

Koninklijk Nederlands Meteorologisch Instituut Ministerie van Infrastructuur en Waterstaat

KNMI Data Platform



Search, find and download KNMI data

KNMI Data Platform

The KNMI Data platform (KDP) provides an overview of KNMI data on weather, climate and seismology. Here you will find information on various subjects such as the most recent synoptic observations, historical series, data about meteorological measuring stations, model calculations, earthquake data and satellite products. In addition to KNMI datasets, we also make datasets from other parties available, such as ECMWF, ECOMET, EUMETSAT and WMO.

- Find datasets in the Data Catalog
- Access and download datasets through different APIs on the Developer Portal
- Stay informed about KNMI Open Data via knmidata.nl

Open Data

The KDP makes her data available as open data and aims to adhere to the FAIR principles (Findable, Accessible, Interoperable, and Reusable). This ensures that our data is freely available for anyone and easily integrates into scientific research and the daily operations of our meteorological institute. The datasets in our catalog are accompanied by descriptive metadata (ISO19115), designed to enhance the interoperability within the Netherlands.

How to search and find data on KDP?

Datasets and their metadata can be found in our data catalog on dataplatform.knmi.nl. In the catalog you can find our most popular datasets, search with keywords or access our data documentation. You could preview the latest files, or you could obtain the data through our open APIs.

What is an API?

API is an acronym for Application Programming Interface. It can be seen as a set of rules which determine how you can access the data provided by software.



The benefit of an API compared to manual downloads is the ease with which it can be automated and integrated in applications.

API Keys

To ensure fair use, you will need an API key to access our APIs. These keys help us regulate the amount of files you can download in a certain timeframe. We have three kinds of keys: the limited and shared anonymous key, the registered key with your own quota and limits, and a bulk key. With the bulk key you could have tailored rates and limits to download a complete dataset.

Open Data API

The Open Data API is a file-based API. It has two endpoints which can be used to list and get files from a dataset. The get endpoint will return a temporary download URL for a dataset file. This URL can be used to actually download the dataset file.

Environmental Data Retrieval (EDR) API

The EDR API is the newest addition to our APIs, which is currently released in an *alpha* version. The reason for developing this API is the presence of official specification and easier integration in applications compared to the Open Data API. The EDR API adheres to the Open Geospatial Consortium (OGC) standard. It can be used to query geospatial data in space and time, and outputs a CoverageJSON.

Web Map Service (WMS) API

The WMS API is available for the gridded datasets and makes it possible to visualize the data in the KNMI WMS viewer. Here you can browse through time, height and the different layers in the dataset.



Figure 1: EDR API output for observation point data from the synoptic AWS observations.

Get started!

- 1 Login on the developer portal
- 2 Request an API key
- 3 Read the documentation of the API
- 4 Get started with making requests! Check out our example scripts

Visit the developer portal



KDP-Community

KDP has been evolving into a strong and highly available platform. This opens up room for community building where we exchange experience and knowledge. Currently, KDP facilitates the community by connecting researchers, organizations, and companies from different fields beyond the traditional meteorological user base. This is done by organizing workshops and setting up a KDP-Community Slack Channel. Additionally, we provide a newsletter to which you can subscribe to.



Figure 2: EDR API output for the temperature parameter of the gridded dataset Tg1.