# THE INDONESIAN ARCHIPELAGIC BASELINES: TECHNICAL AND LEGAL ISSUES AND THE CHANGING OF ENVIRONTMENT

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**BAKOSURTANAL, INDONESIA** 

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### **OUTLINE**

- I. The development of legislation
  - a. Dutch Law (Royal Territorial Sea Ordinance of 1939)
  - b. Law Number 4/Prp. 1960 Indonesian Terittorial Waters
  - c. Law Number 17/1985 Ratification LOS Convention 82
    - Law Number 6/1996 Indonesian Terittorial Waters
    - Gov. Reg. Number 61/1998 on Basepoint in the Natuna Sea
  - d. Gov. Reg. Number 38/2002 on the Geographical List of Coord. of the Indonesian Archipelagic Baselines.
  - e. Gov. Reg. Number 37/2008 revision GR Number 38/2002
- II. Several Changes Configuration of Indonesian Archipelagic Baselines during period 1960-2008
- III. Alteration of basepoints influenced by natural phenomenon
- IV. Concluding Remark

## a. Dutch Law (Royal Territorial Sea Ordinance of 1939)



#### b. Law Number 4/1960 - Indonesian Terittorial Waters



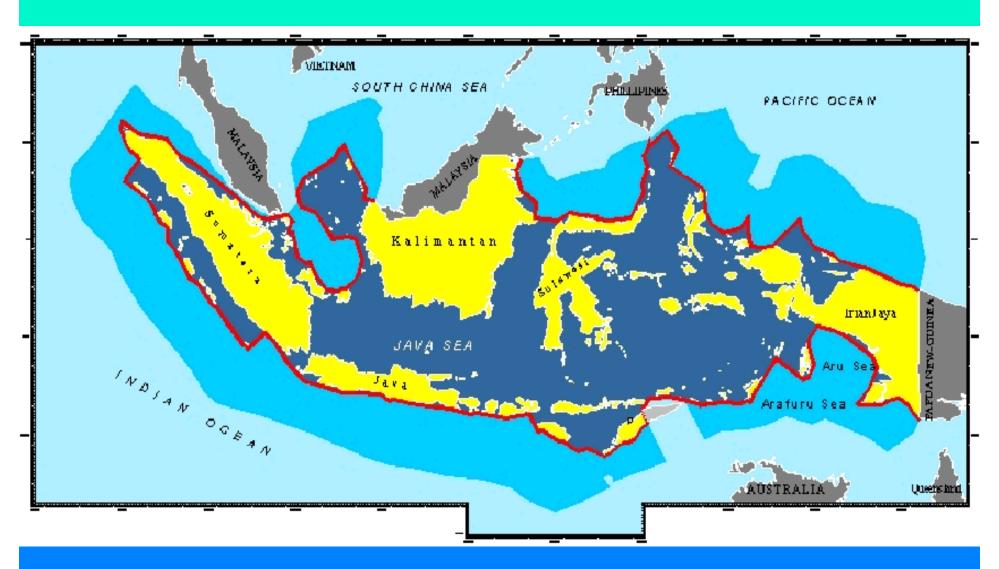
#### 13 DECEMBER 1957 - 17 FEBRUARY 1969

- •Djuanda Declaration 1957
- •Law Number 4/Prp.1960

# Indonesian Archipelagic Baselines on the Law Number 4/1960:

- straight baselines shall be drawn connecting the outermost points of the outermost islands;
- the breath of the Indonesian territorial sea was extended from 3 to 12 nautical miles;
- 201 basepoints the geodetic datum was not specified and comprised 198 individual line segments.
- The drawing of these archipelagic baselines resulted in substantial changes to the Indonesian territorial. The entire maritime area between the Indonesian Archipelago was under the sovereignty of Indonesia.
- This provision gave Indonesia an area of approximately 5,200,000 km2, land and sea, plus its territorial waters by about 282,394 km2.

#### **Law Number 1/1973 – Indonesian Continental Shelf**



- Tap MPR VI / 1978 Integration Timor Timur with Indonesia
- Law Number 17/1985 Ratification LOS Convention 82
- Law Number 6/1996 Indonesian Terittorial Waters
- Gov. Reg. Number 61/1998 on Basepoint in the Natuna Sea



# d. Indonesian Archipelagic Baseline based on the GR Number 38/2002

#### special conditions ruled in Article 47 UNCLOS 1982:

- All of main lands of the archipelagic state must be a system of archipelagic baselines;
- The ratio of water area and land area in the system of archipelagic baselines is between 1 to 1 and 9 to 1;
- The lenght of the archipelagic baselines shall not exceed 100 nautical miles, except that up to 3 percent of the total number of baselines enclosing any archipelago may exceed that lenght, up to a maximum lenght of 125 nautical miles;
- The drawing of the erchipelagic baselines shall not depart to any appreciable extent from the general configuration of the archipelago.

### GR Number 38 /2002

A revised set of territorial basepoints in accordance with Indonesia's obligations to the provisions of Article 47 of the 1982 Convention.

A list of geographical coordinates of 183 points in outer small islands based on the World Geodetic System (WGS) 1984 datum, and identify name each features upon the basepoints are located.

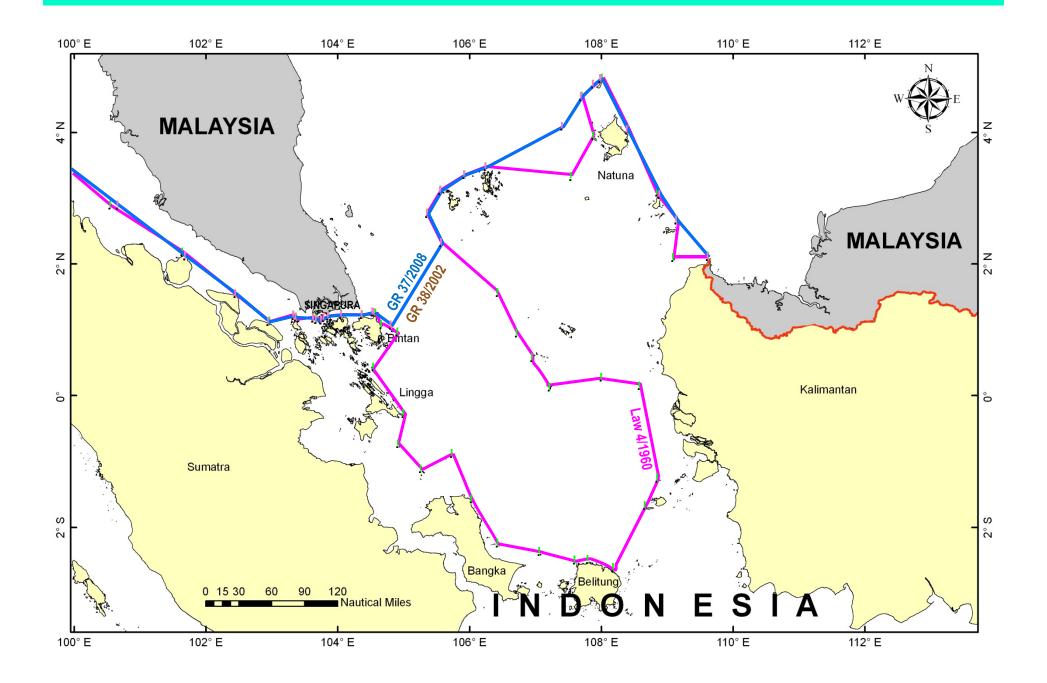
There are 179 archipelagic baselines segment that connect the outer most points of the islands to encompass aprroximately 3.067.504,14 km2 archipelagic waters.

A series of larger scale maps are used for a detail view of specific coast lines. The points plotted on maps compiled at a scale of 1:200.000

There are 64 charts officially published by the Indonesian Government..

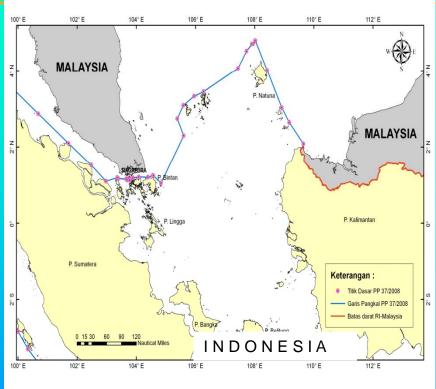
# II. Several Changes Configuration of Indonesian Archipelagic Baselines during period 1960 – 2008

- a. Kantong Natuna Baselines
- b. Baselineas Configuration in the North West Part of Sulawesi Sea
- c. Amendment Baseline Surrounding Timor Island
- d. The Configuration of Basepoints at southern part of central Java

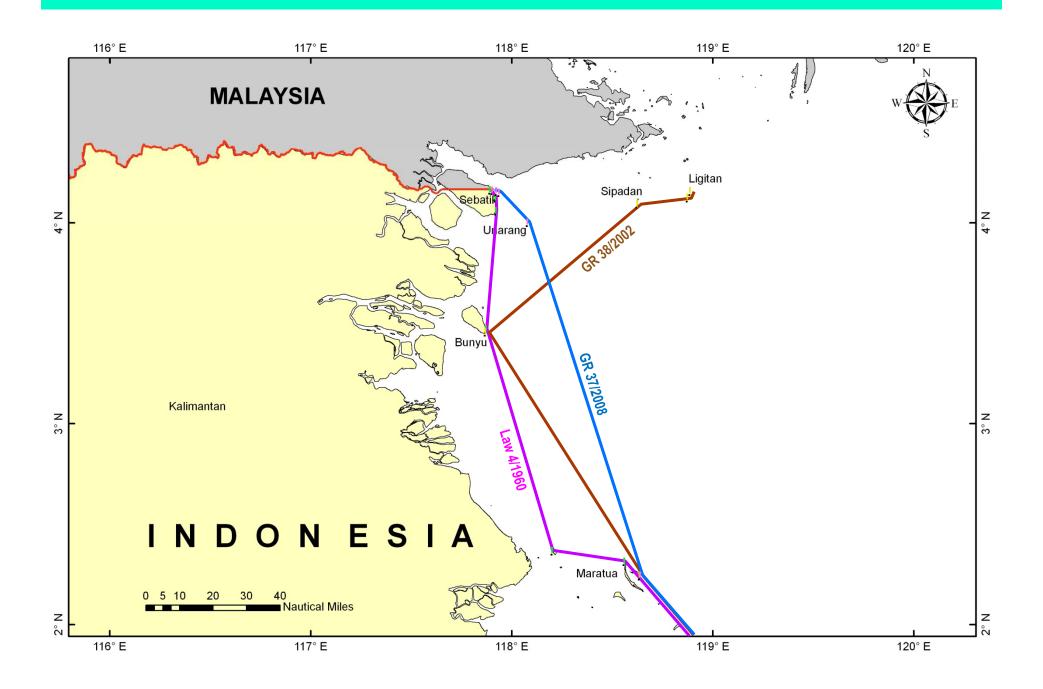


#### a. Enclosing Kantong Natuna - (GR Number 61/1998)



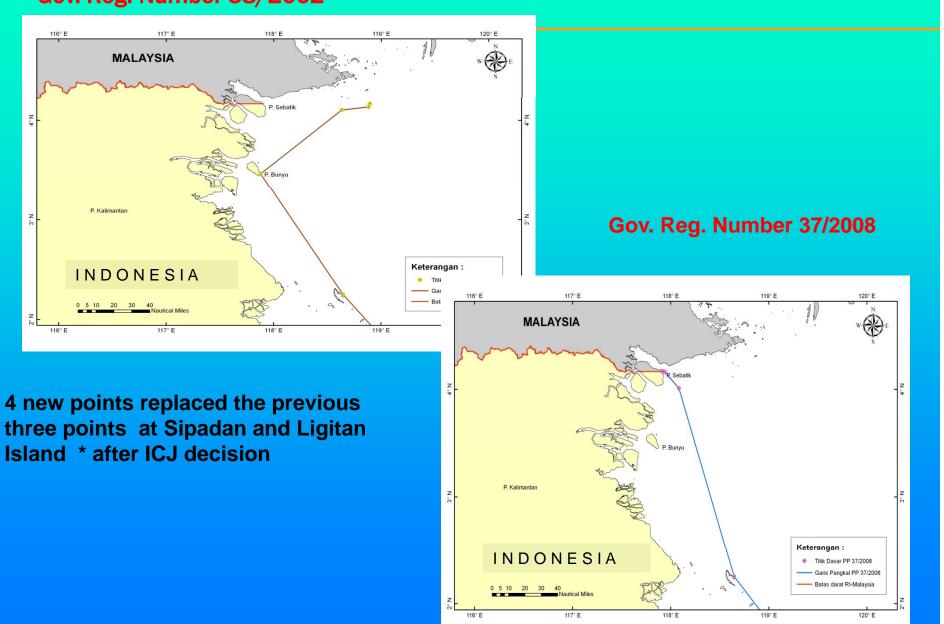


- connecting base point at TD 01A Pulau Sentut to (TD 22) Pulau Malangbiru with distances 87,73 Nm and eliminated 22 basepoints



#### b. Baselineas Configuration in the North West Part of Sulawesi Sea

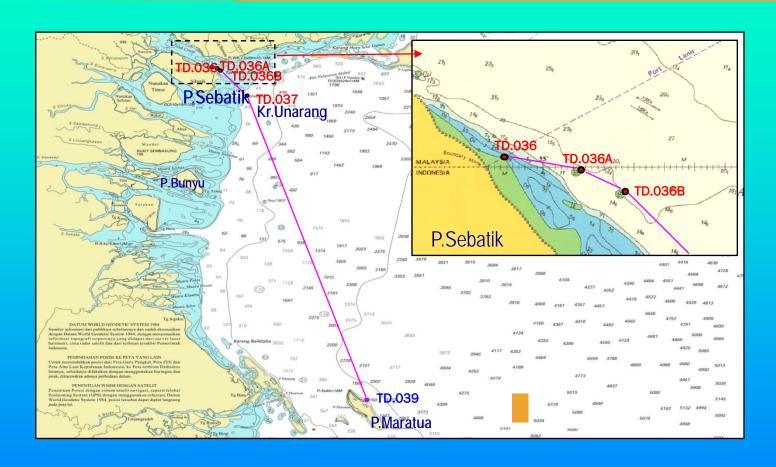
**Gov. Reg. Number 38/2002** 



#### The configuration of baselines around Sebatik Island and Sulawesi Sea



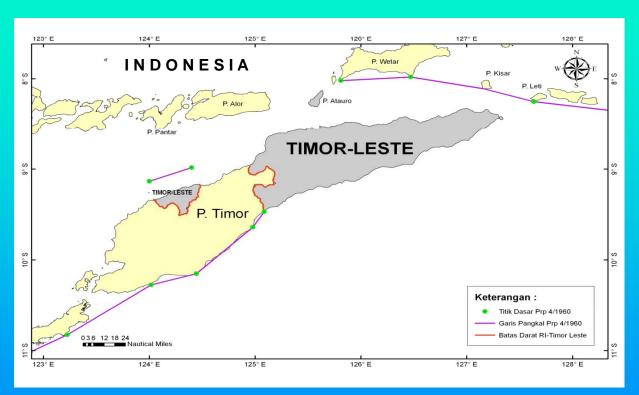
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These new points are LTE / article 13 of the UNCLOS 1982 LTE is situated wholly or partly at a distance not exceeding the breadth of the territorial sea from the mainland or an island, can be used as the basepoints.

#### **C.** Amendment Baseline Surrounding Timor Island -

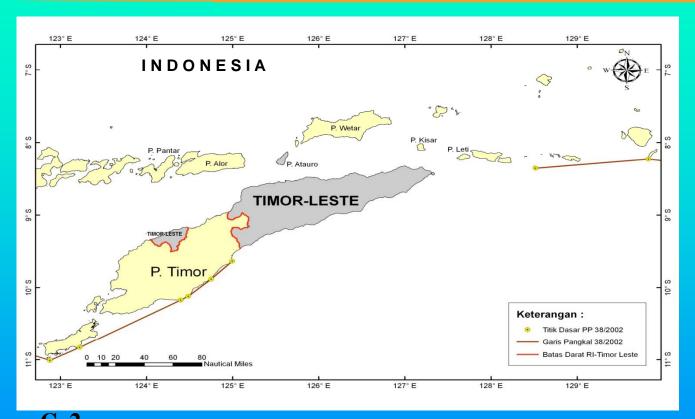
#### Law Number 4/Prp. 1960



#### C 1.

In 1960 - the eastern half of Timor island and the enclave of Oecusi were under jurisdiction of Portugese, there were 9 basepoints surrounding East Timor,

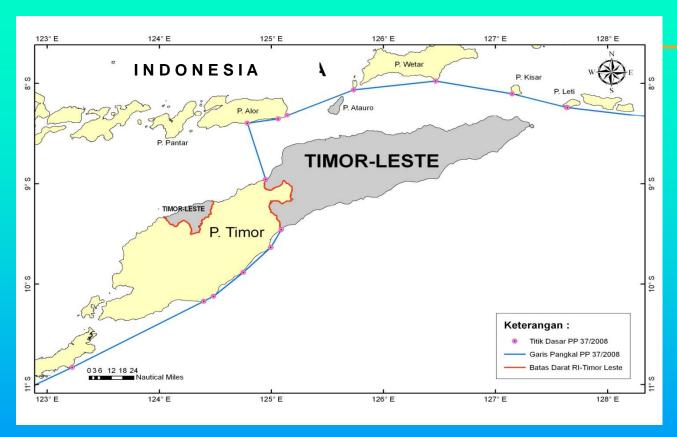
## **Gov. Reg. Number 38/2002**



Indonesian government political decision in 1978 to integrate Timor-Leste as a part of Indonesian territory.

• There are 5 basepoints surrounding East Timor, one in Meatimiarang Island (TD109) and four basepoints (TD 115 to TD 118) which located on southpart of Timor Island

#### **Gov. Reg. Number 37/2008**

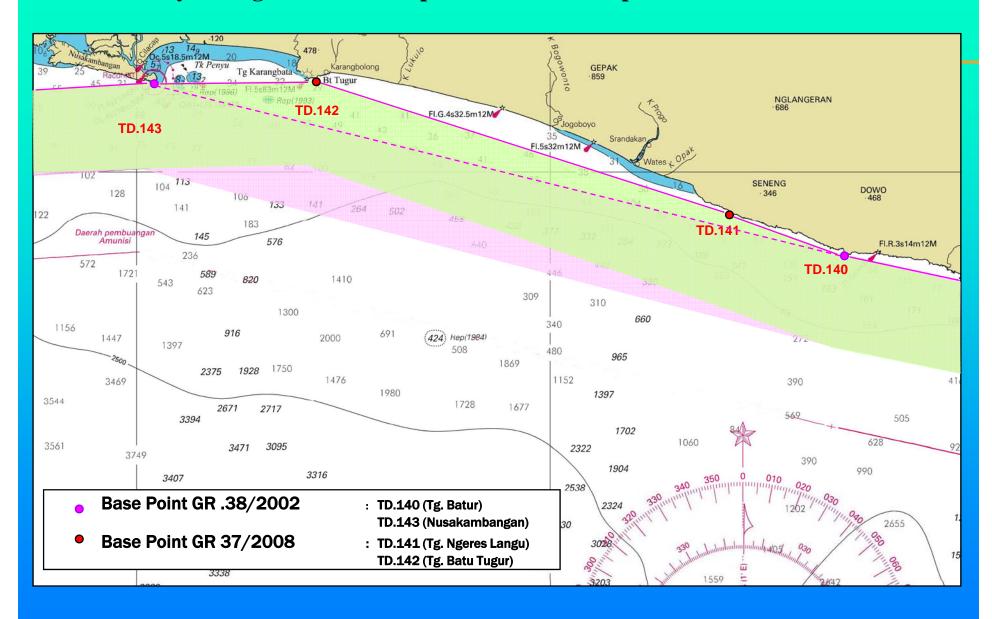


#### C. 3. - Due to the independence of Timor-Leste

- There are 10 new basepoints
- 2 BP at Leti Island; 3 BP at Kisar, Wetar, and Lirang Island; 3 BP at Alor Island and 2 BP in Timor Island/ Mota Biku and Mota Talas



#### The Overlay Configuration of Basepoints at Southern part of central Java



### INDONESIAN MAP: archipelagic baseline GR 38 / 2002 and 37/2008





A list of geographical coordinates of 195 points based on the World Geodetic System (WGS) 1984 datum,

# III. Alteration of basepoints influenced by natural phenomenon





- 1. 92 outermost islands, ± 9 slands facing the open sea, while the rest should share border with ten Indonesia's neighboring states
- 2. Alteration of basepoints influenced by natural phenomenon / i.e eartquake, abrasion and tsunami disaster.
- 3. Tsunami disaster in Aceh 2004 caused environmental and infrastructure damage in the west coast Sumatra

- Some outermost small islands, located in the west of Sumatra island, are possible to be struck by an eartquake and tsunami disaster.
- Eartquake occurs frequently here since the area is above the subdaction zone between Indo-Australia and Eurasia-Pacific Tectonic Plates. For instance, the island of Enggano, Simeulucut, Salaut Besar, Raya island and Rusa island.
- Some of those islands situated in a very remote area, with very low accesbility. But awereness remains to be put in priority considering that their location is very remote and facing to the high seas, so that abrasion can also occur anytime.

#### GEOSPATIAL DATA IN MONITORING ENVIRONTMENT OF BASELINE

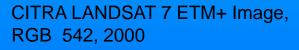
Through Presidential Decree (PD) Number 78/2005, the government of Indonesia gives a greater attention to all its outermost (small) islands

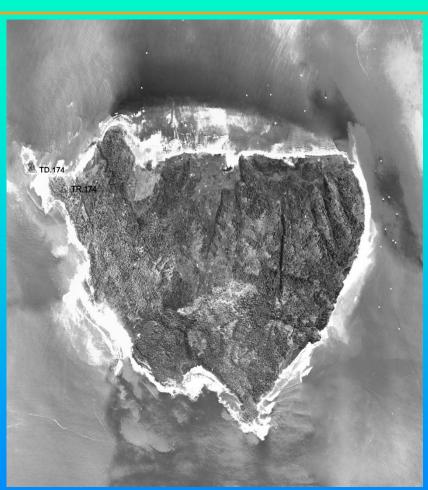
- **BAKOSURTANAL** has conducted several activities related to the outer small islands, such as providing aerial photograph and mapping those outermost small islands.
- Such management of small islands can be realized by maintaining the integrated baselines and basepoints and renewing continuously, showing them on the sufficient chart.
- evaluated and compared GEOSPASTIAL data before and after tsunami using kinematic photograph taken in 2008 with the data obtained from Landsat 7 ETM + satelit image year 2002, it was found that there was no significant difference.

- ➤ Tsunami that hit Nanggroe Aceh Darusalam on 26th December 2004 caused environmental and infrastructure damage in the west coast including surrounding small island, with no exception for Simeulucut island, Rusa island and Raya island that were located in the Indian ocean and share maritime zone border with India.
- \* The land that was eroded by the tsunami still appears in some parts of the coastal area of those islands.

#### P. RAYA







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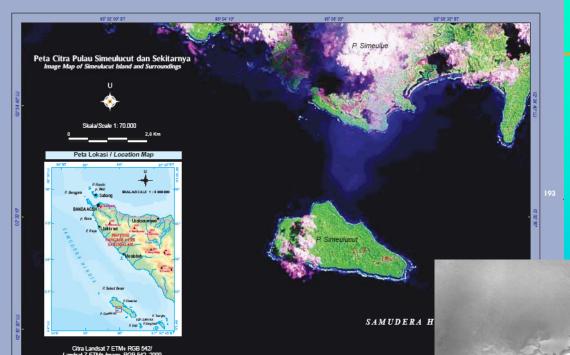
#### P. SALAUT BESAR



CITRA LANDSAT 7 ETM+ Image, RGB 542, 2000



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## P. SIMEULUCUT

CITRA LANDSAT 7 ETM+ Image, RGB 542, 2000

12,6 × 9,1 in <



# IV. Concluding Remark

- The provision of Art 47 of UNCLOS 1982 used by the Indonesian government as the legal basis to redraw its archipelagic baselines.
- Due to political decision / the ICJ's decision and politic issues in Timor-Leste forced the government of Indonesia to revise its archipelagic Baseline around the Timor island
- Alteration of baselines and basepoints in Indonesia caused by both technical and juridical factors, but it also can be influenced by natural phenomenon / i.e. eartquake and tsunami disaster.
- The availability of accurate geospatial, to update topographic and hidrographic maps, including the identification of more accurate features, possible to be for the construction of basepoints,