

Spatial Agent

Access to Data and Analytical Services in a new world of Disruptive Technology

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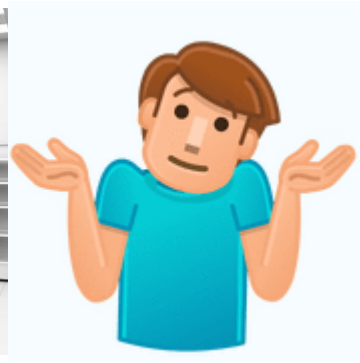
Global Lead (Watersheds → Disruptive Technology)

Environment and Natural Resources Global Practice



Session: From theory to practice: Demonstration of EO tools for WB operations
AWARENESS EVENT: EARTH OBSERVATION FOR SUSTAINABLE AGRICULTURAL DEVELOPMENT
September 27, 2018

We have NO data...



Of course we have data...

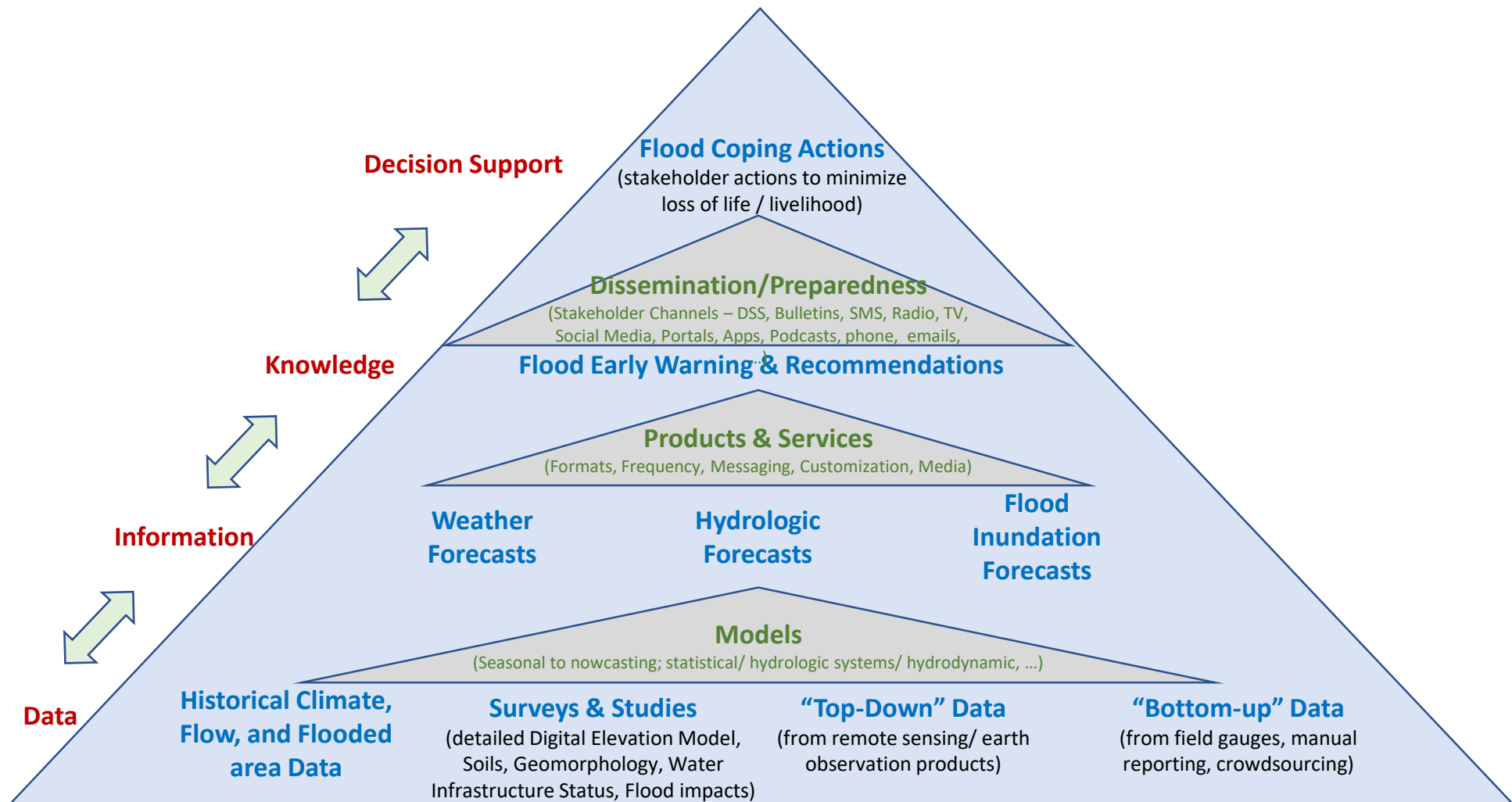


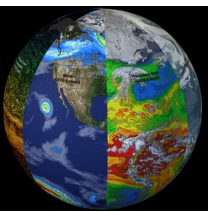
Data, data everywhere...



The Data Value Chain

Example: Deciding on Coping with Floods





A new world of “Disruptive Technology”



Reimagine decision making

- **Data Collection:** Monitoring/Surveys (in-situ sensors/IoT, Earth Observation, UAVs, crowdsourcing...); Digitization
- **Data Management** (telemetry, cloud services, open data, Blockchain, ...)
- **Data Analysis** (Big data, Geospatial/AI/Machine Learning, modeling, script repositories ...)
- **Data Access** (open data APIs, data visualization, gamification, mixed reality-AR/VR, ...)
- **Outreach:** Platforms/Social Media/Portals/Apps/e-books/Competitions



Reimagine production

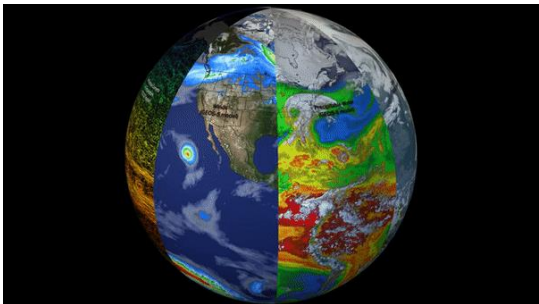
- 3D printing/additive manufacturing
- Automation/Robotics/automated transport
- Advanced materials/nanotech/biotech/distributed energy/green tech...



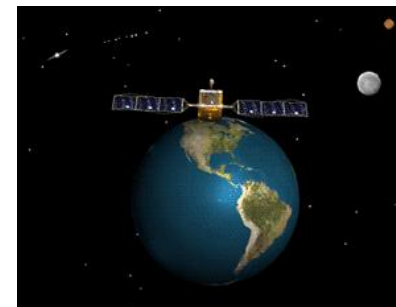
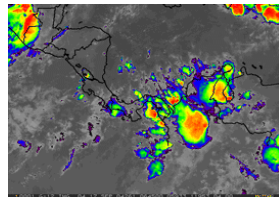
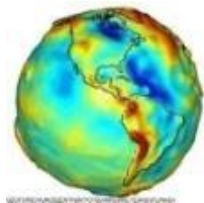
Reimagine interaction

- Crowdsourcing, gamification, competitions (e.g. hackathons, appathons)
- Mobile money, Fintech
- Maker movement/DIY/Tech Incubators
- Sharing economy

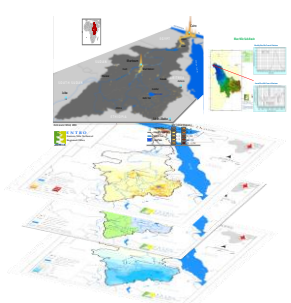




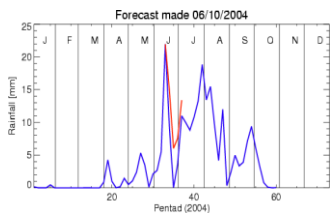
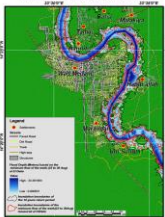
"Top-Down" Data Acquisition System



Satellite & UAV Earth Observation



GIS and other datasets
Data Rescue



Data Management

Analytics/Models

Big Data

Machine Learning/AI

Platforms

(data, analytics,
knowledge, learning)

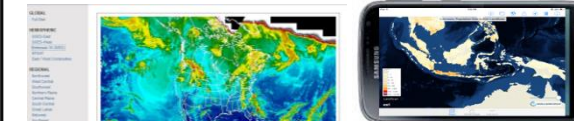


Subscription Services

Crowdsourcing

OGC Services

Open Data APIs



Web Portals/Apps/e-books



Stakeholder Alerts



Operational Control Rooms



Manual Monitoring
Surveys
Crowdsourcing



Automated Monitoring



"Bottom-up" Data Acquisition System → IoT

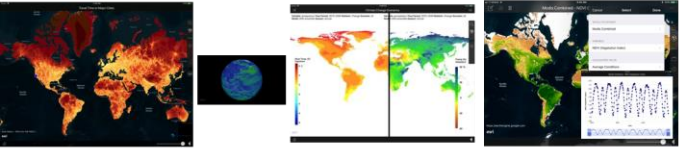
Country-Level

Check out global data from WDI, MIT Atlas on Trade, etc. Great interactive maps and charts.



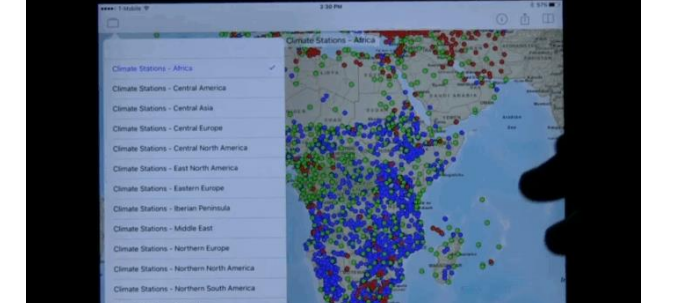
Sub-National

Check out thousands of global datasets from NASA, UN, ESA, GEO, etc. Great interactive tools, including use of the Google Earth Engine API for live cloud computing.



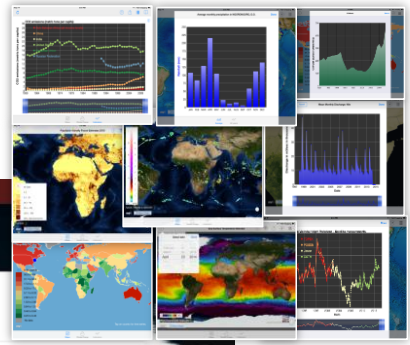
Showcase

Check out great showcase data on Mekong Delta, Poverty, Forecasts, etc. for selected areas and specialized themes



Spatial Agent App

A new world of data and analytics at your fingertips!



- ⇒ Geospatial Platform
- ⇒ HydroInformatics Platform

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