SEN2COR: Sentinel 2 Level 2A Atmospheric Correction Processor, Version 2.0.0, 15.01.2015

This Application will support the following Operating Systems:

Linux, Mac OSX and Windows (64 bit is mandatory).

This is a short instruction how to install and configure the application. Further details are given in the Software User Manual.

Preliminary steps: the application is dependent on the **Anaconda** Python Distribution Package and the **GDAL** Library and Python Bindings.

Anaconda Installation:

Download and install the recent version of the Anaconda python distribution for your operating system from: http://continuum.io/downloads call python from the command line and make sure that the correct python interpreter is called. It should have Anaconda as an identifier, e.g.:

Python 2.7.8 | Anaconda 2.0.1 (64-bit) | (default, Aug 21 2014, 18:22:21)

GDAL Installation:

For Windows: after you have installed Anaconda, open a command line window and type in the following command: "conda install gdal" and follow the given instructions.

For Linux and Mac: Download and install the GDAL Libraries and the GDAL Python bindings for your operation system from: http://trac.osgeo.org/gdal/wiki/DownloadingGdalBinaries according to the given documentation. Please make sure that the chosen GDAL package supports JPEG-2000. This is given and tested for the ELGIS and the Mac OSX distributions.

SEN2COR Installation:

For Windows:

Download the archive http://s2tbx.telespazio-vega.de/SEN2COR-2.0.0.zip, extract it with an unzip utility and place the folder SEN2COR-2.0.0 at a location of your choice.

Step into the folder SEN2COR-2.0.0, type "python setup.py install" and follow the instructions. The installer will generate an 'L2A_Process' Batch file inside of the SEN2COR\bin folder.

Add these three environment variables to your system:

S2L2APPHOME < directory where you have placed the SEN2COR folder>

S2L2APPCFG <directory where you want to place your configuration data> - This is by default "%S2L2APPHOME%\cfg"

GDAL_DATA <directory where the GDAL coordinate system info is stored> - This is by default in the local anaconda installation directory under: "lib\site-packages\osgeo\data\gdal"

Change the latter one if you have installed your own GDAL distribution outside of Anaconda.

The following line: "%S2L2APPHOME%\bin" should be added to the local PATH environment variable in order to allow the processor being executed from any directory of your file system.

Finally, call the processor via "L2A_Process --help". This will give you a list of possible options.

For Linux and Mac:

Download the archive http://s2tbx.telespazio-vega.de/SEN2COR-2.0.0.tar.gz, extract it with

"tar –xvzf SEN2COR-2.0.0.tar.gz" and place the folder SEN2COR-2.0.0 at a location of your choice.

Step into the folder SEN2COR-2.0.0, type "python setup.py install" and follow the instructions. The installer will set the appropriate environments and performs a basic test. Finally, a script called "L2A_Bashrc" is generated inside of the SEN2COR folder. These settings are necessary for execution of the processor. You can call this script either manually via "source L2A_Bashrc" before starting the processor, place it into your .bashrc or .profile script (OS dependent) or call it directly from the S2TOOLBOX setup.

Finally, call the processor via "L2A_Process --help". This will give you a list of possible options.

A basic L1C example test data set for further testing is provided for download at:

http://s2tbx.telespazio-vega.de/testdata.zip