

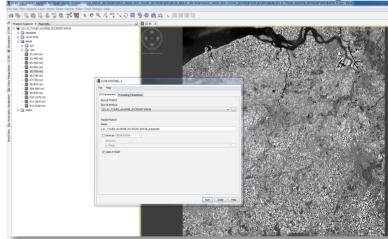
# **ATMOSPHERIC** CORRECTION **SOFTWARE**

iCOR - allows you to correct satellite and airborne images for atmospheric effects



## Something A MULTI-SENSOR PLATFORM

- Atmospheric correction improves the contrast in your scenes which is important for any **object** recognition
- As the largest part of the image information is coming from the atmosphere, atmospheric correction is important to retrieve quantitative information from your scenes.
- Each scene is imaged under different atmospheric conditions. For multitemporal analysis, the effect of the atmosphere has to be corrected



iCOR implementation in SNAP

iCOR is configurable for any optical sensor and can be used over multiple targets.

- Sentinel-2
- Landsat-8
- Sentinel-3
- Airborne hyperspectral
- **MERIS**
- PROBA-V

- Inland waters
- Coastal waters
- Transitional waters
- Land

→ configurable for the sensor of your choice



#### LAND-WATER INTERFACE



iCOR corrects for adjacency effects. These effects lower the contrast at the water-land boundary and can be prominent up to several kilometers from the shore. The methodology is presented in Sterckx et al., 2012\* and Sterckx et al, 2015\*.

## RELIABLE AND FAST PROCESSING TO IMPROVE CONTRAST AT LAND-WATER INTERFACE



#### SCIENTIFICALLY SOUND

iCOR has been validated in the framework of several European projects by VITO and partners. An independent validation was performed by ESA-NASA (ACIX) on various sites over the world.



iCOR validation sites

## **OPERATIONAL SOFTWARE**

iCOR runs as a stand alone application but can also be integrated in an operational environment. iCOR is also integrated in:

- Terrascope, the Belgian collaborative ground segment www.terrascope.be
- WatchItGrow, a service for the potato industry www.watchitgrow.be
- Highroc, a processing chain for coastal waters www.highroc.eu



## WHAT WE OFFER

#### iCOR-basic

**FREE** - For training and basic atmospheric image processing. Teach & train in a few steps.

- Test version for Landsat-8 and Sentinel-2
- Available in the SNAP toolbox
- For researchers and students to test different functionalities

## iCOR-professional

**ADVANCED** - An advanced stand alone processing module for business professionals.

- Customized version for Sentinel-2, Landsat-8, Sentinel-3 (OLCI), PROBA-V, MERIS and airborne sensors
- Tailored developments for new sensors
- Customized user interface
- Customized funtionalities
- For business experts

### iCOR-premium

**CUSTOMIZED** - A professional iCOR module as part of your processing workflow.

- More than atmospheric correction: cloud screening, glint screening, ...
- Completely automated from raw data to end products
- Customized user interface
- Customized funtionalities
- For business experts

Request a training (between 2-8 hours) on atmospheric correction and use of iCOR-basic

\* Sterckx et al., RSE, 2015 | \* Sterckx et al., IJRS, 2011

