



A national infrastructure network to meet major environmental challenges

Drawing up a national strategy

The result of several decades of construction, research infrastructures (RIs) in the Earth and environmental sciences, develop and produce tools, services and data. They serve a community of tens of thousands of scientists and contribute to a better understanding of how the Earth system works, through observation and experimentation.

They allow use modelling to develop solutions to help our environment and societies adapt to global changes.

Concerted actions to:

- ▶ Unite the Earth and Environment system communities
- ▶ Innovate with ambitious infrastructures
- ▶ Strengthen technical and scientific expertise
- ▶ Address cross-disciplinary scientific issues (sustainability sciences)
- ▶ Provide FAIR data (open science)
- ▶ Inform public decision-making
- ▶ Consolidate the international positioning

Overview of **research** in the **Earth and env**

Key figures

21

**accredited
research
infrastructures,**

of which

17

are part of European and
international networks

And more than

100

research organi-
zations, universities and
institutions

110

petabytes of
data produced
annually

Continental socio- economics

In-SYLVA
National research
infrastructure for adaptive
forest management

RARe
Agronomic resources
for research

AnaEE-FR
Ecosystem analysis and
experimentations



RÉCO
French nati
of naturalis

eLTER-FR RZA
European long term ecosystem research
infrastructure - French LTSER network
"zones ateliers"

MULTI D

eLTER-FR OZCAR
European long-term ecosystem research
infrastructure - French network
of critical zone observatories:
research and applications

EMSO
European mu
seafloor and v
observator

Geosphere




EPOS-FR
European plate
observing system

Key infrastructures environment system

Cross-disciplinary logistics and analytical facilities

Logistics and analytical equipment

Atmosphere



DLNAT
National network
of dust collections

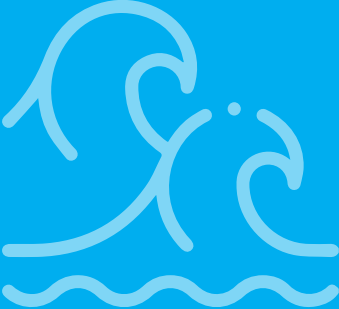
ICOS
Integrated carbon
observation system

IAGOS
In-service aircraft for global
observing system

ACTRIS
Aerosol, clouds and
trace gases research
infrastructure

Oceans

Ocean



ILICO
Marine coastal and
nearshore research
infrastructure


EURO-ARGO
In-situ ocean observation
network/European
contribution to Argo
program



ECORD-IODP
French geochemical and
experimental network



FOF
French oceanographic
fleet



RéGÉF
French geochemical and
experimental network




IN AIR
National infrastructure of
Instrumented aircraft for research




Concordia
French-Italian Antarctic
research station


e-Infrastructures



CLIMERI-France
National research infrastructure
for modelling the Earth's
climate system

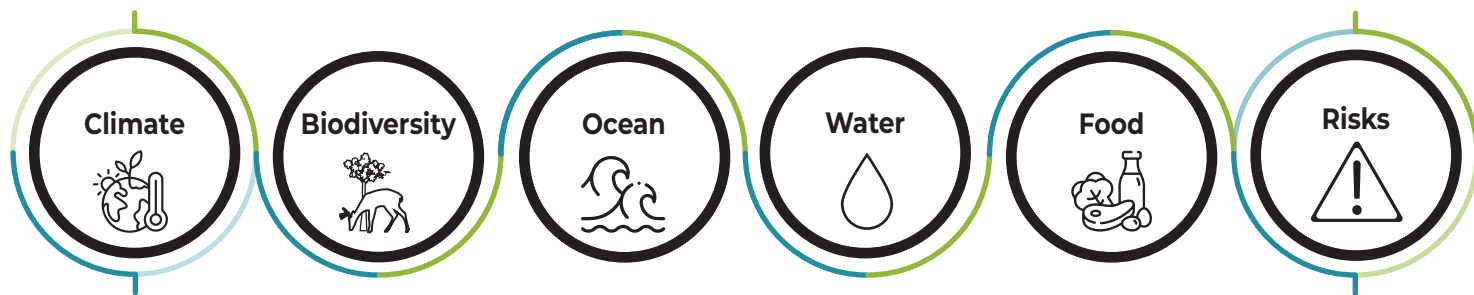


CEPMET
European centre for
medium-range weather
forecasts



DATA TERRA
Data hubs and services
for the Earth system

Major environmental challenges



Certified and qualified data to

- ▶ Ensure long time series
- ▶ Develop interdisciplinary analytical and logistical strengths
- ▶ Develop models based on real field conditions
- ▶ Simulate processes and test scenarios

High scientific and socio-economic impact

- ▶ A cross-disciplinary, integrated approach to environmental research
- ▶ An investment policy designed to meet societal challenges: food, biodiversity, health, soil and hydro-climatic risks, energy transition, etc.
- ▶ A range of services and access to open data to help understand Earth system processes

To find out more



The AllEnvi white paper presents and analyses the structural and thematic diversity of the national network and proposes strategic changes to maintain French research at the highest international level

Scan the QR code



www.allenvi.fr/wp-content/uploads/2022/06/Livre_blanc_Infrastructures_2020-2030.pdf



The French Roadmap 2021 expresses a clear vision for the essential research and innovation infrastructures, providing a true strategic analysis of the research infrastructure landscape.

Scan the QR code



www.enseignementsup-recherche.gouv.fr/sites/default/files/2022-03/feuille-de-route-nationale-des-infrastructures-de-recherche---2021-v2--17318.pdf

