GECO

Koen Hufkens

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UNIVERSITÄT BERN

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OESCHGER CENTRE
CLIMATE CHANGE RESEARCH

Koen Hufkens

Roots in numerical & landscape ecology, now covering various topics from ecophysiology to remote sensing in function of **macro-ecology** research.

Worked at various institutions in the US (~6yr Boston University and Harvard), and in the EU (University of Ghent, INRAE, ETH, now University of Bern).

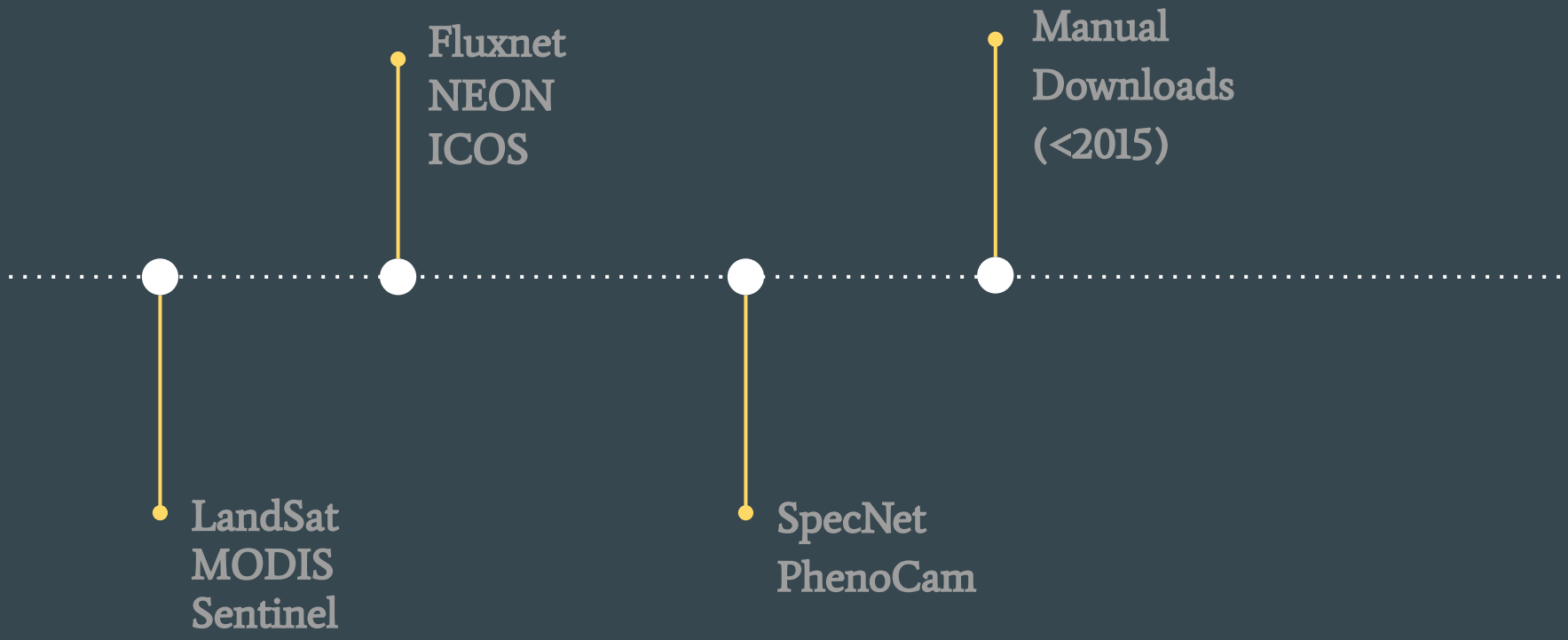
Recipient of an EU Marie Skłodowska-Curie Action and led a multi-institution research projects on eco-climatological data recovery (proxy measures) funded by the Belgian science policy office.

Currently, at the University of Bern, Geocompation and Earth Observation group

Goals

- Have **fun** doing **science**
- **Facilitate science**
  - Software development
  - System integration
- Big science, **small budgets**
- Teach these skills
  - **Community** building

Ecology is not data poor, but (often) poorly integrated



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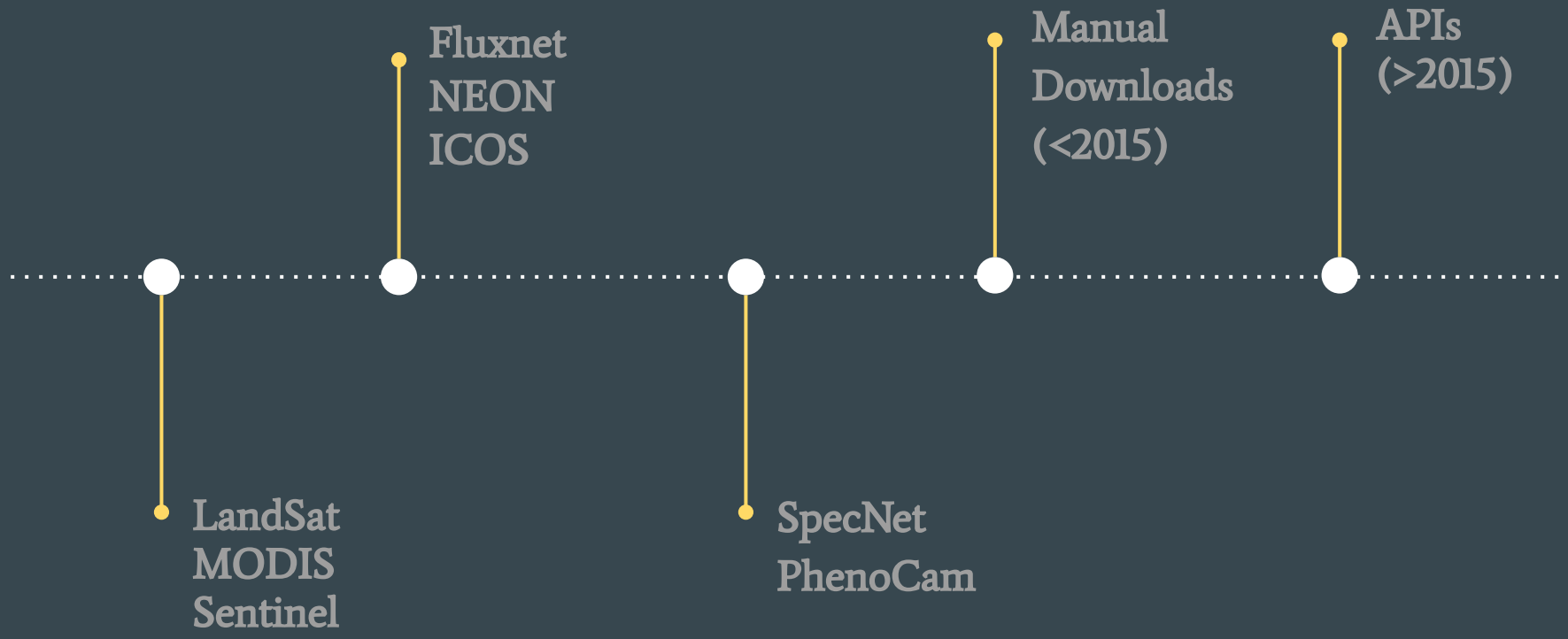


Lost time

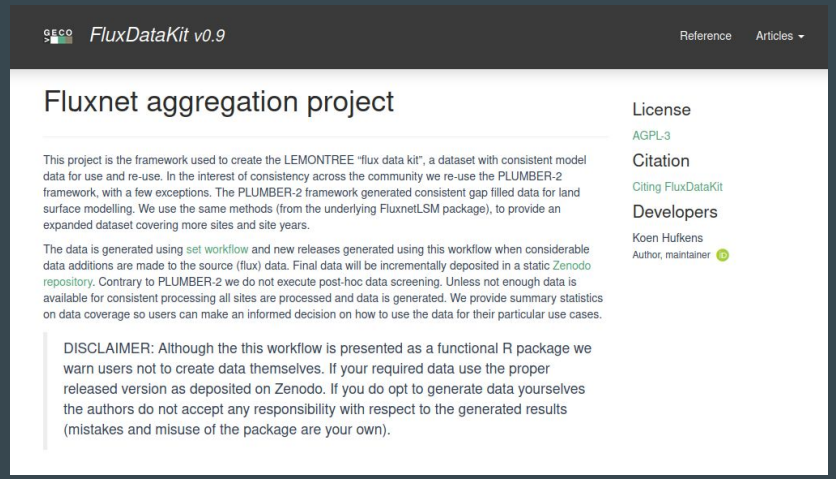
- Data integration is hard
  - Stumbling block ECR
- **Isolated efforts**
  - **FluxnetLSM**
  - **FluxDataKit**
- No community support
- Teach these skills

Facilitate data integration

Requires API interfaces which are easy (e.g. R based MODISTools, ecmwfr, amerifluxr, packages etc).

Requires knowledge transfer, and open sharing of common or similar workflows.

Does not necessarily need “frameworks”, as hard to maintain.



We are not software developers

But can learn some of their practices to enhance research

Open Questions?

- Data integration needs?
- **Infrastructure** required?
- Community integration?
- How to teach / engage?
- Systems approach
- Awesome R/python scripts

Contact

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