



## **Mind the gap – do we need more geoscientific expertise for developing R?**

Michael Dietze (1), Sebastian Kreutzer (2), and Oliver Korup (3)

(1) GFZ German Research Centre for Geosciences, Section 5.1 Geomorphology, Potsdam, Germany (mdietze@gfz-potsdam.de), (2) IRAMAT-CRP2A, Université Bordeaux Montaigne, Maison d'Archéologie, Esplanades des Antilles, 33607 Pessac Cedex, France, (3) University of Potsdam, Institute of Earth and Environmental Science

R has reached a high level of acceptance and usage among geoscientists worldwide, including both users and developers. These two groups are not mutually exclusive but overlap strongly. This is a favourable situation to promote the implementation of new functionalities as packages and shared scripts. Despite this positive trend there is a series of missing functionalities. Likewise, other languages, such as Python, Matlab, C++ or FORTRAN, provide similar possibilities like R and have been used for addressing needs for such missing functionalities already long ago.

R allows in principal to implement such lacking functionalities – but only if they have been identified and communicated amongst the community in a transparent way. Our session addresses this challenge. The PICO presentation gives a brief overview of the directions of R functionalities in the field of geosciences and identifies major gaps, from the viewpoint of us session conveners and most importantly based on the input of participating scientists.

We invite all scientists to discuss and contribute knowledge to this topic based on their experiences and requirements. The suggestions will be broadcast as live updates during the PICO session and beyond. We intend to work towards building an active community of interacting developers and users to fill identified gaps to develop new powerful functionalities in the R environment.