

Ruisdael data policy

The Ruisdael Observatory has been established in 2018 as a consortium of eight Dutch institutes. The *goal* of Ruisdael is to set-up and operate an atmospheric observatory with a comprehensive set of remote sensing and in-situ equipment to characterize the state of the atmosphere, its radiative properties and interaction with the land surface, for the study of physical and chemical processes, climate monitoring and weather forecasting, validation studies and for high resolution modeling purposes.

The *driving motivation* for Ruisdael is the need for observational data to address crucial questions regarding climate change and changes in air quality. This can only be accomplished with the synergistic use of co-located remote sensing instruments in combination with in situ data, and the conviction that joining forces of the participating research institutes will add significant value to Dutch and international science in this field.

The purpose of the data policy for Ruisdael is to establish a common set of guidelines to set expectations and establish procedures for sharing data acquired in the course of the Ruisdael project. Data may be acquired from Ruisdael efforts, or from collaborative programs.

Data providers are the partners involved in Ruisdael. A dataset contains a coherent set of parameters for a given period of time stored in a set of identical structured files. The data policy applies to Ruisdael datasets in the KNMI Data Platform.

The following guidelines are agreed upon by all collaborating partners in the Ruisdael Observatory.

Open data

The Ruisdael Observatory adheres to the principles of open science and the FAIR principles (Findable, Accessible, Interoperable and Reusable): Ruisdael data files stored in the KNMI Data Platform are openly available to the general public. Specific conditions may apply in case of special services.

Users shall provide their data resulting from the KNMI Data Platform in accordance with the FAIR principles, including specifications of the data format, and the users shall respect ethical principles defined in these guidelines.

Licence

Approved Ruisdael data is licensed under a Creative Commons Attribution 4.0 international licence. Under this licence derived products and redistribution are allowed, but it is required to always inform further users of the original source of the data and to refer to the licence text.

Timing for release of Ruisdael data from the KNMI Data Platform

Data providers ensure the highest attainable quality of the data.

The main line is that data is ready for general release as soon as possible after its acquisition. There is a distinction in raw data, validated data and special products:

- raw data is real time available and has undergone automatic quality controls;
- validated data is available within 2 months after its acquisition. During this period the exchange process between data provider and webportal, including quality control and assurance, will have been completed;

- the release of special products (e.g. data obtained during specific campaigns, assignments from commercial parties) is subject to separate agreements, as defined in the Ruisdael access policy.

Acknowledgement and citation

Whenever Ruisdael datasets distributed by the KNMI Data Platform are being used, the origin of the data must be acknowledged and referenced according to the applicable CC-licence. An additional requirement is to reference Ruisdael Observatory as part of the research program National Roadmap Large-scale Research Infrastructure with project number 184.034.015, which is (partly) financed by the Netherlands Organisation for Scientific Research (NWO).

Co-authorship for Ruisdael principal investigators (PIs)

Ruisdael is equipped with sophisticated, state-of-the-art instrumentation and does comply with strict requirements of instrument maintenance, exposure of instruments, calibration, and quality assurance procedures, in order to achieve the highest standards of measurement, accuracy, representativeness, stability and repeatability. To reach this goal, each instrument (or combination of instruments) is linked to a PI who is a leading expert for that specific instrument.

Users of Ruisdael data are encouraged to establish direct contact with PI's for the purpose of complete interpretation and analysis of data. Users of Ruisdael data are encouraged to disseminate results from the work done through the provided data in peer-reviewed publications. They shall acknowledge the contribution and support provided by the Ruisdael Observatory and the PI involved. In accordance with good scientific practice, users are encouraged to offer co-authorship to PI's who have made genuine scientific contributions to their work. Users are encouraged to make their publications available through open access repositories.

Ruisdael publication library

Whenever Ruisdael data is used for publication of scientific results, the author(s) shall send a copy of the respective publication (or DOI) to the Ruisdael consortium in order to build up a Ruisdael publication library. The Ruisdael consortium will maintain this library and will make it public for a continuous monitoring of the Ruisdael Observatory data applications and Ruisdael Observatory's achievements in general.