

# National Land Surveying and Mapping Center

The e-GNSS real-time kinematic positioning system in Taiwan

#### National Land Surveying and mapping Center

Ministry Of the Interior

National Land Surveying and Mapping Center M.O.I.



- Geodetic survey
- \* Topographic and hydrographic map
- Cadastral survey
- Geospatial information & map

#### Taiwan's network RTK system - e-GNSS

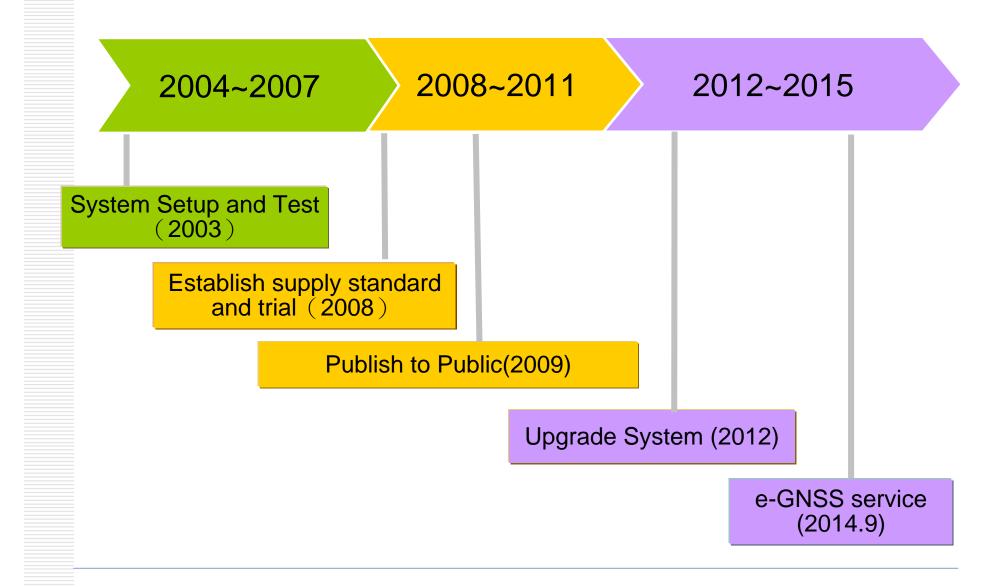
#### ❖Main Purpose

- •Provide real-time positioning service.
- •upgrade domestic surveying technology.

#### ❖Development Brief

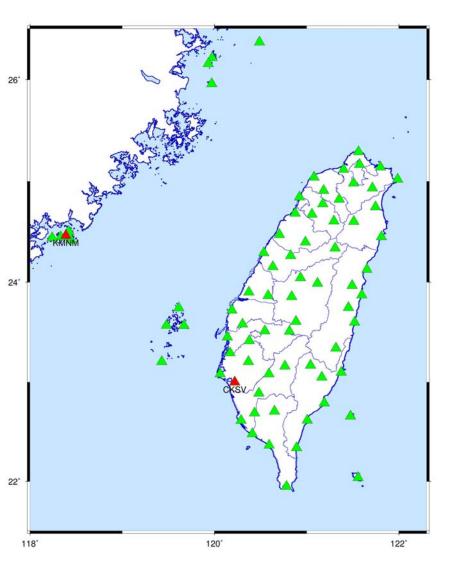
- •System planning and test analysis from 2003.
- •Established system in 2006.
- •Service covers Taiwan, Penghu, Kinmen, Matsu.
- •78 CORS online operation.
  - -Total Funds is about 2 million USD.

## e-GNSS Development Briefs

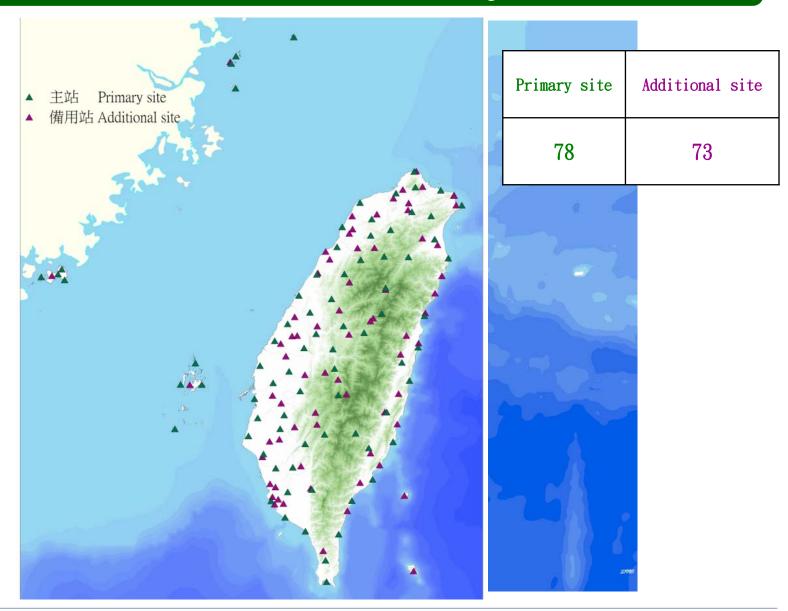


# e-GNSS Base Station Network

#### 2 CORS in IGS

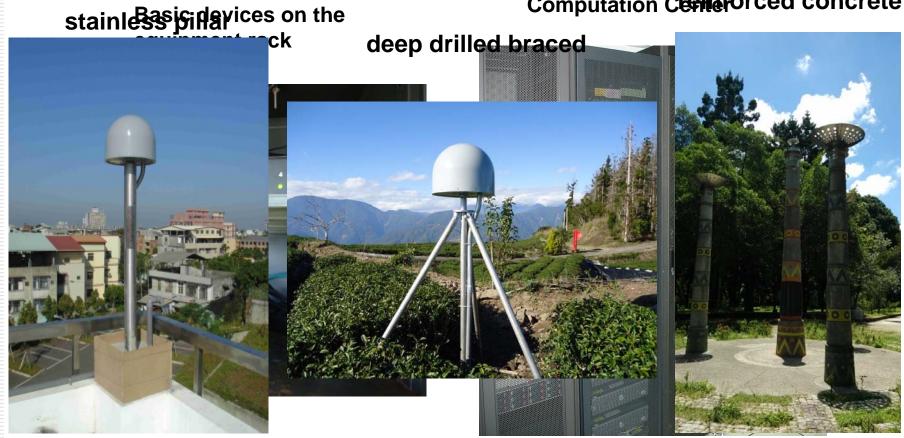


# CORS Redundancy



## e-GNSS Base Station Facility

e-GNSS Control and Computation Ctainsforced concrete



#### e-GNSS system service

- Real-time Kinematic Positioning:
  - 1.VRS-RTK (2cm)
  - 2.Net-Work DGNSS (50cm)
- Provision Of CORS Data:
  - 1.Physical base station data (RINEX)
  - 2. Virtual base station data (RINEX)
- Observation Data Post-process:

Post-process with VRS-RTK positioning technology

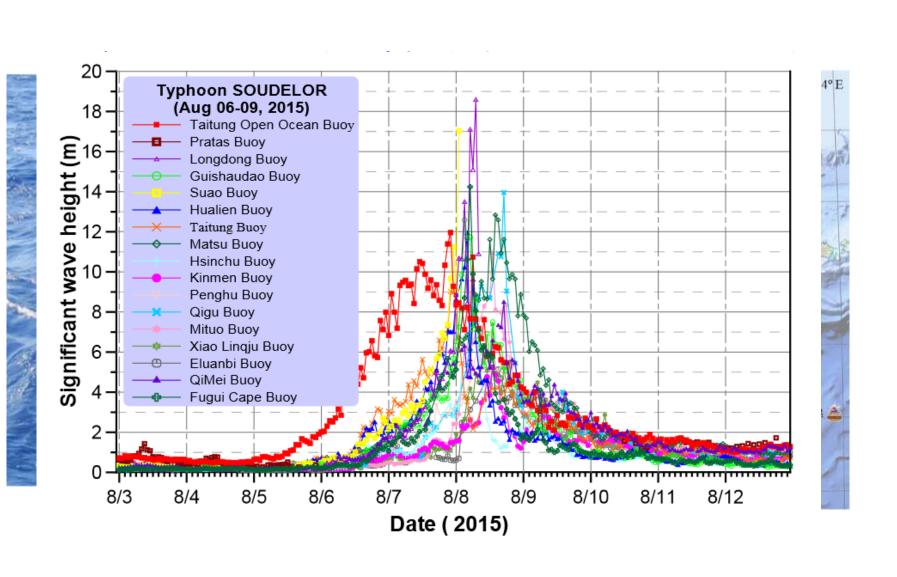
#### RTK Monitor Web



#### Cadastral Surveying · Topographical Surveying



#### Real-time Observation of Tide



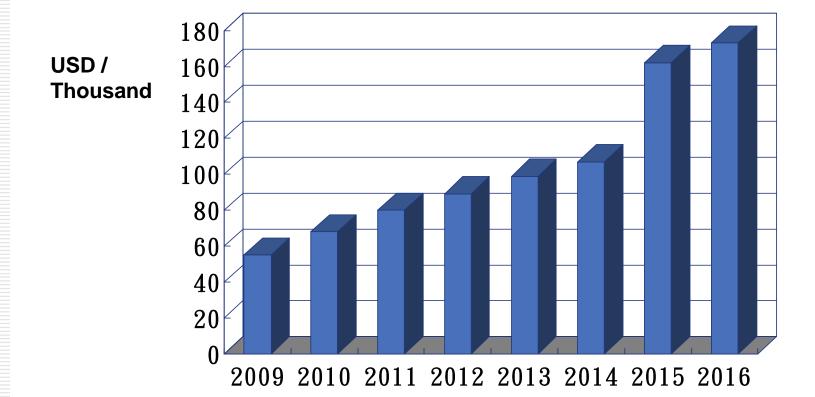
# For education training

Provides free accounts for education training



# e-GNSS operation performance

- \* Brownedbe Service deinte 227089K accounts.
- \* there are about 120 150 jaccounts every working day. The highest online users at the same time is about 50.



# Thanks for your attention