



The Global Geodetic Observing System (GGOS) - infrastructure for Science and Society -

EGU General Assembly 2022

May 2022

Basara Miyahara (GSI)

Laura Sánchez (DGFI-TUM)

Martin Sehnal (BEV)

Allison Cradock (NASA JPL)

GGOS Vision & Mission



GGOS Vision

- Advancing our understanding of the dynamic Earth system by quantifying our planet's changes in space and time

GGOS Mission

- (a) to **provide the observations** needed to monitor, map and understand changes in the Earth's shape, rotation and mass distribution
- (b) to **provide the global frame of reference** that is the fundamental backbone for measuring and consistently interpreting key global change processes and for many other scientific and societal applications
- (c) to **benefit science and society** by providing the foundation upon which advances in Earth and planetary system science and applications are built

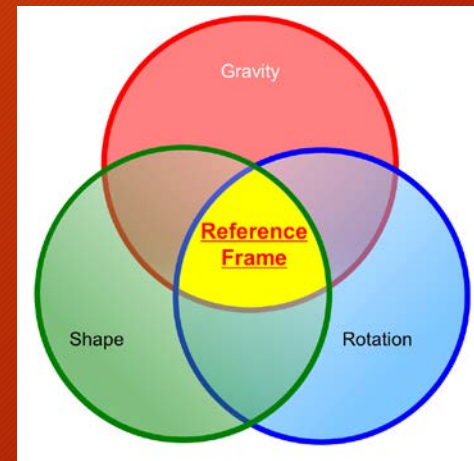
a) Geodetic Observations

- VLBI
- SLR
- GNSS
- DORIS
- Gravimetry..



b) Geodetic Products

- Geodetic Reference Frame



c) benefit science and society

Provide fundamental infrastructure underpinning science and society

Recent Focus of GGOS



Geodesy Outreach

- Outreach the importance of Geodesy to non-geodesists
- How Geodesy contributes to society & science?
 - ✓ Update of GGOS Website (<https://ggos.org/>)
 - ✓ New pages of Geodetic Observations & Products
 - Easy & Simple description, eye-catching visual aids
 - ✓ Development of GGOS short film

GGOS Website (<https://ggos.org/>)



- Entrance gate to geodesy, IAG and its services



Two faces of GGOS

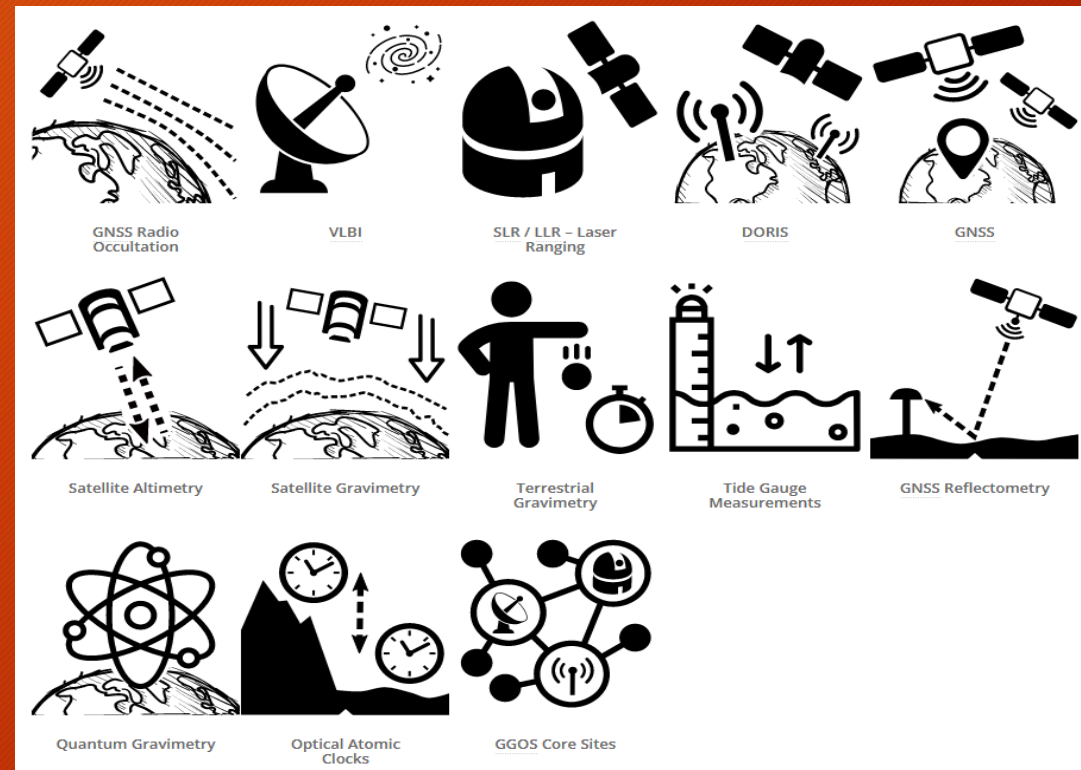
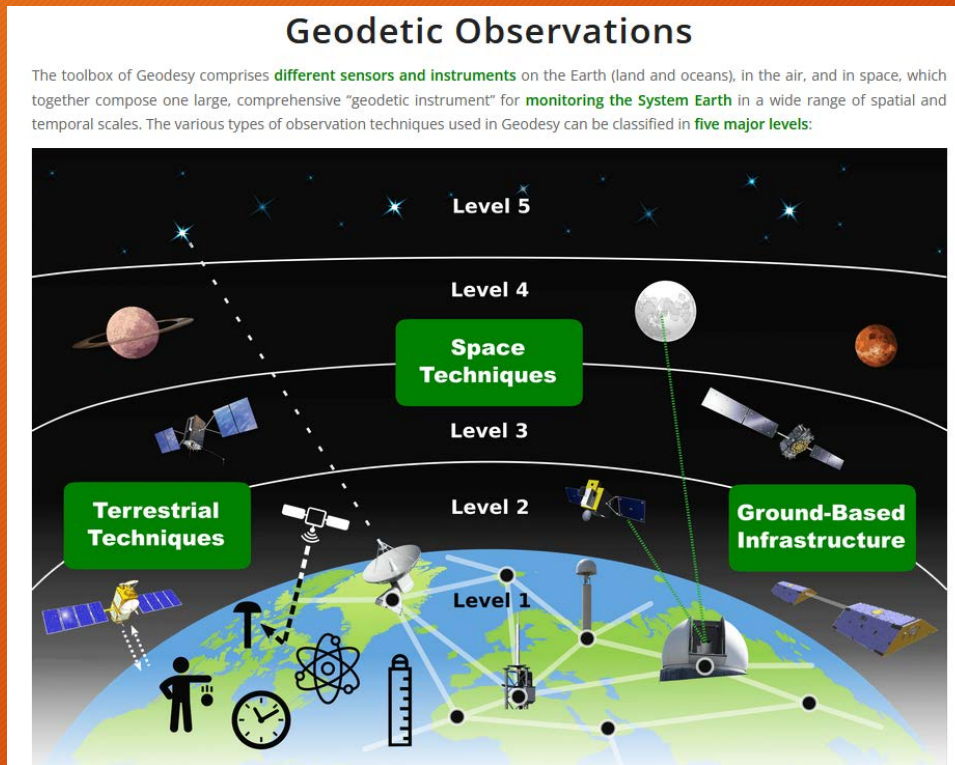
- Organization
- Observing system

- Geodetic Observations
- Geodetic Products
- IAG Services
- Events
- Blog ...

Geodetic Observations (<https://ggos.org/obs/>)



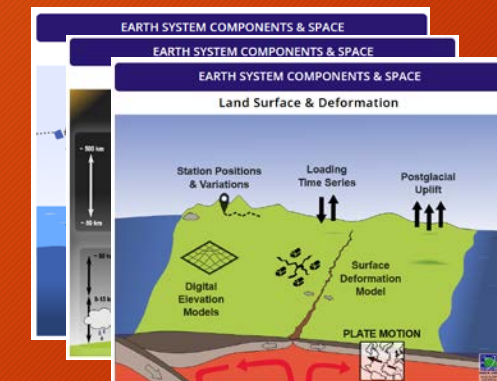
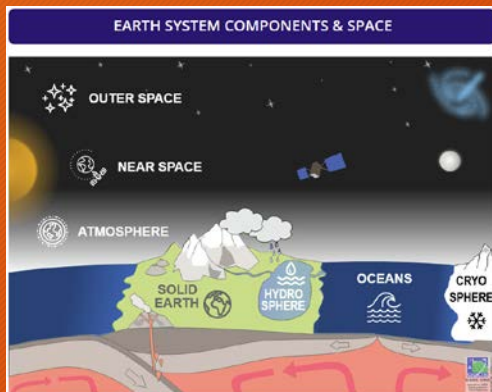
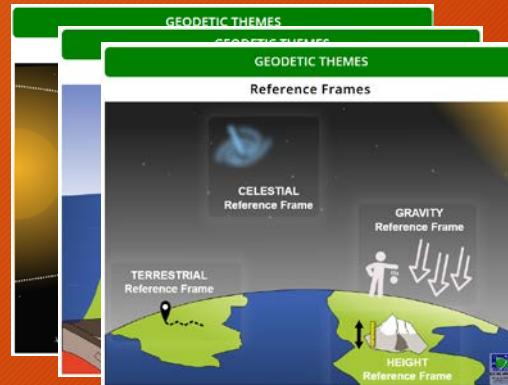
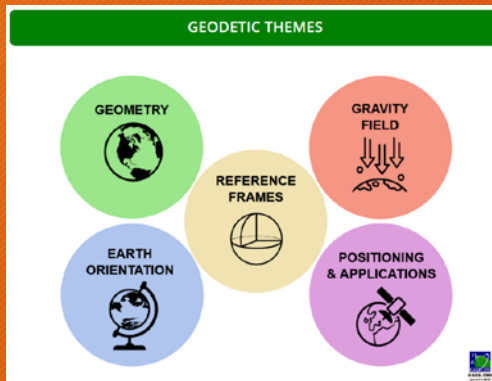
- The role of observations in geodesy and science, how it works etc..
- Conventional (VLBI, SLR, GNSS, DORIS, gravity..) & novel techniques



Geodetic Products (<https://ggos.org/products/>)



- The role of geodetic products, how they contribute to science & society etc..
- Accessible through two gates (geodetic themes, Earth system components & space)



GGOS Short film

(<https://www.youtube.com/watch?v=Jwqz097N2IY>)



- Outreach the importance of Geodesy to the general public
- Why Geodesy is important?
- English, German, Spanish, Japanese, French and Portuguese versions on YouTube



GGOS Meetings 2022



GGOS Days 2022

- November 14-15, 2022 in Munich, Germany
- Bavarian Academy of Sciences (organized by the German Geodetic Commission and TUM)

