



R vector and raster data cubes for openEO

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The recently funded H2020 project openEO (<http://openeo.org/>) will build an API between cloud-based Earth Observation data processing back-ends and clients using R, python or javascript. Regardless how data are stored on the back-end (tiles, granules, array files, array databases), end-users are mostly helped by a data cube view on the data, where filtering takes place on area, time period, and bands, and functions can be mapped to dimensions (space, time, spectral, ...). This paper will show some early results from openEO including client and back-end R implementations of first use cases, and also progress made in representing vector and raster data cubes in the R Consortium-funded project stars (<https://r-spatial.github.io/stars/>).