## THE BELAIR PROJECT



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## THE STEREO III PROGRAMME

- Support to the Exploitation and Research in Earth Observation
- Belgian remote sensing research programme
- Duration: 2014-2021
- Budget: ± 28 M€



## **THEMATIC PRIORITIES**

- Both global and local
- Terrestrial and aquatic environments
- Interaction between (change in) land cover and climate change
- Epidemiology and humanitarian aid
- Security and risk management



## PROGRAMME STRUCTURE

#### RESEARCH

## RESEARCH SUPPORT

- BELAIR site
- Toolbox
- Sensor support

RESEARCH DESSIMINATION

EDUCATION AND PROMOTION

eo.belspo.be eoedu.belspo.be



## PROGRAMME STRUCTURE: RESEARCH SUPPORT

- Activities beneficial to the entire Belgian RS community
  - by encouraging collaboration or
  - by making data and software accessible
- Key activities: STEREO Toolbox and BELAIR site



### THE BELAIR PROJECT

#### **AIM**

- Systematic collection of in situ and RS (airborne and satellite) data over a Belgian multi-site for:
  - Joint innovative thematic research to strengthen research capabilities (algorithm development, thematic validation, etc.)
  - PhD and MSc theses
  - Calibration and validation of RS missions and products

#### CONCEPT

- Belair only finances data collection
- Research to be carried out in framework of ongoing (STEREO) projects or MSC/ PhD theses

## THE BELAIR PROJECT (cont'd)

#### DATA:

- Unique data sharing between Belgian researchers via dedicated portal site
- Data available for all (Belgian/international) after restricted period

#### FIRST STAGE:

- O Thus far: campaign in 2013 and 2015
- Bottom-up approach (researchers propose sites and research activities)
- O 19 teams
- O 2015 budget: 320 k€



## **BELAIR 2015 - Sites**

- Hesbania: crops and soil
- Litora: coast and biodiversity
- Sonia: urban and forestry





## **BELAIR 2015 - Partners**

- BELAIR promotors: in situ-measurements and research
  - Coordinators
    - HESBANIA: Stéphanie Delalieux
    - LITORA: Liesbeth De Keukelaere
    - SONIA: Boud Verbeiren
- BELSPO: overall management and acquisition of RS data (Pléiades, Deimos, ..)
- VITO: acquisition and processing of airborne data and hosting portal site (<u>http://belair.vgt.vito.be</u>)



## **OUTCOME BELAIR 2013 CAMPAIGN**

- Lot of field work done
- Unique sharing of data and equipment between Belgian researchers
- Part cal/val underdeveloped
- Not always enough synergy between activities teams sharing a subsite
- Data not always fully used (due to lack of additional funding)
- Cumbersome administrative and financial project management



## **TODAY'S AGENDA**

- This morning
  - > Presentation of results of the 2015 BELAIR campaign

- This afternoon
  - For BELSPO, promotors and experts: discussion and evaluation
  - For BELSPO and experts: recommendation about a next phase
  - For other participants: site visit



## **QUESTIONS FOR DISCUSSION**

#### **EVALUATION OF PAST ACTIVITIES**

- do the Belgian sites have what it takes to be a proper site for cal/val and joint research? What is missing?
- do the protocols used for in situ measurements guarantee sufficient quality for cal/val purposes
- do we acquire the right data (in situ, airborne and satellite) for cal/val and research purposes and with the right frequency?
- o is a proper joint research going on?



## QUESTIONS FOR DISCUSSION (cont'd)

#### **FUTURE ACTIVITIES**

- o do we have to maintain the double focus (cal/val vs. joint research)?
- what should be the thematic focus for a next phase?
  (agriculture, biodiversity, water, ...) (quid marine?)
- o should all sites be maintained?
- o should other sites be integrated?

#### **OUTREACH**

- are the BELAIR data interesting for future satellite missions?
- how can the promotion strategy (international sensor developers, uptake by scientists and projects) be improved?

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# THANK YOU FOR YOUR ATTENTION

BELAIR

