

What is the difference between ERA-Interim (1979-2019) and ERA-40 (1957-2002)

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ERA-Interim production stopped on 31st August 2019

For ERA-Interim (1st January 1979 to 31st August 2019) access through the ECMWF Web API **stopped on 01 June 2023**

Its successor ERA5 is available from the [Climate Data Store \(CDS\)](#) ([What are the changes from ERA-Interim to ERA5?](#)) and users are strongly advised to migrate to ERA5 ([How to download ERA5](#)).

For those users who still need access to ERA-Interim after 01 June 2023 (subject to further notice), they can do so via the [Climate Data Store \(CDS\) API](#).

Through systematic increases of computing power, 4-dimensional variational assimilation (4D-Var) became feasible and part of ECMWF operations since 1997, paving the way to base **ERA-Interim on 4D-Var** (rather than 3D-Var as in ERA-40).

Enhanced computing power also allowed **horizontal resolution** to be increased from T159 (N80) **to T255 (N128)**, and the latest cycle of the atmospheric model (IFS [CY31r1](#) and [CY31r2](#)) to be used, taking advantage of **improved model physics**.

ERA-interim retains the same 60 model levels used for ERA-40 with the highest level being 0.1 hectopascal.

In addition, data assimilation of ERA-Interim also benefits from quality control that draws on experience from ERA-40, variational bias correction of satellite radiance data, and more extensive use of radiances with an improved fast radiative transfer model.

See [ECMWF publication on ERA-40](#) for further details. An open-access [journal article describing the ERA-Interim](#) reanalysis is available from the Quarterly Journal of the Royal Meteorological Society.



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