



GGOS Japan Uniting Space Geodetic Activities in Japan

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GGOS Japan: 6 Years Old Now

2013 **Establishment** as “GGOS Working Group (of Japan)”: Chair Matsuzaka, Secretary Otsubo.

Since then, it has organised:

“GGOS” Sessions in JpGU & JP Geod Soc meetings.
GGOS-related sessions in international meetings.

Our own meetings once or twice per year.

2014 Site list sent to GGOS. Updated in 2017.

2015 New chair Otsubo, and new secretary Miyahara.

2017 GGOS Sp. Issue in 測地学会誌 (JP Geod Journal)

2017 **Became the first GGOS Affiliate.**

2018 Leaflet (designed by M Mizoe & T Otsubo) →

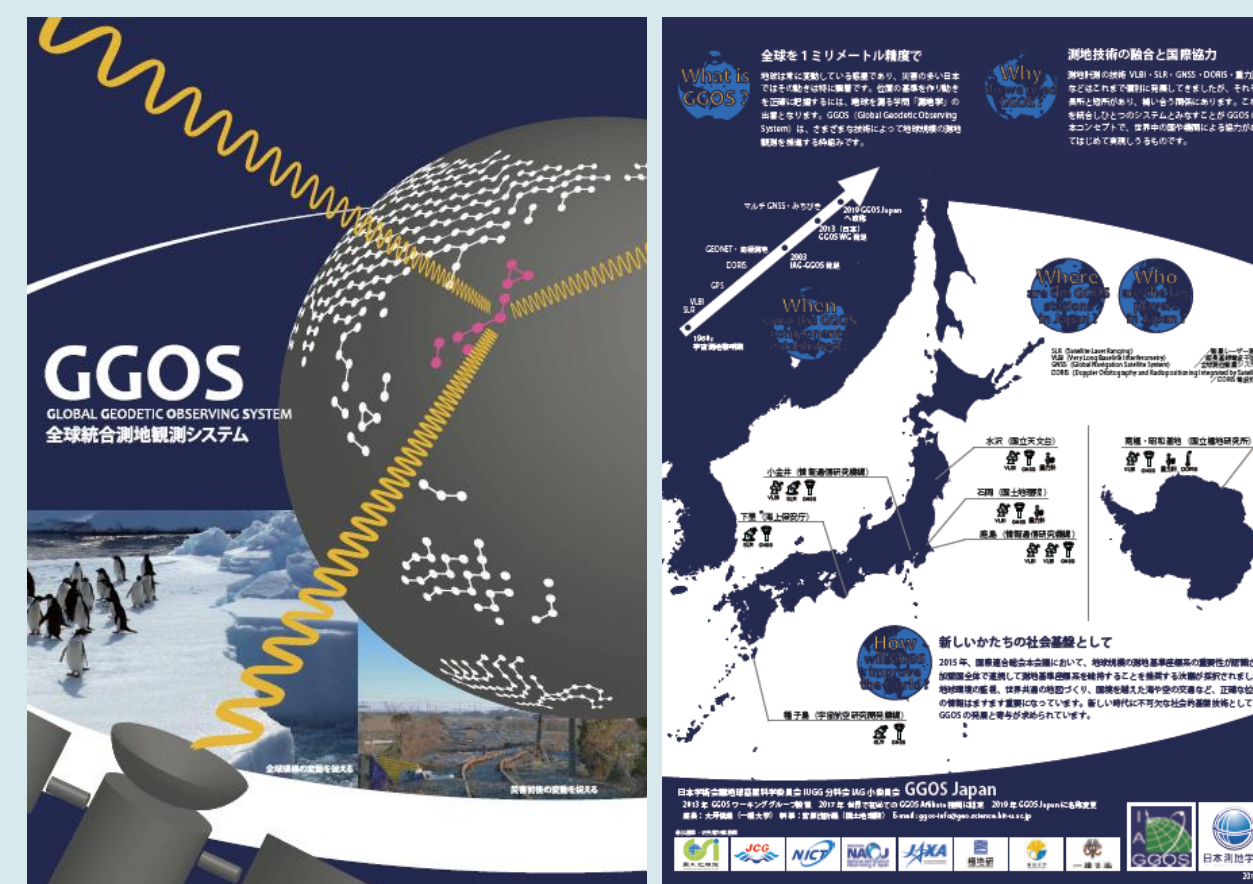
2018 Hosted GGOS Days 2018 Tsukuba.

2019 **Renamed: “GGOS Japan”**, Launch the website.

<http://ggos.org/en/ggos-affiliates/ggos-japan/>

2019-2023 Miyahara: serving as GGOS President

(Invisible) Consultative activities with institutes/stations.



GGOS Japan: Ongoing activities

Hosting meetings and sessions

2020.1 GGOS Japan Meeting in Kyoto University →
2020.7 GGOS Session in JpGU+AGU Joint (Virtual) Meeting

Supporting domestic meetings in space geodesy

2020.3 (ppd) ILRS Technical Meeting in Dodaia

2020.4 (ppd) IVS TDC Meeting in Kashima

Promoting Data DOIs

2019.9 Dedicated small workshop in Tsukuba

2019.10 Yokota: joined “DOIs for Geodetic Data Sets” WG of GGOS

Exchanging local survey know-hows for ITRF2020

Intensive local survey at Ishioka →

2020.3 (ppd) Dedicated small workshop in Tsukuba

* ppd: postponed due to the coronavirus pandemic.



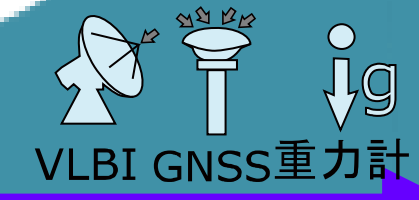
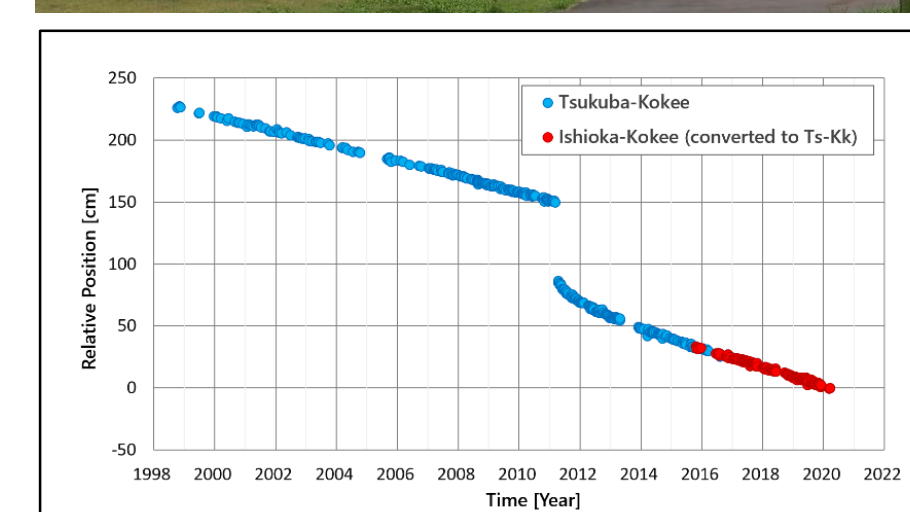
種子島 Tanegashima (2004-)

- SLR observations since 2004.
- Remote operation from Tsukuba Space Center.
- Developing new kHz SLR in Tsukuba Space Center by April 2021.



石岡 Ishioka (2016-)

- Transferred from Tsukuba; VGOS observation since 2016.
- Co-location observation between VLBI and GNSS every year.
- Introducing superconducting filter into QRFH for mixed-mode observation.



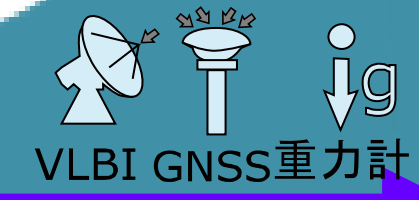
下里 Shimosato (1982-)

- Continuously performing SLR observations since 1982.
- A laser oscillator with pulse repetition rate up to 1 kHz has been installed in 2018.
- The latest co-location survey between GNSS (SMST) and SLR (SISL) was operated in 2020.



水沢 Mizusawa (1992-)

- Recording rate of regular geodetic K-band VLBI observations upgrade to 2-Gbps in 2018.
- Started a test to extend the geodetic observation network to the East Asian VLBI Network.
- GNSS and SG are continuously operated.



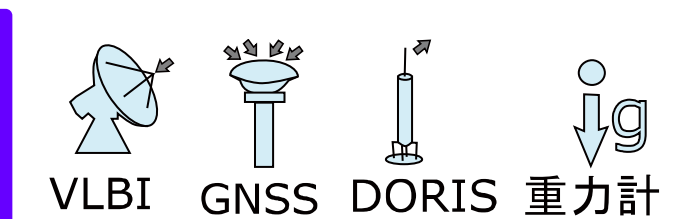
小金井 Koganei (1990-)

- SLR and VLBI observations since 1990 and 1993 respectively.
- GNSS station KGN1 has been operated since 1996 and it was joined in IGS network on July of 1997.
- SLR 1.5m telescope also used for space communications such as OICETS, SOCRATES and ISS-SOLISS.



昭和 Syowa (1989-)

- Best equipped geodetic site in Antarctica.
- Implement of absolute gravity measurement in 2018.
- VLBI high rate sampling of 1Gbps since 2019.



鹿嶋 Kashima (1977-2020)

- VLBI technology development and observations since 1977.
- Kashima 34m antenna was damaged by typhoon No.15 (Faxi) in Sep. 2019. For safety reason, its main reflector panels were removed.
- 34m and 11m antennas to be dismantled in 2020.



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