Activités SDI

UNIGE/Inst. des Sciences de l'Environnement/enviroSPACE Lab. & UNEP/GRID-Geneva
enviroSPACE et UNIGE/GRID

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Earth Observation for Economic Empowerment
Coordination, 13 partners (2013-2015)
http://www.eopower.eu

Fostering sustainability and uptake of research results through Networking activities in Black Sea & Mediterranean areas
Partner, WP leader (2013-2015)
http://iason-fp7.eu

- promouvoir l'utilisation des données d'observation de la Terre
- faciliter le développement de modèles hydrologiques
- renforcer les capacités en SDI
- faciliter la collaboration entre Commissions de la Mer Noire et Commission du Danube (ICPDR et BSC)
FP7 EcoArm2ERA & SCIEX enviroPAD

Towards Armenia's integration into the ERA Partner, WP leader (2011-2014)
http://www.ecoarm2era.eu

enviroPAD : Efficient Development and Execution of Environmental Applications on Parallel and Distributed Infrastructures Coordination (2013-2014)
http://www.unige.ch/envirospace/Projects/enviropad.html

- optimisation de la modélisation par calcul distribué
- modélisation hydrologique du Lac Sevan en Arménie
Integrated Coastal Zone Management (ICZM)

Partner (2010-2014)

http://www.pegasoproject.eu

~ 960 hours
~ ~4’400 kilometers
**RAMSAR – Sites Information Service**

**Ramsar Sites Information Service**

**Ramsar Sites Information Service portal**

**Search for a Ramsar Site**

- **Becher Point Wetlands**
  - *Australia*
  - Area: 52023 km²
  - Coordinates: 32°23' S, 115°44' E

**Overview:**

**Key features of the site:**
The Becher Point Wetlands Ramsar site is a system of about sixty small wetlands located near Rockingham in south-west Western Australia. The wetlands are made up of chains of small linear, ovoid or irregular shaped basins arranged in five groups, each roughly parallel to the coast and separated by sand ridges.

**Download RIS**

**Map download**

**GIS download**
Plusieurs projets soumis ou à soumettre
➢ services écosystémiques
➢ renforcement des capacités EO
➢ interopérabilité des SDI (forêts, climat)
UNIGE/GRID SDI

New metadata catalog: http://metadata.grid.unep.ch
UNIGE/GRID SDI

Services registry: [http://services.grid.unep.ch](http://services.grid.unep.ch)
UNIGE/GRID SDI

Service Oriented Architecture

Application layer
(Desktop & Web clients)
[UNEP-Live, GEOSS, INSPIRE, UNSDI]

Service layer
(Geoserver, GeoNetwork,
PyWPS, THREDDS,
TJSserver)

Data layer
(PostgreSQL/PostGIS, File system)
UNIGE/GRID SDI

Service Oriented Architecture

[Diagram showing the architecture with nodes like GeoNetwork, CSW, OpenSearch, OAI, and connections to Discovery Broker and Service registry.]

Other GRID products (reports, posters, …)
UNIGE/GRID SDI

Guidelines
UNIGE/GRID SDI

Ongoing work: data publication of PhD/Masters students
http://www.uneplive.org

**The need:**
UNEPLive aims to support the growing demand for substantiated, contextualised knowledge about the environment, UNEP has developed richer sets of data and knowledge flows and communities of networks.

**The aim:**
UNEPLive[1] is a web-based platform to:

- facilitate the exchange and sharing of up-to-date data, information, assessments and knowledge amongst member countries, research networks, communities of practice, indigenous peoples and society, in order to keep the environment and emerging issues under review.
- provide open access to national and regional information and global datasets
- provide a range of big-data, visualisation, mapping and publishing tools via local and cloud services
- underpin UNEP's role as UNEA's information and knowledge service provider especially in the delivery of information and evidence to support the SDGs and post 2015 agenda.
UNEP Live

UNEP Live is a platform that provides information on the changing environment, place by place. It allows users to select a country, region, or global area and choose a theme to search for relevant information. The platform covers various themes such as biodiversity, climate change, and sustainable development. The image shows a user interface with options to select a country or region, choose a theme, and search for information.
Capacity Building in GEO

Since January 2014, UNIGE is task coordinator of ID-02 “Developing Institutional and Individual Capacity”.

Next Capacity Building Event: GEOXI plenary in Gabon – November 2014
Bringing GEOSS services into practice

http://www.geossintopracitce.org
GEO Discovery & Access Broker

Implementation of Brokers for Africa and for UNEP Live
GEO Discovery & Access Broker
GEO Discovery & Access Broker

Exploration of the GEOSS DAB API

http://api.eurogeoss-broker.eu/docs/index.html
Metadata generation

Metadata are essential... but boring to prepare.

Using GeoServer and GeoNetwork CSW interfaces. Users are only required to insert Title, Abstract, Keywords when publishing data. Automatic generation of ISO-compliant metadata while harvesting.

Paper under preparation!
Geo For All

http://www.geoforall.org

Making geospatial education and opportunities accessible to all!