

# ecCodes version 2.12.0 released

Downloadable from our [Releases](#) page.

## Changes for Version 2.12.0:

### Contributions

Thanks to Daniel Tipping from [OldReliableTech](#) for the Windows support and conda setup

### New Features/Improvements

- [\[ECC-853\]](#) - Install tigre tools only if ECCODES\_INSTALL\_EXTRA\_TOOLS is set  
The tools tigre\_name, tigre\_accumulations and tigre\_split are no longer installed by default
- [\[ECC-862\]](#) - GRIB2: The 'tablesVersion' key should default to the latest operational WMO version  
When converting from GRIB1 to GRIB2, the "tablesVersion" key is now the latest WMO (was previously 5)
- [\[ECC-868\]](#) - Provide key to control whether large constant fields are produced  
The key "override\_large\_constant\_fields" has been removed and replaced by "produceLargeConstantFields"
- [\[ECC-830\]](#) - BUFR encoding: set to missing if value out of range (key)
- [\[ECC-860\]](#) - GRIB2: Add support for atmospheric chemical product definition templates
- [\[ECC-713\]](#) - grib\_to\_netcdf: Wrong time steps when stepUnits not in hours
- [\[ECC-837\]](#) - BUFR Tables: non-ASCII characters
- [\[ECC-838\]](#) - New probability T850 standardized anomalies with respect to standard deviation
- [\[ECC-854\]](#) - MARS: add soil level and layer with correct mapping for mars 'level'
- [\[ECC-861\]](#) - GRIB2: The 'time' namespace not defined for product definition templates 55 and 59
- [\[ECC-870\]](#) - Add Clear air turbulence (CAT) and Mountain wave turbulence
- [\[ECC-876\]](#) - Add 200-metre U and V wind components and modify 10 and 100-metre related parameters
- [\[ECC-877\]](#) - Create new S2S ocean parameter Mean sea water temperature in upper 300 m
- [\[ECC-878\]](#) - Add wave parameters for cy46r1
- [\[ECC-711\]](#) - Add keys packingError and unpackedError in template 7.42
- [\[ECC-851\]](#) - Refactoring: duplicated tigre 'scan' function
- [\[ECC-857\]](#) - GRIB2: stepType undefined for typeOfStatisticalProcessing 8, 10 and 11
- [\[ECC-859\]](#) - GRIB2 templates for chemicals should use forecastTime and not startStep
- [\[ECC-863\]](#) - GRIB2: Additional keys for gridType=lambert\_azimuthal\_equal\_area
- [\[ECC-864\]](#) - Improved name for the angularPrecision key
- [\[ECC-883\]](#) - grib\_ls -B: does not issue error if sort keyword is wrong
- [\[ECC-884\]](#) - Visual Studio solution: upgrade to VS 2017

### Bug Fixes

- [\[ECC-744\]](#) - Defining master and local table version in GRIB2
- [\[ECC-834\]](#) - Chemicals: using local definition 36 causes grib2 parameters to become unknown
- [\[ECC-856\]](#) - BUFR - length of string attribute not correct if used with subset section
- [\[ECC-866\]](#) - Python3: codes\_gts\_new\_from\_file does not return all GTS bulletins
- [\[ECC-872\]](#) - Step should be set to endStep, not startStep, in stream wamd, type=fc.
- [\[ECC-873\]](#) - grib\_ls with sorting: The 'count' key is wrong
- [\[ECC-875\]](#) - bufr\_copy -g not implemented
- [\[ECC-880\]](#) - grib\_to\_netcdf calculates the time wrongly for forecast data files from [opendata.dwd.de](http://opendata.dwd.de)