

# Copernicus Climate Change Service in support of Infrastructure segment



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Climate  
Change

# Climate and Atmosphere Datastore (CADS)

The **Climate and Atmosphere Datastore (CADS)** project will **modernise** the CDS

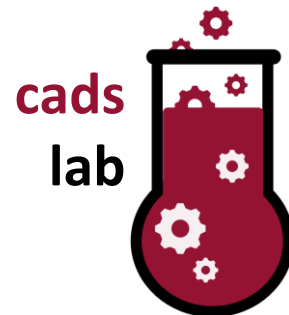


improved **interface** and **exploration** of ever-growing **catalogue** of data



**cads** toolbox

**open-source** Python tools for data **access**, **analysis** and **visualisation**



**cloud resources** and web interface underpinned by **Jupyter notebooks**



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# Use cases for infrastructures

JUNE 2020

## Thermal Assessment Tool

An easy-to-use Thermal Assessment Tool has been developed to visualise complex climate data regarding the impact of hot and cold weather.



NOVEMBER 2020

## Climadjust, a Bias-Adjustment service for the Climate Data Store

Climadjust is a user-friendly web service that provides ready-to-use CMIP and CORDEX climate projections by applying state-of-the-art bias-adjustment methods to local reference datasets. These datasets can be predefined or provided by the user for the region of interest.

Sector: Agriculture and Forestry , Energy , Health , Infrastructure , Water Management Region: Global Country: NA



OCTOBER 2020

## Climate data for sustainable infrastructure

The International Institute for Sustainable Development has integrated climate data from the Copernicus Climate Change Service into their sustainable asset valuation methodology.

Sector: Infrastructure Region: Africa , Europe Country: South Africa , Tanzania , Belgium

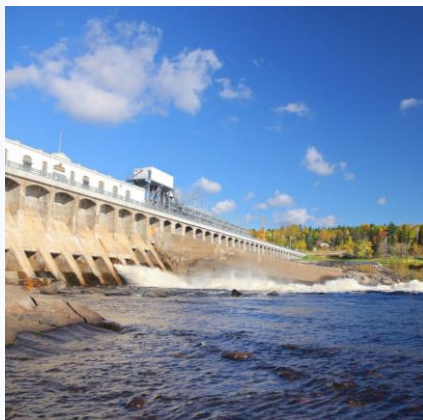




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## Climate Data for Sustainable Infrastructure

## Infrastructure



*Tanzania: Provide insight to the AfDB and other relevant stakeholders on the environmental, social and economic costs and benefits of hydropower projects compared to other renewable technologies.*

*South Africa (2 use cases): Inform the city of Johannesburg on sustainable urban planning and on the mitigation of relevant climate impacts.*

*Belgium: Assess how an agroforestry project (as part of Welkenraedt's climate adaptation action plan) will impact ecosystem services, jobs and labor income under different climate scenarios.*

*The C3S data integrated SAVi assessments provide a systemic monetary valuation of infrastructure assets, informing policymakers as they assess their policy priorities and work to fulfil their national and international climate commitments.*

*Integrating C3S climate data into SAVi assessments enables project partners to understand the costs of climate-related risks and climate-related externalities, and therefore assess the value of climate resilience*

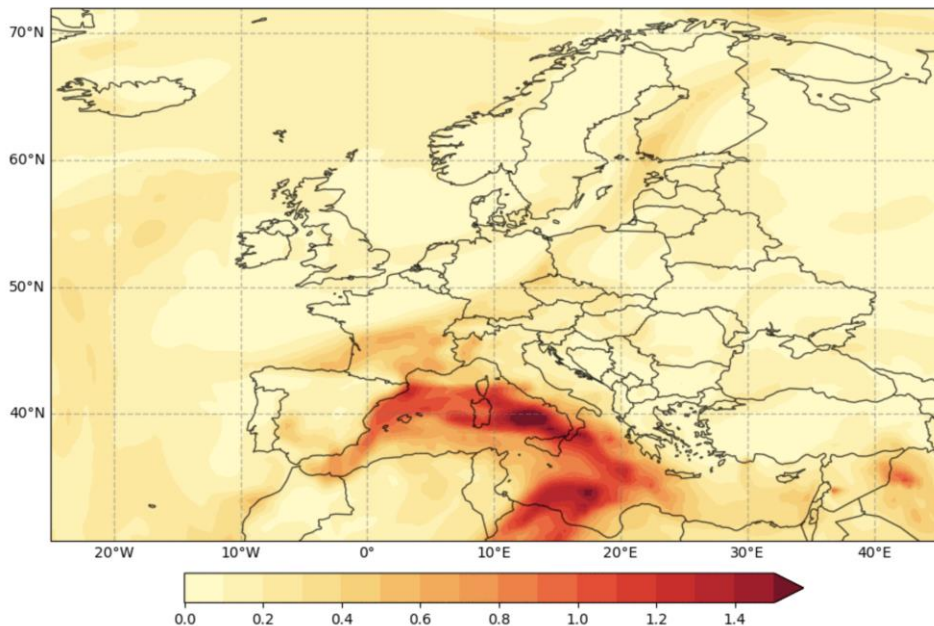
<https://climate.copernicus.eu/climate-data-sustainable-infrastructure>



Atmosphere  
Monitoring

# Dust storms forecasts

CAMS Analysis Total Aerosol Optical Depth at 550nm, 20220318T09



CAMS aerosol optical depth analyses between 14-18 March 2022. Source: ECMWF/CAMS

CAMS AOD forecasts:  
serves applications for  
maintenance of PV installations.



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Thank you!!

For any further question  
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