The bfastSpatial package provides utilities to perform change detection analysis (De Vries et al. 2015, Dutrieux et al. 2015, Verbesselt et al. 2010 and 2012) on time-series of spatial gridded data, such as time-series of remote sensing images (Landsat, MODIS and the likes). The tools provided by bfastSpatial allow user to perform all the steps of the change detection workflow, from pre-processing raw surface reflectance Landsat data, inventorying and preparing them for analysis to the production and formatting of change detection results. The present document aims at providing guidance to the users of bfastSpatial by detailing every steps of the process.

decompresses

resamples

reprojects

stacks(median, mean)

creates cloud masks

improves georegistration accuracy

applies atmospheric correction and data transformations

spectrally calibrates MSS data to TM data

spectrally calibrates OLI data to ETM+ data

creates annual cloud-free image composites and stacks