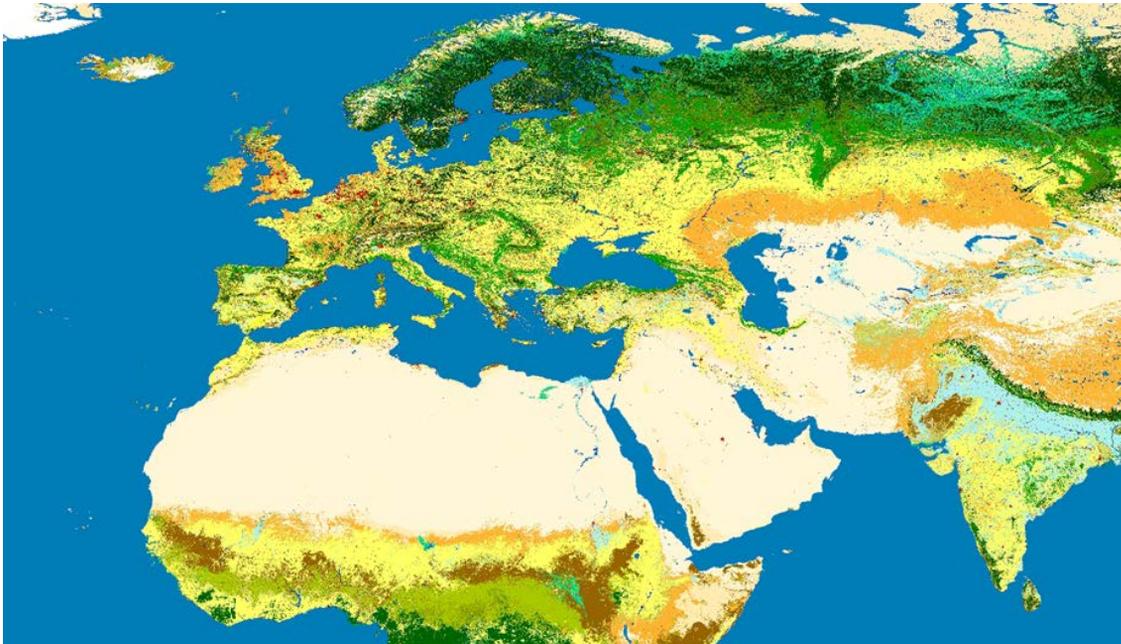


In this issue:

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- The Urban Round-Robin data package



The Urban Round-Robin is launched

The objective of the Urban Round-Robin (RRob) activity is the selection of the “best” algorithm(s) or combination of algorithms for improving / updating existing global urban land cover products on the base of Sentinel-1 C-band SAR data. This is an open activity in which external research groups are invited to develop and propose their own methodologies.

Started on September 1st 2015, this RRob activity focuses on the development of a processing chain to update / improve the existing urban class of the CCI Land Cover global land cover products and get prepared for the next generation of Land Cover maps using SAR imagery. The activity focuses on test sites located in semiarid and arid regions in the Mediterranean and Northern Africa.

The applicability of the proposed methodologies on a global scale is important for the CCI Land Cover project. Therefore, following methodological requirements should be considered in the RRob:

- Applicability to global datasets, i.e. results need to be globally consistent. The RRob results and algorithms performance should be similar for all study areas.
- Processes are rather automated and have a reasonable processing time.
- Applicability to global urban area products at 300 m or/and higher resolution (20 m).

The following outputs are expected :

1. Update of urban class of the Land Cover Map 2010 for all 5 test sites and at least one MMU (20 m or 300 m).
2. A report, named the “Algorithm Theoretical Basis Document”, explaining the proposed methodology in detail.

Delivery of these outputs are due by December 1st 2015.

The validation of the outcomes of the Urban Round Robin activity will be done by independent experts selected amongst the CCI Land Cover consortium, beginning of December. This ensures a completely independent validation.

More information is available on <http://maps.elie.ucl.ac.be/CCI/viewer/index.php>



The Urban Round-Robin sites

The 5 Urban Round-Robin sites are located in the Mediterranean and in North Africa, namely in Portugal, Turkey, Israel, Egypt and Tunisia, encompassing an area between 60.000 and 122.000 km² (see Fig. below).

The test sites were selected as optical and SAR data face major issues for urban area mapping in semi-arid and arid regions.



Figure 1 : Location of the Urban Round-Robin test sites

The Urban Round-Robin data package

The Urban Round-Robin data package consists of multitemporal Sentinel-1 C-Band SAR data acquired between October 1 and December 31, 2014 in the Interferometric Wide Swath mode (GRDH product). For each test site a time series of 14 to 16 VV- and VH-polarized Sentinel-1 images including both, ascending and descending orbit, is available. The data pre-processing was performed by the Friedrich-Schiller-University Jena, Germany, using the Gamma software and IDL.

The processing steps include image calibration, terrain geocoding, topographic normalization, multitemporal filtering and the calculation of multitemporal mean values. The spatial resolution of the processed data set is around 20m.

Access to the Urban Round-Robin data package is provided via the CCI LandCover viewer (<http://maps.elie.ucl.ac.be/CCI/viewer/>).

www.esa-landcover-cci.org

For more information on the project, please write to: contact@esa-landcover-cci.org