



BADAN INFORMASI
GEOSPASIAL

Geodetic Reference Frames of Indonesia: Opportunities and Challenges

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Head

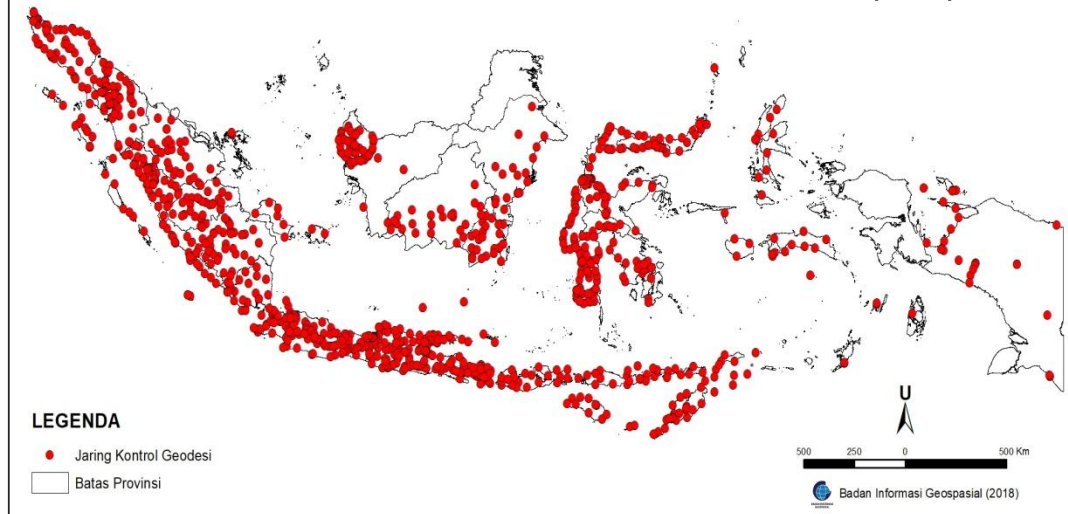
Geospatial Information Agency of Indonesia (BIG)

**8th Plenary Meeting of UN-GGIM-AP
Canberra, 3-5 November 2019**

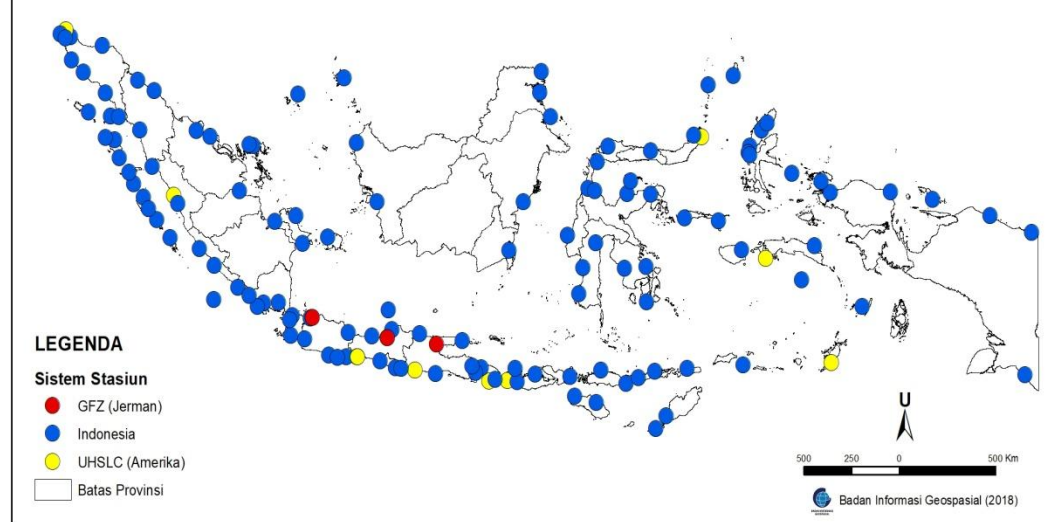


Geospatial Reference Frames of Indonesia

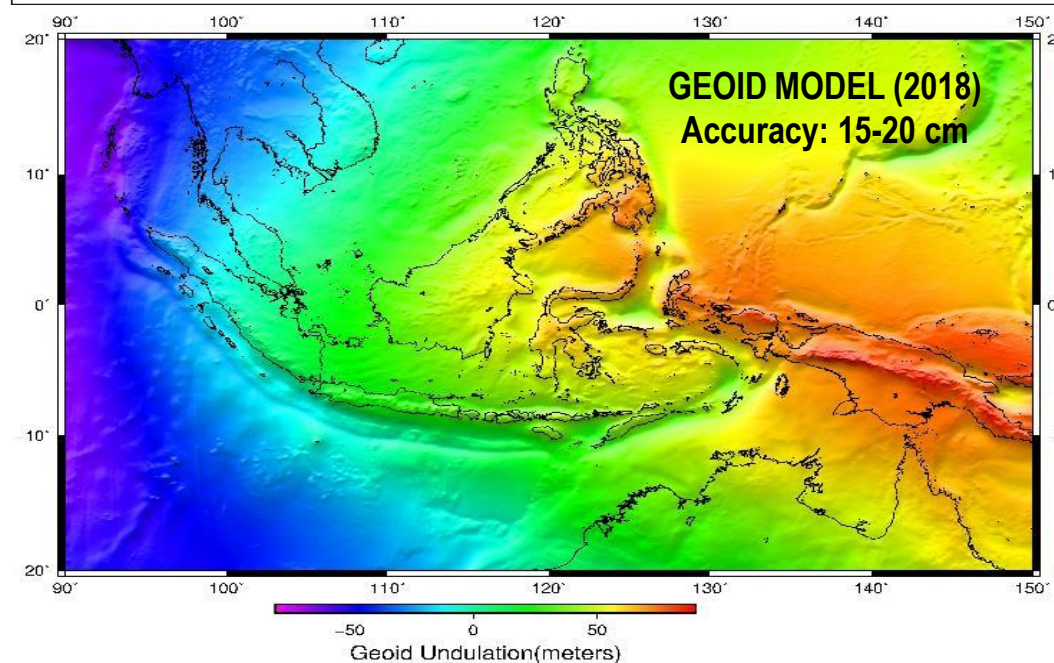
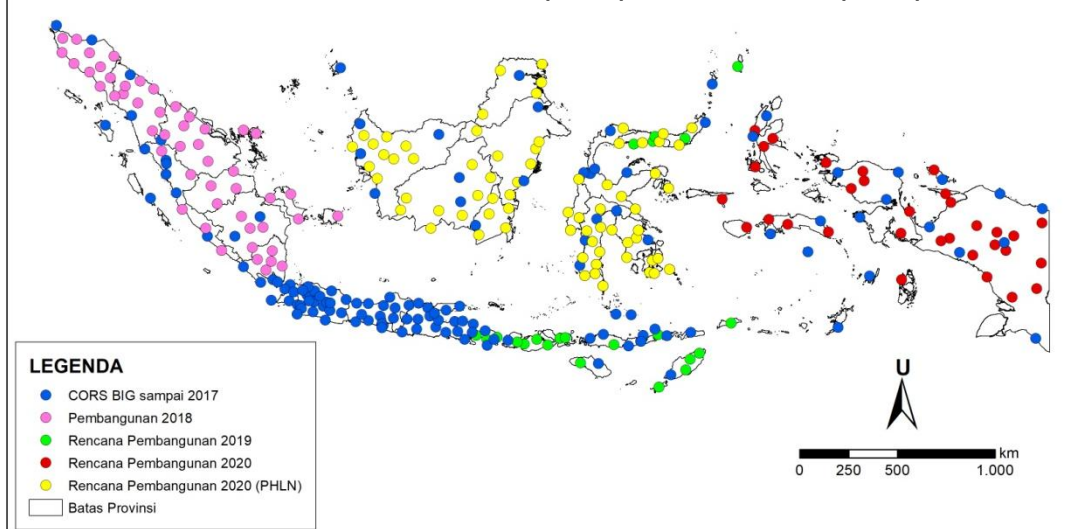
GEODETIC CONTROL NETWORK: 7153 Stations (2018)



TIDE GAUGES STATIONS: 139 Stations (2018) + 20 Stations (2019)



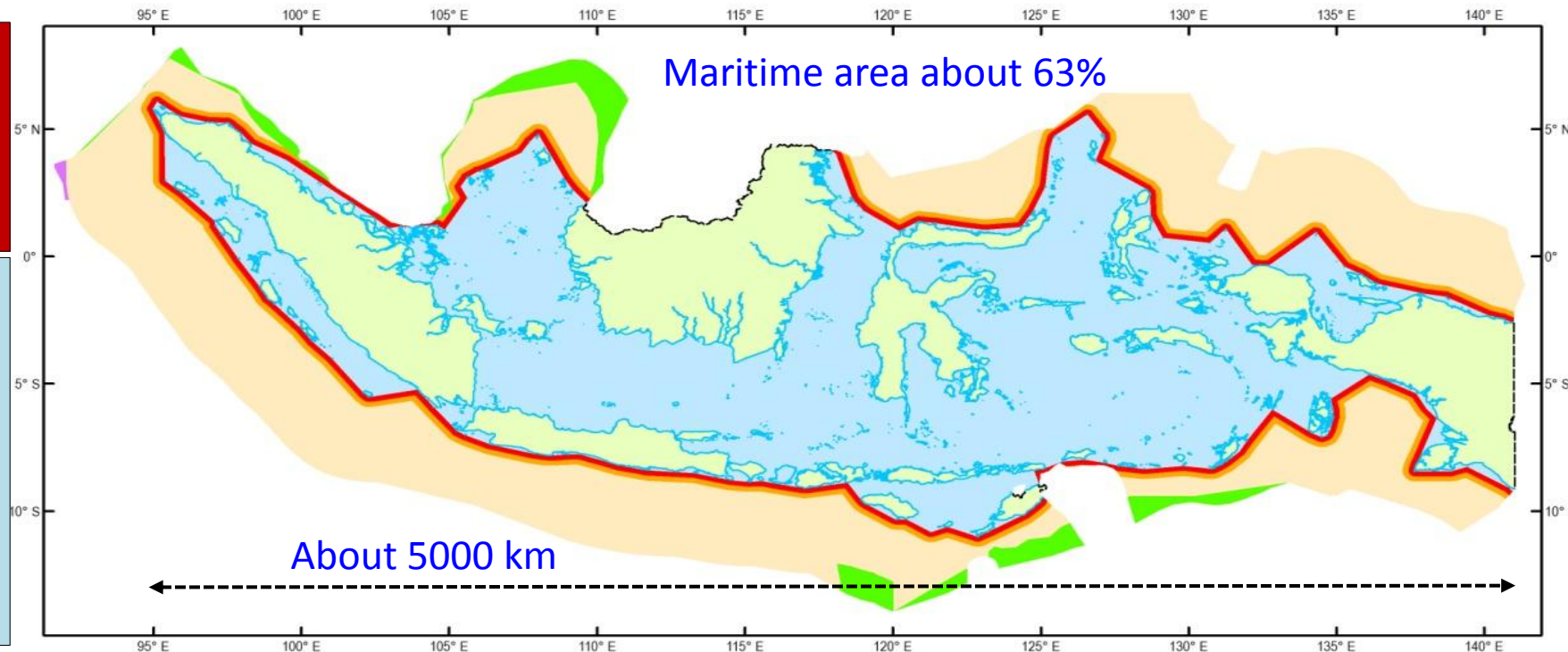
GPS CORS: 187 Stations (2018) + 50 Stations (2018)



Maritime Continent of Indonesia

INDONESIA
has vast territory and
abundant land and
marine resources

Geospatial Information
is compulsory for
supporting sustainable
development of
Indonesia and
managing its natural
resources



LAND AREA	1.900.000 Km ²
MARITIME AREA : Sovereignty Territory	
• Internal and archipelagic waters	3.110.000 Km ²
• Territorial Sea	290.000 Km ²
MARITIME AREA : Sovereign Right Zone	
• Contiguous Zone	270.000 Km ²
• Economic Exclusive Zone	3.000.000 Km ²
• Continental Shelf	2.800.000 Km ²
MARITIME AREA OF INDONESIA	6.400.000 Km²
TOTAL AREA OF INDONEA (LAND & WATER)	8.300.000 Km²

Coastline length	108.000 Km
Number of Islands	17.504 islands, 16.671 islands has been verified and submitted to UN (2018)

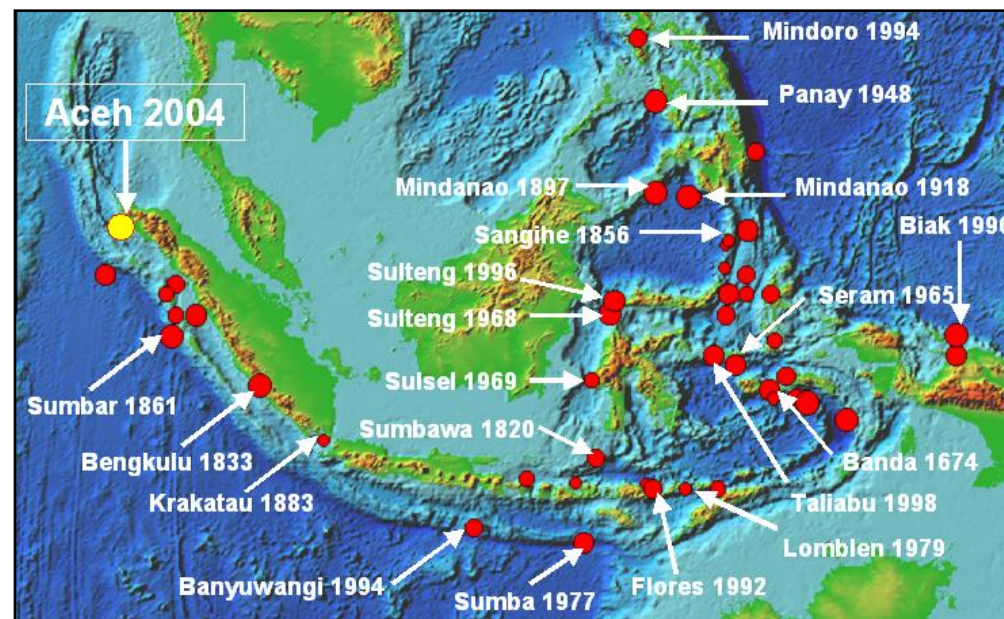
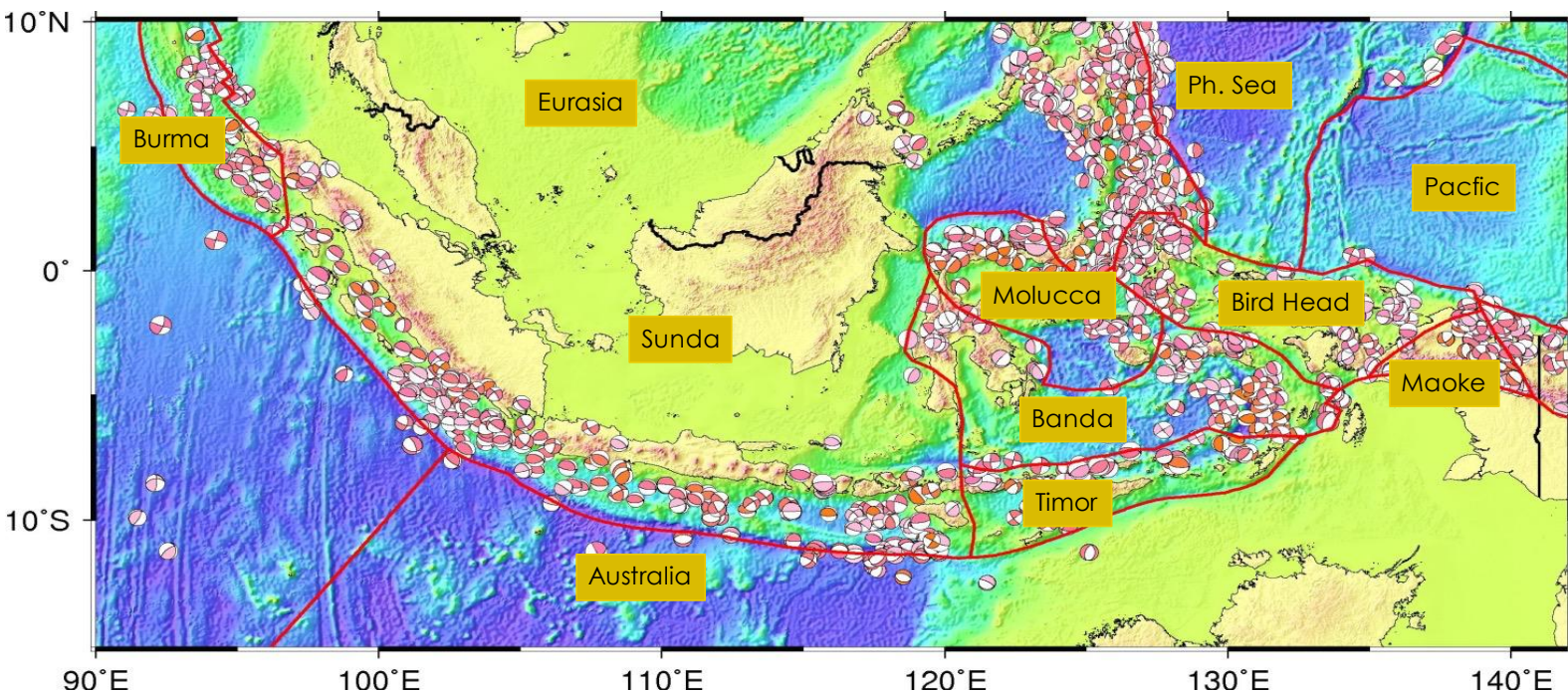
GRF of Indonesia should cover the whole region of Indonesia, for supporting various positioning, surveying, and mapping activities at various scales.

INDONESIA

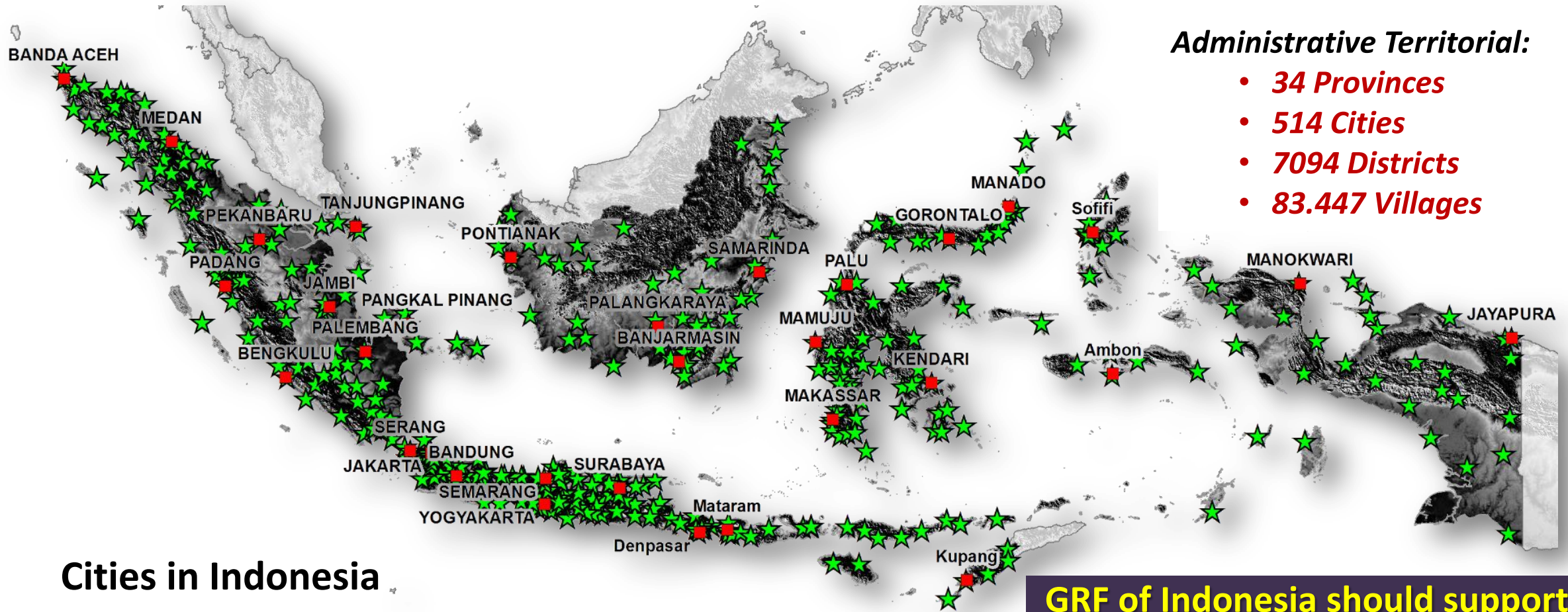
Home of Natural Hazards

Geospatial Information
(including GRF)
should support Disaster
Risk Reduction
Management activities

- *Earthquakes*
- *Tsunami*
- *Volcano Eruption*
- *Flooding*
- *Landslide*
- *Land subsidence*
- *Drought*
- *Flooding*
- *Forest fire*
- *Windstorm*



Geospatial-Enabling Smart Cities Program in Indonesia



Administrative Territorial:

- 34 Provinces
- 514 Cities
- 7094 Districts
- 83.447 Villages

Cities in Indonesia

- ★ Cities
- Provincial Capital

Geospatial Information
is necessary for realization of
Smart Cities program and activities

GRF of Indonesia should support
various positioning, surveying,
and mapping activities **for**
enablement of smart cities
in all region of Indonesia