

ICOS



INTEGRATED
CARBON
OBSERVATION
SYSTEM

**UPDATE ON ECOSYSTEM STATIONS UNIVERSITY
OF ANTWERP**

8 ICOS Research Stations in Belgium:



OCEANIC STATIONS (OS):

Vlaams Instituut voor de Zee
Ship Simon Stevin
Fixed buoy

ECOSYSTEM STATIONS (ES):

Universiteit Antwerpen
BE-Bra: Brasschaat
BE-Lcr: Lochristi
BE-Maa: Maasmechelen

Université de Liège
BE-Jal: La Robinette
BE-Lon: Loncée
BE-Vie: Vielsalm

3 ICOS Ecosystem Stations in Flanders:



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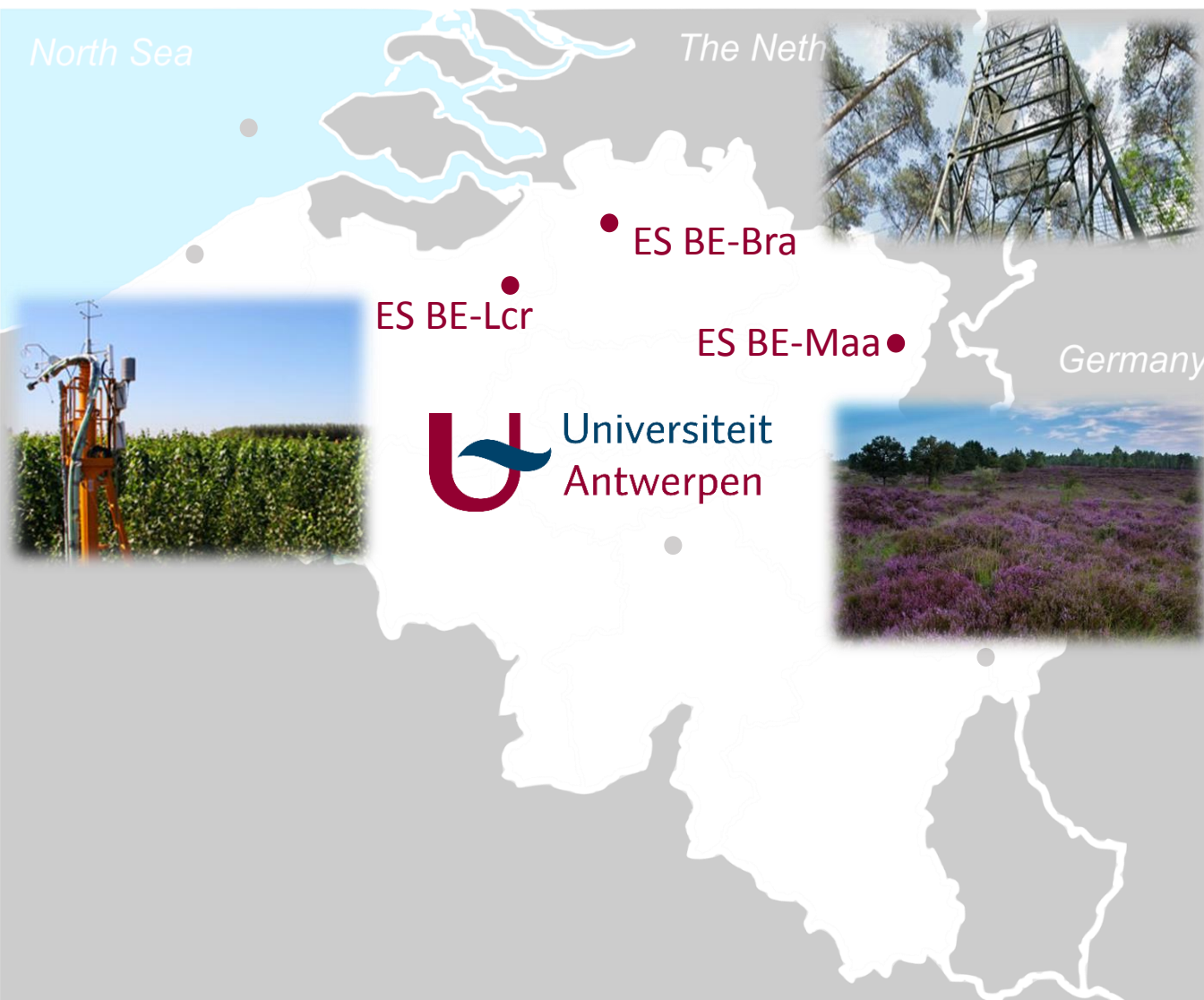
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1. BRASSCHAAT – GENERAL SITE INFO

SCOTS PINE FOREST

- Planted in 1929
- Flux and meteo data since 1997
- 40 m high scaffolding tower
- Near urban area on sandy soil (low productive)
- Greenhouse gases, ozone and air pollution studied
- Partners:



1. BRASSCHAAT - UPDATE

- New cabin to be installed in spring-summer
- New CO₂ analyzer installed on tower (old in parallel)
- Soil CO₂ chambers installed
- Dendrometers installed
- Soil profiles soon to be installed
- Subplots for ancillary data soon to be installed



2. LOCHRISTI– GENERAL SITE INFO

SRC POPLAR PLANTATION

- Planted in 2010 (110,000 trees)
- Former ERC “POPFULL”
- SRC= short rotation coppice
- Wood for biomass energy
- Flux and meteo data since 2010
- Greenhouse gases, ozone and air pollution studied
- Telescopic tower (fast growing!)



2. LOCHRISTI- UPDATE

- Fully ICOS compliant
- Test station for fluxes
- New cabin to be installed in spring-summer
- Soil CO₂ chambers installed
- Dendrometers installed
- Soil profiles and subplots for ancillary data installed
- Additional VOC measurements



3. MAASMECHELEN– GENERAL SITE INFO

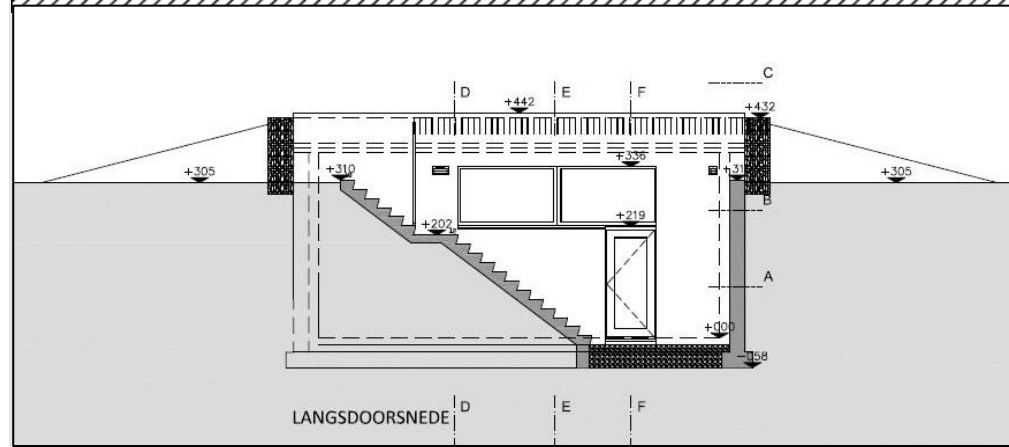
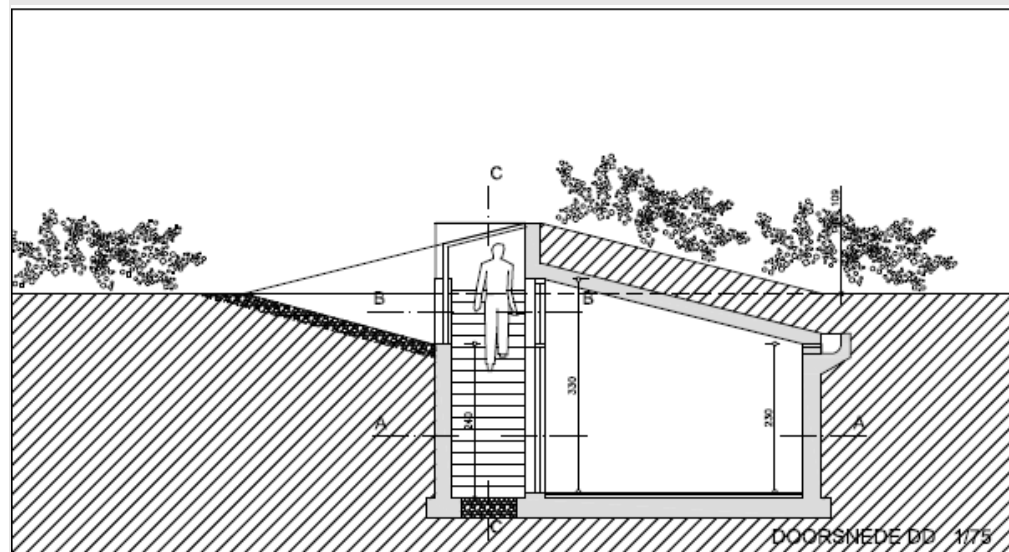
HEATHLAND

- National Park “Hoge Kempen”
- Unique dry heathland in ICOS
- Management by ANB
- Underground cabin
- Tower < 6m
- Close coupling to UH ECOTRON+
- Partners:



3. MAASMECHELEN - UPDATE

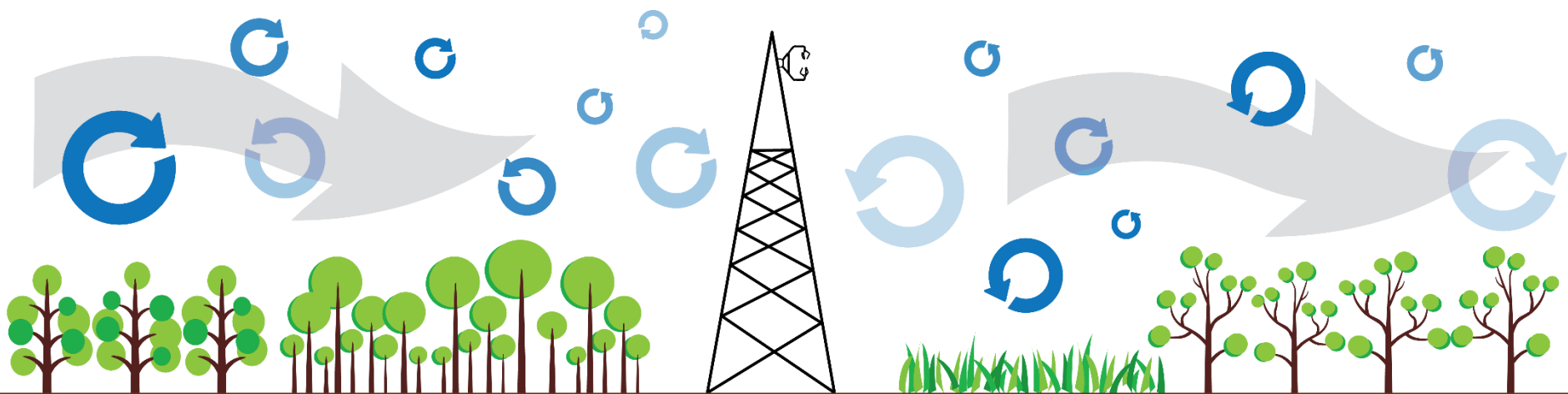
- Building permits obtained, contractor assigned
- Construction in June (1st-31st)
- Power and internet cables from grid up to cabin: 3km (contractor assigned next week)
- Installation of instruments and tower: August - September





www.icos-belgium.be
www.icos-ri.eu





3. Maasmechelen: Heathland in National Park Hoge Kempen



- Unique in ICOS as a dry heathland site
- Tower height < 6m
- Underground cabin to preserve landscape
- ANB performs micromanagement in the area to preserve diversity in heather
- Close coupling to ECOTRON+: soil and meteo data will be transmitted to FRC in real time for controlling of lysimeters

