



EUROPEAN SPACE AGENCY

WEED

WORLD ECOSYSTEM EXTENT DYNAMICS

An open, globally-applicable toolbox to support countries in mapping ecosystems and their dynamics.

Generating fit-for-purpose indicators for multiple global policy frameworks (SEEA-EA, GBF, SDGs, etc.)

National Users

Colombia, Vietnam, South Africa, Greece, Norway, Czech Republic, Cameroon, Georgia, Philippines, Slovakia, Uganda, and the European Environment Agency.

Co-created and evaluated with users



vito

BC3

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International Institute for
Applied Systems Analysis



WEED

WORLD ECOSYSTEM EXTENT DYNAMICS

GLOBALLY APPLICABLE:

use the toolbox to produce your own standardised ecosystem maps for terrestrial, freshwater, and coastal ecosystems, including intertidal zones, and submit them to the Global Ecosystems Atlas

CONTEXT-AWARE:

integrate your own data – the toolbox will automatically optimise the results for your region of interest and relevant ecosystem types, through thematic expert models

FULLY TRANSPARENT:

access to all data and intermediate layers, fully automated documentation

MONITOR DYNAMICS:

provide consistent, high confidence records for trend analysis and reporting

INDICATORS:

direct output to ease ingestion for reporting (e.g. GBF A.2 indicator, ecosystem extent accounting tables)

MAP ECOSYSTEMS:

at high spatial resolution (10-30 m) according to the most important ecosystem typologies: European Nature Information System (EUNIS and EU extent typology), IUCN Global Ecosystem Typology (GET); with the option for crosswalks with national or other typologies (e.g. Ramsar, EU Habitats Directive Annex I)

WIDE APPLICABILITY:

for countries, businesses, investors and financial institutions, and scientists and research networks

OPEN:

an open-source, flexible and innovative toolkit to map and monitor, leveraging advances in computing and Earth observations, following the FAIR principles, and built upon existing state-of-the-art and sustainable platforms: ARIES (supported by UNSD), OpenEO (supported by ESA), Reference Data Module (supported by IIASA)

Co-created with four thematic experts (Danish Hydraulic Institute, James Cook University, Ecounting, University of Bonn), 11 national institutes (Norwegian Institute for Nature Research, Czech University of Life Sciences Prague, University of Patras, Alexander von Humboldt Institute for Biological Resources Research, South African Environmental Observation Network, Vietnam Academy of Science and Technology, Philippines Biodiversity

Management Bureau and Space Agency, Georgia Ministry of Environmental Protection and Agriculture, Ministry of Environment, Nature Protection and Sustainable Development Cameroon, Uganda Bureau of Statistics, the Institute of Landscape Ecology of the Slovak Academy of Sciences), and the European Environment Agency.

GEO GROUP ON
EARTH OBSERVATIONS



GLOBAL
ECOSYSTEMS
ATLAS

WEED contributes to the Global Ecosystems Atlas, a digital public good convened by the Group on Earth Observations.

For more info

