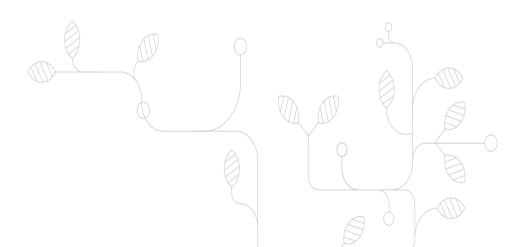
Eric Guzzonato

CS













European Space Agency

RUS - Research and User Support for Sentinel core products



Brice Mora, Eric Guzzonato

Copernicus Ecosystem Workshop, Brussels, Belgium, 9-10 October, 2018













ABOUT RUS

Our Objectives

- Foster the handling and processing of data coming from the Copernicus constellations by the Academic, scientific, R&D communities, incl. SMEs
- Mitigate the "digital divide" affecting Copernicus data access and exploitation (download, archive, handle, process)
- Encourage and enhance the initiatives aiming to support Copernicus uptake

RUS: a free service to end user funded by the EC and managed by ESA.









ABOUT RUS

The service is designed for



Specific research/User communities (e.g. EU Member States, Commission Services, Third Countries, NGOs, SMEs, H2020 projects,...) > Seeking support to facilitate the uptake and handling of Sentinel datasets



University classes > To practise and use
Sentinel core products with either own algorithms or FOSS and COTS



Researchers > To scale up algorithms on large amounts of Sentinel core products



Experts > To process large amounts of Sentinel core products using either Free and Open-Source Software (FOSS) or Commercial Off The Shelf (COTS) tools

Offering expertise and support to any kind of users









Our Pillars ABOUT RUS

ICT

Customized processing platform

- Scalable Virtual Machines tailored to meet users needs
- Preinstalled open source software enabling fast algorithm development and prototyping
- Working environment delivered with user requested data

SUPPORT

A comprehensive service organisation

- A common interface access through a dedicated Front Desk supported by a team of experts
- Customized technical solutions provided on request to users
- Expert advice and support for data processing and algorithm integration

TRAINING

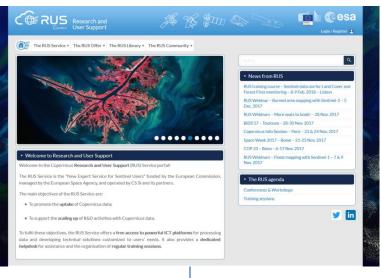
Training & capacity building

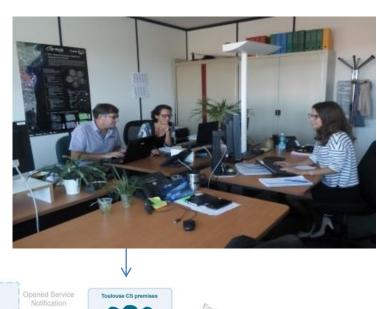
- Hands-on training sessions to handle and process data
- Monthly Webinars free and open to anyone
- Tutorials and on-line documentation
- M-Learning platform for self learning

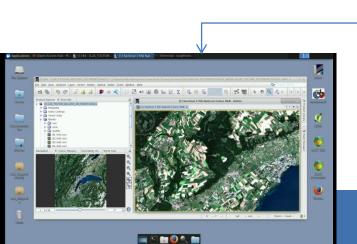


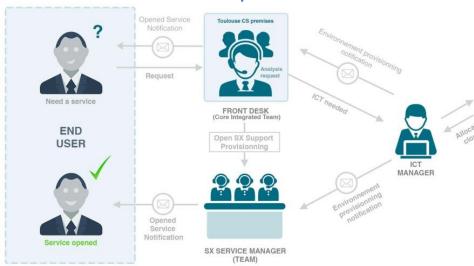












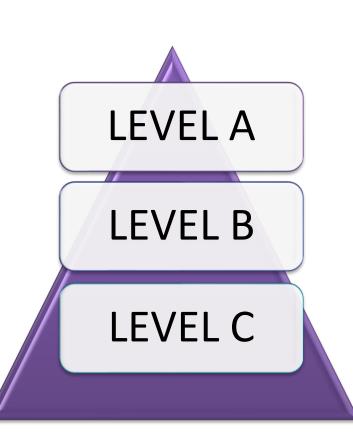






The IT Offer

Levels of service











4 cores

≤ 16 GB

≤ 1 TB

≤ 3 months

≤ 16 cores

≤ 64 GB

≤ 10 TB

≤ 6 months

≤ 48 cores

≤ 450 GB

≤ 50 TB

≤ 12 months

Possibility to make temporary clusters of VMs.

→ Possibility of service extension , subject to service manager's approval.



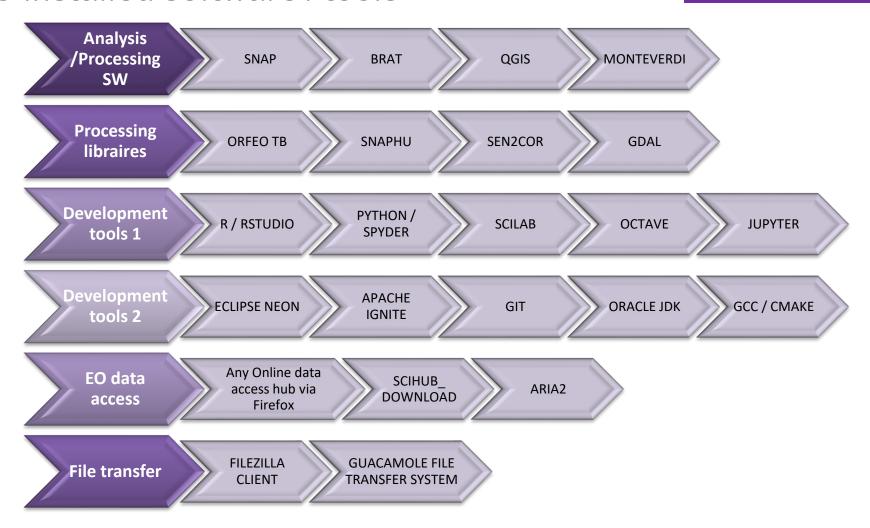






Pre-installed software / tools

The IT Offer







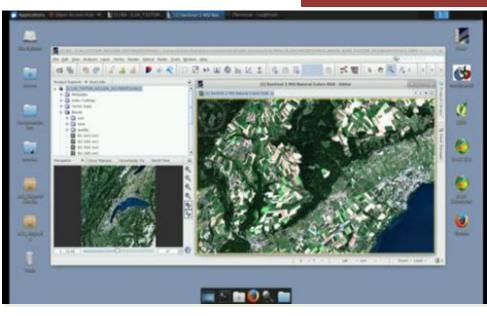


A dedicated Helpdesk









A team of experts

- Analysing User's request
- Supporting data downloading
- Providing technical/scientific support
- Supporting VM management /Incident









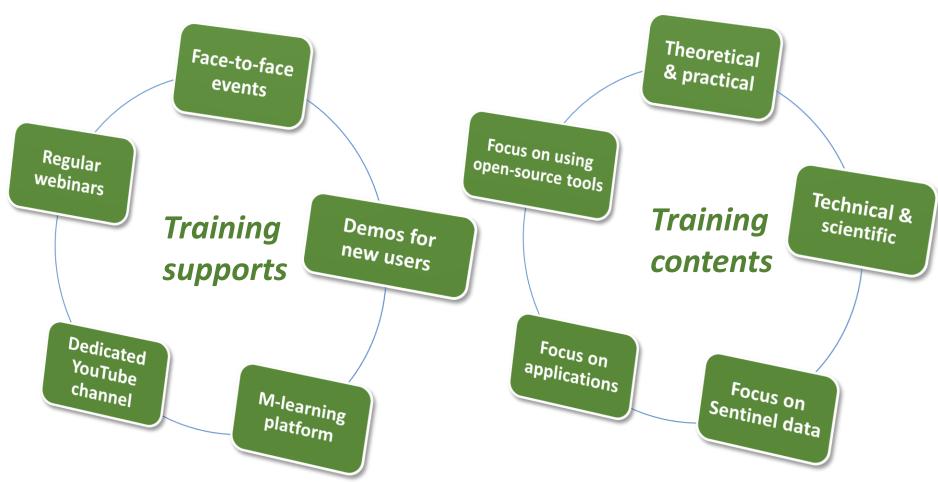




A variety of training supports and contents

Training

All activities are performed using RUS virtual machines











Improving Capacity

Training

Face to Face training events

Applications of RS explained and demonstrated by experts tailored to different user categories (from beginners to trainers). Hands on exercises to extract information from EO data.

Monthly Live Webinars

Aiming to demonstrate how to exploit the RUS environment for processing data and deriving results.





M-learning Portal

Short videos with the theory behind Remote Sensing and Applications; these include questions and quizzes to test the understanding of the lecture





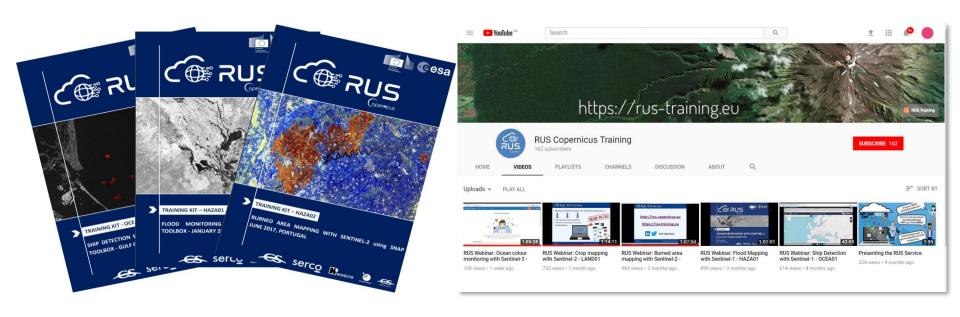






Free materials available online

Training



Training kits to practice on exercises

All webinars available on YouTube



- Download the Q&As of each webinar from the RUS Training portal
- Ask a RUS VM to replay the webinar on your own (with data set and materials)

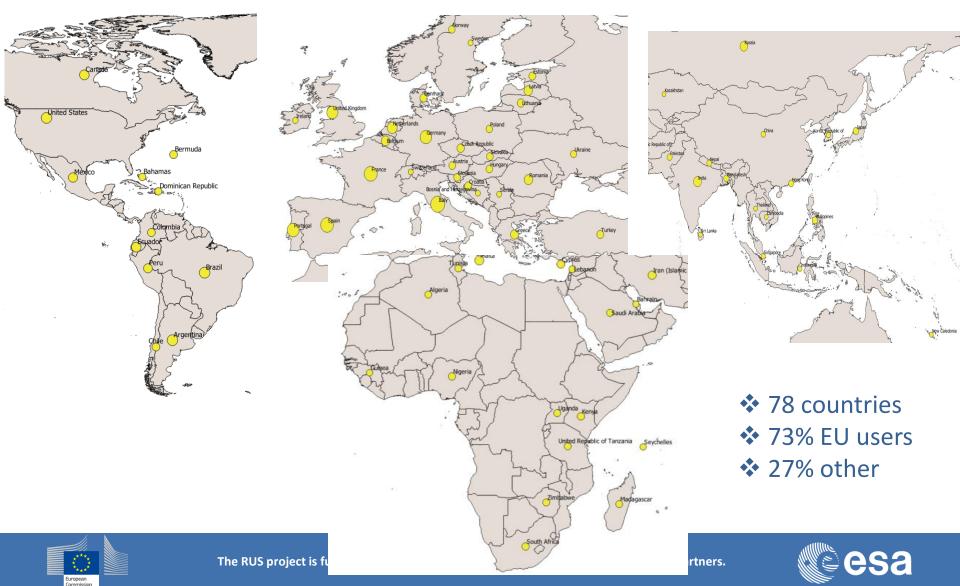








One year of RUS Service operations



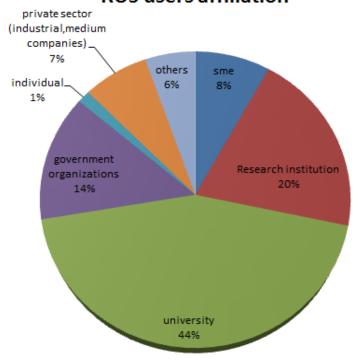




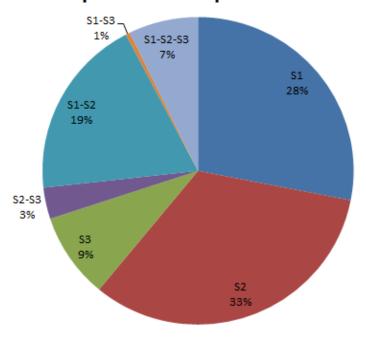
One year of RUS Service operations

600 registered users and an overall satisfcation mark of 9.2

RUS users affiliation



Copernicus core product used











One year of RUS Service operations

Training & outreach

- ☐ 9 RUS face to face training 300 attendees
- ☐ 11 RUS webinar on live 1,450 attendees (12,000 views on RUS Youtube channel)
- ☐ Participation in 46 outreach events
- 12 Publications (papers in proceedings, online journals, newsletters)

















Second year of operations started

Upcoming steps

- ☐ Continuous upgrades: platform, infrastructure, software and processes
- Availability of Sentinel-5 data and related tools
- RUS integration in Data and Information Access Services (Creodias, Mundi, Onda, Sobloo)









Thank you for your attention

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Present at ESA booth during the workshop



RUS-Copernicus



RUSCopernicusService



@RUS_Copernicus



rus-copernicus.eu / rus-training.eu



