

ecCodes version 2.14.0 released

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Changes for Version 2.14.0:

Contributions

- [\[ECC-969\]](#) - GitHub contribution: codes_split_file option to split individual messages
Thanks to the Bureau of Meteorology

New Features/Improvements

- **Performance enhancements**
 - [\[ECC-604\]](#) - Improve multi-threaded performance of GRIB decoding/encoding
 - [\[ECC-985\]](#) - BUFR decoding performance: reduce number of strdup and atol calls
 - [\[ECC-965\]](#) - BUFR decoding performance: tune initial sizes of dynamic arrays
- [\[ECC-401\]](#) - Request for grib_ls output in JSON format
The option "-j" will now output in JSON. This applies to bufr_ls too.
- [\[ECC-543\]](#) - Feature request: -w for grib_histogram
- [\[ECC-954\]](#) - GRIB: Add fire related parameters for CEMS-Fire
- [\[ECC-961\]](#) - grib_dump: ability to dump specific keys
- [\[ECC-987\]](#) - MARS: new class for CARRA/CERRA
- [\[ECC-947\]](#) - MARS: add new streams WFAS and WFCL (GLOFAS) matching the existing EFAS and EFCL (EFAS)
- [\[ECC-948\]](#) - MARS: Amend type 'sfo'
- [\[ECC-963\]](#) - Update parameters shortnames/names
- [\[ECC-964\]](#) - Update parameter 171207 with correct shortname
- [\[ECC-972\]](#) - Add WMO GRIB2 definition to CERRA/CARRA parameters
- [\[ECC-994\]](#) - New parameter for S2S ocean "Mean sea water potential temperature in the upper 300 m"
- [\[ECC-827\]](#) - grib_to_netcdf should not ignore the HDATE key
- [\[ECC-958\]](#) - grib_compare: show bit values for codeflag keys
- [\[ECC-962\]](#) - grib_to_netcdf: Set date to 'hdate' for hindcast fields
- [\[ECC-967\]](#) - GRIB2: Fallback if tables version is bigger than the latest installed version
- [\[ECC-975\]](#) - Add new error code: 'Functionality not enabled'
- [\[ECC-976\]](#) - More user-friendly error when key cannot be decoded as double or long
- [\[ECC-979\]](#) - grib_util_set_spec: Allow encoding of double values on scaledValueOf/scaleFactorOf keys

Bug Fixes

- [\[ECC-136\]](#) - grib_compare ignores difference in indicatorOfTypeOfLevel
- [\[ECC-428\]](#) - Inconsistent number of values when decoding compressed BUFR data
- [\[ECC-673\]](#) - bufr_filter: Arguments not parsed correctly on CLI
- [\[ECC-778\]](#) - Valgrind error when GRIB_IEEE_PACKING=1 (Invalid read)
- [\[ECC-941\]](#) - Crash: simple packed GRIB with invalid data section size/bits per value
- [\[ECC-945\]](#) - Error converting GRIB1 to GRIB2: total precipitation
- [\[ECC-949\]](#) - grib_merge fails to merge grib1 tiles
- [\[ECC-960\]](#) - grib_util_set_spec: Interpolation fails on GRIB message with no levelType key
- [\[ECC-966\]](#) - Crash: setting shapeOfTheEarth=1 but scale factor missing
- [\[ECC-973\]](#) - Assertion: BUFR encoding error should return exit code not assert
- [\[ECC-974\]](#) - Valgrind error: GRIB2: setting gridType=regular_gg on reduced gaussian grid
- [\[ECC-977\]](#) - GRIB2 encoding of scaledValueOfEarthMinorAxis with out-of-bounds value
- [\[ECC-978\]](#) - BUFR key section1Padding: bufr_dump -O gives erroneous length=4 instead of 5, the first character is skipped
- [\[ECC-981\]](#) - grib_util_set_spec: Fails to set gridType of lambert_azimuthal_equal_area
- [\[ECC-982\]](#) - BUFR decode memory leak: associatedFieldSignificance accessors not freed
- [\[ECC-983\]](#) - BUFR decoding: Crash in case of invalid delayed replication
- [\[ECC-984\]](#) - grib_get_data: GRIB2 file with missing jDirectionIncrement produces huge values
- [\[ECC-986\]](#) - GRIB2: setting shortName=10fgg10 produces 'gust' and not '10fgg10'
- [\[ECC-990\]](#) - Crash: grib_copy -r on packingType of grid_second_order_general_grib1