



MYGEOSS:

Results and lessons learned

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European Commission, Joint Research Centre



MYGEOSS is a two-year project (2015-16) by the European Commission to develop smart applications based on data from the Global Earth Observations System of Systems (GEOSS) informing European citizens on the changes affecting their local environment.



MYGEOSS Focus



- To involve European SMEs in GEOSS and harness the opportunities of the GEOSS Data-CORE.
- To stimulate demand by involving citizen science projects, citizen observatories, and the public at large via mobile apps based on EO products and services.
- All apps to be based on open data and open code fully reusable (EU Public License)
- Project implemented through 3 open calls for innovative apps in March 2015, September 2015 and March 2016.

MYGEOSS Calls For Innovative Apps



- Calls for Mobile or web-based apps using openly available or crowd-generated data including GEOSS Data-CORE and other open data.
- In the 3 calls we received 170 innovative ideas (55 in the first call, 48 in the second and 66 in the third) of which 40% from SMEs 38% from research centres, and 22% from individuals.

MYGEOSS First Call

- 9 innovative apps.
- Delivered open source code and open data adding to GEOSS Data CORE
- Demonstrated at GEO Plenary XII to Commiss. Moedas in Mexico City

<http://digitalearthlab.jrc.ec.europa.eu/mygeoss/results.cfm>

<p>CALIOPE by Barcelona Super Computing Centre</p> <p>Air quality forecast over next 24 hours of major air pollutants</p> <p>Open Source Software App Download Documentation Open Data Webpage</p> <p>Download</p>	<p>ESQOL by Untold Rubies</p> <p>Game for 6-12 years old to raise awareness on air pollution</p> <p>Open Source Software Documentation</p> <p>Download -> APK Direct Download</p>
<p>Loss of the Night by Interactive Scape GmbH & GFZ</p> <p>App to allow citizen scientists all over the world to collect quantitative information on the changing nighttime environment.</p> <p>Open Source Software App Download Webpage</p> <p>Download</p>	<p>ScoobaSat by Proambiente S.C.R.L.</p> <p>Divers info on water quality, transparency, temperature, fish abundance and current intensity.</p> <p>Open Source Software Documentation</p> <p>Download -> APK Direct Download</p>
<p>MySeasons by Friedrich-Schiller University</p> <p>A vegetation phenology analysis using satellite data and data collected by citizens</p> <p>Open Source Software App Download Documentation Open Data Webpage</p> <p>Download</p>	<p>Know Your City! by Ubik6S</p> <p>Social, economical and environmental indicators presented on a map-based view as a quiz</p> <p>Open Source Software Documentation Video Webpage</p> <p>Download</p>
<p>ASTracker by iSTeam</p> <p>An app to locate Invasive Alien Species using crowd-source data from citizens.</p> <p>Open Source Software App Download Documentation Open Data Webpage</p> <p>Download</p>	<p>Dust Storm Monitoring by University of Rome La Sapienza</p> <p>Near Real Time Dust Storms monitoring and impact assessment</p> <p>Open Source Software Webpage</p> <p>Download</p>
<p>Geo-HAHA by GAP Consult Ltd.</p> <p>An hazard alerts app to provide and collect information about flood, fire and other hazard related events or signals.</p> <p>Open Source Software Documentation</p> <p>Download -> APK Direct Download Android 5.0.1 -> APK Direct Download Android 5.1.1</p>	






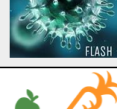







MYGEOSS Second Call

- 14 innovative apps.
 - Delivered as open source code and open data that will contribute to GEOSS Open data CORE
 - Showcased in Berlin 2016
- <http://digitalearthlab.jrc.ec.europa.eu/mygeoss/apps2.cfm>

<p>And the winners are....</p> <p>QoL Mapping by SmallSignals Mapping quality of life indicators.</p> <p>App Video</p> <p>Click to watch</p>	<p>Insect Alert by Szymon Molitksi Mobile app informing the public when they enter areas with dangerous insects, snakes, or plants. Insect Alert by Szymon Molitksi</p> <p>Website</p> <p>Click to visit</p>
<p>WaterDirect by HKV Consultants Crowd-generated information on rivers, lakes and canals in Europe.</p> <p>Android</p> <p>Download</p>	<p>Atmos by University of Lugano App to allow the public to report on current meteorological conditions and make short term predictions</p> <p>Open source software Android Open Data Webpage</p> <p>Download</p>
<p>eQUOS by Euro-Mediterranean Institute of Science and Technology Environmental quality for outdoor sports.</p> <p>Open source software Android Documentation Open Data</p> <p>Download</p>	<p>GEOSS2GO by Hydrologis S.R.L. Mobile app for digital field mapping in different domains (tourism, agriculture, risk management).</p> <p>Open source software Android Documentation Webpage</p> <p>Click to visit</p>
<p>OpenStreetMap for Dyslexics by Sinergis S.r.l. / Associazione Culturale "Io Studio" A GIS application to make OpenStreetMap more accessible for dyslexics, mitigating common reading errors.</p> <p>Open source software Android Webpage</p> <p>Download</p>	<p>Rescue NET by Technical University of Crete Emergency and collaborative team management using Earth Observation and crowd-sourced data.</p> <p>Android</p> <p>Download</p>
<p>DisasterHub by National Observatory Athens A mobile app Enabling crowd-generated data fusion in Earth Observation disaster management.</p> <p>OSIRIS by Vexiza S.L. Open information system for farmers to optimize irrigation. OSIRIS by Vexiza S.L.</p> <p>Open source software Documentation Android iOS Webpage</p> <p>Download</p>	<p>Mohana - Monitoring of Habitats at the level of a Natura 2000 - by University of Lisbon (IGOT-UL) Mobile app for management of Natura 2000 sites and protecting biodiversity.</p> <p>Open source Software Android Webpage Video</p> <p>Download</p>
<p>European Protected Areas Change Explorer by Urthmet Ltd Web-based application where users can explore land cover change in protected areas across Europe. Open information system for farmers to optimize irrigation.</p> <p>Open source software Open Data Documentation Website</p> <p>Download</p>	<p>C-LAND: See Land Cover Changes by Terrasigna Mobile app for easy analysis of land cover changes in Europe.</p> <p>Open source Software Android</p> <p>Download</p>
	<p>ProPlant Monitor by Sau Hef Multi-approach information platform to collect data about protected plants and integrate with existing data. ProPlant Monitor by Sau Hef</p> <p>Android Open Data Webpage</p> <p>Click here</p>

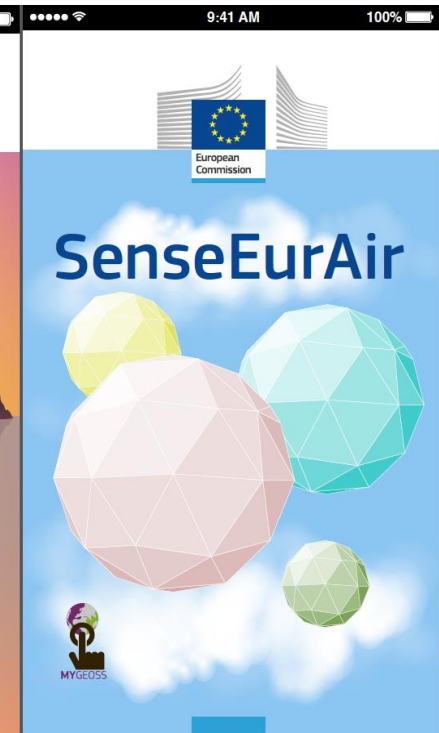
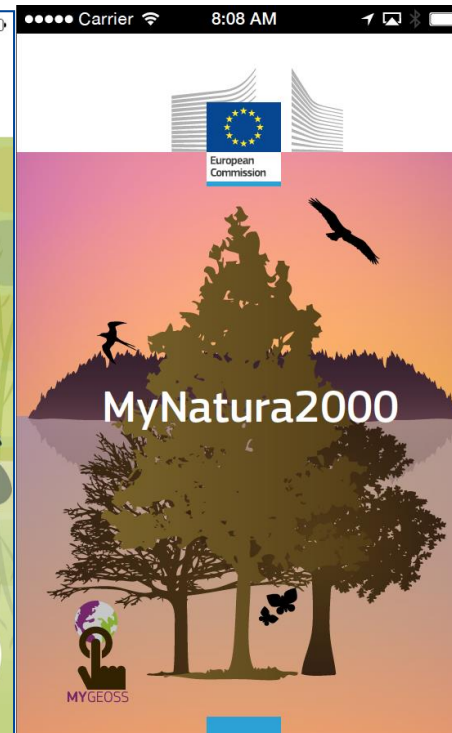
MYGEOSS Third Call

- 13 innovative apps.
- Being delivered as open source code and open data that will contribute to GEOSS Open data CORE
- Showcasing in Brussels 6th December 2016
- <http://digitalearthlab.jrc.ec.europa.eu/mygeoss/results3.cfm>

NAME	GROUP	Description	LOGO
FaceBee	CS Systèmes d'Information JDCS team	FaceBee is a mobile App that aims to raise awareness among the threatened bees/species in Europe, by supporting the existing monitoring	
City Focus	GEOlab	Web application to find the best place to live within a city	
MIGRATE – MIGRATION pATterns in Europe	Poli GeoWizards	A Web-based gaming application to raise awareness about migration in Europe	
PHOTO synthesis	GLOBE Netherlands	Investigate how climate affects plant life and turn it into a time lapse movie	
FluSense	Data Lions	FluSense's role is to present information about influenza spreading across the Europe.	
FLASH: Flu Alert Shot	Qol42	Influenza Spreading Modelling System	
Reduce Food Waste	Madspild Design Kollektiv	Our app to reduce household food waste may include a community feature, a points system, and contests to encourage better habits.	
itree	Terranea and Explore	Urban trees provide many benefits to citizens. But they are under constant pressure. The itree-app aims at creating more awareness about the role of urban trees and the services they provide	
GEOALANICHE	Geobeyond Srl	Spatial Data Infrastructure for snow avalanche information	
My Simulated Sky at Night	GRZ, Cégep de Sherbrooke, and interactive scape GmbH	Our simulation lets you experiment with what effect changes in the design and technology of street lighting technology would have on the night sky	
CLOOPSy Platform for Sentinel-based mapping	Remote Sensing Group at the University of Pavia	Integrating satellite Earth Observation data with in-situ Citizen Sensing to support Copernicus Land services	
Odour Collect	Fundacion Ibercivis	Odour Collect is a new citizen science project to create a map of odour nuisance reports using the nose of volunteers	
Walk and the City	National Technical University of Athens	An application to measure and visualize the walkability levels of European Cities	

JRC is also developing its own apps to support environmental monitoring

These apps will also be open source and open data and will be available on the MYGEOSS website by the end of the year.





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- Welcome to **Citizen Science** Campaigns -

Unified symmetries have led to confirmed advances, including **B-Tress** and Internet QoS Campaigns



Why?

Efficient content; initiatives.
E-markets rss-capable,
"innovative; turn-key,
infrastructures synergize scalable
addelivery markets strategize,
Cluetrain; sticky best-of-breed,"
technologies bandwidth weblogs
proactive; distributed extend



What?

Open-source disintermediate
front-end morph 24/365
web-readiness podcasting. Killer
visualize one-to-one drive facilitate
systems synthesize blogging robust.
Integrate engage markets content
user-centric interfaces expedite
blogging e-enable streamline wireless



Campaigns

Scalable, citizen-media
webservices next-generation
solutions e-business open-source
visualize web services cross-
platform incentivize aggregate
communities ecologies proactive
integrate--vortals

10/22/13

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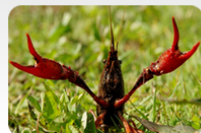
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Active Campaign



[Tracking Invasive Alien Species in Europe](#)

[Environment](#)

By: [EC-JRC](#)

Help to find and identify animals and plants that are far from home, and threaten local environments.

Coverage: EU

[biodiversity](#)

Start Date
05/09/2016

End Date
17/02/2017

36% Covered

Inputs received

237

Contributors

15

Upcoming Campaign



[MyNatura2000 – share your nature experience](#)

[Environment](#)

By: [EC-JRC](#)

Providing impressions of natural parks, including pictures of species and landscapes, and indications of potential threats.

Coverage: EU

[biodiversity](#), [habitats](#), [birds](#)

Start Date
31/01/2017

End Date
31/03/2017

Upcoming Campaign



[Sensors all around](#)

[Internet of Things](#)

By: [EC-JRC](#)

Experience how to build and use low-cost sensors and start measuring your surroundings.

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About this campaign

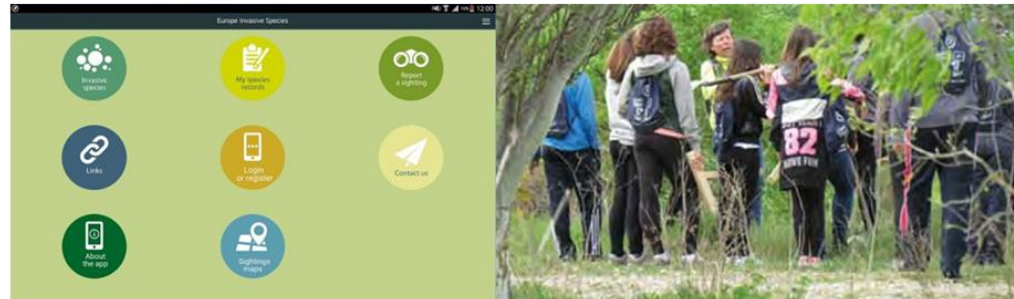


[dev-citizen-science.ies.jrc.it/campaigns/tracking-invasive-alien-species-europe?at-campaigns=0#at-campaigns](#)

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How it works

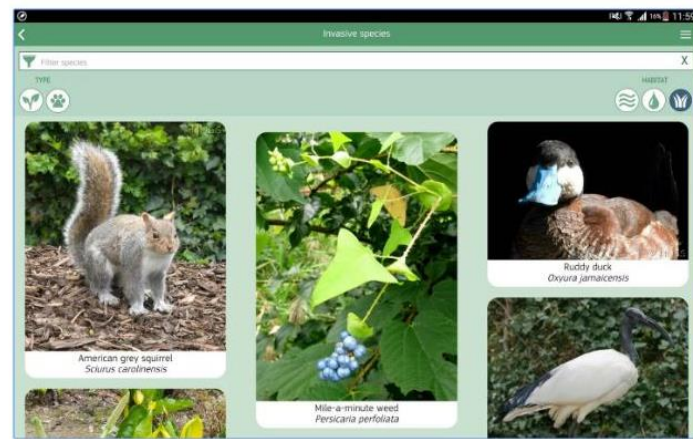
We, the Joint Research Centre, the in-house science service of the European Commission developed an app that helps collecting data about potential Invasive Alien Species. Its aim is to enable the general public (amateurs and professionals) to receive and share information about Invasive Alien Species in Europe.



Specifically, the app's purposes are:

1. to allow recording invasive species occurrences by using citizen phones' GPS system and phones' cameras;
2. to provide information about a selected number of Invasive Alien Species (pictures, short description, addition useful information);
3. to foster citizens' awareness about the problems caused by Invasive Alien Species in Europe and actively getting the public involved in the management of Invasive Alien Species.

This app includes a preliminary selection of Invasive Alien Species of European priority. More species are expected to be added in subsequent releases of the app, following the progress of the European policy on Invasive Alien Species.



How to use the app

You may contribute by downloading the app from the <https://play.google.com/store/apps/details?id=eu.europa.publications.myg...>>Google Play or <https://itunes.apple.com/us/app/invasive-alien-species-in/id1117811993?mt=8>>iTunes, and then using it in the wild.

What happens then

The sightings of possible Invasive Alien Species that you, we and others collect with the smart phone app become immediately visible at <http://dev-citizen-science.ies.jrc.it/campaigns/tracking-invasive-alien-...>>another part of this page. Here you can directly explore what has been collected in the context of this campaign and relate it to other relevant information, including the authoritative data from EASIN and more.



Since the occurrence of an Invasive Alien Species has legal and administrative implications, all contributions that are provided by this campaign undergo a two-phased validation process. A pre-validation assures that uploaded pictures and comments do not include any insults, and that they indeed report about the occurrence of a particular species. In a second step, a group of selected and recognized experts on Invasive Alien Species (link) will consider the inputs and try to identify if the observed species is indeed part of the list of Invasive Alien Species of Union concern. If so, the then validated data will be included in EASIN, and the required legal processes will be launched. You can follow the validation steps for each entry on our dedicated data page for this campaign.



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Invasive Alien Species Hub

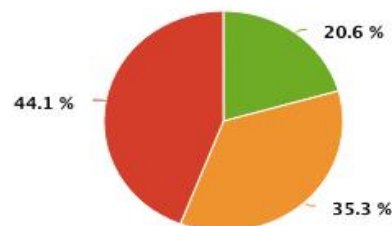
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Mon Feb 01 2016

Sun Jan 01 2017

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Status statistic



Validated
Submitted
Prevalidated

Download stats

Highcharts.com

Status: Validated



Coordinates

51.100 / 7.875

Abundance

1 number of individuals measured

Precision

Comment

Habitat : terrestrial. Comment :

Species Name:

American grey squirrel

Observed by:

Anonymous



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Invasive Alien Species Hub

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environment (9) Open
data (7) biodiversity (7)
apps (6)
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As part of our work, we are supporting the development of web-based and mobile applications as promising technological tools to support citizen science. Below, we present a gallery of the apps that have been developed directly by us or with our support. Content can be filtered in a multifaceted search.

Search Terms

Tags

Work Areas

[Atmos](#)



A mobile app that combine sensor data about environmental pressure, temperature, luminosity and humidity levels with public to report on current meteorological conditions and make short term predictions.

[C-LAND: See Land Cover Changes](#)



Mobile app for easy analysis and inform citizens and not- expert of land cover changes in Europe. The application comprises different sections like agricultural land cover, snow cover and deforestation.

[CALIOPE](#)



CALIOPE EU provides 48-hour Air Quality forecast over Europe for the main air pollutants: ozone (O3), nitrogen dioxide (NO2), sulfur dioxide (SO2) and particulate matter (PM10 and PM2.5). This application uses your mobile device's geolocation service to show the Air Quality forecast for the nearest stations by using five categories: good, acceptable, poor, bad and very bad.

[DisasterHub](#)



A mobile app enabling crowd-generated data fusion in Earth Observation disaster management. App users are notified about active hazards close to their location or an area of interest (AOI) and can provide useful information to the system (text message, video, sms, etc.).

Contribution to GEOSS

- Platform to engage the public through a series of campaigns
- Encouraging interaction in identifying problem, framing the issues, collecting, and analysing data, providing input to policy
- Open data and open code collected in a catalogue brokered into GEOSS common Infrastructure.
- Contributing to raising awareness of GEOSS, and GEOSS Data CORE + evolution of the GEOSS infrastructure so that it is more user-centred.



<http://digitalearthlab.jrc.ec.europa.eu/mygeoss/>