Philippine Geodetic Reference System Infrastructure, Plans and Challenges

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Engr. Charisma Victoria D. Cayapan National Mapping and Resource Information Authority (NAMRIA) Technical Seminar on Reference Frames in Practice Christchurch, New Zealand 1-2 May 2016

110°E

120°F

Philippine Geodetic Reference System

Existing Infrastructure

- Datums in use
 - Horizontal: Philippine Reference System of 1992 (PRS92)
 - Vertical: Mean Sea Level (MSL)

Modernization of the PGRS

- Migration to semi-dynamic geocentric datum
- Development and maintenance of a hybrid geoid that will be the basis for the vertical datum
- Strengthening of core competencies on geodesy



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Philippine Geodetic Reference System

- Status of implementation
 - ➢ <u>PGD2016</u>
 - ✓ Established 34 active geodetic stations
 - ✓ Completed reobservation of zero-order GCPs
 - ✓ Procured Bernese GNSS Software and started processing of PageNET data
 - ➢ <u>PGVD2020</u>
 - ✓ Computed prelimary geoid model (PGM2014)
 - ✓ Troubleshooting of level network
 - ✓ Densification of gravity stations
- Challenges
 - Amendment of PRS92 laws
 - Deformation modeling
 - Capacity building
 - Change management





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Maraming salamat po!