

Project: **1099**

Project title: **ERA-5-Extract**

Principal investigator: **Hannes Thiemann**

Report period: **2020-11-01 to 2021-08-31**

1. Aim and status of the project

Aim: Extract for all years (=1950 to 2021) the ERA5 data from ECMWF for dissemination by DKRZ. In the first period (=2019 and 2021 until July) we could transfer

- all available 2D data (=47 / 47 parameters of analysis / forecast data) from 1979 on,
- all available data on model levels (=16 parameters on 137 levels from 1979 on) and
- all available data on pressure levels (=16 parameters on 37 levels from 1979 on).

All in all these data comprise about 900 TBytes. The download will go on with years 1950 to 1978 as soon as these data is released by ECMWF. This now is announced for the end of 2021. The presently available data of this time span (available via web) is preliminary only.

2. Enhancements in the reporting period

Enhancements and additions have been requested by users or were supplemented by DKRZ:

- Daily aggregations of the data (mean, sum, maximum, minimum). This was achieved for all data except those on model levels. For forecast data the aggregation is under process.
- ERA 5.1 data for 2000 to 2006, as there were some inaccuracies in the lower stratosphere data.
- ERA5-T data (preliminary data “of the three months before today”) are retrieved, too. So the youngest ERA data is only a few days or weeks old.
- Conversion of spectral data format to GRIB on gauss grid.

A better integration of all data in the /pool/data area is ongoing. This will lead to a better overview which groups use which ERA5 data. The number of parameters on surface level will be increased to 49 / 57 (analysis / forecast).