Volume 10, No. 07

July 2024

GeoForAll

Monthly Newsletter

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Table of Contents

4. Conferences

Europe

September 2024

1. 9-10: QGIS User Conference 2024

Venue: Faculty of Civil Engineering, Slovak Technical University, Bratislava, Slovakia

2. 25-27: 5th Spatial Humanities Conference 2024

Venue: Bamberg, Germany

October 2024

3. 14-16: XX Congress of Geographic Information Technologies

Venue: Palma, Mallorka, Balearides Islands, Spain

South America

July 2024

4. 03-05: XVIII IDERA Conference

Venue: Santiago del Estero, Argentina

December 2024

5. 01-08: FOSS4G (stay tuned for more news in the future)

Venue: Belém, state of Pará, Brazil

Asia

November 2024

6. 17-21: The 2nd Ramon International Geospatial Intelligence 360 Conference Geospatial Intelligence for Sustainable and Resilient Future

Venue: Tel-Aviv, Israel

North America and Central America

July 2024

7. Hacking Limnology 2024 and Data Science and Open Science in Aquatic Research

Venue: Virtual Summit

August 2024

8. 14-16: CPGIS; 2024 - The 31st International Conference on Geoinformatics

Venue: Toronto, Ontario, Canada

September 2024

9. 9-11: FOSS4G NA 2024

Venue: St. Louis, MO, USA

October 2024

10. 14-16: I-Guide Forum 2024

Venue: Jackson, Wyoming, USA

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Please refer to the appropriate person according to the following table:

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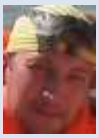
Co-editors  	Pavel Kikin, Senior Lecturer "Department of applied informatics and IT", Siberian State Univer. of Geosystems and Technologies Alexey Kolesnikov, Senior Lecturer "Department of cartography and GIS", Siberian State Univer. of Geosystems and Technologies it-technologies@yandex.ru	Russia, Mongolia, China, Japan, S. Korea, Vietnam, Thailand, Malaysia, Laos, Myanmar, Cambodia, Singapore, Brunei, Indonesia, Philippines, Turkmenistan, Uzbekistan, Tajikistan and Kyrgyzstan.
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	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**

  Theme under revision

- **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: https://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-geocrowd

➢ Website: http://wiki.osgeo.org/wiki/Geocrowdsourcing_CitizenScience_FOSS4G

- **AgriGIS**

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

➢ Mail list: https://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-agrigis

➢ Website: http://wiki.osgeo.org/wiki/Agrigis

GeoForAll Regional Chairs and Contact Information

North America Region

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

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: Msilikale Msilanga (Tanzania), Serena Coetzee (South Africa) and Bridget Fleming (South Africa) Subscribe at mail list http://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-africa

Email: africa.gfa.chair@osgeo.org

Asia Region (including Australia)

Chairs: Tuong Thuy Vu (Malaysia/Vietnam) and Venkatesh Raghavan (Japan/India) Subscribe at maillist http://lists.osgeo.org/cgi-bin/mailman/listinfo/geoforall-asiaaustralia

Email: asia.gfa.chair@osgeo.org

Europe Region

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

Email: eu.gfa.chair@osgeo.org

GeoForAll

GeoAmbassador Content table

July 2016, Vol.2, no.7	Prof. Georg Gartner, Vienna University of Technology
Aug 2016, Vol.2, no.8	Prof. Silvana Philippi Camboim, Federal University of Paraná, Brazil
Sep 2016, Vol.2, no.9	Nimalika Fernando, Sri Lanka
Oct 2016, Vol.2, no.10	Sergio Acosta Y Lara, Montevideo Uruguay
Nov 2016, Vol. 2, no. 11	Victoria Rautenbach, Centre of Geoinformation Science Univ. of Pretoria, South Africa
Dec 2016, Vol.2, no.12	Dr. Daria Svidzinska, Taras Shevchenko National University of Kyiv, Ukraine
Jan 2017, Vol.3 no.1	Dr. Mark Ware, University of South Wakes, UK
Feb 2017, Vol.3, no. 2	Dr. Rafael Moreno Sanchez, Department of Geography and Environmental Sciences, University of Colorado Denver, USA
March 2017, Vol.3 no.3	Dr. Tuong Thuy Vu, School of Environmental and Geographical Sciences, University of Nottingham, Malaysia campus
April 2017, Vol.3 no.4	Michael P. Finn, U.S. Geological Survey
May 2017, Vol.3 no.5	Dr. Peter Mooney, Maynooth University, NASA
June 2017, Vol.3 no.6	Patrick Hogan, NASA
July 2017, Vol.3 no.7	Prof. Dr. Josef Strobl, Salzburg
September 2017, Vol.3 no.9	Bridget Fleming, South Africa
October 2017, Vol.3 no.10	Sven Schade, Joint Research Centre, Italy
November 2017, Vol.3 no.11	Luciene Stamato Delazari, Universidade Federal do Paraná in Brazil
December 2017, Vol.3 no.12	Charlie Schweik, Univ. of Massachussets, USA
January 2018, Vol.4 no.1	Julia Wagemann, European Centre for Medium-Range Weather Forecasts
February 2018, Vol.4 no.2	Barend Köbben, Department of Geo-Information ProcessingUniversity of Twente
March 2028, Vol.4 no.3	Kurt Menke, Birds Eye View
April 2018, Vol.4 no.4	Dr. Clous Rinner, Department of Geography and Environmental Studies at Ryerson University, Toronto, Canada
June 2018, Vol.4, no.6	Martin Landa, Department of Geomatics, Faculty of Civil Engineering, Czech Technical University (CTU) in Prague

Lab of the Month, Content table

Aug 2015, Vol.1 no.1	Open Source Geospatial Lab, Kathmandu University, Nepal (Asia)
Sep 2015, Vol.1 no.2	FOSS4G Lab, University of Colarado Denver (USA)
Oct 2015, Vol.1, no.3	Open Source Geospatial Lab, University of Southampton, UK (Europe)
Nov 2015, Vol.1 no.4	The Northeast Institute of Geography and Agroecology of Chinese Academy of Science, China (Asia)
Jan 2016 , Vol.2 no.1	Centre for Geoinformation Science, University of Pretoria, South Africa, (Africa)
Feb 2016, Vol.2 no.2	Open Source Geospatial Lab, University of Newcastle, UK, (Europe)
Mar 2016, Vol.2 no.3	SMART Open Source Geospatial Lab, University of Wollongong, (Australia)
Apr 2016, Vol.2 no.4	Regional Centre for Mapping of Resources for Development, Nairobi, Kenya (Africa)
May 2016, Vol.2 no.5	GeoDa Centre – Arizona State University, (USA)
June 2016, Vol.2 no.6	Direccion Nacional de Topografia – MTOP Montevideo, Uruguay, (South America)
July 2016, Vol.2 no.7	SIGTE – University of Girona, Spain (Europe)
August 2016, Vol.2 no.8	Open Source Geospatial Lab, Department of Geodesy and Surveying, Budapest Univ. of Technology and Economics, Hungary (Europe).
September 2016, Vol.2 no.9	Open Source Geospatial Lab, Faculty of Geodesy, University of Zagreb, Croatia, (Europe)
October 2016, Vol.2 no.10	Hellenic digital earth Centre of Excellence, Aristotle University of Thessaloniki, Greece, (Europe)
November 2016, Vol.2 no.11	Department of Geoinformatics, Palacký University in Olomouc, Czech Republic
December 2016, Vol.2 no.12	Asian Institute of Technology, Bangkog, Thailand
January 2017, Vol.3 no.1	Spatial Lab, Texas A&M, Corpus Christi, USA
February 2017, Vol.3 no.2	Open Source Geospatial Lab, Faculty of Civil Engineering, Belgrade, Serbia
March 2017, Vol.3 no.3	Geomatics and Earth Observation Laboratory (GEOlab) , Politecnico di Milano, Italy
April 2017, Vol.3 no.4	Faculty of Civil Engineering, Department of Geomatics, Czech Technical University in Prague, Czech Republic
May 2017, Vol.3 no.5	the Laboratory of socio-geographical research of the University of Siena, ITALY
June 2017, Vol.3 no.6	A World Bridge program
July 2017, Vol.3 no.7	Department of Civil, Environmental and Mechanical Engineering of the University of Trento, Italy
August 2017, Vol.3 no.8	Institute of Geography, Faculty of Science, Pavol Jozef Šafárik University in Košice, Slovakia
November 2020, Vol.6 no.11	Universitat Oberta de Catalunya (UOC), Spain
January 2021, Vol.7 no.01	gvSIG Uruguay Community, Uruguay

5. Webinars

- If you want to start learning how to use QGIS, there are some excellent free resources at https://www.gislounge.com/free-ways-to-learn-qgis/

7. Training programs

- GeoForAll educational materials have been transferred to our new web site. GeoForAll educational inventory system, a place to search and share educational materials

11. Free books, educational materials, etc.

- Visit the YouTube QGIS channel at https://www.youtube.com/channel/UCGS162t4hkOA0b35ucf1yng/videos to get videos of QGIS applications, representations and ideas.

12. Article

Acronyms

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

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

3DEP: 3-D Elevation Program

AAG: Association of American Geographers

AGI: Ambient Geographic Information

AGS: American Geographical Society

AGU: American Geophysical Union

AI: Artificial Intelligence

AM/FM: Automated Mapping/Facilities Management

AOSP: African Open Space Platform

API: Application Programming Interface

ASPRS: American Society for Photogrammetry and Remote Sensing

AURIN: Australian Urban Research Infrastructure Network

BBSRC: Biotechnology and Biological Sciences Research Council

BDS: BeiDou Navigation Satellite Demonstration System

BIM: Building Information Modelling

CAADP: Comprehensive African Agricultural Development Programme

CAD: Computer Aided Design

CaGIS: Cartograhy and Geographic Information Society

CCGI: Collaboratively Contributed Geographic Information

CEGIS: Center of Excellence for Geospatial Information Science

CEOS: Committee on Earth Observation Satellites

CHIRPS - Climate Hazards Group InfraRed Precipitation with Station data

CI: CyberInfrastructure

CLGE: The Council of European Geodetic Surveyors

CODATA: Committee on Data for Science and Technology

COGO: Coordinate geometry

CRC: Census Research Centre

CRS: Coordinate Reference System

CSA: Canadian Space Agency

CSSTEAP: Center for Space Science & Technology Education in Asia and the Pacific

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

FDO: FAIR (Find, Access, Interoperate, and Reuse) Digital Objects

FOSS: Free and Open Source Software

FOSS4G: Free and Open Source Software For Geospatial

GCP: Ground Control Point

GDAL: Geospatial Data Abstraction Library

GEO: Group on Earth Observations

GEO: Geosynchronous Earth Orbits

GloFAS: Global Flood Awareness System

GNSS: Global Navigational Satellite System

GODAN: Global Open Data for Agriculture and Nutrition

GPS: Global Positioning System

GPX: GPS Exchange Format

GRACE: Gravity Recovery and Climate Experiment (satellite program)

GRASPgfs: Geospatial Resource for Agricultural Species and Pests and Pathogens with workflow integrated modeling to support Global Food Security

GSoC: Google Summer of Code

HLPF: High Level Political Forum (of UN)

HOT: Humanitarian OpenStreetMap Team

HPC: high-performance computing

ICA: International Cartographic Association

ICIMOD – International Centre for Integrated Mountain Development

ICSU-WDS: International Council for Science – World Data System

IDE: Spatial Data Infrastructure

IFAD – International Fund for Agricultural Development

INSPIRE: Infrastructure for Spatial Information in Europe

IPCC – Intergovernmental Panel on Climate Change

IPGH: Pan American Institute of Geography and History

ISO: International Organization for Standardization

ISPRS: International Society for Photogrammetry and Remote Sensing

ISRO: Indian Space Research Organization

JAXA: Japan Aerospace Exploration Agency

KML: Keyhole Markup Language

LBS: Location-Based Service

LEO: Low Earth Orbits

LiDAR: Light Detection and Ranging

LOC: Local Organizing Committee

LOD: Level Of Detail

MEO: Medium Earth Orbits

MIL: Media and Information Literacy

MoU: Memorandum of Understanding

MSS: Multispectral Scanner

NAD: North American Datum

NARSS: National Authority for Remote Sensing and Space Sciences of Egypt

NCSA: National Center for Supercomputing Applications

NDVI - Normalized Difference Vegetation Index

NDWI - Normalized Difference Water Index

NED: National Elevation Dataset

NEPAD: NEw Partnership for African Development

NGA: National Geospatial Intelligence Agency

NHD: National Hydrologic Dataset

NIR - Near-Infrared

NLCD: National Land Cover Dataset

NOOSA: United Nations Office for Outer Space Affairs

NRSA: Indian National Remote Sensing Agency

NSDI: National Spatial Data Infrastructure

NSF: National Science Foundation

OECD: Organisation for Economic Co-Operation and Development

OER: Open Educational Resources

OGC: Open Geospatial Consortium

OHI: International Hydrographic Office

OSGeo: Open Source Geospatial Foundation

OSM: OpenStreetMap

OTB: Orfeo Tool Box

PPGIS: Public Participation in Geographic Information Systems

PPSR: Public Participation in Scientific Research

RBV: Return Beam Vidicon

RCMRD: Regional Centre for Mapping of Resources for Development

RDA: Research Data Alliance

ROSCOSMOS: Russian Federal Space Agency

ROSHYDROMET: Russian Federal Service for Hydrometeorologyand Enviromental Monitoring

RUFORUM: Regional Universities Forum for capacity building in agriculture

SaaS: Software as a Service

SAR: Synthetic Aperture Radar

SDG: Sustainable Development Goal

SDI: Spatial Data Infrastructure

SIG: Geographic Information System

SIGTE: The GIS and Remote Sensing Service of the University of Girona, Spain

SPIDER: open SPatial data Infrastructure eDucation nEtwoRk

SQL: Structured Query Language

STISA 2024: Science Technology Innovation Strategy for Africa

STSM: Short Term Scientific Missions

SWIR: Short Wave Infrared

TIN: Triangulated Irregular Network

UAV: Unmanned Aerial Vehicle

UML: Unified Modeling Language

UN-GGIM: United Nations Global Geospatial Information Management

USGS: U.S. Geological Survey

USGIF: United States Geospatial Intelligence Foundation

VGI: Volunteered Geographic Information

VNIR: Visible Near Infrared

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

17. Ideas / Information

1. If you are interested in educational material, then go to https://www.osgeo.org/initiatives/geo-for-all/in-your-classroom/ where you can find software resources for your classroom. Also, go to "Resources" https://www.osgeo.org/resources/ to get a guidance on how to use open source projects and tools.

2. From SUCHITH ANAND (S.Anand@exeter.ac.uk)

Professor of Practice in Science Policy at the University of Exeter
Senior Adviser to Governments and International Organisations

Dear colleagues,

Climate change is an urgent global challenge that affects us all. And for those who are vulnerable and already struggling, the impacts are even harsher. Earth observations offer a vital scientific framework for monitoring and addressing these pressing issues.

Earth observations offer far more than just images from space. They provide valuable information on various aspects of the Earth's well-being, from deforestation rates to urban resilience, and more. These insights contribute to climate models that help guide policy decisions, making science and policy mutually reinforcing.

This BBC article "Canada wildfires: Trudeau criticises Facebook over news ban amid crisis" might be of interest.

According to this BBC article published on 21st August 2023, "*Canadian Prime Minister Justin Trudeau has accused Facebook of putting "profits ahead of people's safety" after it blocked news amid devastating wildfires in the country. Facebook banned news on its platform in response to Canadian law forcing it to share profit with news outlets. Wildfire evacuees have said the ban has impacted their ability to share critical news with each other.*"

Details at https://www.bbc.co.uk/news/world-us-canada-66573512

If this is the situation in a rich country like Canada, imagine the situation in a poor country in the developing world? Some Big Tech companies are becoming more powerful than countries.

Digital Feudalism

In 2022, I wrote a Data Values article which looks into Digital Feudalism in Earth Observation (EO) data affecting farmers. I thank the Global Partnership for Sustainable Development Data (GPSDD) for inviting me to write this article. More details at https://datavaluesdigest.substack.com/p/how-digital-feudalism-hurts-farmers

Data Colonialism/Data Feudalism might also lead to questions around the rise of EO data platform monopolies benefiting a few big companies and the power imbalance that could create; as well as the resulting EO data asymmetry and its impact on the global society.

As a member of the Ethics Sub Group at the Group on Earth Observations(GEO), I have been raising these topics for many years in GEO. For example, What is the impact of EO Data Colonialism for African countries and for the people of Africa?

Who owns Africa EO/Geo Portals? What are the costs to be paid per year to the GIS/EO Vendor Owners by African countries and citizens in a few years' time for accessing EO data and insights?

The Ethics Sub group was closed by GEO Secretariat in 2022. The closing of Data Ethics sub group in GEO raises many ethical questions.

It is essential that GEO Secretariat advance the dialogue on developing ethical principles and policy guidelines as a means to help address these issues. Thank you.

These articles might be of interest:

This recording of Data Talk **"Beyond "Data Colonialism": Shaping Data Governance through African Cultural Realities"** organised by the Data Innovation Lab and links to various resources might be of interest. Details at https://www.jiscmail.ac.uk/cgi-bin/wa-jisc.exe?A2=ind2405&L=GIS-UK&O=D&P=19244

Big Tech Companies Are Becoming More Powerful Than Nation-States

"They are already richer than many countries, and the rise of AI looks set to increase their influence. The world's biggest tech companies are now richer and more powerful than most countries."

Details at
https://www.commondreams.org/opinion/big-tech-companies-more-powerful-than-nations

The Big Tech Antitrust Battle Is A Fight For Democracy

https://www.commondreams.org/views/2022/06/17/big-tech-antitrust-battle-fight-democracy

Big Tech and AI companies are getting even more powerful than governments. Will this lead to the rise of Billionaire Tech CEOs as the most powerful rulers of the world in the future? What will be the impact of this for humanity?

Governments need to regulate the Big Tech to protect democracy, protect human rights and prevent corruption.

3. Tracking India's Air Quality

NASA Earth Observations Assist in tracking air quality in India.

Air Quality Index (AQI) values across India routinely surpasses World Health Organization limits for healthy breathing, contributing to the country's rising rates of illness and premature death. NASA Earth observation data are helping scientists track and monitor pollutants across the country.

EARTHDATA
OPEN ACCESS FOR OPEN SCIENCE

4. The Significance of SWOT


Dr. Tamlin Pavelsky is the freshwater science lead for the SWOT mission. Credit: University of North Carolina at Chapel Hill

There never has been an orbital hydrology mission quite like the Surface Water and Ocean Topography (SWOT) spacecraft. SWOT's freshwater science lead, Dr. Tamlin Pavelsky, talks about what makes SWOT special and how you can maximize your use of SWOT data.