Add context to your model, Sentinel-2 time series for everyone
Recipient: Adriaan van Natijne

Adriaan van Natijne will work on the project "add context to your model, Sentinel-2 time series for everyone" within the framework of the NCG Talent Program. His project aims to provide easy access to Sentinel-2 time series. Optical satellite data, such as from Sentinel-2, is a `friendly' resource, and is intuitive for new users: simple analyses (e.g. NDVI) will show immediate results. Improved availability of the data will allow both new and experienced users to explore the information hidden in time series as well as enrich their existing models with contextual information.

With the support of the NCG Talent Program, Adriaan will extend his existing project, GeoTiles.nl, with a publicly available data cube of Sentinel-2 imagery. This cube contains all acquisitions that overlap with the Netherlands, corrected for atmospheric effects, from 2015 onward. A data cube allows for easy access to the full time series from a single source. Data can be used both for visualisation in QGIS as well as more advanced analytics in Python and other programming languages. Furthermore, thanks to the tiling of the data, files will be small enough to be handled on consumer laptops and are easier to integrate into high performance computing, an example is illustrated here.

The data will be as much plug-and-play as possible, and accessible enough to be integrated in education. Introductory and advanced, public tutorials will be provided with the data. The tutorials will guide new users in their first steps in geo-information and help experienced users to accelerate their projects.