

RT-WG Memberlist

December 3rd, 2020

| Active Working Group Members | | |
|------------------------------|----------------|--------------|
| Name | Affiliation | IGS Function |
| Peter Neumaier | BKG | |
| Andrea Stürze | BKG | |
| Wolfgang Söhne | BKG | |
| Erwin Wiesensarter | BKG | |
| Michael Moore | GA | |
| Ryan Ruddick | GA | |
| Loukis Agrotis | ESA/ESOC | RT-WG ACC |
| André Hauschild | DLR/GSOC | RT-WG Chair |
| Martin Schmitz | geo++ | |
| Gerhard Wübbena | geo++ | |
| Jianghui Geng | Wuhan | |
| Shengfeng Gu | Wuhan | |
| Jing Guo | Wuhan | |
| Ningbo Wang | AIR/CAS | |
| Zishen Li | AIR/CAS | |
| Wenwu Ding | ICG/CAS | |
| Baoqi Sun | NTSC/CAS | |
| Omid Kamali | NRCan | |
| Catherin Robin | NRCan | |
| Jason Bond | NRCan | |
| Stuart Elleson | NRCan | |
| Reza Ghoddousi-Fard | NRCan | |
| Pat Michael | CDDIS | |
| Sandra Blevins | CDDIS | |
| David Maggert | UNAVCO | |
| Jan-Peter Weiss | UCAR | |
| Adam Sunshine | UCAR | |
| Pavel Vaclavovic | RIGCT | |
| Alexis Blot | CNES | |
| Clement Gazzino | CNES | |
| Denis Laurichesse | CNES | |
| Maorong Ge | GFZ | |
| Markus Bradke | GFZ | IC Chair |
| Laura Martinez Fernandez | GMV | |
| Guillermo Tobias | GMV | |
| Lennard Huisman | Geopinie | |
| Dirk Stöcker | Alberding GmbH | |
| Nacho Romero | ESA/ESOC | RNX-WG Chair |
| Ken Harima | RMIT | |
| Manuel Hernandez Pajares | UPC | |
| Qi Liu | UPC | |
| David Roma-Dollase | IEEC | |
| Andrzej Krankowski | UWM | ION-WG Chair |
| Adam Fron | UWM | |
| Artur Oruba | Fugro | |
| Carine Bruyninx | ROB | |
| Eric Pottiaux | ROB | |

CHARTER IGS RT-WG (update Dec 2020)

The use of real-time data in GNSS processing has gained a significant importance over the last decade. The applications using real-time data cover a wide range from scientific studies to commercial services: RTK and PPP positioning, tsunami or earthquake monitoring, ionospheric delay estimation, time dissemination or GNSS constellation monitoring are only a few examples.

Real-time data streams with GNSS observations and broadcast ephemerides provide the necessary data to enable these various applications. Central servers for data distribution (NTRIP casters) are used to disseminate the data streams to users with low latency. Data formats capable of streaming real-time data are required to transport observations, broadcast ephemerides as well as derived products with low bandwidth requirements.

The IGS through its real-time working group (RTWG) is dedicated to provide open data, open products and open standards for real-time users to the GNSS community. The RTWG aims at maintaining high quality data and providing high precision products that are state-of-the-art. It supports their dissemination by improving existing data formats or by developing new standards. The RTWG provides a forum to discuss the development of new methods and algorithms, for example, to improve the performance of precise point positioning (PPP) techniques in terms of convergence, accuracy and reliability.

The goals of the RTWG are defined as follows:

- Maintain and expand the multi-GNSS real-time reference station network of IGS stations in close cooperation with the Infrastructure Committee and the Network Coordinator
- Monitor and improve the quality of GNSS real-time observations and broadcast ephemerides in cooperation with the RINEX WG and give advice on stream configuration
- Provide precise real-time corrections for orbits, clock, biases and atmospheric delays
- Provide and monitor a combination of correction data streams for a robust and reliable IGS real-time product
- Develop new and improved RT products and work with the RT ACC to transition these products to the Real Time Service (RTS)
- Develop and improve open standards for real-time data and products
- Investigate new streaming technologies
- Provide users access to real-time data from reference stations and correction streams through the internet