

Geospatial Sensing Conference 2019

INVITATION

From Sensing to Understanding our World

Earth observation networks, e.g. in-situ sensors and remote sensing systems, deliver a multitude of data capturing the state of our environment. The data sets delivered are highly valued by scientists and other stakeholders from various domains and backgrounds such as hydrology, marine sciences, traffic management, environmental monitoring, energy supply or smart city systems. An active research and development community works on new approaches to share, manage, discover, analyze, and visualize such sensor data. The Geospatial Sensing Conference gives an overview of current developments and provides a discussion platform for scientists, developers and users.

This year's conference "Geospatial Sensing – from sensing to understanding our world" emphasizes the importance of sensor data interpretation, analysis and visualization; tools and infrastructures for sharing sensor data; and novel sensor platforms. The conference will cover new developments, emerging technologies, as well as ongoing research activities in the field of geospatial sensing.

Conference overview

The program begins Monday afternoon, September 2nd with hands-on tutorials . We invite participants to select their topics of interest so that the two to four most popular tutorials will be organized.

The main conference day is Tuesday, September 3rd. It focuses on diverse presentations (see program) and reports of user experiences.

Wednesday, September 4th, is an interactive workshop day focusing on important aspects for future developments of Sensor Web, Geoprocessing und EO Infrastructures.

Program – Geospatial Sensing Conference 2019

DAY 1: TUTORIAL SESSIONS

MONDAY, SEPTEMBER 2

Registration

Tutorial(s)

Tutorial(s)

Icebreaker

DAY 2: CONFERENCE

TUESDAY, SEPTEMBER 3

Registration, Welcome and Introduction

Experiences Using SOS for Citizen Science Interoperability

J. Masó, E. Prat (CREAF) and A. Cobley (University of Dundee)

Accessing and Integrating Citizen Science Sensor Data: Evaluation of OGC Sensor Observation Service Implementations

T. Padiya, C. Pathe, F. Loeffler (Friedrich Schiller University) and F. Klan (DLR - Institute of Data Science)

A User Focused Approach to Use WPS Processes for the Natural Hazard Domain and Multi-Risk Assessment

N. Mandery, M. Böck, M. Langbein, M. Friedemann, T. Riedlinger (DLR) and B. Proß (52°North)

How the openEO Project Unifies Access to Big Earth Observation Data Processing Platforms

C. Friedrich, E. Pebesma and M. Mohr (University of Münster)

Data Recommender System: Improving the Discovery of Environmental Datasets through Text Analytics and Usage Mining

A. Devaraju, U. Schindler, R. Huber and M. Diepenbroek (PANGAEA, MARUM)

Adaptation of the Helgoland Client to Represent the Marine Monitoring Network of BSH

H.-C. Schreyer (BSH)

Critical Success Factors of the ReefTEMPS Sensors-oriented Environmental Information System for a Real Operationality

S. Fiat (ENTROPIE, IRD) and R. Hocdé (MARBEC, IRD)

Invited Flash Talks

Samplings and Monitoring Programs: Synchronizing Well-defined CSV Files with the New Sensor Web Data Model

C. Malewski (Wupperverband)

MONOCLE – Multiscale Observation Networks for Optical monitoring of Coastal waters, Lakes and Estuaries

O. Clements (Plymouth Marine Laboratory) and K. Poser (Water Insight)

Invited Flash Talks

Conference Dinner

DAY 3: INTERACTIVE WORKSHOP

WEDNESDAY, SEPTEMBER 4

Introduction:

What aspects are important for future developments of Sensor Web, Geoprocessing und EO Infrastructures?

Break out sessions:

e.g. event-based architectures, Sensor Web, Geoprocessing, Security, EO integration

Presentations and discussion of break out session results

Developer Meet-ups

MORNING

AFTERNOON

EVE

Geospatial Sensing Conference 2019

Tutorials

We ask you to help choose appropriate topics for the tutorial sessions on the 2nd of September. Depending on the feedback, we will provide at least two, a maximum of four, tutorials that have received the most interest. Topic preferences will be considered until July 30th (end of the Early Bird period). Final tutorials will be posted on the website as of August 5th.

- _ Web-based Geoprocessing with WPS4R
- _ sos4R Convenience API
- _ Automatic Interpolation of Data from the Sensor Web
- _ Using Copernicus Data in Practical Use Cases
- _ Data Import and Export within the Sensor Web
- _ Management and Visualization of Sensor Web Data

Interactive Workshop

Participants will meet in small groups to discuss specific topics of Sensor Web processing and analysis. The workshop will comprise three phases: 1) Group work, 2) Recap, 3) Presentation.

The following is a list of possible workshop topics

- _ Architecture and Standards Developments
- _ Integration of In-situ and Remote Sensing Data in the Context of Copernicus
- _ Event Processing (pub/sub)
- _ Managing and Processing Big Observation Data
- _ Real-time Spatial Analytics in the Sensor Web
- _ Dockerization of Sensor Web Components
- _ Cloudifying the Sensor Web
- _ The Role of Real Time Dashboards
- _ Contributions of the Sensor Web to Citizen Science

Participants are welcome to suggest additional topics.

Location

Technologiehof

Technologieförderung Münster GmbH

Mendelstraße 11, 48149 Münster, Germany

Conference fee

The conference fee (VAT included) helps cover costs for the coffee breaks and the conference dinner.

Early Bird Fee	74,99 €
until July 30, 2019, payment by August 26, 2019	
Regular Fee	95,00 €
Student Fee*	20,00 €

*does not include the conference dinner

More information and conference registration is available at <http://52north.org/conference>



52°North Initiative for

Geospatial Open Source Software GmbH

Martin-Luther-King-Weg 24, 48155 Münster, Germany