



In VITO's OpenStack private cloud environment, anyone can access a virtual research environment with access to the complete data archive and a powerful set of tools and libraries to work with the data (e.g; SNAP toolbox, GRASS GIS, QGIS) or to develop, debug and test applications in R, python or Java. Different flavours of virtual machines are available for the most demanding needs. After a prototyping phase, a Hadoop processing environment is readily available for upscaling to larger datasets and to make large processing jobs more efficient.

Large processing jobs over entire archives of satellite data need specific processing power. VITO has a Hadoop processing environment with 3000+ cores and is readily available for upscaling to larger datasets and to make large processing jobs more efficient. All datasets are mounted on all processing nodes for your parallel processing needs. Prototyping on smaller datasets can be done using a regular flavour of virtual machines, but can be upscaled using a couple of Spark code adaptations to the Hadoop cluster.