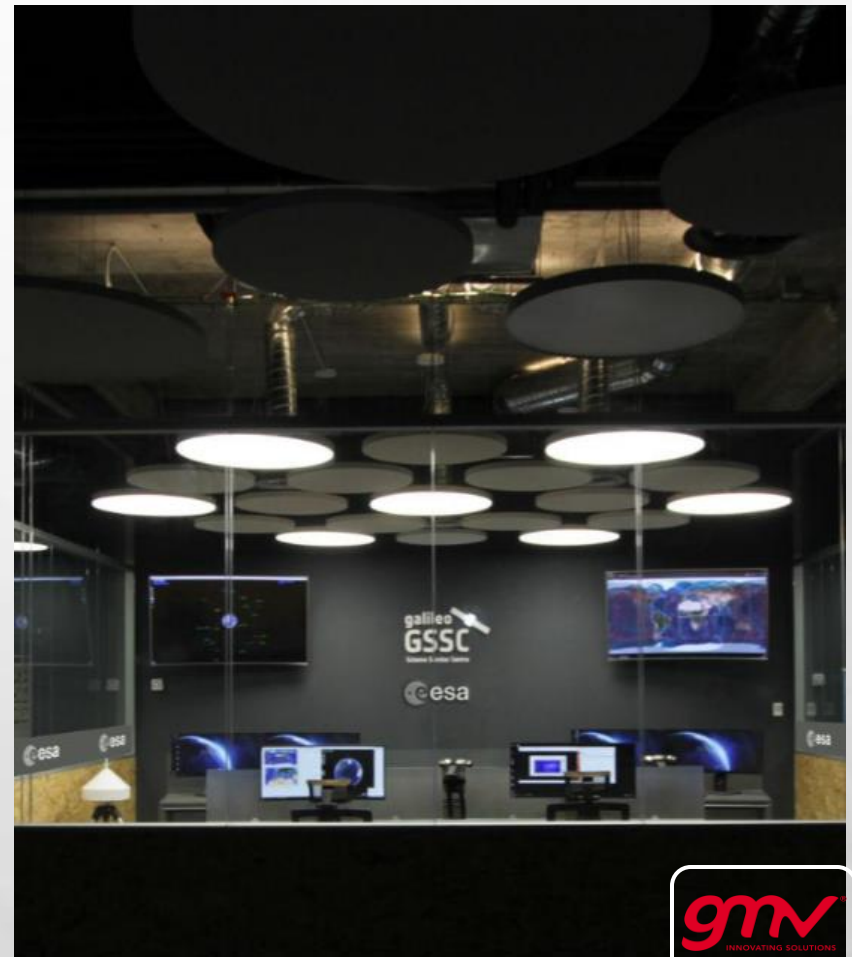


GSSC - GNSS SCIENCE SUPPORT CENTRE

- **BIG DATA FROM SPACE 2025**
- **02/10/2025**
- **RIGA - LATVIA**
- **PRESENTED BY PABLO GARCÍA**



GSSC NOW: AN OPEN DOOR TO GNSS SCIENCE

- **POWERFULL METADATA-DRIVEN SEARCH ENGINE**
- **RESTFULLAPI**
- **BROWSER BASED EXECUTION TOOLS**
- **FAIR PRINCIPLES**
 - **FINDABLE**
 - **ACCESSIBLE**
 - **INTEROPERABLE**
 - **REUSABLE**



THE ARCHIVE AND SEARCH ENGINE

ALMOST 300 MILLIONS OF DATA RESOURCES

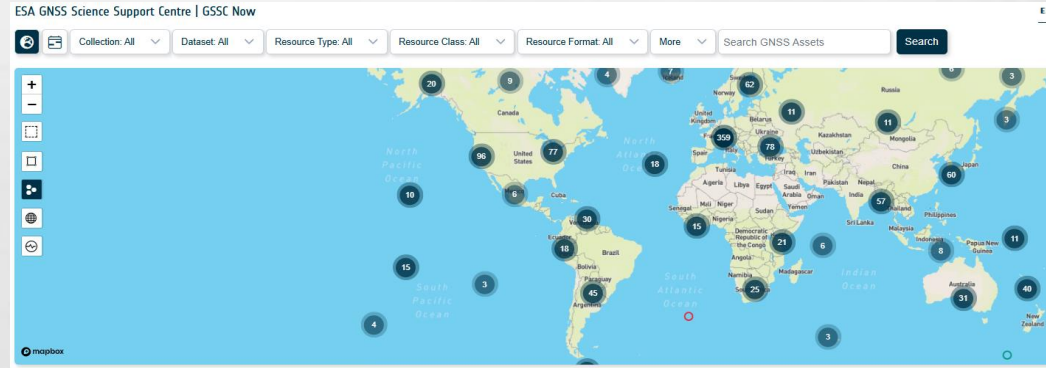
- **OBSERVATION DATA** • **ATMOSPHERIC PRODUCTS**
- **NAVIGATION DATA** • **SPACE SEGMENT DATA**

COMMUNITY-STANDARD FORMATS

- **RINEX 2/3/4**
- **SP3**
- **SINEX-BIAS**
- **IONEX**
- **AND MORE...**

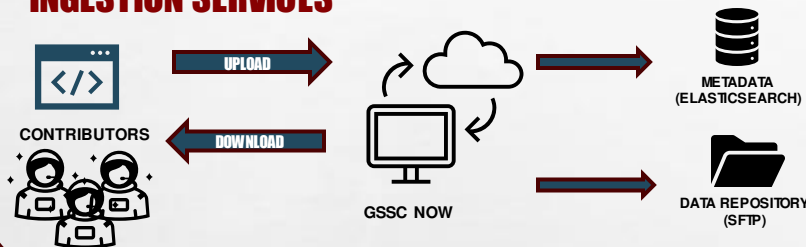
INTERACTIVE, WEB-BASED SEARCH INTERFACE

- **STATION LOCATIONS**
- **TIME RANGES**
- **GNSS CONSTELLATIONS**
- **OBSERVATION PARAMETERS...**



ARCHITECTURE AND DESIGN

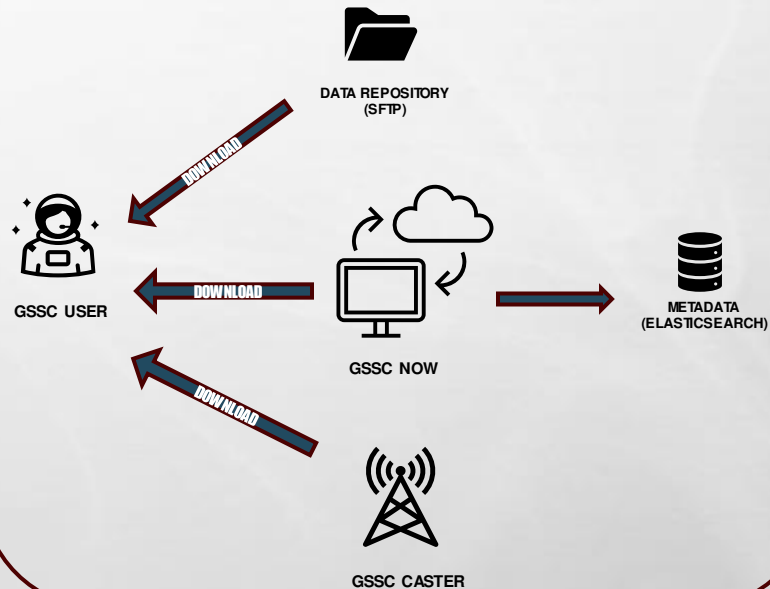
INGESTION SERVICES



EXPLOITATION SERVICES



DISSEMINATION SERVICES



DATALABS: BROWSER-BASED SCIENTIFIC COMPUTING

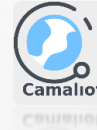
- **CONTAINERIZED EXECUTION ENVIRONMENTS MANAGED WITHIN ESA CLOUD**
- **NO INSTALLATION, NO HIGH-PERFORMANCE COMPUTER REQUIREMENTS**



- **PERSISTENT USER STORAGE**
- **GPU RESOURCES**

SOME USE CASES: ADVANCED ANALYTICS AND MACHINE LEARNING

- **CAMALIOT INITIATIVE, LARGE SCALE PARTICIPATORY SCIENCE**
- **UBISAP, INTERNET OF THINGS INTEGRATION WITH GSSC WORKFLOWS**



AND NOW, WHAT?

- **CONTINUOUS EVOLVING THE PLATFORM IN TERMS OF PERFORMANCE, SECURITY AND STABILITY**
- **INTEROPERABILITY WITH OTHER SPACE GEODETIC TECHNIQUES DATA PLATFORMS**
- **EXPANDED APIS**
- **EDUCATIONAL CONTENT**

THANK YOU

My email: paag@gmv.com

GSSC Now platform is openly accessible at: <https://gssc.esa.int>

Register form: <https://gssc.esa.int/register/>

Don't forget your invitation code!: **BIDS25**