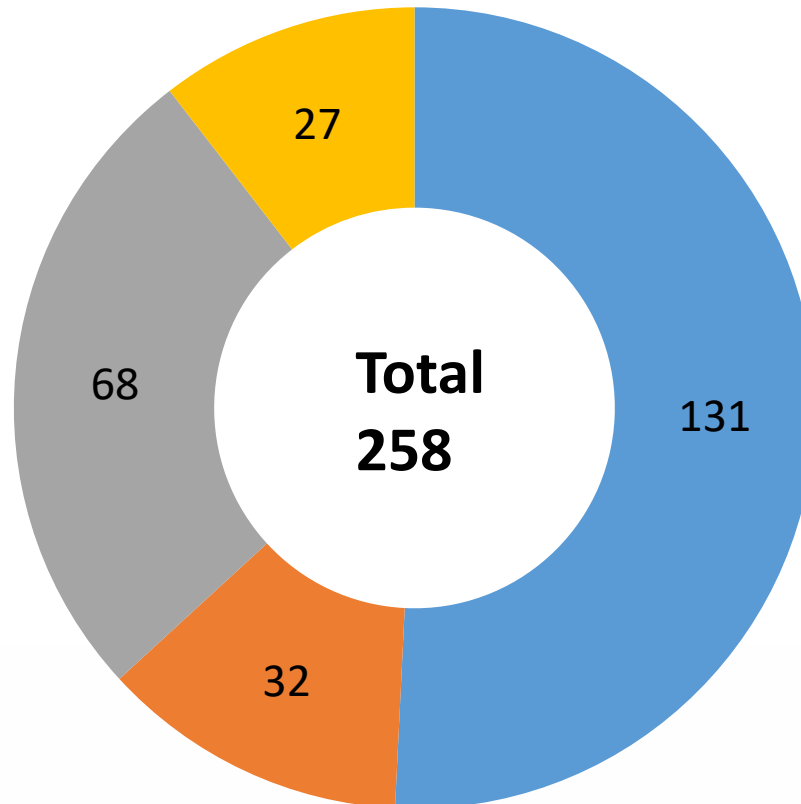
# History



# TIU (Technical Implementing Unit) & Field Station



# Our Resources



## 12 Laboratories

- researchers
- research assistants
- administrative staff
- research vessel crews

### RV. BARUNA JAYA VIII

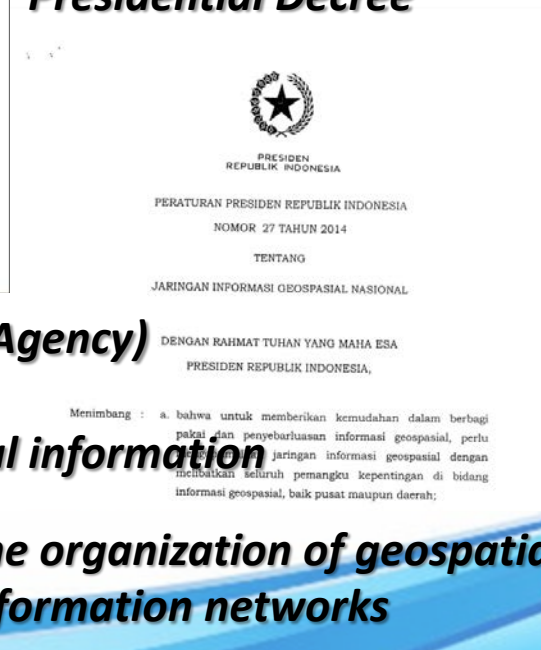


GWT: 1250 T  
LOA: 50.0 m

## Regulation on Geospatial Information



## Presidential Decree



**BIG (Geospatial Information Agency) is mandated to coordinate the organization of geospatial information**

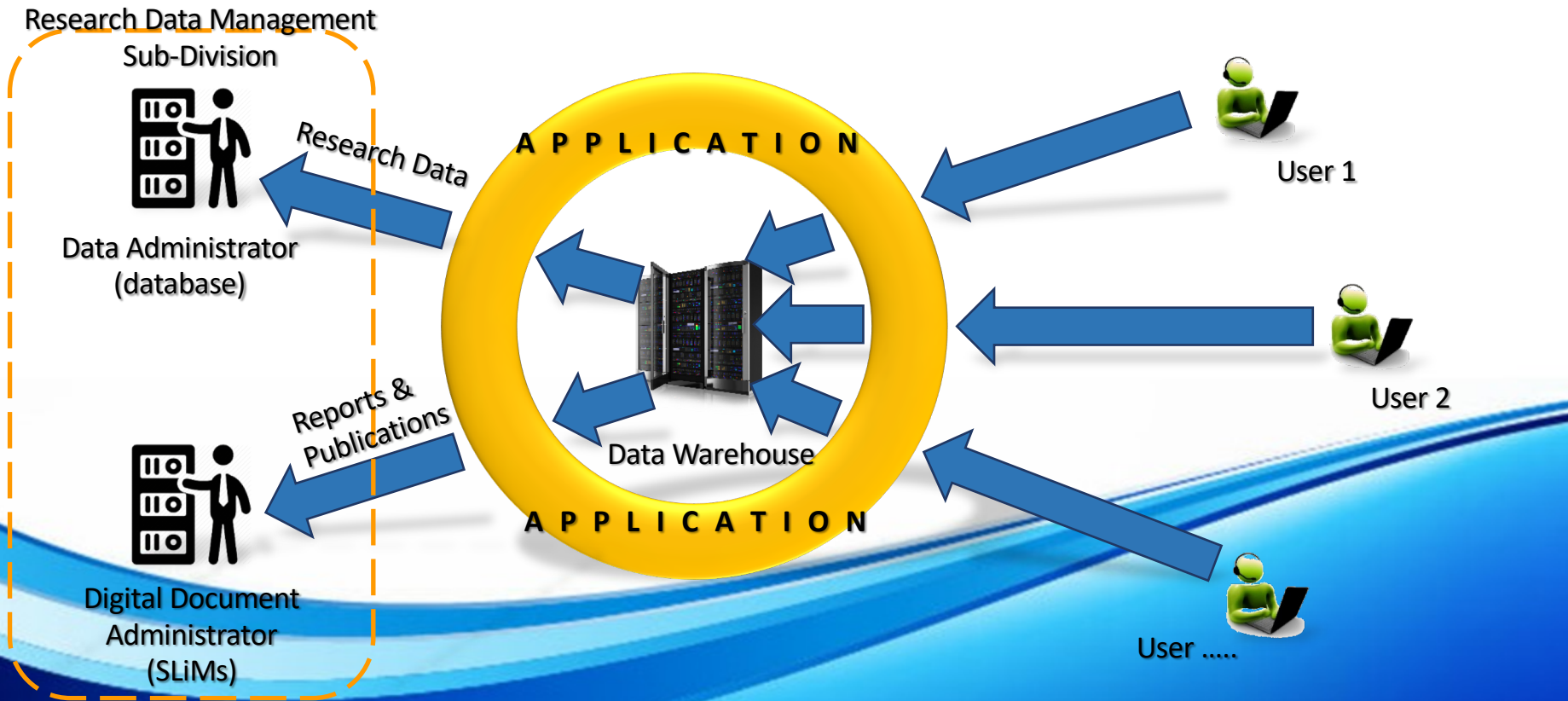
**The organization of geospatial information networks**

## Decree of Geospatial Information Agency



**RCO - LIPI appointed as data custodian for coral reef and seagrass**

# Data Management System



# Data Sharing Policy

- Open Data → information, published data, general data (list of species of reference collection), and re-scale data
- Limited Data → unpublished data, after certain period (5 years) can be accessed by other researchers in the institution (RCO). Data can be released to external parties/stakeholders through licensing and cooperation agreement.
- Confidential Data → Data or Information that is excluded under the Act of Public Information Disclosure No. 14 of 2008.



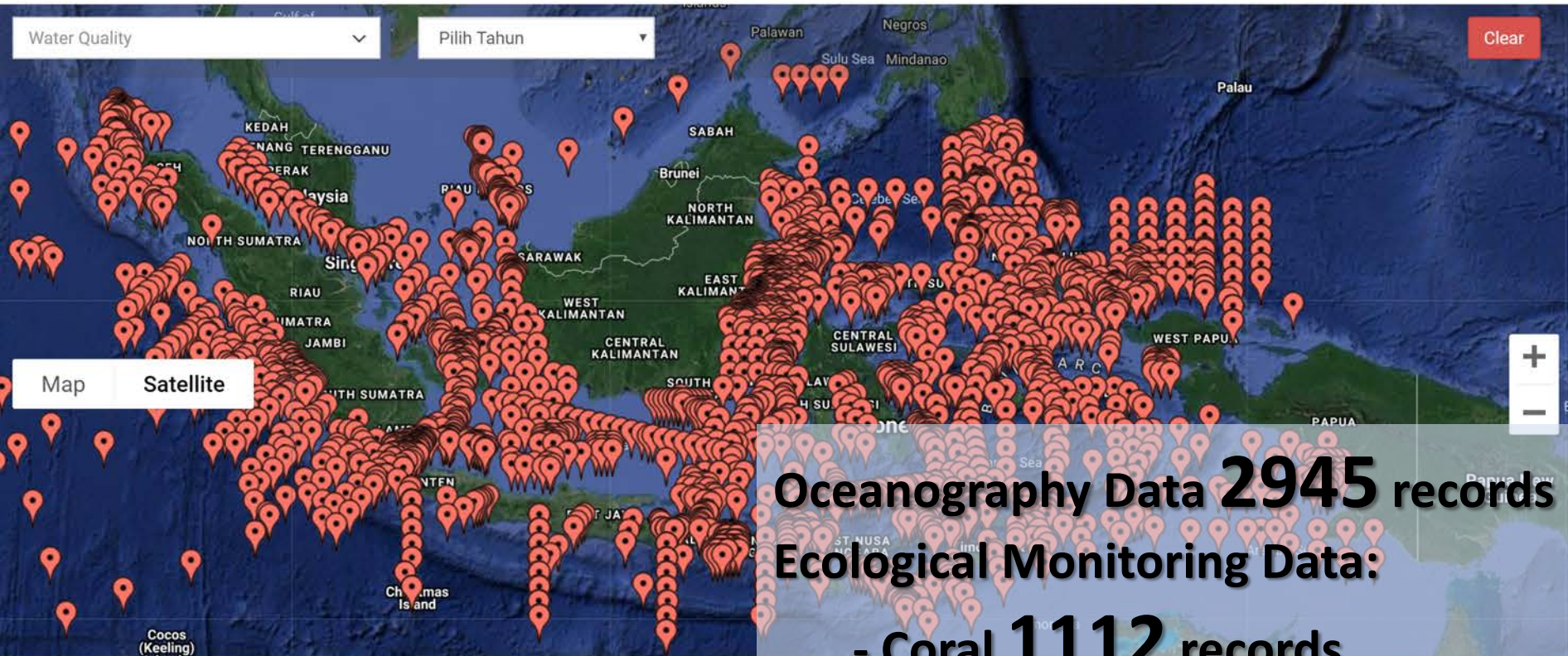
# Recent Data

Type of Data	Data Source	Location	Description
Ecological Data (Coral reef, Seagrass, and Mangrove)	Field survey (monitoring program)	30 locations spread throughout Indonesia under national program on coral reef management (COREMAP-CTI)	Data available from 2004 until 2018
Reef Distribution/Map	Satellite imagery	Throughout Indonesia	One-map policy (Data Integration on 2014)
Seagrass Distribution	Satellite imagery	Throughout Indonesia	Data Integration on 2018
Habitat map of shallow water (coral, seagrass, and mangrove)	Satellite imagery and field survey	30 locations spread throughout Indonesia under national program on coral reef management (COREMAP-CTI)	Conducted in 2014 and 2015 Will be updated in 2019

# Recent Data

Type of Data	Data Source	Location	Description
<p>Physics data: Temperature, salinity, density, turbidity, conductivity, current, depth</p> <p>Chemical data: pH, ammonia, nitrite, nitrate, phosphate, silicate, TSS, DO</p> <p>Biological data: Chlorophyll</p>	Oceanographic Cruise Report	Indonesian Waters	1970 - now
	Field survey/in-situ measurement	Makassar Strait	Ekspedisi Widya Nusantara (EWIN) in 2013
		Sulawesi Sea	Ekspedisi Widya Nusantara (EWIN) in 2014
		Enggano	Ekspedisi Widya Nusantara (EWIN) in 2015
		Sumba	Ekspedisi Widya Nusantara (EWIN) in 2016
		The west coast of Sumatera	Ekspedisi Widya Nusantara (EWIN) in 2017
		North Sulawesi (Tahuna – Miangas)	Ekspedisi Widya Nusantara (EWIN) in 2018
		Pacific Outer Islands of Indonesia	Ekspedisi Nusamenggala in 2018

# NATIONAL DATA CENTER FOR COASTAL ECOSYSTEM



# Reference Collection Data

## Kingdom : Animalia

Phylum	Class	Ordo	Family	Genus	Number of Specimen (individual)
Echinodermata	5	17	54	127	2088
Mollusca	3	29	162	444	5709
Cnidaria	2	13	61	141	2375
Arthropoda	1	3	80	230	100010
Porifera	2	19	49	66	427
Pisces	3	16	108	289	3908

**116,176  
SPECIMEN**

## Kingdom : Plantae

Group	Class	Ordo	Family	Genus	Number of Specimen
Algae	3		32	49	448
Seagrass	1	3	2	8	452
Mangrove	4	21	46	66	759

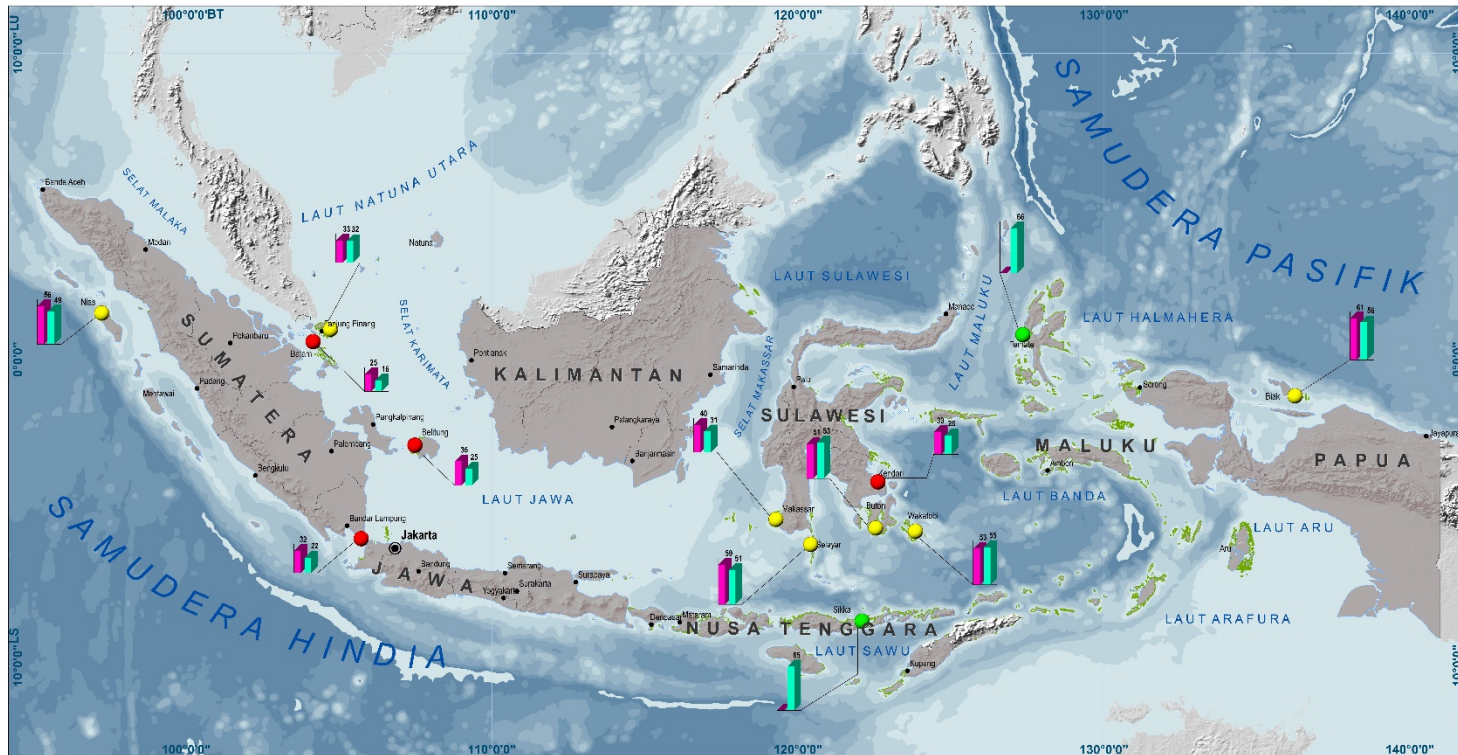
# Indonesia joins the OBIS network



<http://www.iobis.org/2018/10/02/indonesia/>

# Information on National Status of Seagrass

## STATUS PADANG LAMUN INDONESIA 2018



**Legenda :**

**Status Padang lamun :**  
 ● Miskin  
 ● Kurang Sehat  
 ● Sehat

**Keterangan :**  
 ● Ibu kota Negara  
 ● Ibu kota Provinsi  
 — Batas Negara  
 — Batas Provinsi  
 — Lamun

**Persebaran Tutupan Lamun**  
 ■ 2016 ■ 2017

Untuk mengetahui status padang lamun di Indonesia digunakan sumber data yang berasal dari Reef Health Monitoring Coremap CTI P2O LIPI

Data yang dikumpulkan adalah data 2017. Kondisi lamun dikategorikan melalui Keputusan Menteri Negara Lingkungan Hidup nomor 200 (2004), yaitu sehat (>63%), kurang sehat (30-55,9%) dan miskin (0-29,9%).

Secara umum persentase tutupan lamun di Indonesia yang dihitung dari 110 stasiun adalah 42,23%, sehingga dikategorikan kondisi lamun kurang sehat. Proporsi kondisi padang lamun di Indonesia 2018 yaitu kategori sehat (15,38%), kurang sehat (53,85%) dan miskin (30,77%).



Datum ..... DGN-95/WGS-84  
 Sistem Proyeksi ..... Transverse Mercator  
 Sistem Koordinat ..... Geografis

Dikeluarkan oleh

LIPI

Bekerjasama dengan

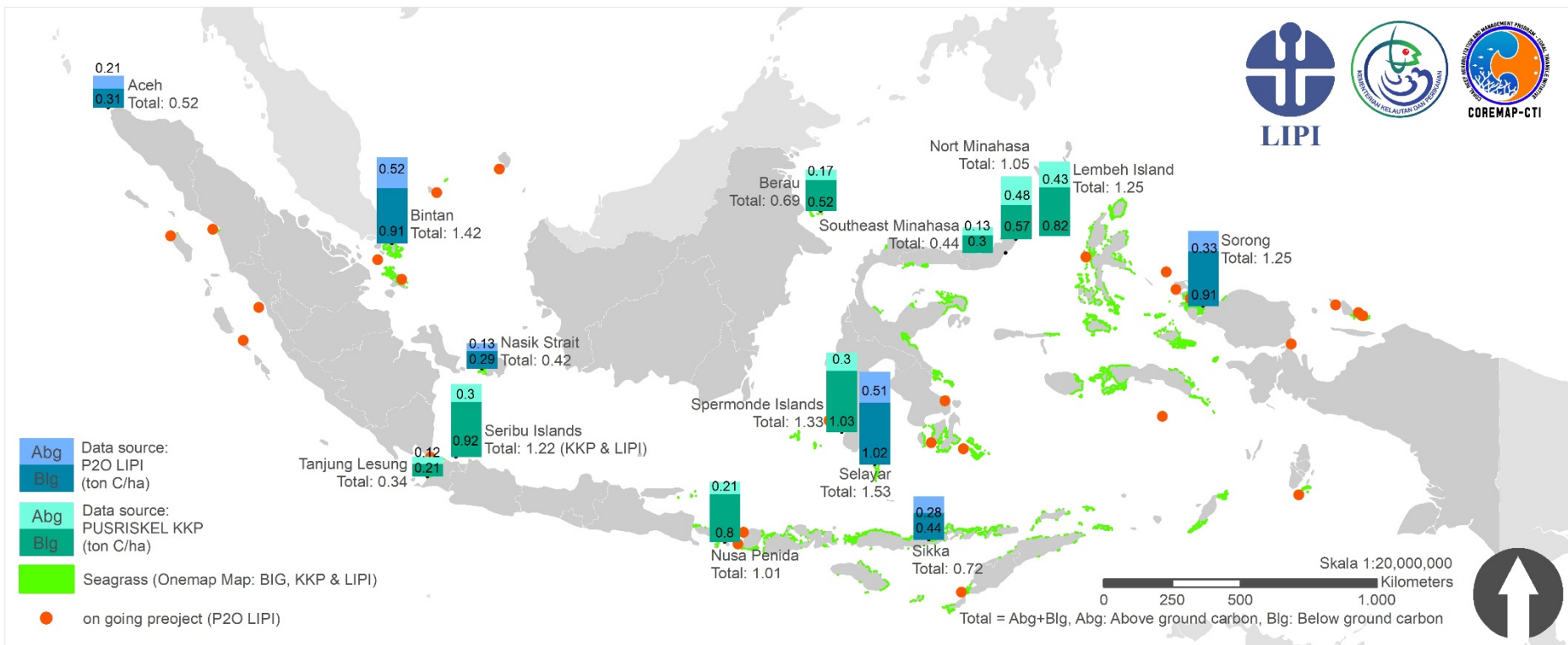
CEMAREP-CTI

LIPI

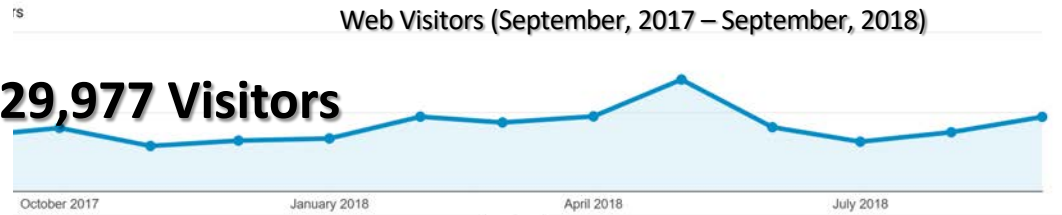
Pusat Penelitian Oseanografi  
 Lembaga Ilmu Pengetahuan Indonesia

The Nature Conservancy

# Information on Blue Carbon (Seagrass)



# Information System for Coastal Ecosystem



[www.oseanografi.lipi.go.id](http://www.oseanografi.lipi.go.id)

- National Status of Coral Reef and Seagrass
- Coral Reef and related ecosystem monitoring data
- Physical oceanography data



*GIS explicit data*  
[gis.oseanografi.lipi.go.id](http://gis.oseanografi.lipi.go.id)

[pusdata.oseanografi.lipi.go.id](http://pusdata.oseanografi.lipi.go.id)





# Welcome To National Data Center For Coastal Ecosystem

Research Center for Oceanography LIPI entrust to conduct research and monitor coastal ecosystem throughout Indonesia. Various data have been produced and managed in the database from the above activities. The integrated database actualized into The National Data Center for Coastal Ecosystem.

The National Data Center for Coastal Ecosystem used for 1) reference for coastal ecosystem management; 2) baseline data for planning and development of coastal ecosystem; and 3) improvement of oceanography data in Indonesia.

Pusat Penelitian Oseanografi - LIPI Jl. Pasir Putih I, Ancol Timur, Jakarta 14430 Telp. 021 - 64713850 Fax. 021 - 64711948  
E-mail : [humas.oseanografi@mail.lipi.go.id](mailto:humas.oseanografi@mail.lipi.go.id)



## CRMIS

Coastal Ecosystem  
Monitoring Data

[Go to Application](#)



## GIS

Coastal Ecosystem WebGIS

[Go to Application](#)



## Repository

Repository Scientific  
Publications Oceanographic  
Research - LIPI

[Go To Application](#)



## Data Request

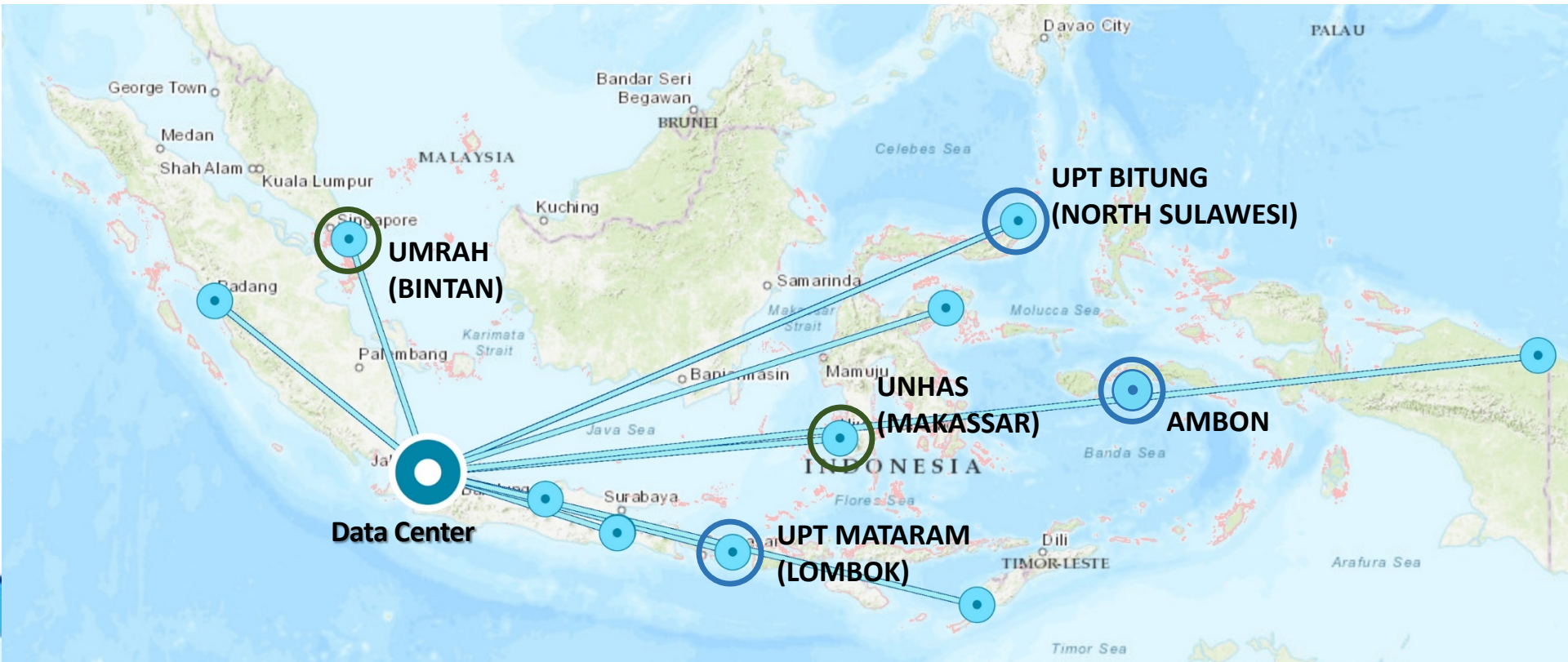
You can request data here

[Request](#)

# Future Development

- Be a part of Regional/International data network → country node for marine data
- Developing data protocol (policy and standardization of data) → improve data interoperability
- Broaden the data network in the national level → collaborate with other institutions
- Develop and strengthen the real-time monitoring data → improve the resources (system infrastructure and technical capabilities of human resource)

# Data Network



*Three sub-nodes will be established in 2018 (UPT BITUNG, UPT MATARAM, AMBON)*

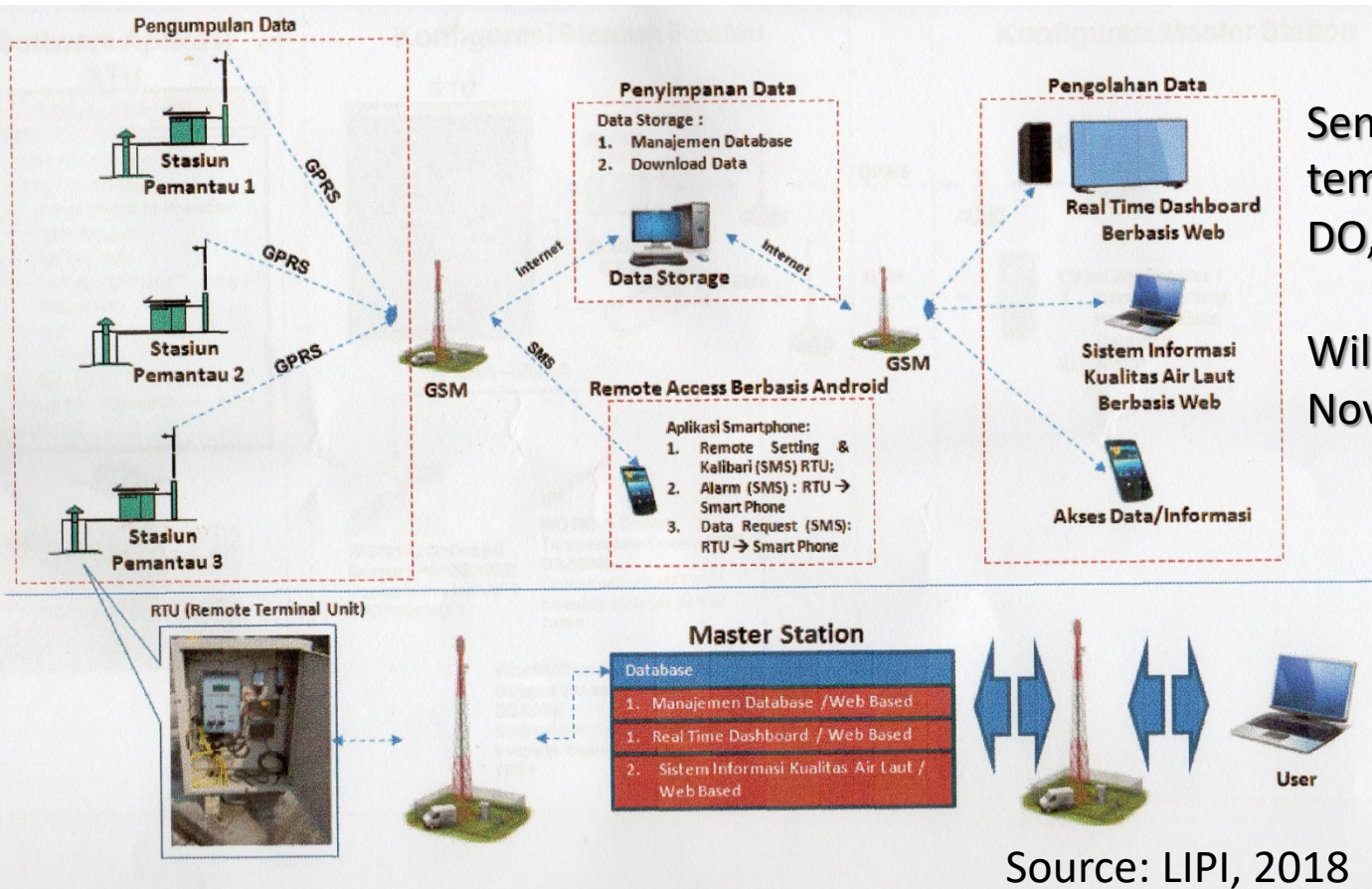
# REAL-TIME COASTAL MONITORING SYSTEM



*The infrastructure will be established in four location (BITUNG, LOMBOK, SERIBU ISL., AMBON)*

**Aims to monitor coral bleaching and ocean acidification**

# Real-time coastal waters monitoring system

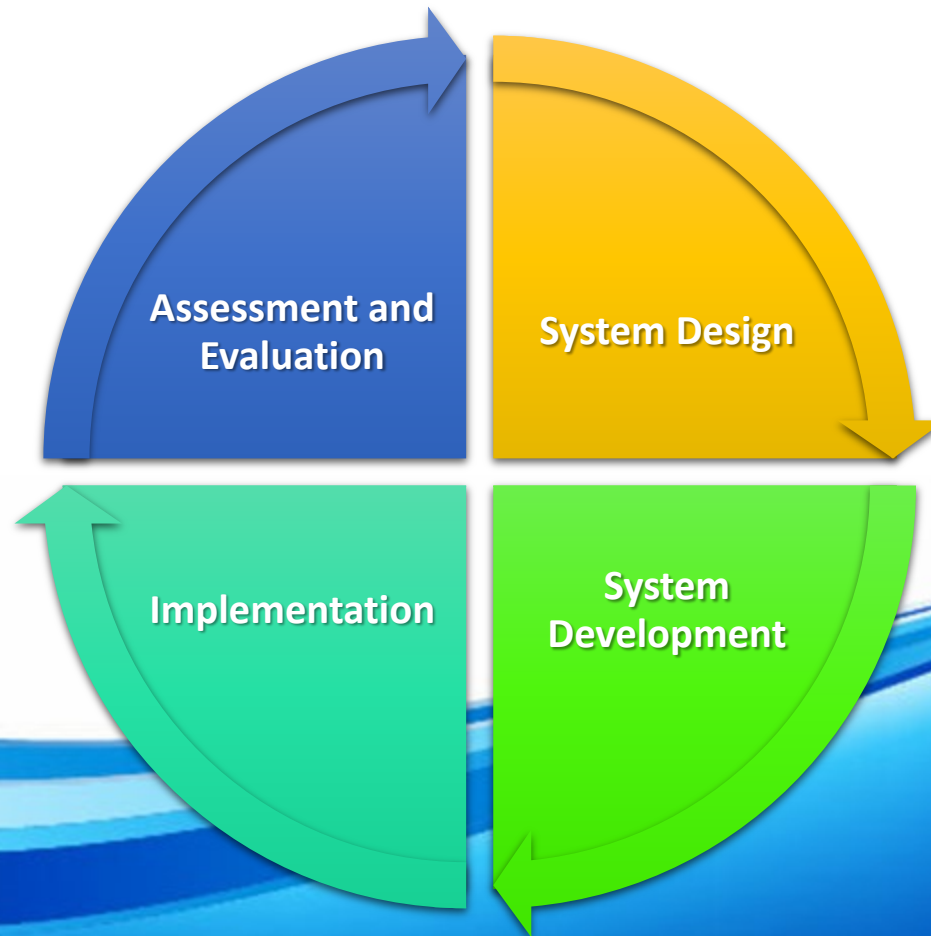


Sensor consist of temperature, salinity, pH, DO, water level

Will be established on November 2018

Source: LIPI, 2018

# Cycle of System Development



THANK YOU  
TERIMA KASIH