UN-SPIDER:
Evidenz dissemination and recommended practices

EvIDENz mid-term workshop

21-22.09.2017

UN Campus, Bonn, Germany

Evidenz dissemination

- to Sendai framework related events, working groups and partnerships (e.g. GP-STAR)
- To UNCCD, UNFCCC environment
  - Africa Drought Conference, Windhoek declaration
  - Research dialogue, SBSTA, Climate Change Convention

The Windhoek Declaration for Enhancing Resilience to Drought in Africa

PREAMBLE

We, the African Member States and Parties to the United Nations Convention to Combat Desertification (UNCCD), Ministers, Heads of Delegation and Experts, attending the High Level Meeting of the first African Drought Conference (ADC);

Having met in Windhoek, Namibia from the 15 - 19 August 2016;

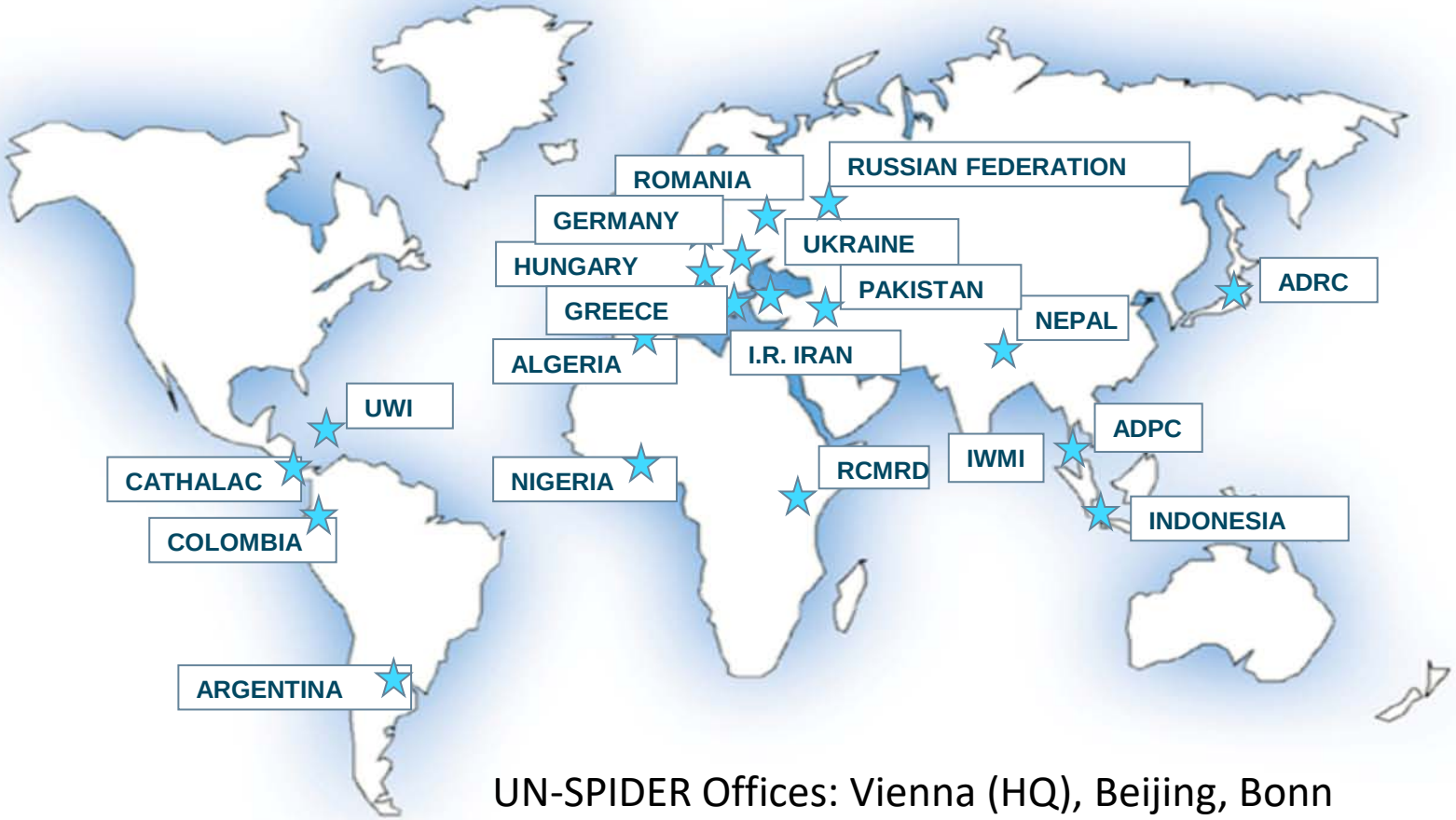
- Testing of developed workflows
- Recommended practice
- Dissemination through Knowledge Portal

UN-SPIDER: Mission statement

„Ensure that all countries have access to and develop the capacity **to use** all types of **space-based information** to support the **full disaster management cycle**.“

General Assembly Resolution 61/110 (2006)

UN-SPIDER Network of Regional Support Offices



UN-SPIDER Offices: Vienna (HQ), Beijing, Bonn
6 Space Training Center, ~46 National Focal Points

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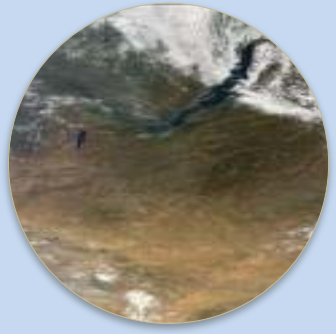
Key tasks



Technical Advisory Support

UN-SPIDER provides support to countries in assessing national capacity and in evaluating disaster and risk reduction activities, policies and plans

Knowledge Portal

The UN-SPIDER Knowledge Portal is a web-based tool for information, communication and process support

Capacity Building

UN-SPIDER facilitates capacity building and institutional strengthening, including the development of curricula and an e-learning platform (e-SPIDER)

Fostering Cooperation

UN-SPIDER fosters alliances and creates forums where both space and disaster management communities can meet

and many more…

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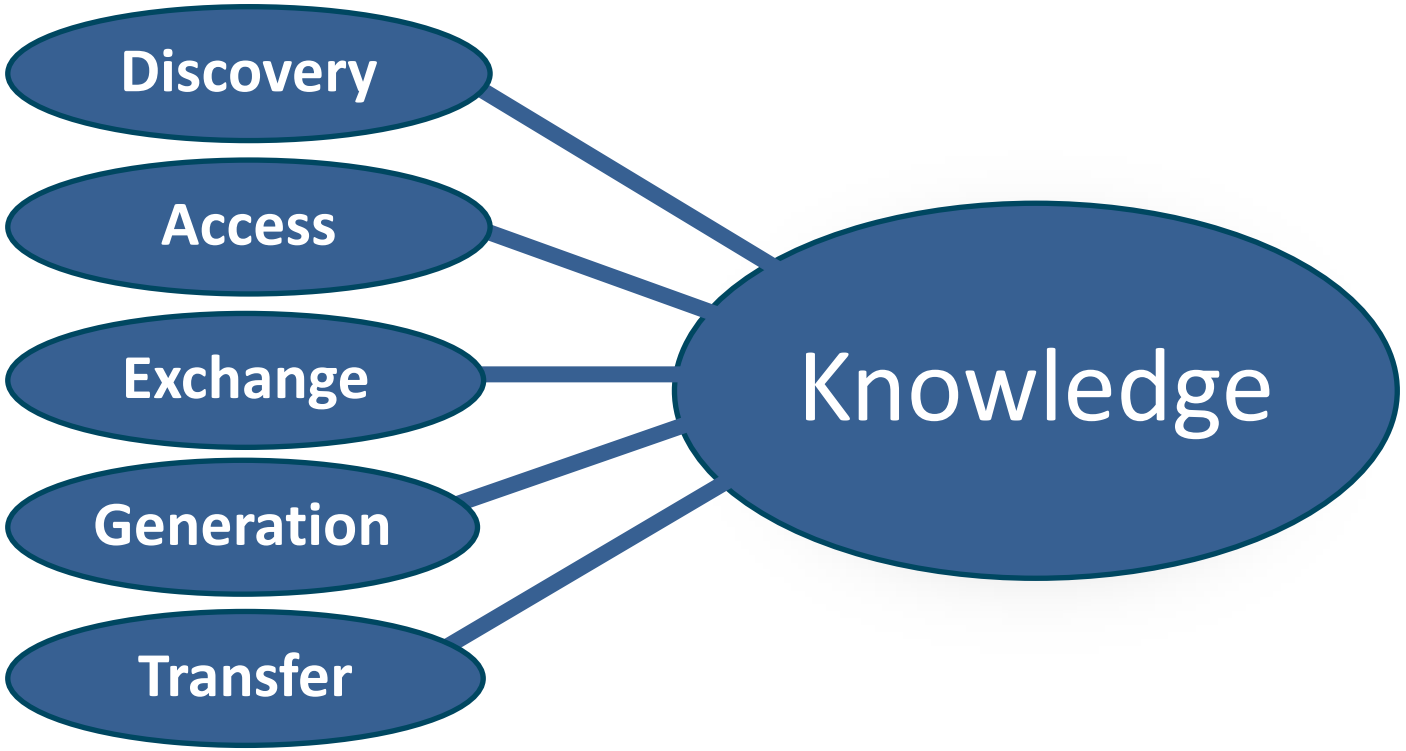
UN-SPIDER Bonn Office

Focusing on **Knowledge Management** to enable Member States to generate and use **space-based information** in all phases of the **disaster management cycle**

Knowledge Management efforts



Discovering relevant knowledge and information

Discovery

- **Finding and extracting information from selected websites and portals (space agencies, disaster management organizations, partners, news webpages, etc);**
- **Discovering information from publications and documents from partner institutions.**

Facilitating access to knowledge and information

Access

Newsletters and publications

UN-SPIDER Knowledge Portal

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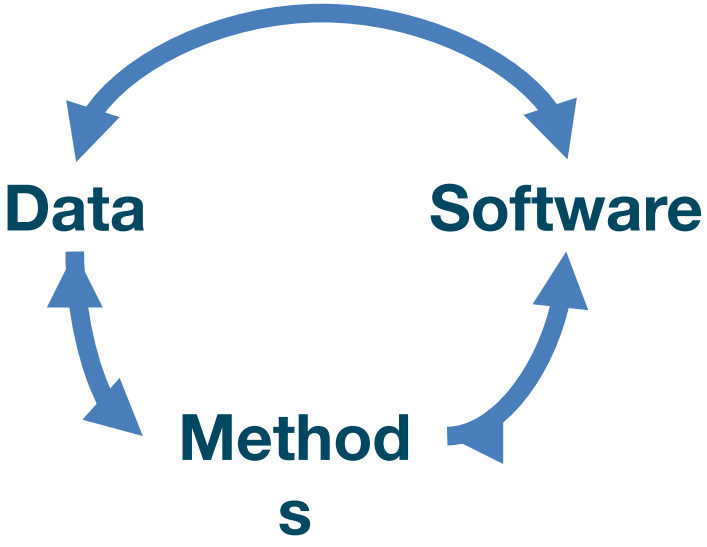
Facilitating access to data, information and knowledge

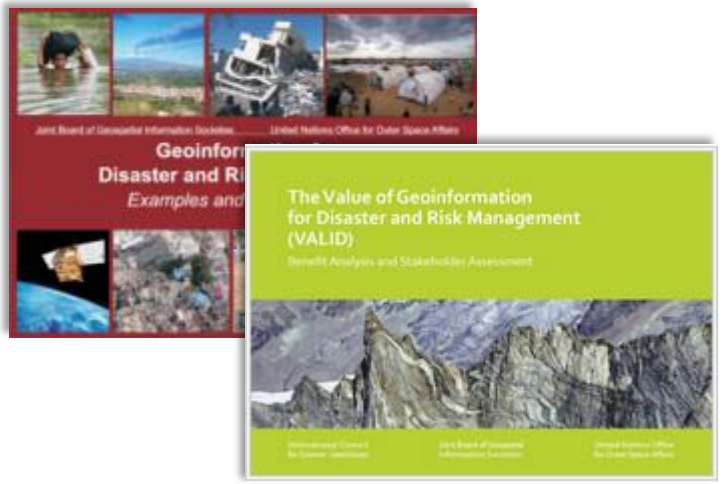
Links and Resources



Space Application Matrix

Awareness raising

- **Participation in events organized by partners;**
- **Mobilization of experts to events organised by partners;**
- **Participation in networks (IWG-SEM, IN-MHEWS, etc);**
- **Publication of Newsletters, monthly updates, Booklets; and**
- **Social media efforts**



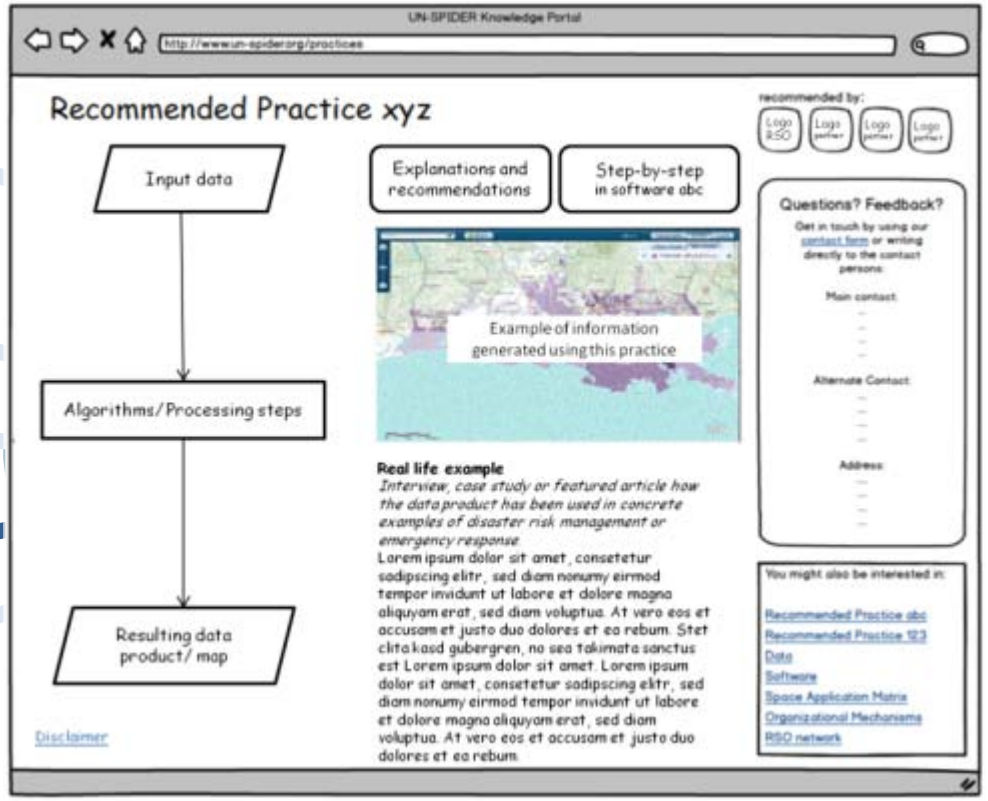
Facilitating the Exchange of Knowledge

- Discovery
- Access
- **Exchange**
- Generation
- Transfer

Conferences, Workshops, Expert Meetings

Facilitating the Generation of Knowledge

- Discovery
- Access
- Exchange
- **Generation**
- Transfer



RSOs

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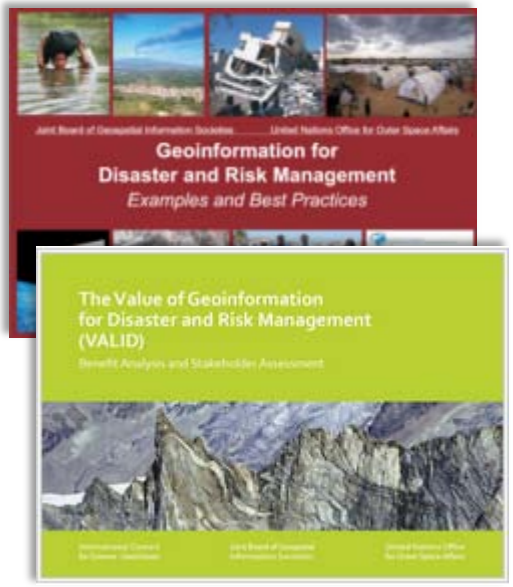
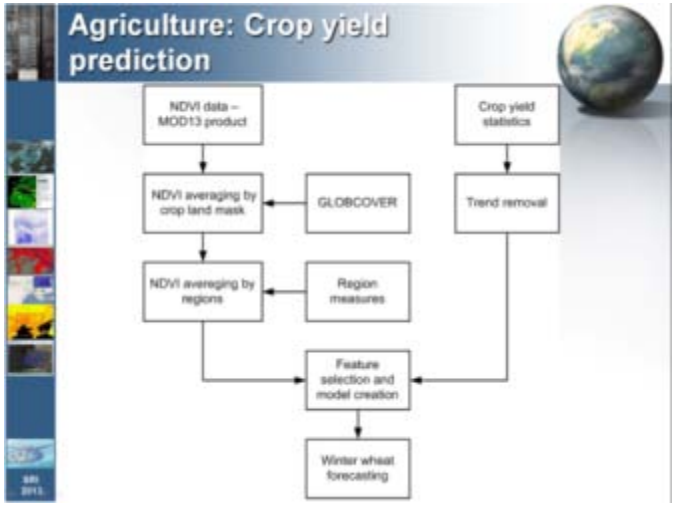
Facilitating the Generation of Knowledge



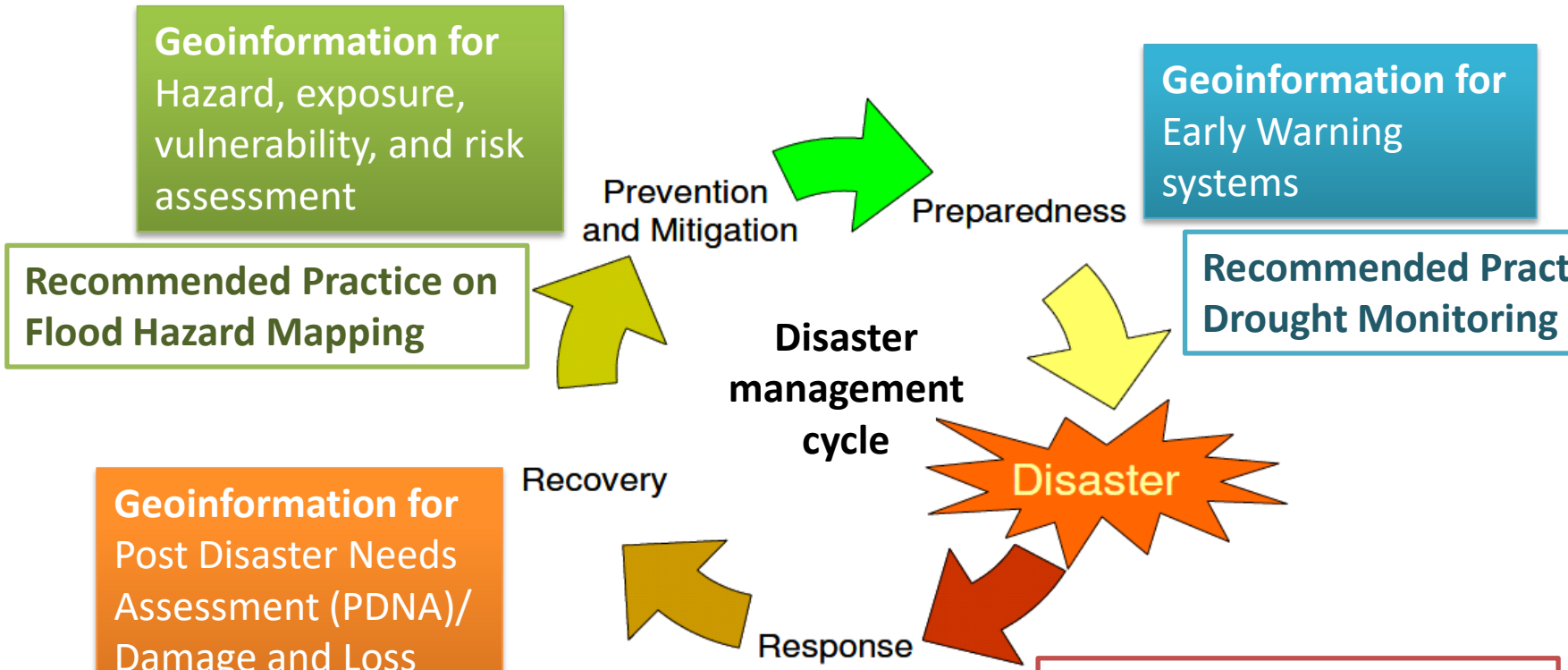


Training material & tutorials

Publications

Recommended practices

Access to Knowledge



Knowledge Transfer

- Discovery
- Access
- Exchange
- Generation
- Transfer

Training courses

From Science to Practice…

How can I apply these methods?

Where do I get the data and software?

Are the methods robust?

Is the method transferable, i.e. can I apply it in my country?

Do I have sufficient capacity and resources to apply the method?

How accurate and reliable are the results?

How do I interpret the resulting image?

…?

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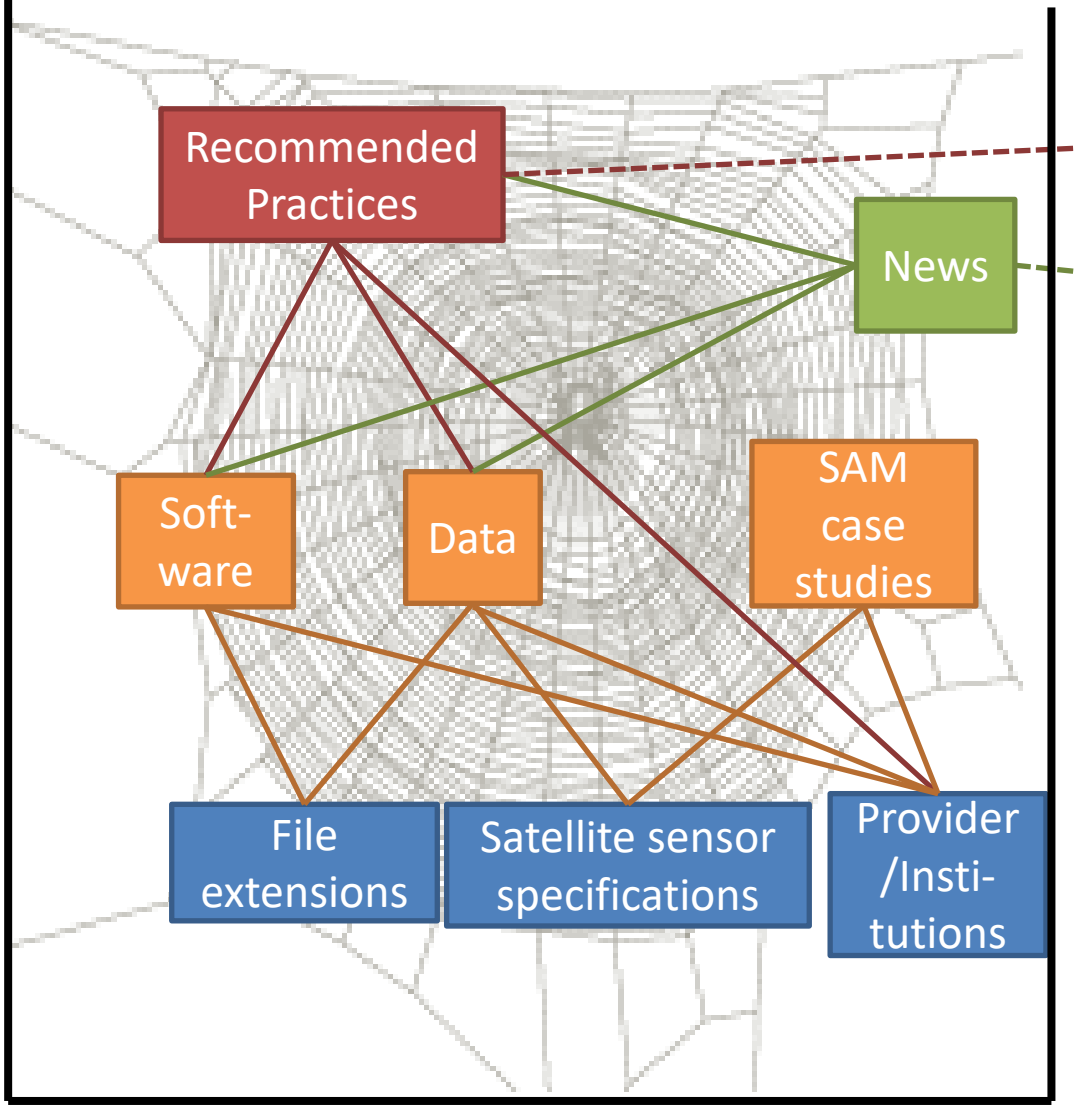
Recommended Practices on the Knowledge Portal



104 published data sources
107 software items
199 SAM case studies
106 satellite sensor specifications
1878 news
375 institutions
2 recommended practices finalized

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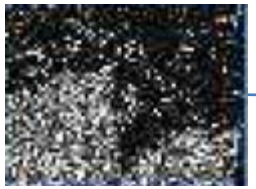
Recommended Practice Flood Extent Mapping

How can I create a flood extent map based on SAR data using free software?

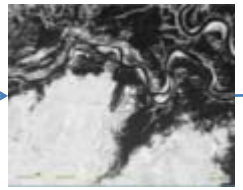
Recommended practices by UN-SPIDER's Ukrainian Regional Support Office provides step-by-step instructions.

SAR image

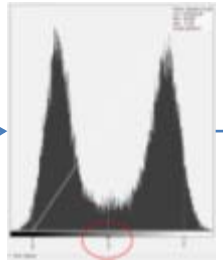


Backscatter coefficients

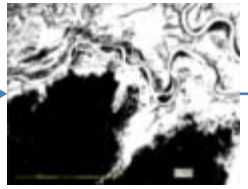
Filtered image product



Binarization



Classified image



Terrain corrected classified image

Flood Extent Map

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ІКД

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UN-SPIDER **KNOWLEDGE PORTAL**

Space-based information for Disaster Management and Emergency Response

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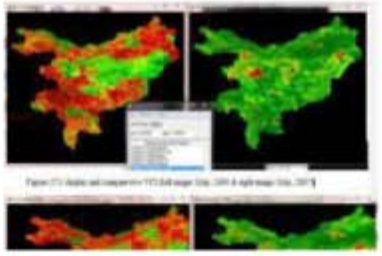
Flowchart

Recommended Practice: Drought monitoring using the Vegetation Condition Index (VCI)



Drought monitoring is an important component in drought early warning systems. This practice shows how to monitor the impacts of meteorological drought on natural vegetation using MODIS optical satellite imagery.

Step by Step

In Detail

Objective:

The purpose of this recommended practice is to monitor impacts of meteorological drought on natural vegetation (rain fed, range land & forest). Availability, simplicity, free of charge data, good research literature and citation, minimum requirements of inputs are main criteria, which have been considered to define the methodology.

Disaster Cycle Phase:

Recommended by:

Related Practices

Recommended Practice: Flood Hazard Mapping

Related data

MODIS Vegetation Product (NASA)
Crop monitoring - GEOGLAM (GEO)
view all

Related Software

GP-STAR Terms of Reference

Purpose of GP-STAR:

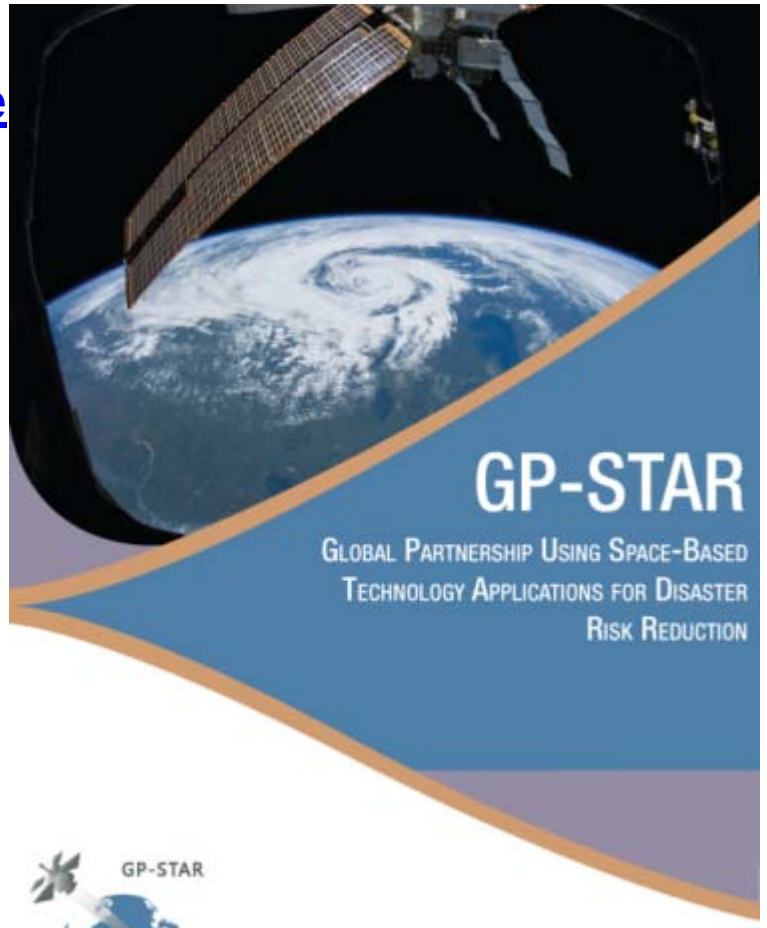
- is to facilitate the use of Earth Observation as well as satellite-based technology and application … for application in the context of the Sendai Framework for Disaster Risk Reduction 2015-2030 (Sendai Framework)

Partners (29):

GP-STAR & brochure

http://un-spider.org/network/gp-star-brochure

http://un-spider.org/network/post2015_drr



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UNISPACE+50

Invitation to Conference

Nov 22-24, 2017

Bonn, Germany

Dissemination

- at relevant events
- using UN-SPIDER networks
- Knowledge Portal
- Testing of workflows
- Recommended practices
- Use in technical advisory support, if appropriate
- Awareness raising

Acknowledgment

We would like to acknowledge:

BMWi for funding the EvIDENz project

Raumfahrtmanagement at DLR
for facilitating the process