Volume 4, No. 07 July 2018











## Be part of "Geo for All"

# 1. Activities of the Network

Ottawa, Ontario, OSGeo Meetup
 Group meets on the third
 Thursday of each month. If you
 are located in the area, go to the
 link to sign up to the group and
 get updates about future events.
 (http://www.meetup.com/Ottaw
 aOSGeo/)

### 4. Conferences

#### <u>Europe</u>

#### **July 2018**

1. 28-30 July: State of the Map 2018.

Venue: Politecnico di Milano, Piazza Leonardo da Vinci, Milan, Lombardy, Italy.

#### September 2018

**2.** 12-14 September: <u>EuroGEOSS</u> Workshop 2018

Venue: the University of Geneva and the Museum of Ethnography,

Geneve, Switzerland

## **3.** 12-14: 6th Conference on the <u>Use of</u> R in Official Statistics

Venue: Dutch Office for National Statistics (CBS), Hague, The Netherlands.

#### October 2018

**4.** 1-5 October: ISPRS Com IV Symposium

Venue: Delft, The Netherlands

**5.** 9-11 October: <u>5th Open Source</u> <u>Geospatial Research and Education</u> <u>Symposium</u>

Venue: University of Applied Sciences and Arts of Southern Switzerland (SUPSI)

## North and Central America and the Caribbean

#### **July 2018**

**6.** 15-17: <u>Geospatial Use Cases and Core Technical Capabilities</u>

Venue: Chicago, IL. USA.

#### August 2018

**7.** 13 August: Tennessee FOSS4G Meeting. Second annual meeting.

Venue: Knoxville, Tennessee, USA.

#### **November 2018**

**8.** 6-9 November: XVIII International Symposium of the Latin American Society of Remote Perception and Systems of Space Information.

Venue: Havana, Cuba

Contact: MSc. Ing. Pedro Luis García Pérez Presidente del Comité Organizador. (537) 836 34 47

pedroluis1664@gmail.com lgarcia@ch.unaicc.cu

continued on page 4

#### Table of Contents

Editorial
Editorial Board
1. Activities 1
2. A) Lab of the month
B) GeoAmbassador
3. Events
4. Conferences 1,4
5. Webinars 4
6. Courses
7. Training programs 4
8. Key research publication
9. Funding opportunities 5
10. New free and open software open data
11. Free Books 5
12. Articles 6
13. Scholarships for students and staff
14. Exchange programs for students and staff
15. Awards 8
16. Web sites
17. Ideas 8
18. Social contribution











## **Editorial Board**

Please refer to the appropriate person according to the following table:			
Chief Editor	Nikos Lambrinos, Professor, Dept. of Primary Education, Aristotle University of Thessaloniki, Greece. President of the Hellenic digital earth Centre of Excellence <a href="mailto:labrinos@eled.auth.gr">labrinos@eled.auth.gr</a>	Oceania	
Co-editor	Rizwan Bulbul, Assistant Professor of GIScience Head of Geospatial Research and Education Lab Department of Space Science, Institute of Space Technology, Islamabad, Pakistan bulbul@grel.ist.edu.pk	India, Sri Lanka, Pakistan, Afghanistan, Nepal, Burma, Iran, Iraq, Jordan, Syria, Israel, Lebanon, Turkey, Saudi Arabia, Oman, Yemen, United Arab Emirates, Kuwait and Islands of S. Pacific.	
Co-editors	Pavel Kikin, Senior Lecturer "Department of applied informatics and IT", Siberian State Univer. of Geosystems and Technologies Alexey Kolesnikov, Senior Lecturer "Department of cartography and GIS", Siberian State Univer. of Geosystems and Technologies <a href="mailto:it-technologies@yandex.ru">it-technologies@yandex.ru</a>	Russia, Mongolia, China, Japan, S. Korea, Vietnam, Thailand, Malaysia, Laos, Myanmar, Cambodia, Singapore, Brunei, Indonesia, Philippines, Turkmenistan, Uzbekistan, Tajikistan and Kyrgyzstan.	
Co-editor	Rania Elsayed, Computers & Information Researcher, Division of Scientific Training & Continuous Studies, National Authority for Remote Sensing & Space Sciences, Cairo, Egypt.  ranyaalsayed@gmail.com	Africa	
Co-editor	Seraphim Alvanides, Reader (Geographical Information Science) Northumbria University, Newcastle NE1 8ST, United Kingdom. s.alvanides@gmail.com	Scandinavian countries, Denmark, Germany, Austria, Switzerland, UK, Ireland, Iceland	
Co-editor	Antoni Perez Navaro, Associate Professor at Universitat Oberta de Catalunya (UOC) Computer Sciences and Multimedia Department aperezn@uoc.edu	Italy, Malta, Spain, Portugal, France, Belgium, The Netherlands, Luxemburg.	
Co-editor	Emma Strong, Planner with the City of Gulfport, Mississippi eestrong118@gmail.com	North and Central America	
Co-editor	Sergio Acosta Y Lara, Departamento de Geomática Dirección, Nacional de Topografía, Ministerio de Transporte y Obras Públicas, URUGUAY sergio.acostaylara@mtop.gub.uy	South America	
Co-editor	Codrina Ilie, PhD student at the Technical University of Civil Engineering, Bucharest, Romania	The Balkans, Ukraine, Moldavia, Estonia, Lithuania, Belarus, Latvia, Hungary, Czech Republic, Slovakia	
Production Designer	Nikos Voudrislis, MSc, PhD in geography education.  nvoudris@gmail.com	Design and final formation of the newsletter	
	Paulo César Coronado Sánchez, Professor of computer sciences at Universidad Distrital Francisco José de Caldas, Head of GISEPROI and OSGeoLabUD research Group. Bogotá, Colombia paulocoronado@gmail.com	Translator and designer of the Spanish Edition	











## **GeoForAll Themes**

OpenCity Smart

➤ Chairs: Chris Pettit (Australia), Patrick Hogan (USA)

➤ Mail list: <a href="http://lists.osgeo.org/cgi-bin/">http://lists.osgeo.org/cgi-bin/</a> mailman/listinfo/geoforall-urbanscience

➤ Website:

http://wiki.osgeo.org/wiki/Opencitysmart

Teacher Training & School Education

➤ Chairs: Elżbieta Wołoszyńska-Wiśniewska (Poland), Nikos Lambrinos (Greece)

➤ Mail list: geoforall-teachertraining@lists. osgeo.org

➤ Website:

http://wiki.osgeo.org/wiki/GeoForAll TeacherTraining SchoolEducation

CitizenScience

Chairs: Peter Mooney (Ireland) and Maria Brovelli (Italy)

➤ Mail list: <a href="https://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-geocrowd">https://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-geocrowd</a>

Website:

http://wiki.osgeo.org/wiki/Geocrowdsourcing CitizenScience FOSS4G

AgriGIS

Chairs: Didier Leibovici (U.K.) and Nobusuke Iwasaki (Japan)

➤ Mail list: <a href="https://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-agrigis">https://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-agrigis</a>

Website: <a href="http://wiki.osgeo.org/wiki/Agrigis">http://wiki.osgeo.org/wiki/Agrigis</a>

## **GeoForAll Regional Chairs and Contact Information**

#### **North America Region**

Chairs: Helena Mitasova (USA), Charles Schweik (USA), Phillip Davis (USA) Subscribe at mail list <a href="http://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-northamerica">http://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-northamerica</a>

Email: na.gfa.chair@osgeo.org

#### **Iberoamerican Region**

Chairs: Sergio Acosta y Lara (Uruguay) and Silvana Camboim (Brazil) and Antoni Pérez Navarro (Spain). Subscribe at mail list:

https://lists.osgeo.org/mailman/listinfo/geoforall-iberoamerica

Email: geoforall-iberoamerica@lists.osgeo.org.

#### **Africa Region**

Chairs: Rania Elsayed Ibrahim (Egypt), Serena
Coetzee (South Africa) and Bridget Fleming (South
Africa) Subscribe at mail list
<a href="http://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-africa">http://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-africa</a>

Email: africa.gfa.chair@osgeo.org

#### Asia Region (including Australia)

Chairs: Tuong Thuy Vu (Malaysia/Vietnam) and Venkatesh Raghavan (Japan/India) Subscribe at maillist <a href="http://lists.osgeo.org/cgibin/mailman/listinfo/geoforall-asiaaustralia">http://lists.osgeo.org/cgibin/mailman/listinfo/geoforall-asiaaustralia</a>

Email: asia.gfa.chair@osgeo.org

#### **Europe Region**

Chairs: Maria Brovelli (Italy) and Peter Mooney (Ireland) Subscribe at mail list <a href="http://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-europe">http://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-europe</a>

Email: eu.gfa.chair@osgeo.org











continued from page 1

9. 9-10 November: Seattle GNU/Linux Conference

Venue: Seattle, Washington, USA.

#### **Africa**

#### August 2018

10. 27-28 August: FOSS4G 2018 Workshop

28-31 August: FOSS4G 2018: Main Conference

Venue: Dar es Salaam, Tanzania

#### September 2018

11. 1-2 September: FOSS4G 2018: Code Sprints and

**Community Events** 

Venue: Dar es Salaam, Tanzania

#### November 2018

12. 5-8 November: SciData Con-IDW 2018

International Data Week

Session Title: Sustainable Development Goals (SDG)

Data at the Subnational Level Venue: Gaborone, Botswana

#### <u>Asia</u>

#### December 2018

13. 2-5 December: FOSS4G: ASIA "Open Source for

Sustainable Development"

Venue: University of Moratuwa, Sri Lanka.

#### **Oceania**

#### November 2018

14. 20-23 November: FOSS4G - SotM Oceania Venue: University of Melbourne, in the Old Arts

Building, Melbourne, Australia

#### 5. Webinars

Thinking about QGIS as a consultant and educator. Webinar by Kurt Menke.

## 7. Training programs

- GeoForAll educational materials have transferred to our new web site. GeoForAll educational inventory system, a place to search and share educational materials
- Science Gateways Bootcamp: Strategies Developing, Operating, and Sustaining Your Gateway is a week-long workshop for leaders of gateways who want to further develop and scale their work. Participants engage in hands-on activities to help them articulate the value of their work to key stakeholders and to create a strong development, operations, and sustainability plan. The Bootcamp includes:
  - Core business strategy skills
  - Technology best practices
  - Long-term sustainability strategies

Venue: Chicago, IL. August 13-17

International Summer School: Geocomputation using free and Open Source Software (20th-24th August 2018) organized by Spatial Ecology (www.spatial-ecology.net) hosted at the Berkeley Institute of Data Science in Berkeley, California, USA.

A 5-day intense experience opening new horizons on the use of the vast potentials of the Linux environment and command line approach for geodata massive processing using Bash, AWK, Python, GRASS, QGIS, GDAL/OGR, R, and PKtools. We will guide newbies and experienced GIS users who have never used a command line terminal to a stage which will allow them to understand and apply very advanced open source data processing routines. Our focus is to enhance a self-learning approach. This allows participants to keep on progressing and improving their skills in a continuously evolving technological environment. Participation at the Summer School is not free.

More information and registration:

www.spatial-ecology.net

www.facebook.com/spatialecology -> event











# 9. Funding opportunities, bids, etc.

**Call for Proposals** 

ISPRS Scientific Initiatives 2019

In accordance with the statutory mission and activities of ISPRS, the Society shall provide funds to support scientific and other initiatives, which will further improve its international status in the field of the photogrammetry, remote sensing, and spatial information sciences, and will therefore benefit all ISPRS members. For 2019, the ISPRS Council is making up to SFr. 60,000 available to support new scientific initiatives. The maximum funding assigned to any one scientific project shall be SFr. 10,000 per annum. Projects should commence on January 1, 2019, and typically last up to 12 months. In exceptional cases, applications for projects lasting up to 24 months will be considered. Projects of greater than one-year duration will be subject to annual review before subsequent funding will be released.

ISPRS Working Group Officers are invited to submit applications to their respective Technical Commission President by the deadline below, using the template provided (download the template here as MS-Word / PDF). The submission must be compiled in one PDF document. Further details, including information on the topics and the application process, are available in Appendix 9 of the Orange Book at:

## http://www.isprs.org/documents/orangebook/app9.a spx

All applications will be reviewed based on the following criteria:

- Topic and objectives
- Scientific method and/or contribution
- Value to ISPRS (e.g., enhancing ISPRS reputation or promoting ISPRS)
- · Quality of proposal
- Budget

Any queries should be addressed to the ISPRS Treasurer, Songnian Li, at <a href="mailto:isprs.org">isprs.org</a>.

#### Timescale

Announcement of Scientific Initiatives: June 18, 2018.

Deadline for submission of proposals from WG Officers to TCPs: November 1, 2018.

Deadline for submission of recommendation from TCPs to ISPRS Treasurer: November 19, 2018.

Announcement of successful awards by Council: December 15, 2018.

Funding available from: January 1, 2019.

# 11. Free books, educational materials, etc.

"Conservation Technology Series Issue 4:
 SATELLITE REMOTE SENSING FOR CONSERVATION"
 New free book. To download go to
 <a href="https://www.researchgate.net/publication/32453752">https://www.researchgate.net/publication/32453752</a>
 Conservation Technology Series Issue 4 SATELLI
 TE REMOTE SENSING FOR CONSERVATION













#### 12. Articles

#### **Abbreviations**

by **Nikos Lambrinos**, Chief Editor, and **Michael** Finn.

For those who would like to support this effort, please send any abbreviations to the Chief Editor (labrinos@eled.auth.gr).

3DEP: 3-D Elevation Program

AAG: Association of American Geographers

AGS: American Geographical Society

AM/FM: Automated Mapping/Facilities

Management

ASPRS: American Society for Photogrammetry

and Remote Sensing

AURIN: Australian Urban Research

Infrastructure Network

BBSRC: Biotechnology and Biological Sciences

Research Council

BIM: Building Information Modelling

CAADP: Comprehensive African Agricultural

**Development Programme** 

CAD: Computer Aided Design

CaGIS: Cartograhy and Geographic Information

Society

CEGIS: Center of Excellence for Geospatial

Information Science

CEOS: Committee on Earth Observation Satellites

CI: CyberInfrastructure

CLGE: The Council of European Geodetic

Surveyors

CODATA: Committee on Data for Science and

**Technology** 

COGO: Coordinate geometry

CRS: Coordinate Reference System

CSA: Canadian Space Agency

**CUDA: Compute Unified Device Architecture** 

DAAC: Distributed Active Archive Center (of

NASA)

**DEM: Digital Elevation Model** 

**DSM: Digital Surface Models** 

DWG: Design file format

DXF: Drawing Interchange File

ECMWF: European Center for Medium range

Weather Forecasting

**EOS: Earth Observation Science** 

EOSDIS: Earth Observing System and Data

Information System

**EPA: Environmental Protection Agency** 

EPSG: European Petrol Survey Group (used in

projection IDs)

ESA: European Space Agency

ESERO: European Space Education Resource

Office

EUROGI: European Umbrella Organisation for

**Geographic Information** 

EuroSDR: European Spatial Data Research

FOSS: Free and Open Source Software

FOSS4G: Free and Open Source Software For

Geospatial

GCP: Ground Control Point

GloFAS: Global Flood Awareness System

GNSS: Global Navigational Satellite System

**GPS: Global Positioning System** 

**GPX: GPS Exchange Format** 

GRASPgfs: Geospatial Resource for Agricultural

Species and Pests and Pathogens with workflow integrated modeling to support

**Global Food Security** 

HOT: Humanitarian OpenStreetMap Team

HPC: high-performance computing

ICA: International Cartographic Association

ICSU-WDS: International Council for Science –

World Data System

INSPIRE: Infrastructure for Spatial Information

in Europe











ISPRS: International Society for

Photogrammetry and Remote Sensing

JAXA: Japan Aerospace Exploration Agency

KML: Keyhole Markup Language

LiDAR: Light Detection and Ranging

LOC: Local Organizing Committee

LOD: Level Of Detail

MIL: Media and Information Literacy

MoU: Memorandum of Understanding

NAD: North American Datum

NCSA: National Center for Supercomputing

**Applications** 

**NED: National Elevation Dataset** 

NEPAD: NEw Partnership for African

Development

NGA: National Geospatial Intelligence Agency

NHD: National Hydrologic Dataset

NLCD: National Land Cover Dataset

NSDI: National Spatial Data Infrastructure

**NSF: National Science Foundation** 

**OER: Open Educational Resources** 

OGC: Open Geospatial Consortium

OSGeo: Open Source Geospatial Foundation

OSM: OpenStreetMap

OTB: Orfeo Tool Box

RCMRD: Regional Centre for Mapping of

Resources for Development

RDA: Research Data Alliance

ROSHYDROMET: Russian Federal Service for Hydrometeorologyand Environmental Monitoring

RUFORUM: Regional Universities Forum for

capacity building in agriculture

SaaS: Software as a Service

SAR: Synthetic Aperture Radar

SDI: Spatial Data Infrastructure

SIGTE: The GIS and Remote Sensing Service of

the University of Girona, Spain

SQL: Structured Query Language

STISA 2024: Science Technology Innovation

Strategy for Africa

STSM: Short Term Scientific Missions

TIN: Triangulated Irregular Network

**UAV: Unmanned Aerial Vehicle** 

UN-GGIM: United Nations Global Geospatial

Information Management

USGS: U.S. Geological Survey

USGIF: United States Geospatial Intelligence

Foundation

VGI: Volunteered Geographic Information

XSEDE: Extreme Science and Engineering

**Discovery Environment** 

WCS: Web Coverage Service

WFS: Web Feature Service

WGCapD: Working Group on Capacity Building

and Data Democracy

WGS: World Geodetic System

WISERD: Wales Institute of Social & Economic

Research, Data & Methods

WMO: World Meteorological Organization

WMS: Web Map Service

WMTS: Web Map Tiles Services

WOIS: Water Observation Information System

**WPS: Web Processing Service** 

## 2. Digital Archaeology in Mongolia: Visualizing the Data

By Nicholas Case (nicholaswcase@me.com)

San Deigo Mesa College, USA

Winner of the GeoForAll prize at the Student

Competition 2018

More details at

http://www.sdmesa.edu/ resources/newsroom/post
s/geoed mesastudent.php













#### Abstract:

This study presents results from data visualizations of archaeological sites in northern and western Mongolia. Unlike traditional site documentation techniques applied throughout the discipline, digitalization of data while in the field presents distinct advantages for the study and preservation of both cultural heritage and archaeological data collections. These methods include the production of digital 3D maps, from both aerial and hand-held photogrammetry, data collection with tablets using project specific and updatable forms, near real-time data entry into a secured locally hosted onsite database, and increasing data integrity through preprinted unique barcodes for each artifact and sample collected. We implemented these open source techniques for the Northern Mongolia Archaeology Project located in Darkhad Basin, Khuvsgul province, northern Mongolia, and the Tsagaan Asga Project, located in Bayan-Ulgii province, western Mongolia. By creating high-resolution maps using QGIS in both visible and near-infrared light combined with the spatially aware data collected, the result is a fully digitized site to assist in data organization and analysis so that the focus is less on the data entry and more on the data queries.

http://www.geotechcenter.org/uploads/1/0/5/4/105 463337/nichholas.png

## 15. Awards

1. We are happy to announce the winners of the OSGeo UN Committee Educational Challenge (https://www.osgeo.org/foundation-news/osgeo-uncommittee-educational-challenge/). The proposals were all excellent and it was very hard for the jury to select the winners.

Here are the results:

1) Challenge 1: Ketty Adoch (Uganda)

2) Challenge 2: Silvia Franceschi (Italy)

3) Challenge 3: Maria Ilie Codrina (Romania)

A special word of thanks to the jury for their evaluations: Christina Hupy, Hae-Kyong Kang, Maria

Arias De Reina, Victoria Rautenbach, Ivana Ivanova, Serena Coetzee, Angelos Tzotsos, Thomas Mueller, Paolo Corti and Gregory Giuliani.

Thanks also to the participants for their great proposals.

Looking forward to seeing the work of Ketty, Silvia, and Maria Ilie!

2. Nicholas Case is the student winner of the GeoForAll prize for the best use of open source software for GeoTech Center Student Competition 2018. Congratulations, Nicholas! We are proud to announce initiatives like yours, and we are looking forward to having more like you in the coming years.

Members can find the abstract of his work at the "Articles" Section of the Newsletter.

## 17. Ideas / Information

**1.** To post your FOSS4G educational information go to <a href="http://www.osgeo.org/education">http://www.osgeo.org/education</a>.



There you can find more educational activities posted by members of our community.FOSS4G is the annual global event of the Open Source Geospatial Foundation. It is the largest technical geospatial Open Source conference in the world. The FOSS4G conference focuses on Free and Open Source Software for Geospatial applications. In addition to high level technical talks four key domain are discussed every year to showcase the connection between free and open source software and communities from neighbouring domains. In 2018, the conference will take place in Dar es Salaam, Tanzania, on 29-30-31 August. The four thematic domains selected for this edition are: Urban; Coastal, Marine and the Environment; Widening Access and Humanitarian Mapping; Drones.











#### 2. GeoForAll Iberoamerica Award - 2018 edition

#### **GENERAL RULES - PURPOSE**

GeoForAll Iberoamerica is pleased to announce the Contest of Use of Free Geographic Information Technologies 2018. The purpose of the contest is to reward the free/open geospatial technological skills of University students of the Ibero-American region. Students who compete will present a project using free geospatial technology to address a real-world problem.

The project and results will be presented on a poster that should highlight the use of geospatial technology and show the communication and presentation skills of the candidate.

GeoForAll Iberoamerica announces this contest in order to encourage the use of free geospatial technologies and to encourage all students who use these free technologies to share and give visibility to their work.

#### **PARTICIPANTS**

The awards are for undergraduate and postgraduate university students from all countries of the Ibero-American region (South America, Central America, Mexico and the Caribbean, Spain and Portugal). Participants must be over 18 years of age by October 18, 2018.

#### TYPE OF WORK

The submitted works must have used any Free Geographic Information Technology (alone or in combination with each other) in any area of knowledge. The works must be originals of the participants. The software developed in the submitted works must be subject to a NU / GPL v3 or AGPL v3 license. They can be final degree's and postgraduate's projects presented throughout 2017 and until June 2018, or other works carried out during 2018.

#### **PRESENTATION**

- The works must be presented:
- individually.
- in Spanish, Portuguese or English.
- in a compressed file that includes:
  - PDF with the poster, with the title of the work and the name of the author.

- PDF with an article that complements the poster, with the title of the work and the name of the author.
- a form (provided by the organization) that must be completed with the following information:
- title of the work.
- summary of the work of 100 words max.
- to which degree and level corresponds the work.
- author's data:
- name
- contact phone
- physical address
- email address
- optionally (what will be positively evaluated) may be delivered:
  - o a webpage about the work (in html)
  - a video of 2 to 3 minutes where the work is exposed (in mp4, AVI or other format of current use)

#### **DEADLINE**

 before September 17, 2018 to the following email address: jornadas.uruguay@gvsig.org

#### MEMBERS OF THE JURY

- Sergio Acosta y Lara Comunidad gvSIG Uruguay
- Álvaro Anguix Asociación gvSIG Spain
- Carolina Arias Muñoz, PhD. GIS Developer -Colombia
- Dr. Antoni Perez-Navarro. Universitat Oberta de Catalunya (UOC) - Spain
- Guillermo Pizarro Universidad Politécnica Salesiana - Ecuador
- Luis M. Vilches-Blázquez Pontificia Universidad Javeriana - Colombia
- Rodrigo Abarca del Río Universidad de Concepción, Chile
- Victoria Álvarez Comunidad gvSIG Uruguay

#### **EVALUATION CRITERIA**

The evaluation of works will be based on the following criteria:

- project: originality of the proposal,
- methodology followed,











- quality of the presented,
- presentation: presentation of the report and the poster,
- · quality and clarity of the writing,
- impact,
- applicability of work in real environments

#### **AWARDS - AMOUNTS**

Selected works will be shared in the GeoForAll repository.

The following prizes will be awarded:

- a first prize of US \$ 250,
- a second prize of US \$ 150 and
- a third prize of US \$ 100.

All the awarded students will receive a diploma granted by GeoForAll Iberoamérica that certifies the decision of the jury. The awarded works will be announced in the next Free and Open Source Geographic Information Technologies Conference to be held in Montevideo, Uruguay, on October 18, 2018.

#### ACCEPTANCE OF RULES AND INCIDENTS

Participation in this call implies acceptance of all of these rules. The incidents that may arise and the assumptions not foreseen in these bases will be resolved by the jury of the call. All works submitted to the contest will respect the industrial and / or intellectual property rights of third parties. Likewise, by submitting the works to this call, the authors assign GeoForAll Iberoamérica on a non-exclusive basis, and until the work becomes public domain, the rights of reproduction, transformation and public communication on the work. In any case, the moral right of the authors to be appointed will be respected.

**3.** The live stream of the 2018 GEO Symposium is available at

https://www.earthobservations.org/me\_201806\_wps\_php?t=home



- **4.** The Livestreaming of The United Nations WTO World Conference on Smart Destinations is available at <a href="http://sdt.unwto.org/event/2nd-unwto-world-conference-smart-destinations">http://sdt.unwto.org/event/2nd-unwto-world-conference-smart-destinations</a>
- **5.** The United Nations Office of Information and Communication Technology (UN OICT) is teaming up with NASA WorldWind and ESA for this year's World Challenge.

The United Nations has long recognized that technology is critical to the delivery of its mandates. The United Nations leverages ICT to enable its work in the areas of peace and security, international law, human rights, development, and humanitarian affairs. Furthermore, the Secretary-General, António Guterres, has emphasized how ICT can help us on each and every Sustainable Development Goal.



This World Challenge is an opportunity for students, academia, and industry to deliver brilliant, innovative solutions for world peace, health, ecology, education, and sustainability in the spirit of the ESA and NASA mottos "or the benefit of all." The finalist teams get an all-expense paid trip to Helsinki for the climax week!

#### http://www.worldchallenge.live/

Create an app, video, and website and apply to the challenge by August 3<sup>rd</sup>.

