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Note of restriction:

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Winners of the Copernicus Masters 2013

In addition to the overall winner – the Copernicus Master 2013 – the European Earth Monitoring Competition has awarded prizes worth EUR 350,000 in nine categories.

Ideas Challenge

Dr Jonas Franke and team, RSS Remote Sensing Solutions GmbH, Germany

[EyeOnMalaria: Africa-wide Monitoring of Environmental Suitability for Malaria Transmission](#)

EyeOnMalaria aims to provide maps (updated monthly) of environments' aptitude for malaria transmission, which will directly support targeted malaria control at the necessary times and locations while raising public awareness of the malaria season. The service is to be provided via a web portal and mobile applications.

Keywords: health, malaria control, development aid

ESA App Challenge

Alain van Hanegem, Decos Information Solutions B.V.; Alexander Popp, Technical University of Munich; Stephen Trainor, Crookneck Consulting LLC; Valentijn Venus, University of Twente

[Cheetah – Taking on a Billion-dollar Problem in Africa](#)

Cheetah is an acronym for **C**hains of **H**orticultural Intelligence towards **E**fficiency and **E**quity in the **A**gro-Food **T**rade along the **T**rans-**A**frica **H**ighway.

33 % of global food production is lost post-harvest. Cheetah provides a novel approach in combining crowdsourcing with Earth observation data to secure the global food security issue with particular focus on the production and transportation of crops in Africa.

Keywords: food security; road safety, development aid

DLR Environmental Challenge

Kaupo Voormansik and team, University of Tartu, Estonia

[Urban Analyser: Your City Development Tool](#)

The proposed service would offer fresh and accurate high-resolution information about urban area growth based on Sentinel-1 data e.g. to the European Commission, environmental agencies, and large municipalities, which will aid in planning policies for environmental protection and infrastructure development.

Keywords: urban development; mapping; land management

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T-Systems Cloud Computing Challenge

Dr Thomas Heege and team, EOMAP GmbH & Co. KG, Germany

[Operational Satellite-Derived Bathymetry Service](#)

This service is a novel satellite-based approach for mapping global bathymetry (water depth) for optical shallow waters. It uses a Cloud-based infrastructure to map bathymetric data operationally with a method that processes repeated satellite recordings and mitigates shortcomings faced in turbid coastal areas. Especially the oil & gas industry, offshore engineering companies, hydrographic offices, environmental agency, and research institutes benefit from this service.

Keywords: cloud-based service; ocean; global water depth mapping, bathymetry

European Space Imaging High-Res Challenge

Györk Fülöp, Corvinus University of Budapest, Hungary

[CAMEA – Certification of Agronomy for Marketing Environmentally Friendly Agriculture](#)

The CAMEA project aims to set up a certification service for environmentally friendly agronomic activities that produce crops with a smaller ecological footprint. The label and the agronomic quality it represents will be monitored with **with** radar and very high resolution optical satellite imagery.

Keywords: sustainable agriculture; land management

Astrium Radar Challenge

Steve Lee and team, Stevenson Astrosat Ltd, UK

[WaveCERT – Wave + Current Energy Reporting Tool](#)

WaveCERT extends Astrosat's existing "CERT Suite" of renewable, low-carbon, space-driven technologies to support this valuable source of renewable energy. The system provides vital remote (space-based) modeling, allowing for prediction, monitoring, and surveying of tidal and wave potential anywhere in the world.

Keywords: renewable energy, wave power plant, certification

BMW ConnectedDrive Challenge & overall winner „Copernicus Master“

Hartmut Runge, German Aerospace Center (DLR), Germany

[Landmark Navigation with Radar Fix Points from Satellites](#)

The idea is for a new vehicle navigation system that works independently of Global Navigation Satellite Systems (GNSS). It will navigate by landmarks that are

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easily visible from the vehicle, whose positions will be derived precisely from radar remote-sensing satellites. The combination of this technique with GNSS will lead to higher system integrity and reliability, which is important in applications requiring a high level of safety (e.g. autonomous cars).

Keywords: autonomous car, navigation, road safety

Best Service Challenge

Julie Maguire, Daithi O'Murchu Marine Research Station, Ireland

[HAB Forecast – Harmful Algal Bloom Forecast](#)

The project hosts a monitoring service that provides a weekly regional alert on Harmful Algal Bloom via a web-published bulletin. The service is designed to combine all of the available information from: Earth (in-situ monitoring stations), Space (satellite data), and In-silico (biological and physical oceanic models) sources for the northeast Atlantic Ocean, thus providing the aquaculture industry with an overview of areas at risk of a HAB event.

Keywords: aquaculture; fisheries management; ocean

GEO Illustration Challenge

Alexander Popp, Student, Germany

[Aqua Alta – Artistic Illustration of Human's Footprint on Earth Based on Satellite Images](#)



In its Illustration Challenge "Traces of Humankind" GEO magazine was looking for illustrations that accentuate humankind's footprint on our blue planet by applying graphical and artistic techniques to satellite imagery. The winning illustration shows a satellite image of Venice in the form of a human footprint. It is named after the recurring floods in Venice.

Keywords: human footprint; climate change

Image download: <http://www.copernicus-masters.com/downloads/pictures/awardsceremony2013.zip>

For further information on the Copernicus programme, please refer to:

www.esa.int/copernicus & www.copernicus.eu