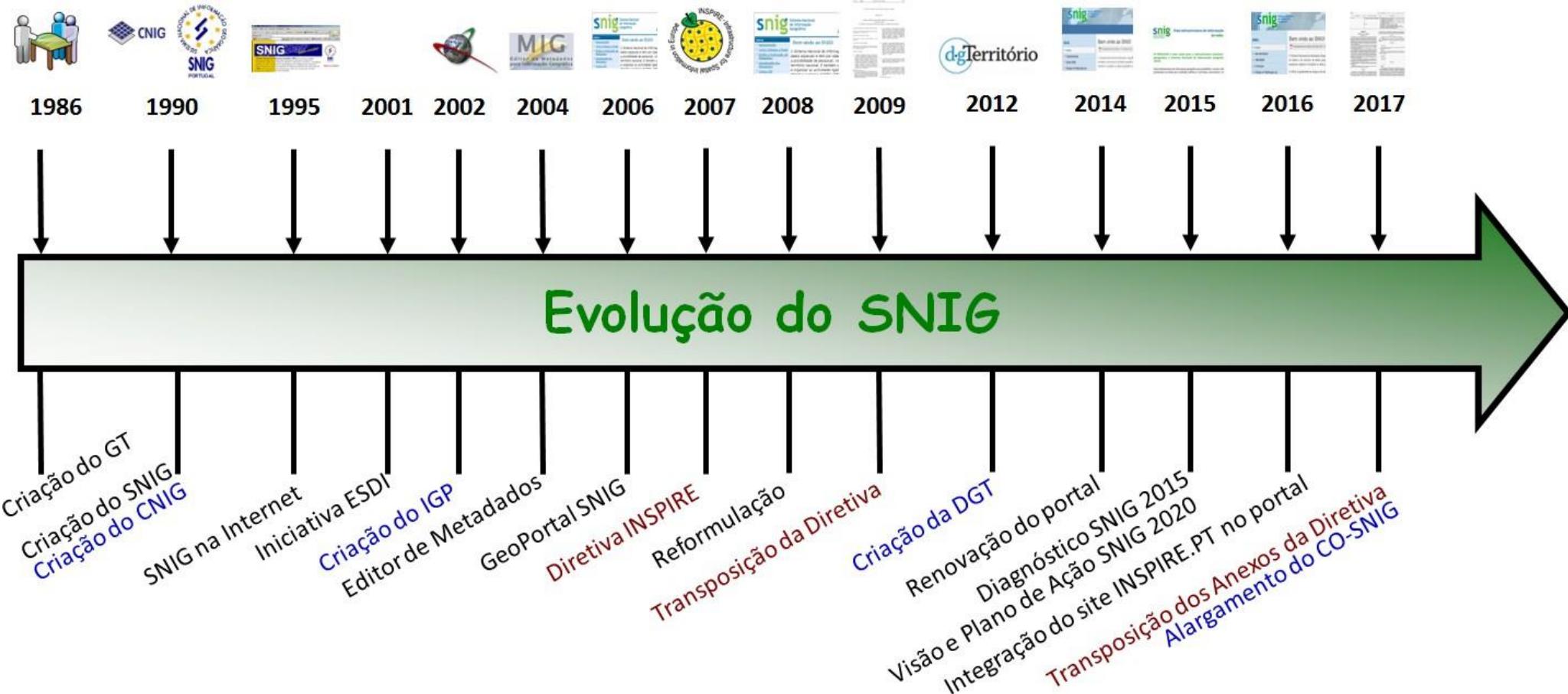


Environmental data sources

Theo Fernandes
António Câmara

March 20th, 2019



[SNIG Evolution](#)

Digital Portugal

Expo98

Virtual flyover and thematic databases
connections in real time
1.5 million users



Environmental data sources

An international perspective

A national perspective

Data analysis tools

An international perspective

US environmental data infrastructures

European environmental data infrastructures

Global environmental data infrastructures

US environmental data infrastructures

[EPA](#)

[USGS](#)

[NOAA](#)

[NASA](#)

[NPS](#)

[NWS](#)

[NCBI](#)

Environmental Topics



Find the most popular pages in your topic of interest, or search the [A-Z index](#) for specific terms.

- [Air](#):

- pollution and your impact
- indoor air issues like asbestos
- air quality research and data
- emissions, greenhouse gases

- [Chemicals and Toxics](#):

- formaldehyde, mercury, other substances
- how EPA handles spills
- safer chemicals, TSCA
- databases such as IRIS and SRS

- [Environmental Information by Location](#):

- conditions in your state or community
- nearby facilities or cleanup sites

- [Greener Living](#):

- sustainable energy
- transportation choices
- food waste and recycling
- home and business

- [Health](#):

- effects of common pollutants
- risk and exposure studies
- asthma, children in school buildings

- [Land, Waste, and Cleanup](#):

- landfills
- hazardous waste
- plastic and waterways
- superfund, cleanups

- [Science](#):

- methods, modeling, data and tools
- research grants and opportunities

- [Water](#):

- drinking water quality
- watersheds and rivers
- wastewater, stormwater, runoff
- infrastructure finance and resilience

Narrower Topics

- [Bed Bugs](#)
- [Lead](#)
- [Mold](#)
- [Pesticides](#)
- [Radon](#)

USGS Science Data Catalog (SDC)

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By Mission Area

[Core Science Systems](#)
[Ecosystems](#)
[Energy and Minerals](#)
[Environmental Health](#)
[Land Resources](#)
[Natural Hazards](#)
[Regional Offices](#)
[Water Resources](#)

By Science Topic

[Aquatic Biology](#)
[Botany](#)
[Climatology](#)
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[Environmental Health](#)
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[Geomorphology](#)
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[Information Sciences](#)
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[Planetary Sciences](#)
[Remote Sensing](#)
[Seismology](#)
[Soil Sciences](#)
[Volcanology](#)
[Wildlife Biology](#)
[Wildlife Disease](#)

By Data Source

[Alaska Science Center](#)
[Arizona Water Science Center](#)
[Astrogeology Science Center](#)
[California Water Science Center](#)
[Caribbean-Florida Water Science Center](#)
[Central Energy Resources Science Center](#)
[Central Midwest Water Science Center](#)
[Chief Cooperative Research Units](#)
[Climate Adaptation Science Centers](#)
[Climate and Land Use Research & Development Program](#)
[Coastal and Marine Hazards and Resources Program](#)
[National Phenology Network](#)
[National Research Program](#)
[National Wildlife Health Center](#)
[Nebraska Water Science Center](#)
[Nevada Water Science Center](#)
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USGS Data Catalog



OneStop

NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION

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OneStop

A NOAA Data Search Platform

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Weather



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Coasts

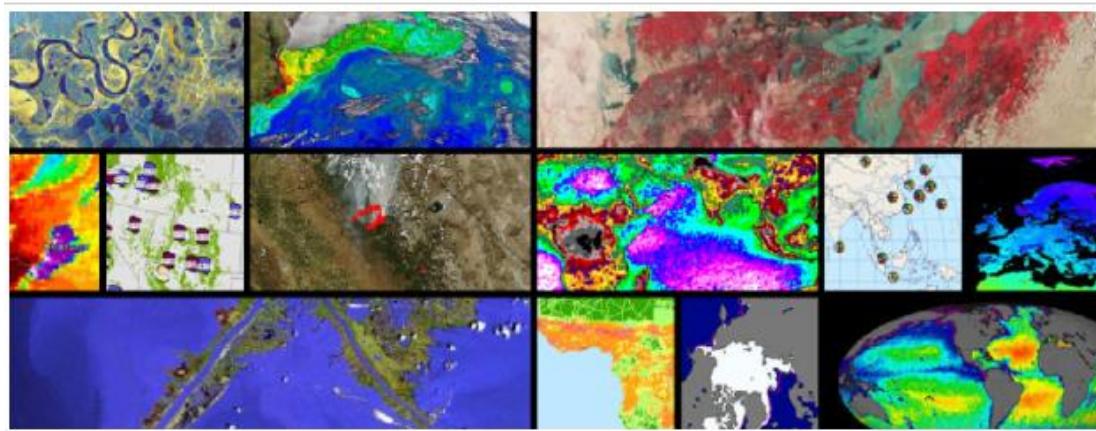


Oceans

Featured Data Sets

NOOA Data Discovery Portal

Getting Started with NASA Earth Science Data



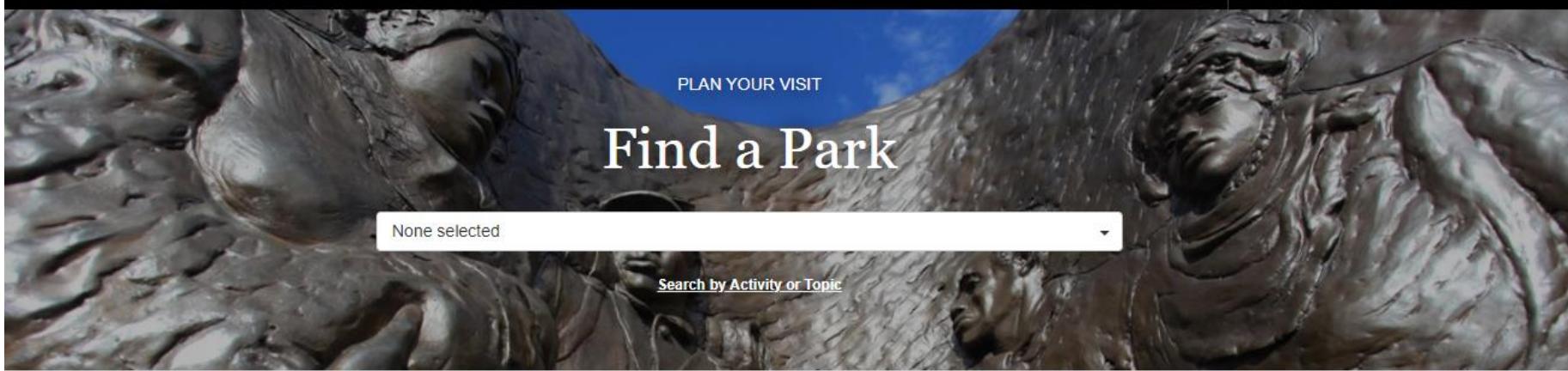
For more than 30 years, NASA's Earth Observing System Data and Information System (EOSDIS) has provided long-term measurements of our dynamic planet. The thousands of unique data products in the EOSDIS collection come from a variety of sources including the International Space Station, satellites, airborne campaigns, field campaigns, in-situ instruments, and model outputs.

Learn about Data

The [Learn](#) section includes information and guides to help you find and use NASA Earth science data, services, and tools.

- [Earth Science Disciplines](#)
- [Data Formats and Standards](#)
- [Webinars and Tutorials](#)
- [Data Toolkits](#)
- [Data Pathfinders](#)
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[NASA Open Data Portal](#)



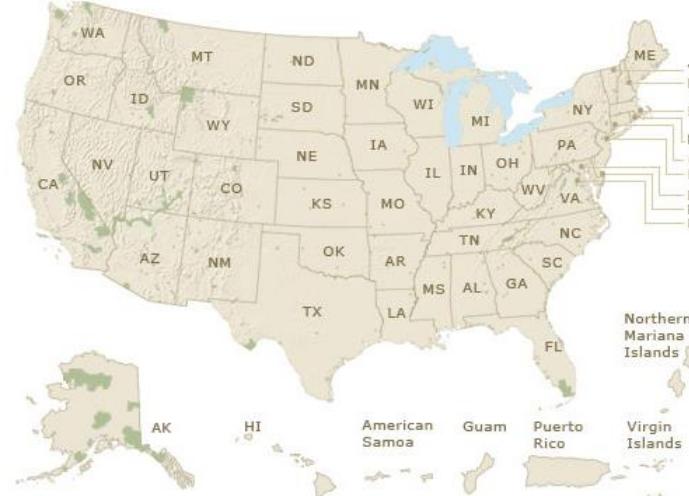
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[Search by Activity or Topic](#)

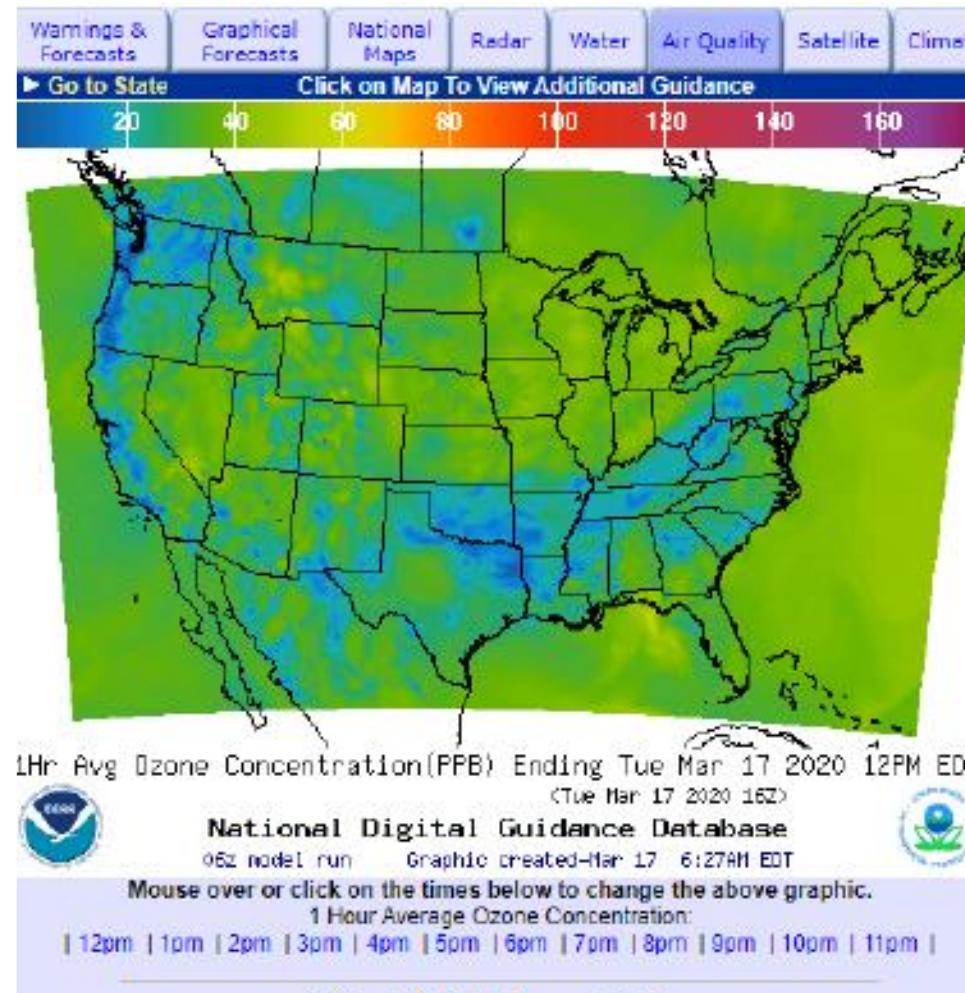
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[National Park Service](#)



National Weather Service

NCBI Home

Resource List (A-Z)

All Resources

Chemicals & Bioassays

Data & Software

DNA & RNA

Domains & Structures

Genes & Expression

Genetics & Medicine

Genomes & Maps

Homology

Literature

Proteins

Sequence Analysis

Taxonomy

Training & Tutorials

Variation

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The National Center for Biotechnology Information advances science and health by providing access to biomedical and genomic information.

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European environmental data structures

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• Browse data by Earth Topics



Agriculture



Atmosphere



Land



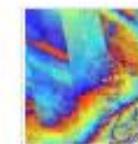
Natural Disasters



Ocean and Coast



Snow and Ice



Solid Earth



Water

• Browse data by instrument type



Atmospheric



Gravimetry



Hi Res. Optical
Multispectral



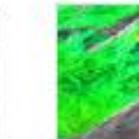
Low Res. Radiometry



Orbit Parameters



Radar Altimetry



Radar Imagery

• Browse data by mission



WorldView-2



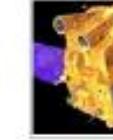
WorldView-3



ALOS



Aura



CartoSat-1



COSMO-SkyMed



CryoSat



Deimos-1



[European Space Agency data](#)



INSPIRE GEOPORTAL

Enhancing access to European spatial data

European Commission > INSPIRE > Geoportal

Home Priority Data Sets Viewer Thematic Viewer Harvesting status Find out more about

INSPIRE Data Themes

Explore all Member States' INSPIRE data sets by selecting an INSPIRE data theme.

Annex I



Addresses

— Def.: Location of properties based on address identifiers, usually by road name, house number, postal code.

1 2223 | 40 | 99



Administrative units

— Def.: Units of administration, dividing areas where Member States...

1 845 | 77 | 132



Cadastral parcels

— Def.: Areas defined by cadastral registers or equivalent.

1 11671 | 16 | 40



Geographical grid systems

— Def.: Harmonised multi resolution grid with a common point of origin...

1 150 | 12 | 12



Geographical names

— Def.: Names of areas, regions, localities, cities, suburbs...

1 1271 | 56 | 61



Hydrography

— Def.: Hydrographic elements, including marine areas and all other water bodies and items related...

1 1586 | 160 | 171



Protected sites

— Def.: Area designated or managed within a framework of international, Community and Member States'...

1 1738 | 277 | 341



Coordinate reference systems

— Def.: Systems for uniquely referencing spatial information in...

1 136 | 11 | 5

Inspire Data Themes

Interactive data viewers

See all

General information on Natura 2020 network

This dashboard provides information at the national level on the numbers and surface area of Natura 2000 sites and associated legal measures in place.

[Read more](#)

Infographics

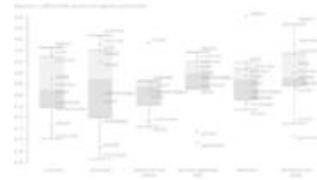
See all



Examples of circular actions that improve the management of construction and demolition waste

[Read more](#)

Effect of land use change on vegetation productivity

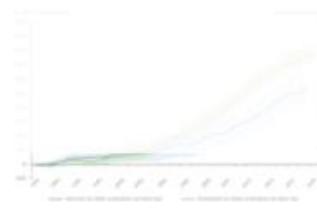


Vegetation productivity



Free flowing rivers in Europe

Effect on vegetation productivity: number of frost days



Greenland and Antarctic ice sheets



Climate change impacts in Europe

European Environmental Agency data and maps



EXPLORE FURTHER



Climate change

Browse this section of our website dedicated to statistics on climate change.



Circular economy

Eurostat environmental statistics

Global environmental data infrastructures

[Google Earth](#)

[Amazon Data Sustainability Initiative](#)

[Protected Planet \(UN\)](#)

[Climate Change \(UN\)](#)

[IPCC](#)

[FAO \(UN\)](#)

[Lifecycle initiative \(UN\)](#)

[Environmental statistics \(UN\)](#)

[Remote sensing data market map](#)



Exploring Earth's Ecosystems

Have 6th graders read and watch examples of how ecologists study different aspects of ecosystems, including their function and relationship with humans.

[INQUIRY GUIDE →](#)

[HHMI BIOINTERACTIVE →](#)



Follow India's Lifelines

Follow the paths of Indian rivers and learn how they shape landscape, culture, and life.

[RIVERS OF INDIA →](#)

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Extreme Biodiversity on the High Seas

Join Mission Blue on a high seas adventure to the Costa Rica Thermal Dome Hope Spot where we follow marine biologists in the field tagging turtles, tracking sharks and more.

[HOP ABOARD →](#)



Geo VR

Explore from an immersive viewpoint through in Street View VR galleries, Google Expeditions, Earth VR and more.

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Google Earth



Cloud grants to improve understanding of our planet

Access to cloud services helps national governments realize the potential of earth observations for sustainable development.



Unlocking sustainability insights around the world

The Amazon Sustainability Data Initiative is leveling the playing field to allow researchers to access and analyze massive datasets at a scale like never before.



Featured data sets

The Amazon Sustainability Data Initiative catalog offers several sustainability-oriented datasets through the AWS Public Dataset program.



Registry of open data on AWS

The Amazon Sustainability Data Initiative helps people discover and share datasets through the AWS open data registry.

Amazon Data Sustainability Initiative

Discover our Thematic Areas



Aichi Target 11 Dashboard

Dive into the summary of our progress towards Aichi Target 11 at global, regional and national scales with the Dashboard.

[Learn more →](#)



WDPA

The World Database on Protected Areas (WDPA) is the most comprehensive global database on [terrestrial](#) and [marine](#) protected areas.

[Learn more →](#)



Marine Protected Areas

Explore the World's marine protected areas

[Learn more →](#)



ICCAs

The ICCA Registry is an [online](#) platform for [indigenous peoples'](#) and community conserved territories and areas, where communities themselves provide data, case studies, maps, photos and stories.

[Learn more →](#)



PAME

PAME is a global database, comprising many thousands of assessments of how well a protected area is being managed – primarily the extent to which it is protecting values and achieving goals and objectives.

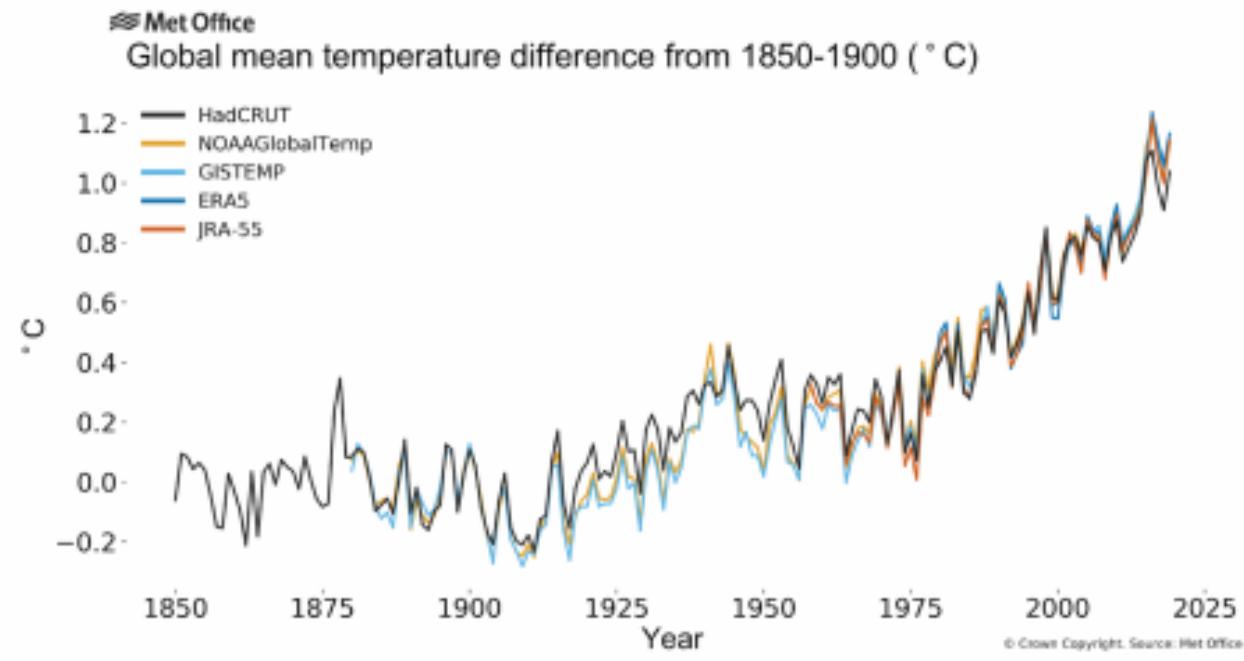


PARCC

The PARCC project's main objective was to assess the [vulnerability](#) of West African protected areas to climate change and help design more resilient protected area networks.

[Learn more →](#)

Protected Planet (UN)



Climate Change (UN)

Observations

- Observations of the climate
- Socio-Economic Baseline Dataset
- IPCC AR5 Observed Climate Change Impacts
- IPCC AR4 Observed Climate Change Impacts
- Carbon Dioxide: observed atmospheric concentrations

Computer Simulations

Computational models play an increasingly central role in underpinning our understanding of the environment, society. The DDC contains data produced from Integrated Assessment Models (IAMs), Carbon-cycle Models, General Circulation Models, and Earth System Models.

- Global climate model output
- Global climate model output: period-averages
- Global climate model output: global-means (AR4)
- SRES Emissions scenarios
- IS92 Emissions scenarios
- Carbon Dioxide: Projected emissions and concentrations

Analyses

- Regional scatter-plots

Data visualisation

- Visualise global climate model data and climate observations

IPCC



FAOSTAT

FAOSTAT provides free access to food and agriculture statistics (including crop, livestock, and forestry sub-sectors) for over 245 countries and territories and covers all FAO regional groupings from 1961 to the most recent year available.



SDG Indicators

FAO's Sustainable Development Goals (SDG) Data Portal provides access to the 21 SDG Indicators under FAO custodianship as well as key information to support countries in tracking progress towards SDGs.



AMIS

The Agricultural Market Information System (AMIS) is an Inter-agency platform to enhance food market transparency and policy response for food security. It provides market information on four grains particularly important in international food markets: wheat, maize, rice and soybeans.



Food and Agriculture Microdata Catalogue (FAM)

The Food and Agriculture Microdata (FAM) Catalogue provides access to micro datasets collected through farm and household surveys which contain information related to agriculture, food security and nutrition.



FPMA

Food prices



DAD-IS

Domestic Animal Diversity



WIEWS

Plant Genetic Resources

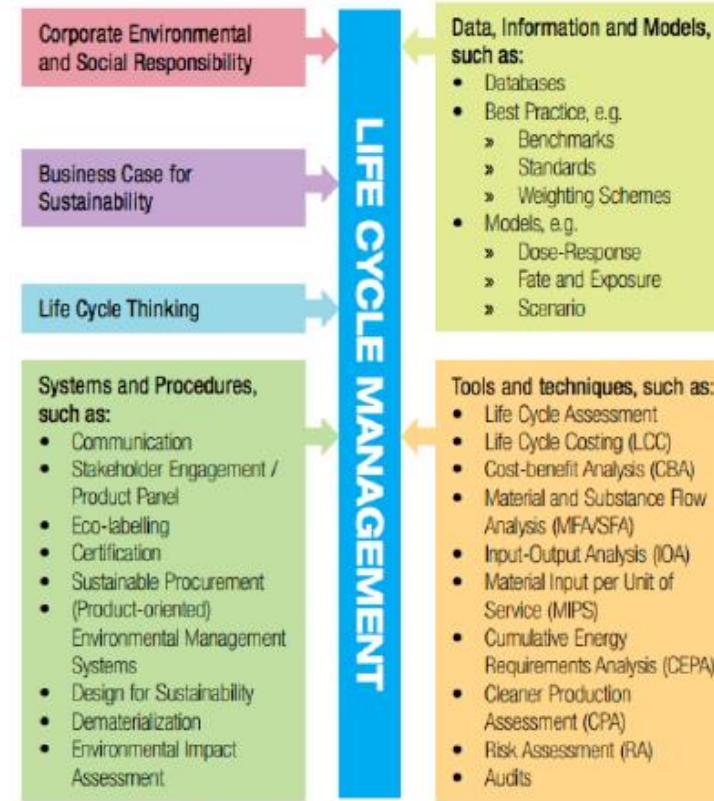


INFOODS

Food Composition

FAO (UN)

Elements of Life Cycle Management



Source: UNEP/SETAC. Life Cycle Management: A Business Guide to Sustainability. Paris, 2007.

Lifecycle initiative (UN)



Environmental statistics (UN)



Remote sensing data market map

Public Environmental Datasources in Portugal

[SNIAMB](#)

GIS database

[SNIRH](#)

Water Resources

[SIAIA](#)

Environmental assessment

[QUALAR](#)

Air Quality

ERSAR

Utilities data

PENSAAR

Strategical Monitoring

Let's Play

datastudio.google.com