1.1 Module 4: Copernicus Land Monitoring Service

1.1.1 Submodule A: Product portfolio and data access

Executive summary

The submodule provides an overview of the Copernicus Land product portfolio with its different portals and data access mechanisms. The In-situ component is not included!

This module consists of a Power Point Presentation (PPT) and a video in *.mp4 format. The video to submodule A is to be understood such that the presenter can chose to press the "Pause" button whenever/wherever he wants to elaborate on contents.

Script

The script describes the procedure of performing the tasks with the "real" online data sources and provide also associated links, whereas the PPT and video run offline.

1. Go to the Copernicus homepage as general entry point: http://copernicus.eu/
2. Navigate on the left side to **Products and Services _Land Monitoring_** to get general information on the Copernicus Land Monitoring Service (CLMS)
3. Scroll down and click on land.copernicus.eu to enter the whole variety of Copernicus Land Monitoring Services

   Global

   Present the Global Land product portal with its variety of global bio-physical variables and access mechanism. Provide some information of established indices and variables.

4. Click on Global to enter the product portal of the Copernicus Global Land Service
5. Navigate with the mouse to **Products** to get an overview of the global products in the different thematic domains (vegetation, water cycle, energy budget).
6. Just briefly refer to the **User support corner** in the bottom right corner for additional information (leaflet, product portfolio, FAQ)
7. Click on **_Viewing_** to access the viewing services and click then on Tiled map viewing service to get an impression of the existing viewing services.
8. Select **NDVI V2**, and perform a global time series viewing by defining a time span within 2016.
9. Go back to the Global Land Homepage, then click on **_Product Access_** to search and download Global Land Products of your interest.

   Hint: You need to register (upper right corner) to be able to download products.

Pan-European

Present the Pan-European product portal with its variety of products, services, reference data and access mechanism. Provide some specific details on product definition and characteristics.

10. Go back to the CLMS portal land.copernicus.eu and click on Pan-European to enter the product portal.
11. Navigate from the left (Image mosaics) to the right (Related Pan-European products), then click on Image mosaics.
12. Select Very high resolution, then click on True color image 20112 (Core 3, VHR – 2.5m) to open the map viewing service.
13. Fully zoom to a location of your choice (e.g. Athens in Greece).
14. Click on Web services. A pop-up window appears on the left side of the map: click on WMS. A WMS link appears in a new tab, it allows you to integrate the map image within your GIS.
15. Go back to Pan-European and click on CORINE Land Cover to access the CLC product group. Select and click on a CLC product (e.g. CLC 2012). The Map Viewer opens automatically.
16. Zoom within the map to a location of your choice (e.g. Athens in Greece), then click on **Metadata** to get more information about this specific dataset.
17. Click on **Download** and select the product type(s) of your choice (e.g. CLC 2012 as 100m GeoTiff and as ESRI Geodatabase). Then activate the checkbox under the product listing and click on **Download selected items (2)**.
18. The Login interface opens automatically. To download the selected dataset(s) login with your EIONET credentials. The download starts after successful login. New users have to registrate first by clicking on Registration. The registration form opens automatically. Fill in the form, accept the **Terms of Use** and click on **Register**.

    Hint: The registration procedure is identical for **Pan-European** and **Local** CLMS products.

19. Click on Pan-European to get back to the Pan-European product overview and click on High Resolution Layers to browse between the different layers.
20. Click on Imperviousness to get an impression of the available HRL Imperviousness products for Europe.
21. Go back and click on Forests to do the same for the HRL Forest.
22. Click again on Pan-European, then select Reference Data to show pan-European hydrographic and elevation reference datasets. Click on EU-DEM to get more information.

Local

Present the Local Component product portal with its variety of products. Finally, refer to the User corner as additional source of information.

23. Click on Local to enter the product groups of the local component.
24. Select Urban Atlas to enter the Urban Atlas product family.
25. Go back and click on Riparian Zones to do the same for the Riparian Zones products.
26. Repeat the whole action with Natura 2000 (N2K).

27. Finally, refer to the *User corner* on the right for additional information (publications, technical library, service desk, etc) and click on [Technical library](#) to view and download technical documents.