

# Expanded Freshwater and Terrestrial Environmental Observation Network (EFTEON)

Gregor Feig, Kerneels Jaars

Savanna Network Meeting

2020/03/03



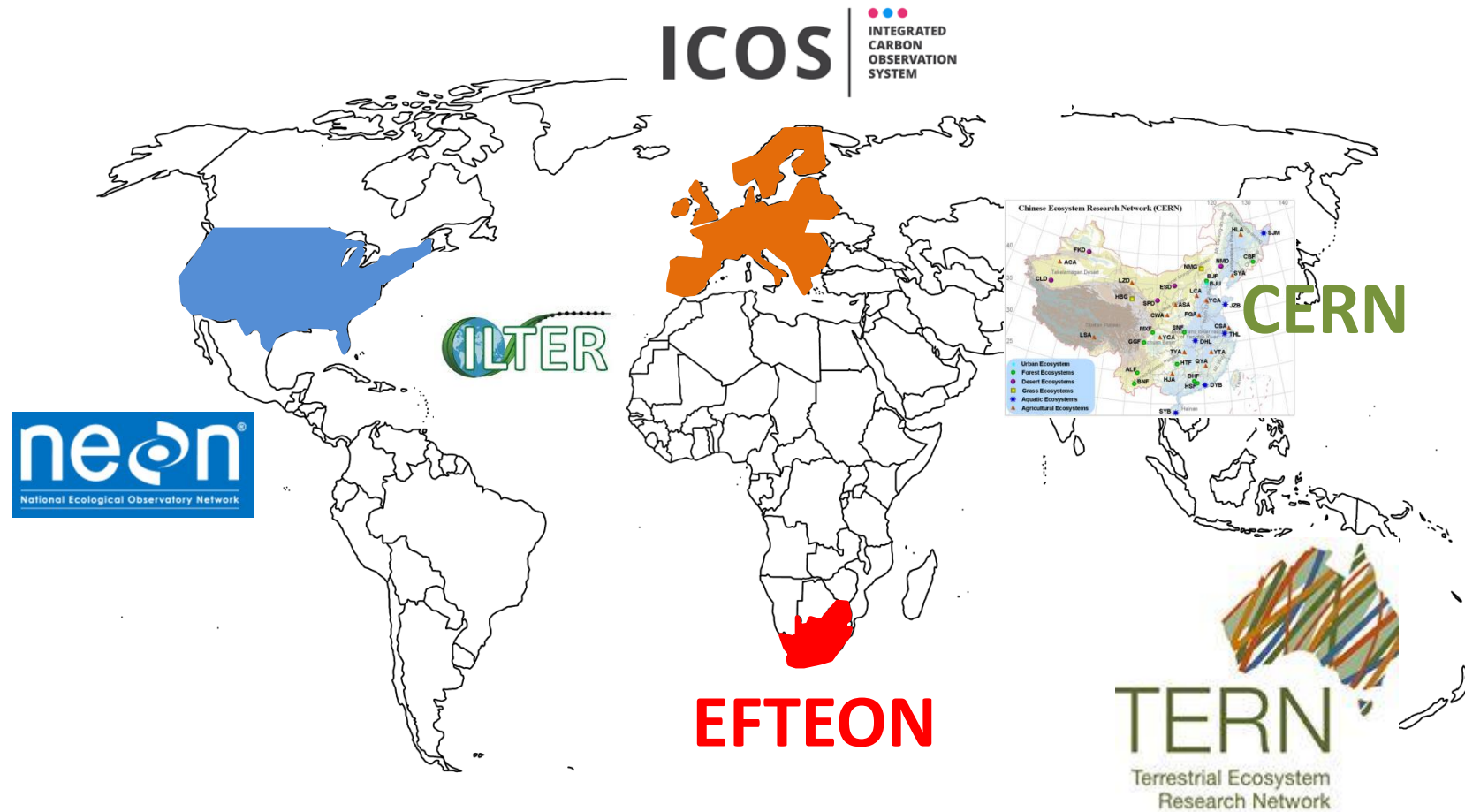
science & innovation

Department:  
Science and Innovation  
REPUBLIC OF SOUTH AFRICA



SAEON  
South African Environmental  
Observation Network

# Long Term Ecological Research Infrastructures



science & innovation

Department:  
Science and Innovation  
REPUBLIC OF SOUTH AFRICA





# The South African Research Infrastructure Roadmap (SARIR)

Aims to keep South African researchers globally competitive with respect to equipment and facilities that are too large and long-term to be effectively managed by individual institutions

13 Diverse Research Infrastructures have been are being developed

- Expanded Freshwater and Terrestrial Environmental Observation Network (EFTEON) and
- Shallow Marine and Coastal RI (SMCRI)
- South African Marine and Antarctic Facility

An open-data and platform for hosting research for use by many individuals and institutions



science & innovation

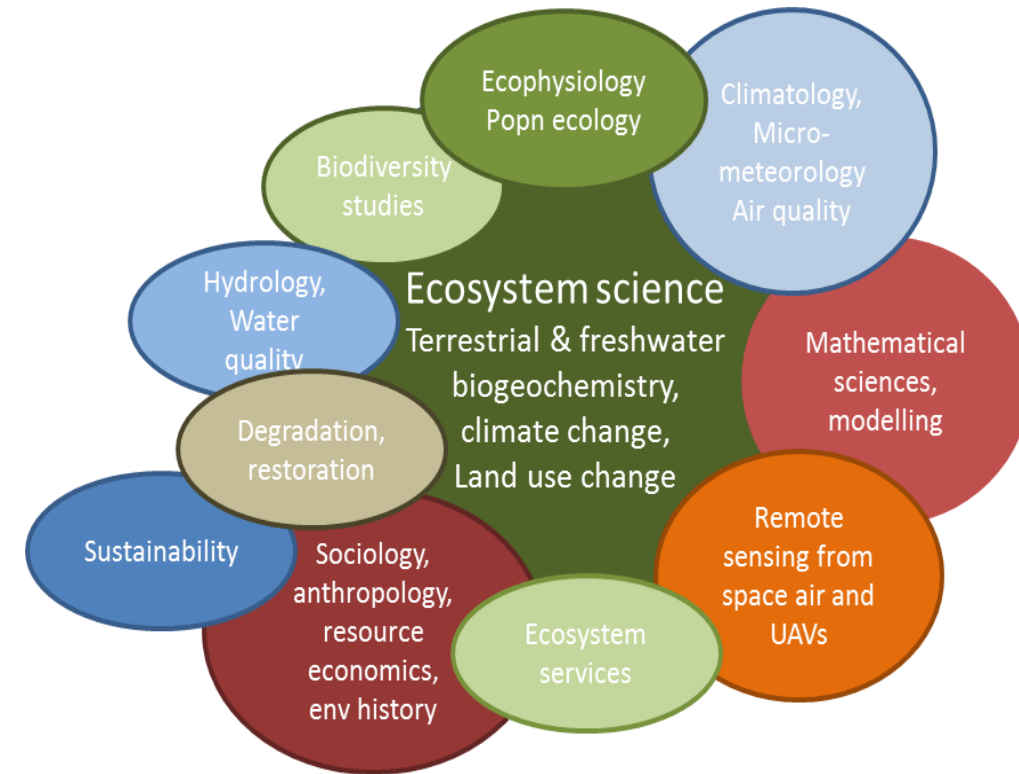
Department:  
Science and Innovation  
REPUBLIC OF SOUTH AFRICA



# Expanded Freshwater and Terrestrial Environmental Observation Network

## Guiding principles for EFTEON Landscapes

- Long Term Environmental Research needs and questions
- Use South African comparative advantage
  - Unique ecosystems and ecosystem characteristics
  - Globally under studied ecosystems
  - Globally representative development challenges
- Work in lived-in landscapes
  - Place the research in the path of change
- Use state-of-the-art methods - to remain globally competitive
- Embrace complexity
- Data archaeology
- Ensure that existing observation efforts are fit-for-purpose and accessible
  - Including for user communities



science & innovation

Department:  
Science and Innovation  
REPUBLIC OF SOUTH AFRICA



# EFTEON Design

Modular, networked research infrastructure to support studies on coupled social-ecological systems in South Africa.

## Design based on 6 distributed landscapes

Representing important South African Ecosystem-Human complexes.

Representatives of major biomes and human transformed ecosystems and their embedded aquatic systems



View from the Skukuza Flux Tower

Each landscape will have heavily-instrumented core sites for fresh water and terrestrial observations and a linked network of lightly instrumented subsidiary sites, plus a survey system for collecting social data and biodiversity data



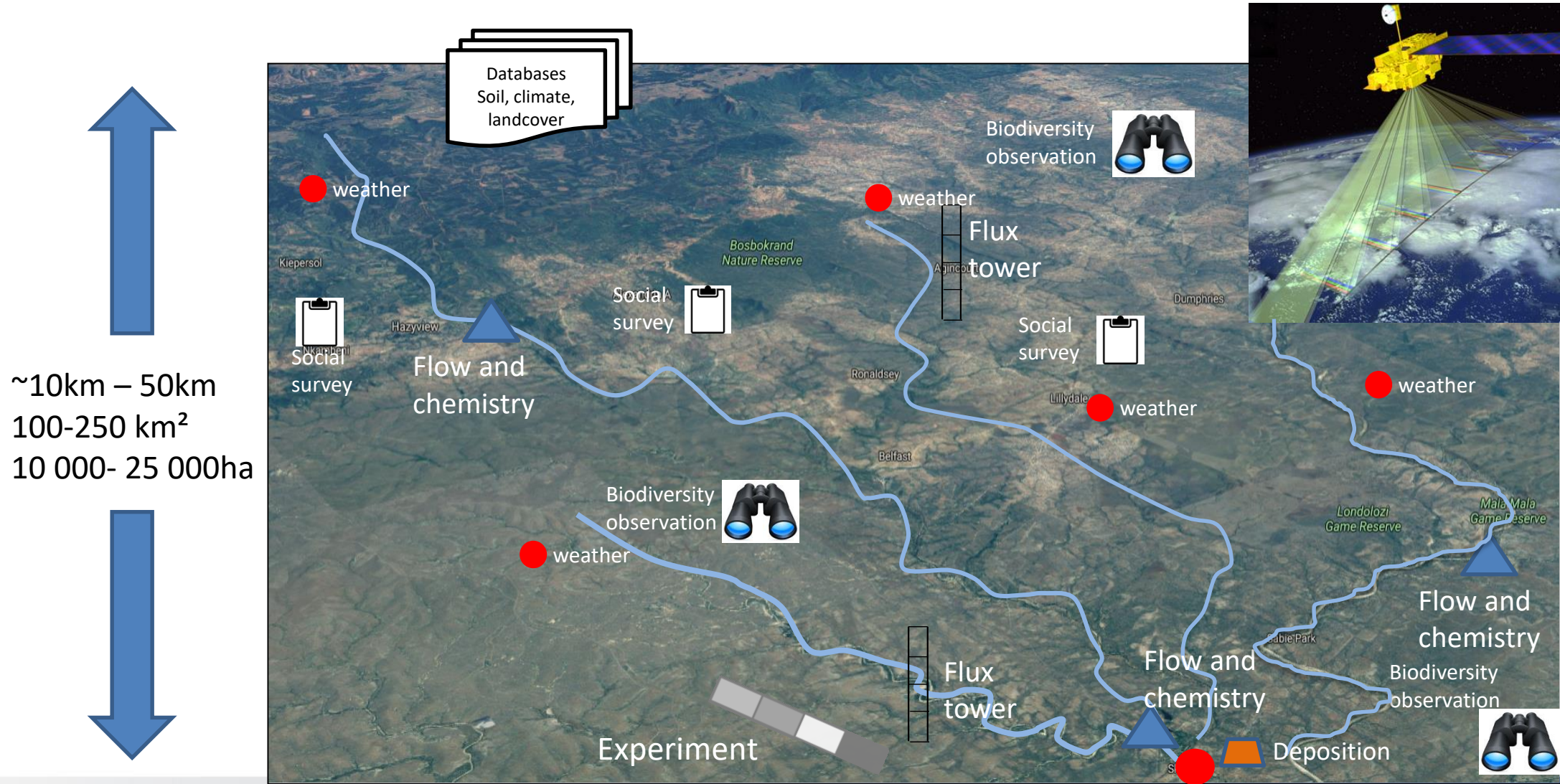
science & innovation

Department:  
Science and Innovation  
REPUBLIC OF SOUTH AFRICA





# What will the infrastructure look like?



science & innovation

Department:  
Science and Innovation  
REPUBLIC OF SOUTH AFRICA



SAEON  
South African Environmental  
Observation Network

# Landscape Selection

## The 3-Step Landscape Selection Process

NOMINATION OF  
LANDSCAPES

REGIONAL WORKSHOPS

DETAILED  
LANDSCAPE  
PROPOSALS

PROPOSAL EVALUATIONS

LANDSCAPE  
SELECTION



- **Call for landscape nominations** The community is encouraged to propose landscapes for EFTEON research infrastructure development.

**CLOSING DATE 15 MARCH 2020**

- **Regional workshopping** landscape proposal assessment.

**MARCH – MAY 2020**

- **Request for detailed Proposals** from prioritized landscapes.

**MAY – AUGUST 2020**

- **EFTEON Landscapes selected** and contracting initiated.

**SEPTEMBER – OCTOBER 2020 →**

<https://efteon.saeon.ac.za/>



science & innovation

Department:  
Science and Innovation  
REPUBLIC OF SOUTH AFRICA





# Questions

<https://efteon.saeon.ac.za/>



science &  
Department:  
Science and Innovation  
REPUBLIC OF SOUTH AFRICA

[Gregor@saeon.ac.za](mailto:Gregor@saeon.ac.za)

**SAEON**  
National Research Foundation  
South African Environmental Observation Network