



Katowice Declaration

RRENs on leveraging the impact of Earth
Observations research efforts

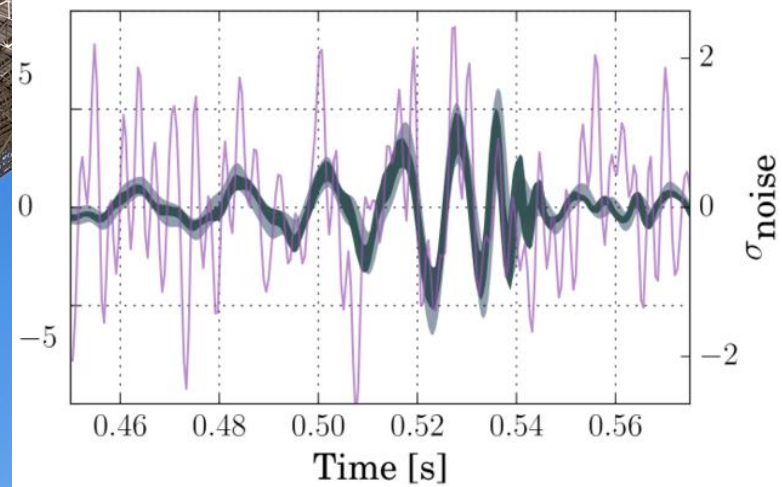
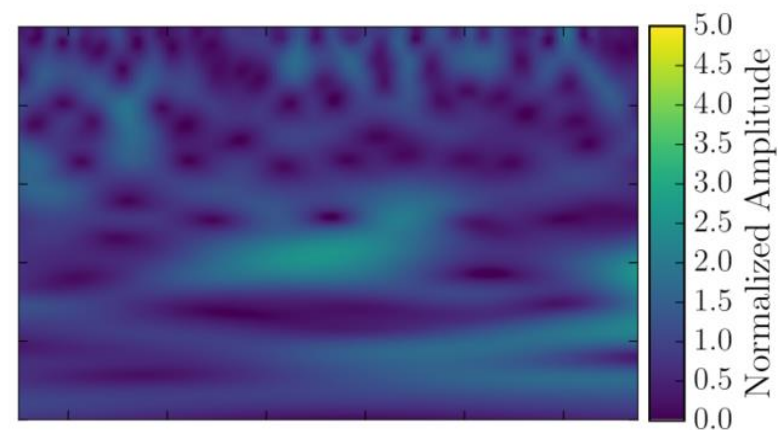
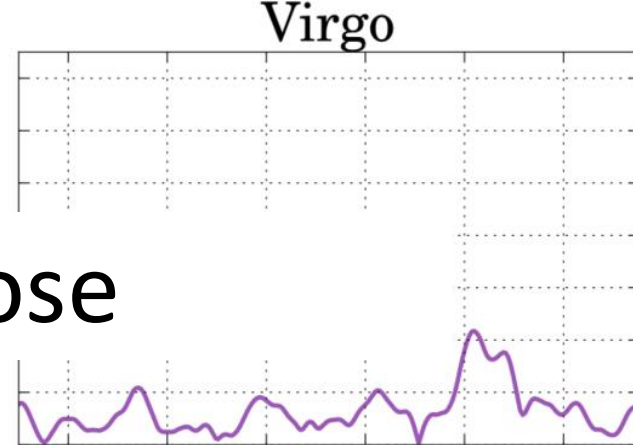
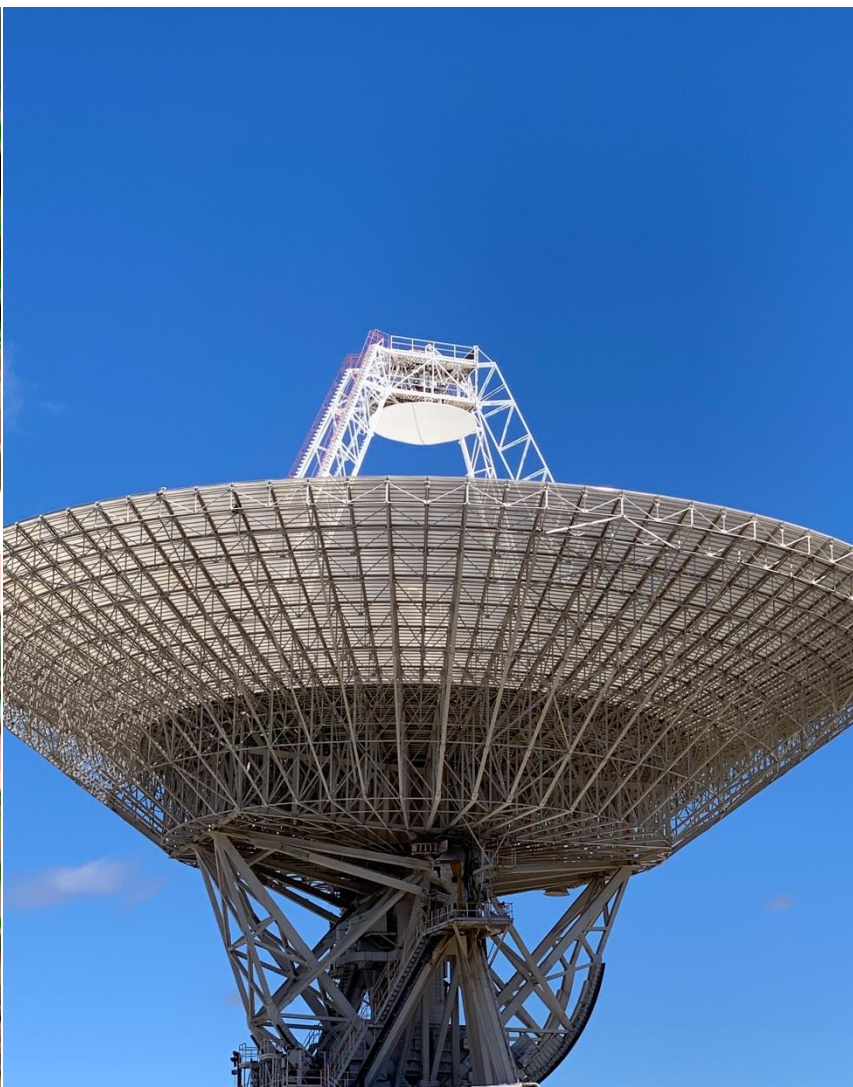
Chris Atherton
Senior Research Engagement Manager

GÉANT Infoshare Series on Earth Observations
22/04/25

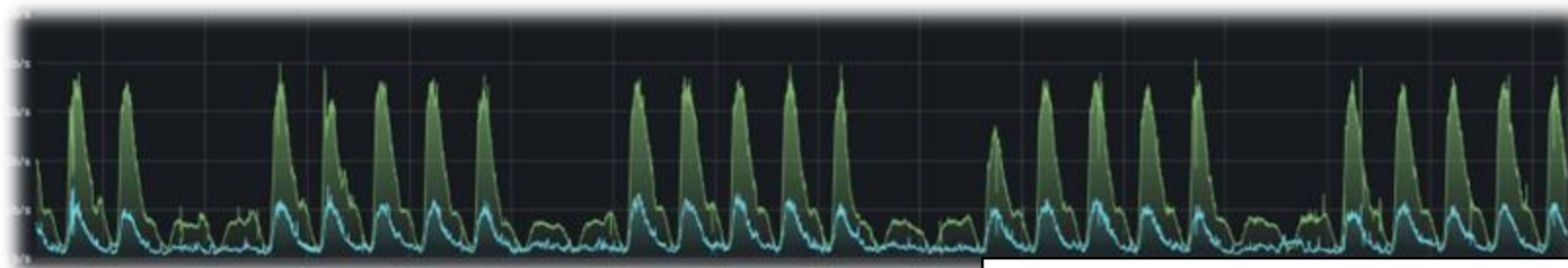
Public



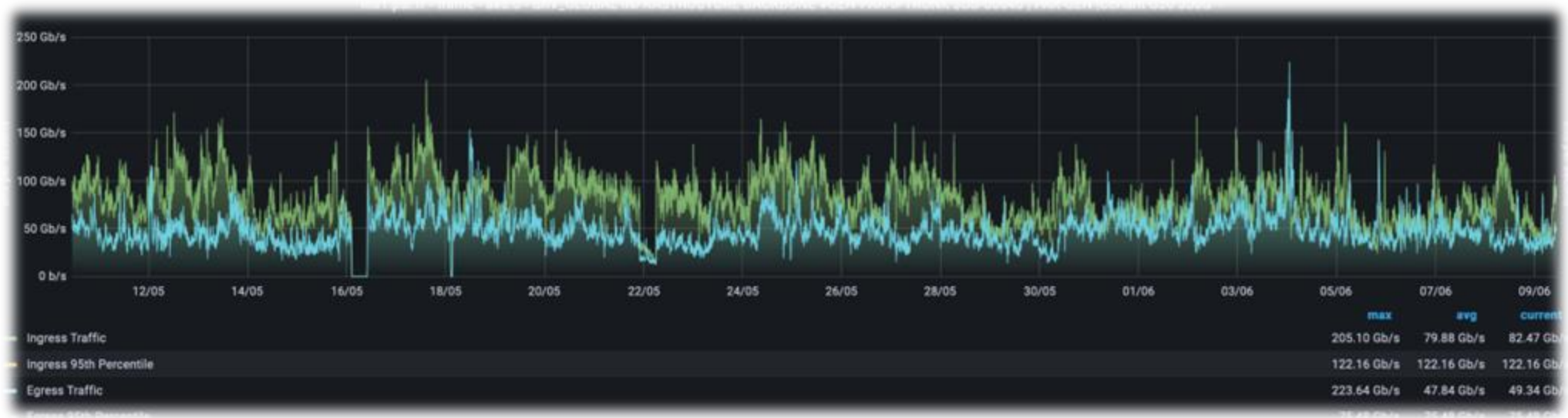
Unique data we can't loose



Unpredictable Traffic

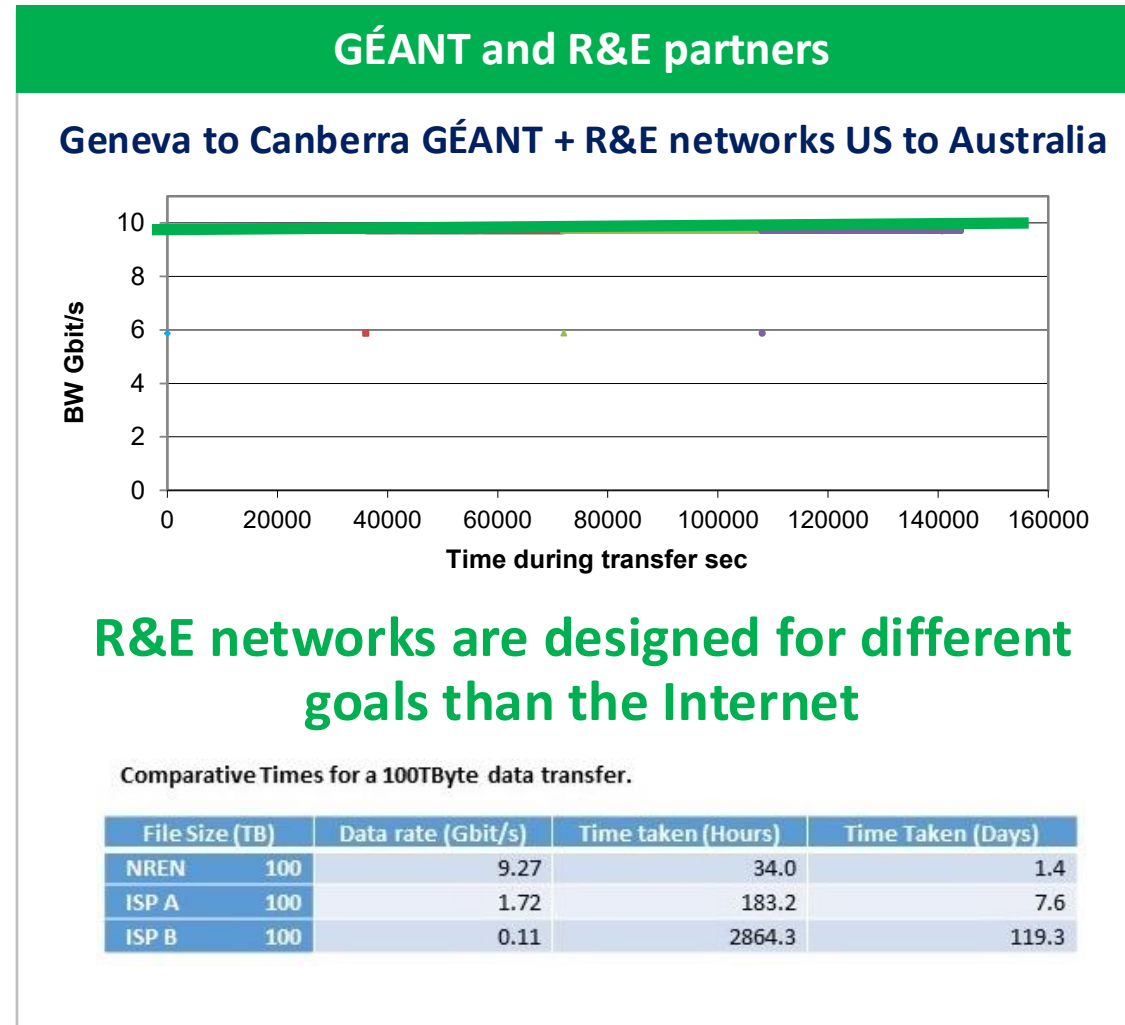
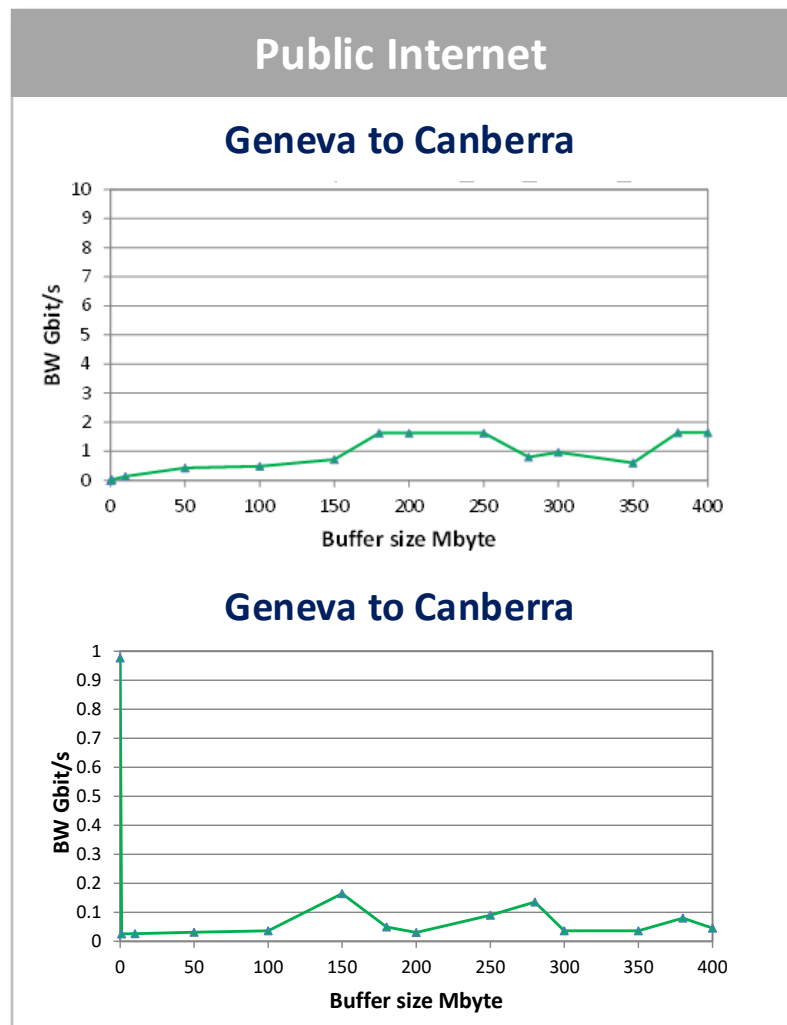


Standard aggregated internet traffic

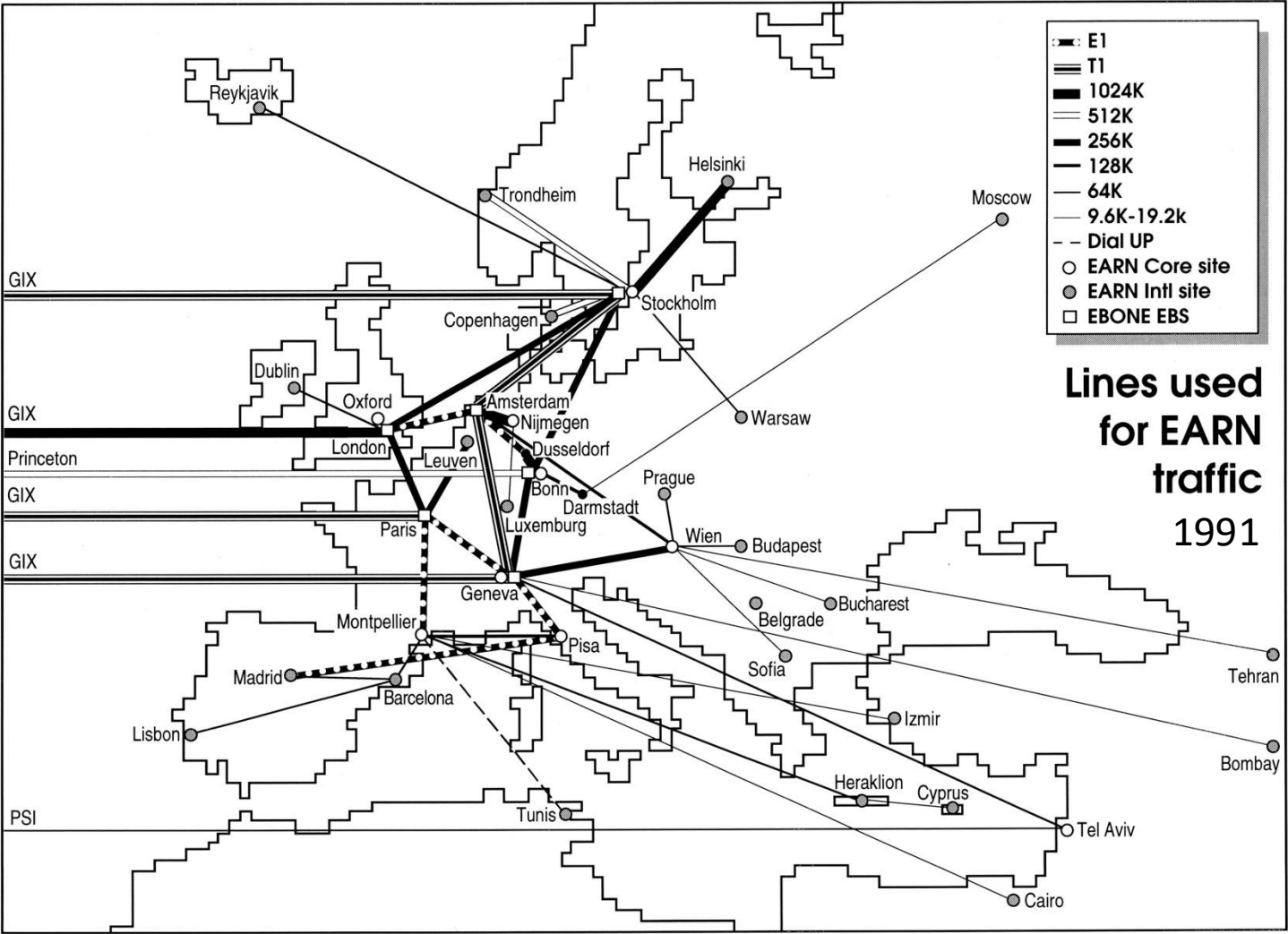


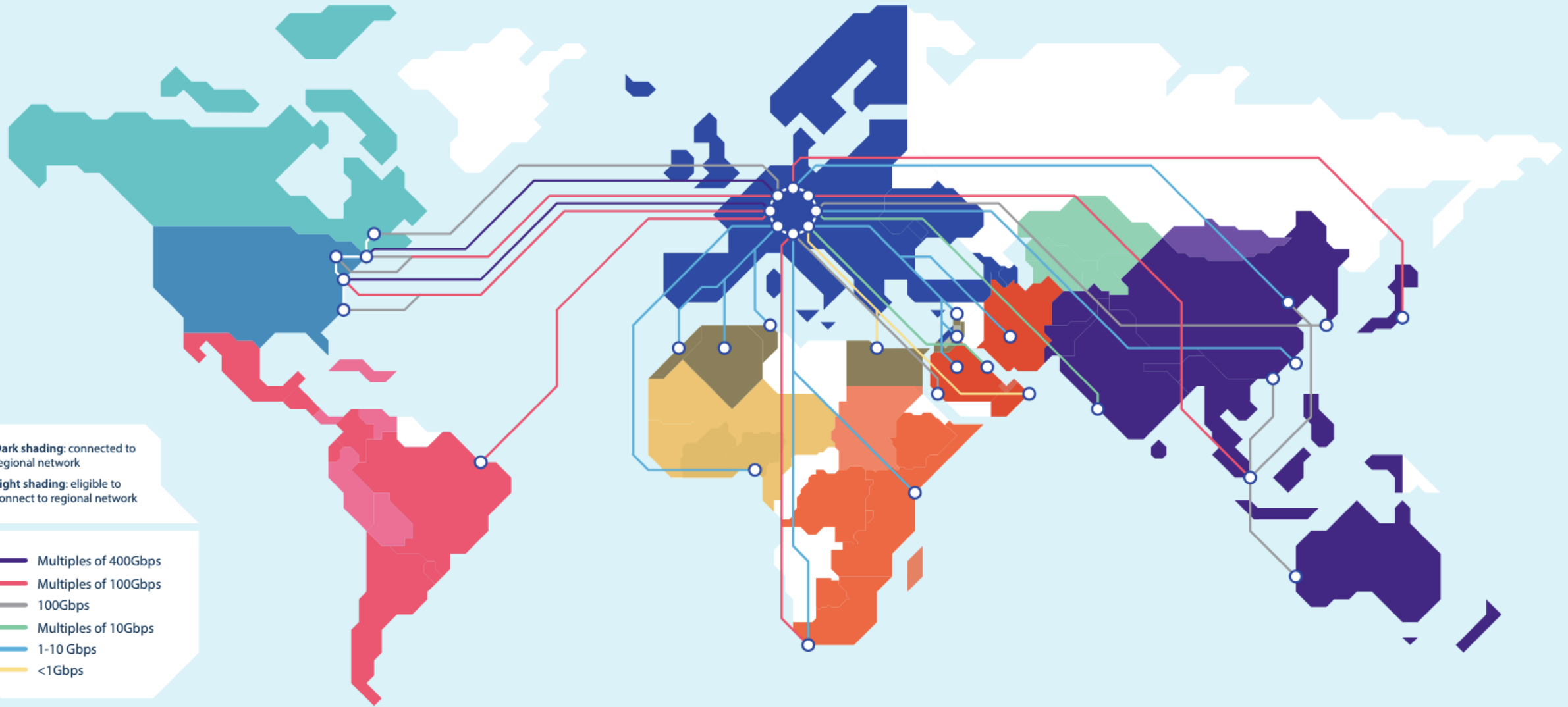
GÉANT aggregated network traffic

Optimised for research data transfers (2017)



Where GÉANT came from





Canada & USA	Latin America	Europe	North Africa & Eastern Mediterranean	West & Central Africa	Eastern & Southern Africa	Central Asia	Asia-Pacific	Other R&E Networks

eduroam

Linking students to the global community

eduroam provides a secure global roaming infrastructure for the research and education; users authenticate locally and get online in eduroam-enabled locations

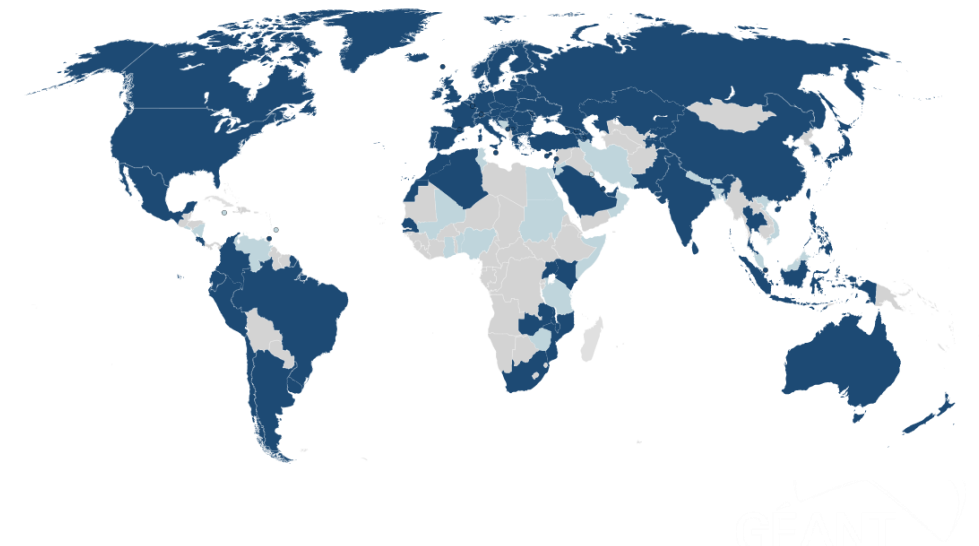
A global network of users across 106 territories.

More than 7.5 billion national and international authentications in 2023.

A worldwide success story

From its early beginnings as a joint venture between a few European universities to today – with millions of users in more than 100 territories worldwide, eduroam has been an amazing success story and an example of research and education collaboration.

eduroam.org [@eduroam](https://twitter.com/eduroam)

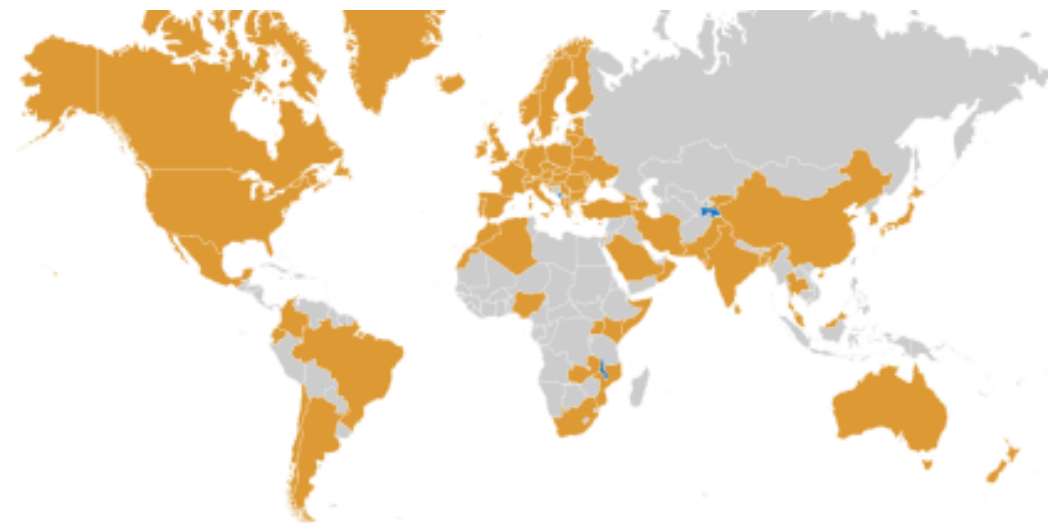


eduGAIN

Enabling secure Single Sign On services to global research and educational resources

Federated identities enable users to access a wide range of services using their account managed by their 'home' institution.

- Improves access.
- Improves security.
- Reduces management overhead and costs.



January 2024:

79 Federations active

9,109 Entities

5,525 Identity Providers

3,604 Service Providers

edugain.org

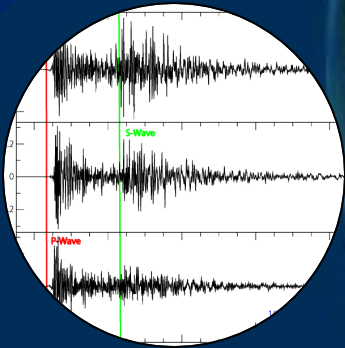


SUBMERSE

Indicative Site Locations



Marine Biology



Seismology



Oceanography



SVALBARD, Norway
(DAS, SOP, SOP OTDR)

Preveza, Greece
(DAS, SOP, SOP OTDR)

SINES, Portugal
(DAS, SOP, SOP OTDR)

MADEIRA, Portugal
(DAS)

FORTALEZA, Brazil
(SOP, SOP OTDR)

SOP - State of Polarisation
DAS - Digital Acoustic Sensing
OTDR - Optical Time Domain
Reflectometer

How to discover NRENs services in your country?

- Check the GÉANT compendium website <https://compendium.geant.org/data>



NRENs
services



The screenshot shows the GÉANT Compendium Data website. The header includes the GÉANT logo and navigation links: NETWORK, SERVICES, COMMUNITY, TNC, PROJECTS, CONNECT, IMPACT, CAREERS, ABOUT, NEWS, RESOURCES, and COMPENDIUM. The main heading is 'COMPENDIUM DATA' with a 'COMPENDIUM REPORTS' icon on the right. Below the heading is a descriptive paragraph: 'The GÉANT Compendium provides an authoritative reference source for anyone with an interest in the development of research and education networking in Europe and beyond. Published since 2001, the Compendium provides information on key areas such as users, services, traffic, budget and staffing.' The main content area features five expandable sections: ORGANISATION, STANDARDS AND POLICIES, CONNECTED USERS, NETWORK, and SERVICES. The SERVICES section is expanded, showing a list of service matrices: NREN Network services matrix, NREN ISP support services matrix, NREN Security services matrix, NREN Identity services matrix, NREN Storage and hosting services matrix, NREN Multimedia services matrix, NREN Collaboration services matrix, and NREN Professional services matrix. A small 'iPhone Mirr' label is visible in the bottom right corner.

A top-down view of a diverse group of people's hands stacked in a circle, symbolizing collaboration and teamwork. The hands are of various skin tones and are wearing different colored sleeves (white, grey, blue, pink). The background is a neutral, light-colored floor.

Collaboration



Katowice declaration

Recognising that a rapid and fluid exchange of data, information and knowledge among researchers worldwide is an important facilitator of scientific progress.

Explore technologies which facilitate synchronisation of platforms that support GEO-data transfer within and between continents.

Human capacity building within and between NRENs and RENs on this subject should be supported.

Increase engagement with end-user communities that produce and digest GEO-data.

Open access policies need to be formed and adopted in line with the UNESCO Recommendation on Open Science.

Increase understanding of research priorities for each continent and identify areas of overlap for more effective collaboration.

Increasing the level of digital literacy in the GEO ecosystem.

Involvement in governance efforts in GEO communities.

Facilitate the development of a global research and education network (GREN).

Enhancing the effectiveness of research along the GEO 'chain' to fully exploit the value of geospatial data.

Collaborate with the GEO communities on the realisation of many of the United Nations' Sustainable Development Goals.

Baseline activities in support of the United Nations Sustainable Development Goals.



WACREN and UbuntuNet Alliance Join – TNC23





Thank You

Any questions?

www.geant.org