



Work Package 5

DISSEMINATION, EXPLOITATION & USE CASES

W5 P5

Work package 5 includes the dissemination, exploitation and communication of and about the methods and results of G3P. This includes a dedicated project website, journal publications and conference presentations. Also the integration of G3P products into the GravIS and GGMN for user-friendly visual exploitation and access is included in this work package. Finally, it will include the development of a European use case for the G3P product.

DESCRIPTION OF THE ACTIVITIES

Development and maintenance of project website

As a standard dissemination instrument for project information the G3P website is implemented. The website will not just provide static information about the project. It will be a living platform for disseminating, exploiting and communicating essentially all products and results generated in the project, to the users in science and applications and to the general public. The website can be reached through: www.g3p.eu.



G3P product integration into other platforms



G3P groundwater data, both the new gravity-based products as well as new in-situ observations, will be added as data layers into the Global Groundwater Monitoring Network (GGMN) portal: <https://ggmn.un-igrac.org>. This task may include the programming of data interfaces and visualization tools in GGMN.

In addition, the G3P groundwater product and all observation-based individual storage compartments smoothed to the effective GRACE spatial resolution will be integrated into the Gravity Information Service (GravIS) for visual exploitation and data access, <http://gravis.gfz-potsdam.de>. All data layers will be made available for the time-epoch of monthly gravity fields, including the uncertainty estimates at both grid and catchment level. This task includes the programming of data interfaces and visualization tools in GravIS.

Groundwater resources assessment

This task is devoted to using the G3P outcomes to better assess the state of groundwater resources globally. The assessment focuses on identifying the current situation of the considered aquifers to see if they are at risk of depleting, stable, or a source of groundwater for human consumption with higher potential for exploitation. The assessment combines the G3P outcomes with data and information collected in work package 4 on the aquifers to better understand which aspects of each aquifer are relevant for their assessment. It also considers limitations and opportunities of new G3P information.



Dissemination of G3P results and public education

G3P will be promoted through all partner's channels and networks and presented at relevant events world-wide. G3P will be promoted as a component of GGMN and as such, it will be part of GGMN trainings, workshops, presentations, conferences, and related GGMN events. Moreover, G3P will be presented to our partners and through our networks at international events and via the consortium and the G3P websites, as well as via the existing Copernicus services and channels operated by the individual data providers in G3P. Most important findings will be made public by press releases. A teaser lecture will be prepared which explains the fundamental methods from satellite gravimetry to the groundwater product in simple words and figures to the interested public and the non-specialized user communities. Scientific achievements will be documented and published in preferably open-access scientific journals and as conference contributions.

G3P integration into a Drought Early Warning System

This activity aims to evaluate a hydrogeological drought index based on the G3P and its integration into the monitoring component of the regional Drought Early Warning System InfoSequia (<https://www.futurewater.nl/2016/10/infosequia-nl/>).

The development of this new groundwater index for InfoSequia will be prototyped, calibrated and tested at the basin level in Southern Spain, comprising the Segura, Guadalquivir and Guadiana river basins with a total coverage of about 145 000 km². Sub tasks of this activity include:

1. The set-up, calibration and evaluation of the G3P-based Groundwater Drought Index (G3P-GDI) by including in-situ data;
2. The comparison of G3P-GDI against InfoSequia's meteorological (SPI) and agricultural (VHI) drought indices to better understand the mechanisms of drought propagation and persistence in the region; and
3. A technical feasibility assessment of integrating G3P-GDI directly into in InfoSequia.

Publications in scientific journals and conferences

Scientific achievements will be documented and published in preferably open-access scientific journals and as conference contributions. All published materials are available for download in the G3P website:

<https://www.g3p.eu/what-we-have-for-you/materials>.

Or scan the QR code on the right:



DELIVERABLES

- 5.1: G3P project website
- 5.2: Web-based information system: G3P results integrated in GGMN
- 5.3: Web-based information system: G3P results integrated in GravIS
- 5.4: Global groundwater resources assessment report
- 5.5: G3P teaser lecture
- 5.6: G3P-GDI InfoSequia integration and evaluation report



CONTACT

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