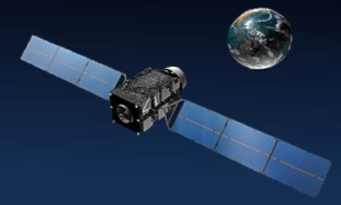


Asian Base Station Network Project Report

17/1/2015

Hiroko Tokura

Points for setting Reference station



- Selecting suitable site
- GNSS receivers, GNSS antennas, cables
- Power supply for receiver and for the PC running the reference station software
- GPS reference station software and control computer (server)

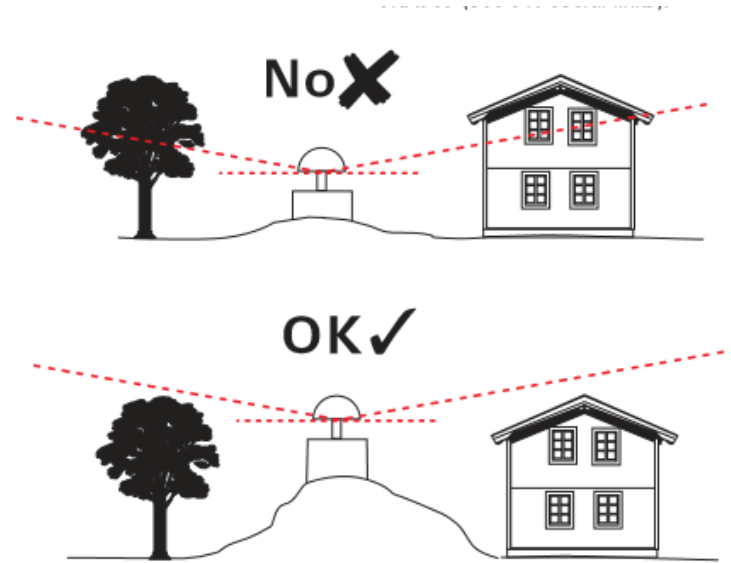
GPS Reference Stations and Networks
An introductory guide



Selecting suitable site



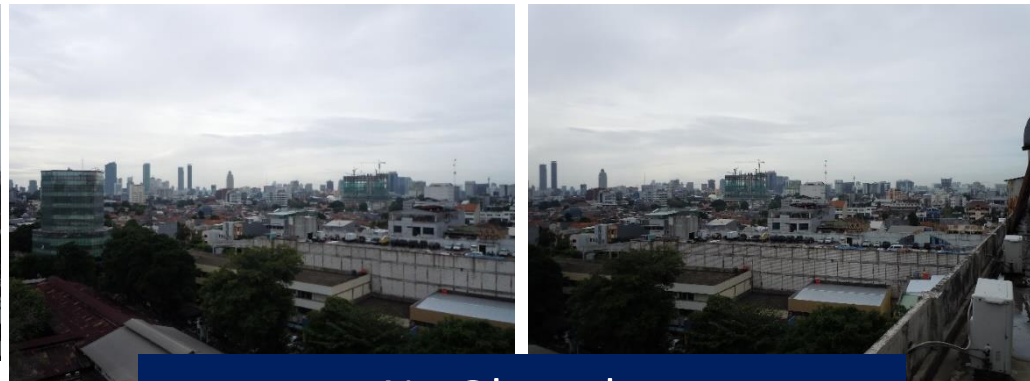
- Open view of the sky
- No objects in the vicinity
- No other transmitters
- Power and communication
- Protect the equipment



The case of Jakarta

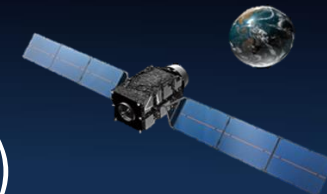


Roof top of the building

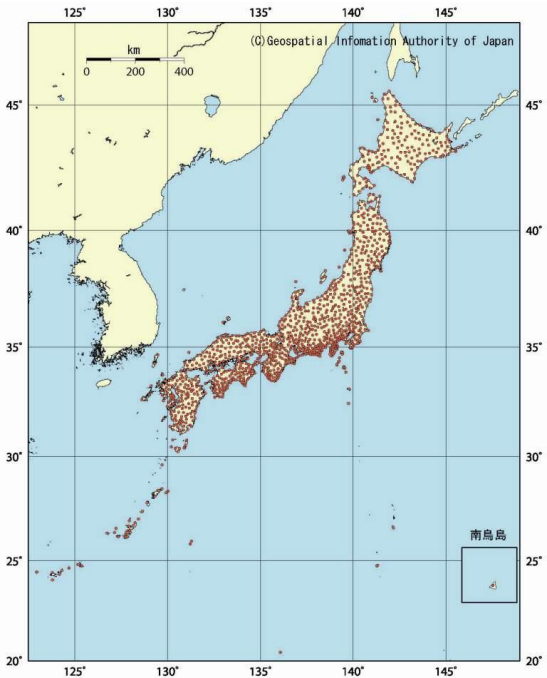


No Obstacles

GEO-NET GSI(Geospatial Information Authority of Japan)



GNSS-based control stations over 1,300



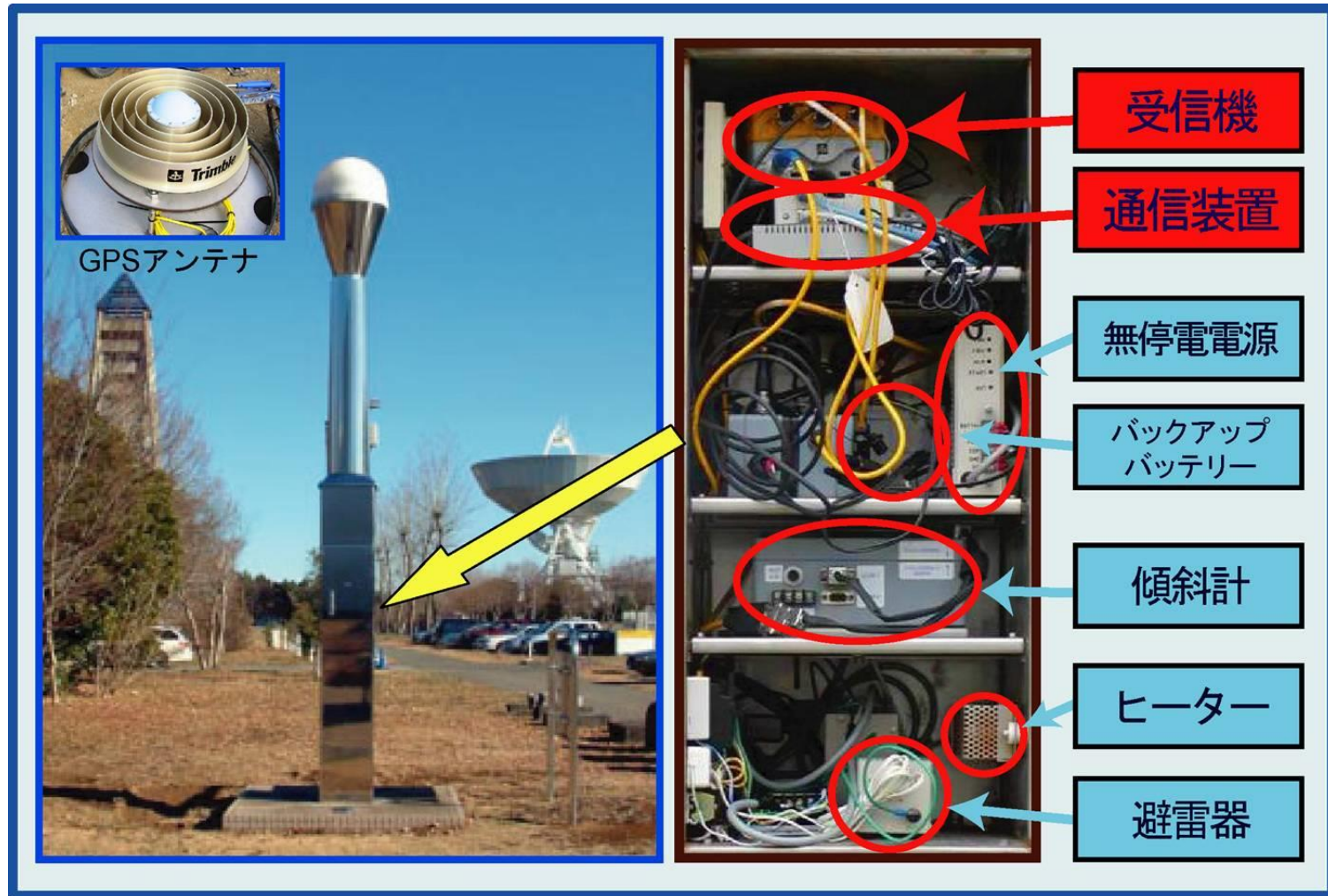
基準点詳細【電子基準点】	
局番号	950228
局名称	世田谷
稼働状況	稼働
基準点コード	EL05339359001
受信機名	NETR9
アンテナ名	TRM/E9900.80 GSI
都道府県	東京都
所在地	世田谷区桜上水
RINEX名称	0228
衛星対応	GPS+GLONASS+QZSS
上空状況	http://950228.php
緯度(概略)	35.66369714
経度(概略)	139.6306501

スカイプロット表示 [閉じる](#)

950228 世田谷

最新	全天写真
<p>観測日 (950228) Date: 2016/01/15</p>	
<p>3ヶ月前</p> <p>観測日 (950228) Date: 2015/10/01</p>	<p>半年前</p> <p>観測日 (950228) Date: 2015/07/01</p>

Components of reference station by GSI



GNSS receivers, GNSS antennas, cables



- Selecting suitable receivers and antennas for your objective

- Dual/single frequency
- Multi-GNSS/GPS satellite constellation
- Provide types of observation



Trimble Zephyr Geodetic Antenna

- Antenna cables

- Standard 10m
- Longer cable --it has to be to minimize loss of signal and the heavier and more unwieldy it becomes.

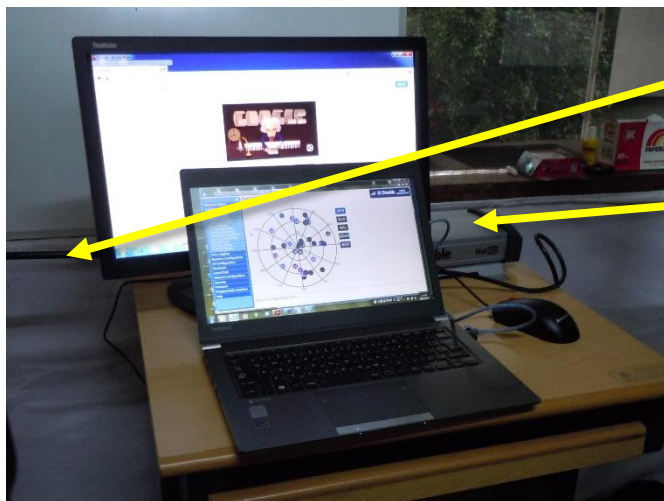


Installing reference station at Indonesia University Set up the GNSS-Antenna 17 Dec.



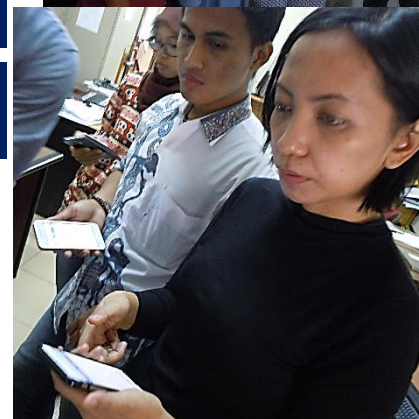
Antenna

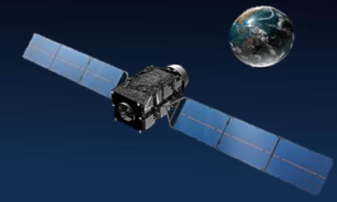
30m cable



30m cable

Receiver





For the Next fiscal year...

CORS – Network

(Continuously Operating Reference Stations)

Japan

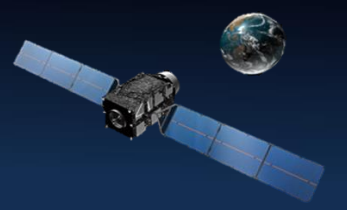
- Tokyo
- Keio
- TUMSAT

Asia

- Chulalongkorn Univ.
- AIT Univ.
- Univ. of Philippines

Univ. of Indonesia

- Improvement of contents of our website
 - How to do the RTK by reference data?
 - How to improvement the results?



Thank you!