

DUP109b

→ THE DATA USER ELEMENT



ABOUT DUE

The nature of Earth Observation data makes it a unique tool for providing local and global scale environmental information to wide range of potential users. ESA's DUE provides the opportunity and framework to align new EO capabilities and techniques to the practical and operational needs of the end-user communities.

DUE activities and projects bring together user communities and actors from research institutes, industrial companies and other specialised fields. This collaborative approach ensures the transfer of valid and high quality demonstration products into sustainable environments which meet the practical and operational needs of the user communities.



“Bridging the gap between research projects and the sustainable provision of EO products that respond to the operational needs of User Communities”

NEW CHALLENGES



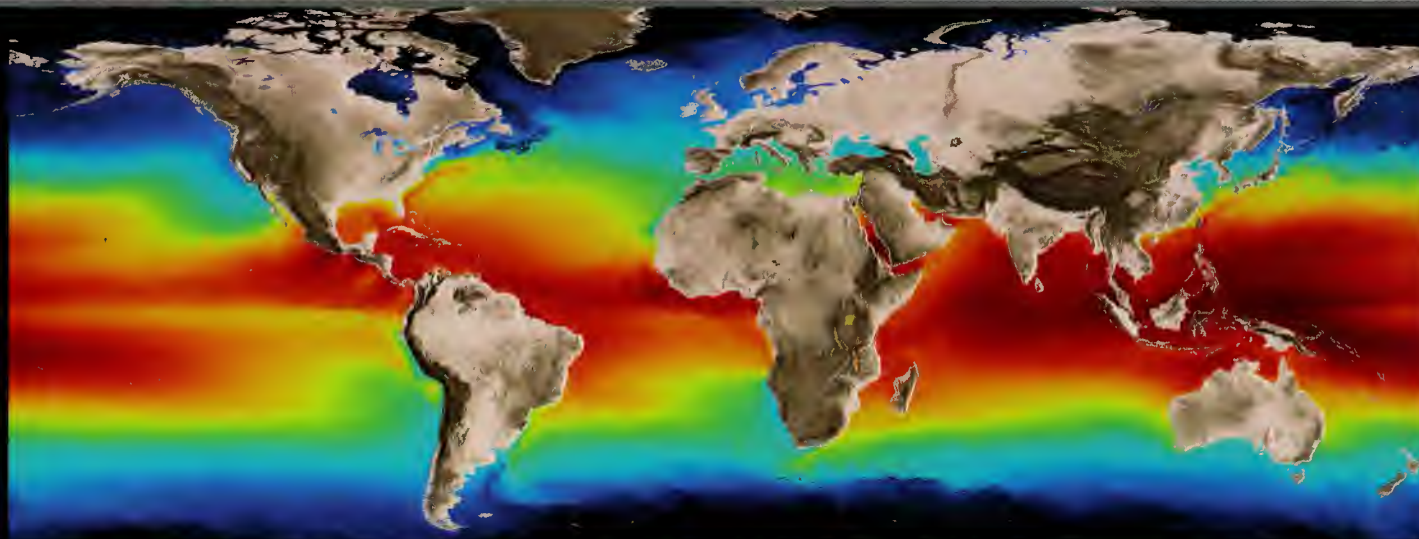
Several DUE projects have already pioneered applications that are being further developed into operational services by the European Commission under the Global Monitoring for Environment and Security (GMES) initiative.

The data and services from DUE's Medspiration and GlobColour projects pave the way for the Marine Core Service of the GMES (Global Monitoring for Environment and Security) initiative.

“Clues to climatic changes may already be written on the oceans’ surface. [...] ESA is making a difference to public awareness of climate change by helping us to better understand the sea surface temperature story.”

Prof. Ian Robinson - National Oceanography Centre, Southampton (NOCS) UK

Global Sea Surface Temperature



SUPPORTING INTERNATIONAL ENVIRONMENTAL CONVENTIONS

Projects such as the GlobWetland project demonstrate that satellite data can support the inventorying, monitoring and assessing of wetland ecosystems. The GlobWetland methodology has been adopted as standard by the Ramsar Convention on Wetlands.



The collaboration of the users in the field is a key element for the success of the final products.

“Often made up of complex and inaccessible terrain, monitoring ecological changes in wetlands without the use of satellite data is very difficult. [...] ESA EO data has considerable power and potential in providing the intelligence behind making sound decisions on management and policy.”

Nick Davidson - Ramsar Convention on Wetlands

Land Use Land Cover, Parc naturel régional des caps et marais d'Opale [France]





IN TOUCH WITH THE USERS

DUE has continuously consulted the international user communities via thematic workshops and participation to the Conference of the parties (COP) of the major International Environmental Conventions.

In addition DUE has established project offices to strengthen the engagement of ESA in international coordinated actions.

IGOS-GEOHAZARDS PROJECT OFFICE
BRGM, French Geological Survey (France)

IGBP-ESA JOINT PROJECT OFFICE
ESA-ESRIN (Frascati, Italy)

GHRSS-PP PROJECT OFFICE
National Centre for Ocean Forecasting NCODO,
Met office (UK)

GOF- GOLD LAND COVER PROJECT OFFICE
Friedrich-Schiller-University Jena (Germany)

“ESA has shown a high corporate social responsibility towards the protection of our world heritage”

COP9 UN Convention on Biological Diversity, Bonn 2008 - Mario Hernandez, UNESCO



The European Space Agency (ESA) is Europe's gateway to space. It is an international organisation with 18 member states. ESA's mission is to shape the development of Europe's space capability and ensure that investment in space continues to deliver benefits to the citizens of Europe and the world.

The Data User Element (DUE) is a programmatic component of the Earth Observation Envelope Programme, an optional programme of the European Space Agency. The Programme is run by the Projects Section of the Exploitation and Services Division (D/EOP-SEP) within ESA's Earth Observation Science, Applications and Future Technologies Department.

www.esa.int

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PIONEERING RESULTS

DUE projects have acted as precursor activities helping to establish new dialogues between many specialised user communities - particularly in the fields of international environmental management and global climate change.

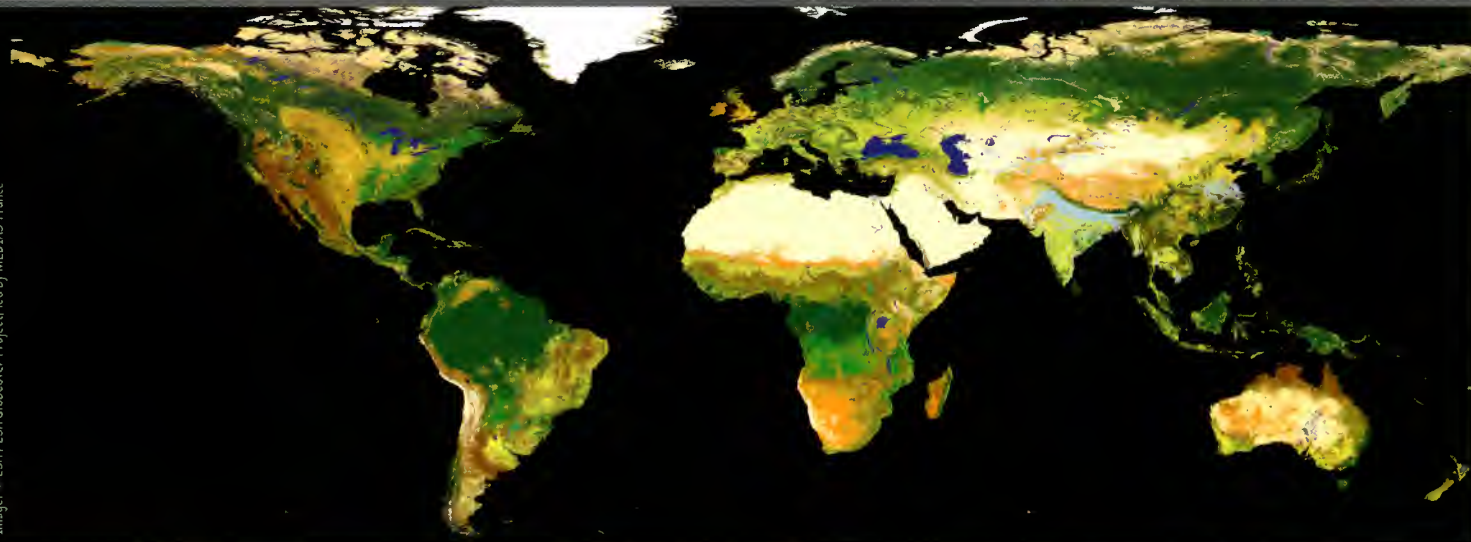


The GlobCover Land Cover product is the highest resolution (300 meters) global land cover product ever. To date over 6000 users have registered and downloaded the product.

“Land cover data is an essential requirement of the sustainable management of natural resources, environmental protection, food security, climate change and humanitarian programmes.”

Dr. John Latham - Food and Agriculture Organization of the United Nations (FAO)

GlobCover map



DUE TODAY AND TOMORROW

Successfully building a strong relationship with the user communities has been a key element in transferring many demonstrated EO services into sustainable environments such as the Global Monitoring for Environment and Security Initiative (GMES).

Other user-driven projects underpin successful initiatives such as TIGER (through AQUIFER further funded by AfDB, The African Development Bank).

GlobCarbon, GlobCover, GlobColour, GlobAerosol, GlobGlacier and GlobIce are considered pioneer projects for the ESA Climate Change Initiative recently funded by the ESA Member States.

“The DUE - like its forerunner DUP - is an instrument to support the development of operational EO applications. It is in particular working to support the users of such applications along with the EO service industry, and is instrumental also to encourage the cooperation between parties in the various participating states.”

Dr. Nico Bunnik - Former National Delegate to the Earth Observation (EO) Programme Board

