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RUS Copernicus Service: Cloud Computing, Support and Training for Sentinel Users.

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Offering systematic open and free Earth observation data at global coverage (and with an observational continuity ensured for decades), the Copernicus satellite constellation is a game-changer for many different applications, including climate monitoring, environmental changes (atmospheric, marine, land), agriculture, forestry, natural hazards and many others. However, the exploitation of remote sensing data is often computationally heavy and knowledge demanding.

With the aim to tackle these issues the RUS Copernicus (Research and User Support for Sentinel Core Products) project, funded by the European Commission and managed by the European Space Agency (ESA), started operations in October 2017. The service is offered free of charge and is operated by CSSI and its partners: Serco Italia SPA, Noveltis, Along-Track, and CS Romania. The main aim of RUS is to enable and increase the uptake of Copernicus data and support R&D activities within Europe. The service provides not only powerful computational environment (up to 40 cores for processing and 50 TBytes of storage capacity) - in the form of customized Linux based Virtual Machines (VMs) preinstalled with a wide variety of open source toolboxes - but also EO expertise and support for application-specific data selection, processing and visualization as well as algorithm development and scaling-up to large amount of Sentinel products. Moreover, users can install additional proprietary tools and SW in case they hold a valid license. The service is exclusively foreseen for training, research and R&D (no commercial use) and is currently available only to the residents of EU ("Copernicus citizens").

Apart from ICT resources and user support, RUS Copernicus has implemented an extensive training programme, led by Serco Italia SPA, and open to everyone (from students to decision-makers and professionals). It is designed to fit users' needs at all levels of expertise regardless their location or the topic of interest. The training programme covers a wide portfolio of applications and consists of three main pillars: 1) Face-2-Face training (generally up to 2 days in duration, for max. 45 participants); 2) Webinars (regular monthly webinars, special webinars, up to 500 participants); 3) E-learning. All trainings/resources are free and exploit only open source software in order to facilitate repeatability for users (even users not registered for a free RUS VM).

By January 2019, more than 2,000 people have participated in RUS training events and the recorded webinars count more than 28,000 views on the dedicated RUS YouTube channel. Additional 1,200 users are registered to the E-learning portal, which enables them to learn and test their knowledge in EO at their own pace.