





EO outreach & requirements

José Manuel Delgado Blasco EO Outreach activities

EOcafe

10th September 2020

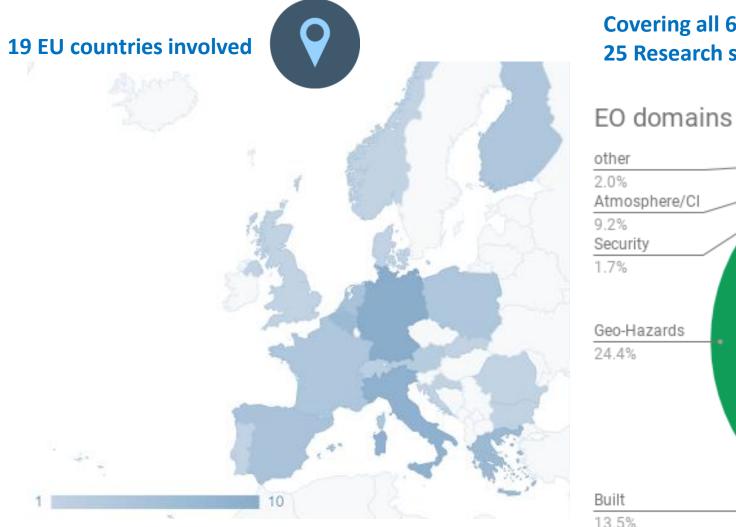


EO Requirements Gathering - summary

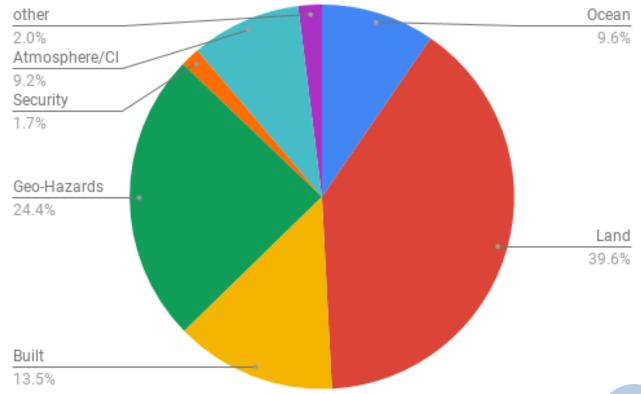
EO Outreach & requirements Participation



70+ Participants



Covering all 6 main domains with 25 Research subdomains



EO Outreach & requirements Identified technical capabilities



Data Processing Services



User Algorithms Hosting

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ForestChang	Repriorestation	Change mapping using Sentinel-2 data	Θ
Version	Service Type	Owechption	
1.0	Processor *	Forest change mapped by difference in re-	d band betwee
TILES INP	UT DEFINITIONS	OUTPUT DEFINITIONS	
Doctorium P-32: Objicación P-32: Objicación Capacitación L-Capacitación P-menel (Pase ale	a limita anhay a	Pile Language Dockwike * I HOH obuntur10.04 # MultifAufic Forestry TCP # Dependencies # MultifAufic Forestry TCP # Carlis # Survive # S	Esecutable

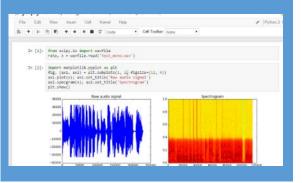
Data Analytics



Value-added products



Interactive development





Powered by a scalable data collocated processing environment - DIAS

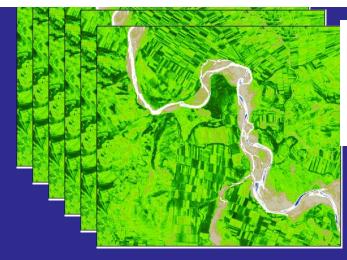


Examples of potential applications:

Examples

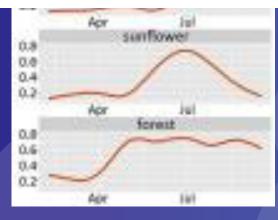
Open Clouds for Research Environments

Value-added products



0.8 0.6 0.4 0.2 Apr Jul maize

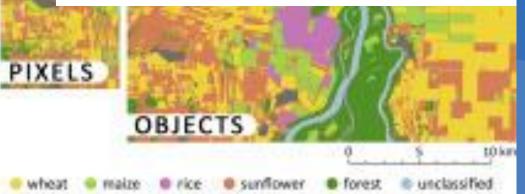
Time series analysis Statistics Change detection



CROPS CLASSIFICATION USING TIME-WEIGHTED DYNAMIC TIME-WARPING



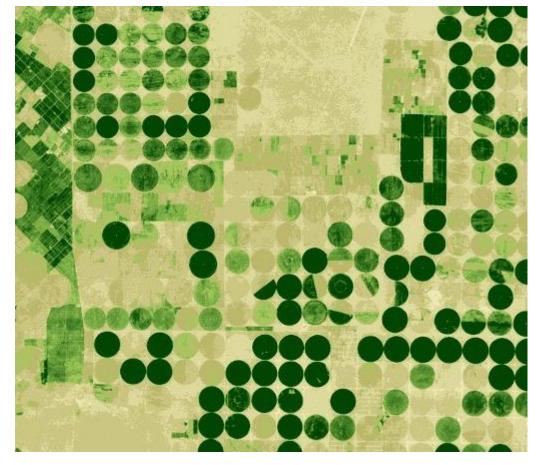
Land use / land cover maps Multi-temporal land cover maps LULC change



EO Outreach & requirements Non-exhaustive list of different applications



NDVI time series



- Healthy vegetation identification
- Time series analysis
- Crop season analysis
- Crop identification
- Land cover mapping
- Food production
- Crop yield
- Soil erosion
- Physical parameter retrieval/model : NDVI vs evapotransporation
- Climate change



Examples of potential customer scenario:

Scenario 1: Non-EO / traditional EO customer

Customer

In-house services

for Research

Environments

Value-added generation Data time series Analytics/statistics Classifications / ML Data sharing Systematic production Algorithm hosting Algorithm sharing

Scenario 2: New gen. basic EO customer



Online services

Value-added generation Data time series Analytics/statistics Classifications / ML Data sharing Systematic production

for Research

Environments

Provider

Provider's processing platform

Customer

Scenario 3: New gen. expert EO customer

Online services

Interactive development Algorithm hosting Algorithm sharing Data sharing Systematic production

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Provider's processing platform

Provider

Environments

Customer



Thank you

Please send any questions to the OCRE EO outreach team: j.delgado@rheagroup.com a.romeo@rheagroup.com

