

# OSGeo events at EGU General Assemblies: Making Open Science a Reality

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# OSGeo events at EGU General Assemblies: Making Open Science a Reality

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## ABSTRACT

This submission reports on the continuing efforts by OSGeo activists within the annual General Assembly gatherings of the European Geoscience Union (EGU). Starting as improvised splinter events, the format soon emerged both into dedicated topical sessions for Open Source within the EGU division of Earth and Space Science Informatics (ESSI), but also dedicated annual evening events (Townhalls). Further, the format of topical Open Source sessions was quickly adopted also by the American Geophysical Union (AGU). This talk covers lessons learned from past events, current developments and opportunities within ESSI in EGU and AGU, and also new activities.

## TOWNHALLS AT EGU GENERAL ASSEMBLIES

The European Geosciences Union (EGU) is a non-profit international union in the fields of Earth, planetary, and space sciences, which was founded in 2002. EGU is structured in 22 scientific divisions, including Earth and Space Science Informatics (ESSI). Members are individuals which are professionally associated with these fields, including students, scientists and retirees. EGU members are globally distributed. The General Assembly (GA) in Vienna is the largest annual event hosted by EGU. It is attended by over 15,000 scientists from all over the world. Over 50 percent of the attendees of the annual General Assemblies are Early Career Scientists (ECS), which have received their highest degree within the past seven years. The weeklong General Assembly event includes topical sessions, speeches and public discussions, and also social events, including splinter meetings and townhalls. Splinter meetings are side meetings that can be organised by GA participants during the ongoing GA event for non-commercial matters. Townhall meetings are meetings open to all conference participants, which need to be approved ahead of the GA by the programme chair, as they are listed in the official programme. During townhall meetings, news about science initiatives can be announced to and discussed with a larger audience of up to 200(?) people..

## THE OSGEO FOUNDATION

The OSGeo foundation is an umbrella organization which acts since its founding in 2006 as a communication platform for a growing number of community driven geospatial open source projects. The foundation has established common quality standards and best practices for projects, including social aspects of community governance and communication, but also technical aspects like coding standards and repository management. OSGeo embraces and fosters the paradigms of open source, open data, open standards and open education as the building blocks for open science. However, best practices for software citation remain to be included in the OSGeo incubation process.

Within OSGeo, several committees are fostering the exchange with education and science. The “Geo for All” Committee for Educational outreach and works in close collaboration with ICA, ISPRS, UN-GIS, AGILE, UCGIS, IGU and other partners worldwide in our mission for making geospatial education and opportunities accessible to all. The “Open GeoScience Committee” fosters the exchange between the OSGeo communities and geoscience organisations including the European Geoscience Union (EGU) and the American Geoscience Union (AGU). For this, a Memorandum of Understanding was signed by OSGeo and AGU in 2018.

## FREE AND OPEN SOURCE WITHIN EGU

Before the year 2012, software-related topics were addressed at EGU within the sessions hosted by the Earth and Space Science Informatics (ESSI) Division, but no format existed in the roster of EGU GA events which addressed explicitly Free and Open Source Software as a part of the scientific process.

### 2013 - 2014: Splinter Meetings

Since the EGU GA of 2007, Logos of open source projects such as R, GRASS GIS, QGIS and Rasdaman were noticed repeatedly during the GA poster sessions, with their numbers appeared to increase. Because of this, during the GA in 2012, a splinter session was improvised. The session consisted of a short presentation(Peter Löwe and Alessandro Frigeri, 2012) and an open discussion. It was well received, despite the very short preparation and advertisement phase (Figure 1. Over 20 people attended and expressed interest in follow-up events. Therefore, a second splinter session(Peter Löwe and Alessandro Frigeri, 2013) was held in 2013, which was again very well received. The format of a presentation followed by a discussion was maintained.

### 2015 - 2018: Townhall Meetings

As a lesson learned from the Splinter Sessions, planning begun for an Open Source-themed Townhall event for EGU 2014. The board of OSGeo was approached for funding, as libations and refreshments are usually served during Townhalls. The first OSGeo Townhall(Peter Löwe, 2015a) was held during EGU 2015. To allow for transparency regarding finances, planning and roles of involved persons, the project was managed through a page in the OSGeo wiki(Peter Löwe, 2015b). This approach remains unchanged(Peter Löwe, 2016)(Peter Löwe, 2017)(?). The founding of the OSGeo Open Geoscience Committee in 2016 resulted in the Committee taking over the Townhall effort, including management and funding. This was beneficial as the funds for the Townhall have since become part of the annual budget of the committee. Before, the OSGeo Board had to be approached every year for funding.

While sponsored by OSGeo, the events are open to people from all aspects of the geospatial domain. The events attract 30 to 60 participants. Depending on the time-slot an OSGeo townhall gets assigned, there are also events in parallel, which affect the number of participants. Such competing events include other townhalls, but also medal lectures or special events for early career scientists.

## RELATED ACTIVITIES IN EARTH AND SPACE SCIENCE INFORMATICS

Since the Splinter Meetings of 2013 and 2014 had provided sufficient proof that there was a noticeable and growing interests in Free and Open Source, a dedicated session(Jens Klump, Dominik E. Reusser, Peter Löwe, Yann Chemin and Markus Neteler, 2015) in the ESSI division of EGU was also introduced in 2014. This was paralleled by a twin session at the annual American Geophysical Union (AGU) Fall Meeting. Both FOSS-themed session formats are still held annually. The EGU ESSI session on FOSS complements the Townhall effort, as it enables potential GA participants to publish the FOSS-related aspects of their work, in addition to the topical aspects which can be showcased in the other EGU divisions.

Since the advent of the FAIR ("Findable, Accessible, Interoperable, Reusable) paradigm and the Research Software Engineer (RSE) community, the open source related activities have further diversified. Since 2018 RSE also hosts Townhalls at EGU and the Enabling FAIR Data project pushes to establish a critical mass of stakeholders in the Geosciences, including both EGU and AGU communities.

## CONCLUSION

The interest for Free and Open Source Software as a integral part of open science continues to grow in science organizations including EGU and AGU. Since 2015 this has also affected the scientific session programmes for Earth and Space Science Informatics. During the EGU General Assemblies, the Free and Open Source themed social events have served since 2013 to connect the stakeholders within EGU and to establish trust and improve the mutual understanding of the value of open source among all parties from industry, community projects and academia.



**Figure 1.** Improvised announcement poster for the first EGU splinter meeting in 2012 on Free and Open Source Software. Image: Jens Klump

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