

The **ECOMS UDG** provides a homogeneous access (through a single controlled vocabulary) to the different available [datasets?](#). However, only a reduced number of [variables required](#) by the different ECOMS activities (impact applications and downscaling studies) is provided by the portal. The following list of variables has been identified (and is periodically updated) according to the user's needs, receiving feedback from EUPORIAS WP22 (climate information indices, CIIs), WP23 (impact models), WP21 (calibration and downscaling) and SPECS WP61 (pilot applications) and WP52 (calibration and downscaling). See the section on the [assessment of user's needs](#) for more details.

The following labels are used in the table below (**Available**: The variable is available and ready to use through the ECOMS UDG; **e**: The variable exists in the original dataset; **P**: The variable exists in the original dataset and work is in progress to incorporate it to the UDG; blanks indicate lack of data).

Note that the short names shown in boldface correspond to standard variables according to the [NetCDF Climate and Forecast Metadata Convention](#) and to the naming convention within SPECS.

| short name | Variable description | Frequency | Aggregation | Availability for the following datasets: | | | | |
|---------------|--|-----------|-------------|--|--------------------------------------|------------------------------------|------------------------------------|-----------------------------|
| | | | | ?System4 seasonal 15 | ?System4 seasonal 51 | ?System4 annual 15 | ?CFSv2 seasonal 16 | ?SPECS-ESGF |
| tas | Near-Surface air temperature | Daily | mean | Available | Available | | Available | e |
| tasmax | Daily Maximum Near-Surface Air Temperature | Daily | maximum | Available | Available | Available | Available | e |
| tasmin | Daily Minimum Near-Surface Air Temperature | Daily | minimum | Available | Available | Available | Available | e |
| tp | Total precipitation amount | Daily | accumulated | Available | Available | Available | Available | e |
| psl | Sea Level Pressure | Daily | mean | Available | Available | e | Available | e |
| ps | Surface air pressure | Daily | mean | P(*) | | | e | |
| wsp | Wind speed (at 10m) | Daily | mean | P(*) | e | e | e | |
| tdps | 2m Dewpoint Temperature | Daily | mean | P | e | | | e |
| huss | Surface (2m) specific humidity | Daily | mean | P(*) | | | e | |
| rsds | Surface Downwelling Shortwave Radiation | Daily | mean | P | e | | e | e |
| rlds | Net Longwave Surface Radiation | Daily | mean | P | e | | e | e |
| sst | Sea surface temperature | Daily | mean | e | e | e | | |
| uas | Eastward Near-Surface Wind | Daily | mean | e | e | e | e | e |
| vas | Northward Near-Surface Wind | Daily | mean | e | e | e | e | e |
| wspmax | Wind speed (at 10m) | Daily | maximum | e | e | e | e | |
| wgust | Wind gust | Daily | maximum | e | e | | | |
| mrso | Total Soil Moisture Content | Daily | mean | | | | e | e |
| mrros | Surface runoff flux | Daily | accumulated | e | e | | e | |
| mrro | Total Runoff | Monthly | mean | e | e | | | e |
| ssro | Sub-surface runoff rate | Daily | mean | e | e | | | |
| prsn | Snowfall Flux | Daily | mean | e | e | | | e |
| wcsl | Water Content of Soil Layer | Daily | mean | e | e | | | |
| | | Monthly | mean | e | e | | | |
| z850 | Geopotential 850mb | Daily | mean | e | e | e | e | |
| z925 | Geopotential 925mb | Daily | mean | e | e | | | |
| ua850 | Eastward Wind | Daily | mean | e | e | e | e | |
| va850 | Northward Wind | Daily | mean | e | e | e | e | |
| ua925 | Eastward Wind | Daily | mean | e | e | | e | |
| va925 | Northward Wind | Daily | mean | e | e | | e | |
| zg700 | Geopotential Height | Daily | 12 UTC | e | e | e | e | |
| zg1000 | Geopotential Height | Daily | 12 UTC | e | e | | e | |

(*) These variables do NOT exist in the corresponding dataset, but they will be derived/approximated from other available variables. More information in the table of [?variables-datasets mapping](#).