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| WORLD METEOROLOGICAL ORGANIZATIONCOMMISSION FOR BASIC SYSTEMS-----------------------------SECOND MEETING OFINTER-PROGRAMME EXPERT TEAM ONCODES MAINTENANCEOFFENBACH, GERMANY, 28 MAY - 1 JUNE 2018 |  | IPET-CM-II / Doc. 2.6 (1)22.05.2018-------------------------ITEM 2.6ENGLISH ONLY |

 New editions of Table-Driven Code Forms

GRIB edition 3 samples

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**Summary and Purpose of Document**

In relation with GRIB 3 development sample data set is available for validation.

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**ACTION PROPOSED**

The team is invited to examine the GRIB3 samples.

**DISCUSSIONS**

Following up presented proposals on GRIB edition 3 (GRIB3) at IPET-CM I meeting the following development have been done:

* The section related templates and template components have been consolidated.
* The GRIB 3 structure has been documented with relevant sections, templates, templates components and code/flag tables on ECMWF confluence pages.
Here is the link to the pages for convenience: [https://software.ecmwf.int/wiki/display/DGOV/GRIB3+Structure](https://software.ecmwf.int/wiki/display/DGOV/GRIB3%2BStructure)
* The sample set of data have been produced with emphasis on combination of variety Templates for Time, Horizontal and Vertical domain. For this purpose, ECMWF ecCodes library for encoding/decoding GRIB 3 data is used.

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| GRIB3 sample | Sample output | GRIB3 templates used in the sample |
| [time3.0horizonal4.0vertical5.0.grib3](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.0horizonal4.0vertical5.0.grib3?version=2&modificationDate=1524131406893&api=v2) | [time3.0horizonal4.0vertical5.0.grib3.txt](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.0horizonal4.0vertical5.0.grib3.txt?version=1&modificationDate=1524132419283&api=v2) | [Template 3.0 - Forecast Point in Time](https://software.ecmwf.int/wiki/display/DGOV/Template%2B3.0%2B-%2BForecast%2BPoint%2Bin%2BTime)[Template 4.0 - Latitude/longitude regular grid on ellipsoidal planet](https://software.ecmwf.int/wiki/pages/viewpage.action?pageId=81892446)[Template 5.0 - Vertical level](https://software.ecmwf.int/wiki/display/DGOV/Template%2B5.0%2B-%2BVertical%2Blevel) |
| [time3.0horizonal4.0vertical5.1.grib3](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.0horizonal4.0vertical5.1.grib3?version=1&modificationDate=1524131805702&api=v2) | [time3.0horizonal4.0vertical5.1.grib3.txt](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.0horizonal4.0vertical5.1.grib3.txt?version=1&modificationDate=1524132419281&api=v2) | [Template 3.0 - Forecast Point in Time](https://software.ecmwf.int/wiki/display/DGOV/Template%2B3.0%2B-%2BForecast%2BPoint%2Bin%2BTime)[Template 4.0 - Latitude/longitude regular grid on ellipsoidal planet](https://software.ecmwf.int/wiki/pages/viewpage.action?pageId=81892446)[Template 5.1 - Vertical layer](https://software.ecmwf.int/wiki/display/DGOV/Template%2B5.1%2B-%2BVertical%2Blayer) |
| [time3.0horizonal4.1vertical5.0.grib3](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.0horizonal4.1vertical5.0.grib3?version=1&modificationDate=1524131406889&api=v2) | [time3.0horizonal4.1vertical5.0.grib3.txt](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.0horizonal4.1vertical5.0.grib3.txt?version=1&modificationDate=1524132419280&api=v2) | [Template 3.0 - Forecast Point in Time](https://software.ecmwf.int/wiki/display/DGOV/Template%2B3.0%2B-%2BForecast%2BPoint%2Bin%2BTime)[Template 4.1 - Rotated latitude/logitude regular grid on ellipsoidal planet](https://software.ecmwf.int/wiki/pages/viewpage.action?pageId=81892966)[Template 5.0 - Vertical level](https://software.ecmwf.int/wiki/display/DGOV/Template%2B5.0%2B-%2BVertical%2Blevel) |
| [time3.0horizonal4.1vertical5.1.grib3](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.0horizonal4.1vertical5.1.grib3?version=1&modificationDate=1524131378287&api=v2) | [time3.0horizonal4.1vertical5.1.grib3.txt](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.0horizonal4.1vertical5.1.grib3.txt?version=1&modificationDate=1524132419277&api=v2) | [Template 3.0 - Forecast Point in Time](https://software.ecmwf.int/wiki/display/DGOV/Template%2B3.0%2B-%2BForecast%2BPoint%2Bin%2BTime)[Template 4.1 - Rotated latitude/logitude regular grid on ellipsoidal planet](https://software.ecmwf.int/wiki/pages/viewpage.action?pageId=81892966)[Template 5.1 - Vertical layer](https://software.ecmwf.int/wiki/display/DGOV/Template%2B5.1%2B-%2BVertical%2Blayer) |
| [time3.0horizonal4.2vertical5.0.grib3](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.0horizonal4.2vertical5.0.grib3?version=1&modificationDate=1524131378286&api=v2) | [time3.0horizonal4.2vertical5.0.grib3.txt](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.0horizonal4.2vertical5.0.grib3.txt?version=1&modificationDate=1524133734635&api=v2) | [Template 3.0 - Forecast Point in Time](https://software.ecmwf.int/wiki/display/DGOV/Template%2B3.0%2B-%2BForecast%2BPoint%2Bin%2BTime)[Template 4.2 - Stretched latitude/logitude regular grid on ellipsoidal planet](https://software.ecmwf.int/wiki/pages/viewpage.action?pageId=81892971)[Template 5.0 - Vertical level](https://software.ecmwf.int/wiki/display/DGOV/Template%2B5.0%2B-%2BVertical%2Blevel) |
| [time3.0horizonal4.2vertical5.1.grib3](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.0horizonal4.2vertical5.1.grib3?version=1&modificationDate=1524131378284&api=v2) | [time3.0horizonal4.2vertical5.1.grib3.txt](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.0horizonal4.2vertical5.1.grib3.txt?version=1&modificationDate=1524132991784&api=v2) | [Template 3.0 - Forecast Point in Time](https://software.ecmwf.int/wiki/display/DGOV/Template%2B3.0%2B-%2BForecast%2BPoint%2Bin%2BTime)[Template 4.2 - Stretched latitude/logitude regular grid on ellipsoidal planet](https://software.ecmwf.int/wiki/pages/viewpage.action?pageId=81892971)[Template 5.1 - Vertical layer](https://software.ecmwf.int/wiki/display/DGOV/Template%2B5.1%2B-%2BVertical%2Blayer) |
| [time3.0horizonal4.3vertical5.0.grib3](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.0horizonal4.3vertical5.0.grib3?version=1&modificationDate=1524131378282&api=v2) | [time3.0horizonal4.3vertical5.0.grib3.txt](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.0horizonal4.3vertical5.0.grib3.txt?version=1&modificationDate=1524134209617&api=v2) | [Template 3.0 - Forecast Point in Time](https://software.ecmwf.int/wiki/display/DGOV/Template%2B3.0%2B-%2BForecast%2BPoint%2Bin%2BTime)[Template 4.3 - Stretched and rotated latitude/logitude regular grid on ellipsoidal planet](https://software.ecmwf.int/wiki/pages/viewpage.action?pageId=81892978)[Template 5.0 - Vertical level](https://software.ecmwf.int/wiki/display/DGOV/Template%2B5.0%2B-%2BVertical%2Blevel) |
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| [time3.1horizonal4.0vertical5.1.grib3](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.1horizonal4.0vertical5.1.grib3?version=1&modificationDate=1524131335446&api=v2) | [time3.1horizonal4.0vertical5.1.grib3.txt](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.1horizonal4.0vertical5.1.grib3.txt?version=1&modificationDate=1524132991782&api=v2) | [Template 3.1 – Forecast time interval](https://software.ecmwf.int/wiki/pages/viewpage.action?pageId=83399688)[Template 4.0 - Latitude/longitude regular grid on ellipsoidal planet](https://software.ecmwf.int/wiki/pages/viewpage.action?pageId=81892446)[Template 5.1 - Vertical layer](https://software.ecmwf.int/wiki/display/DGOV/Template%2B5.1%2B-%2BVertical%2Blayer) |
| [time3.1horizonal4.1vertical5.0.grib3](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.1horizonal4.1vertical5.0.grib3?version=1&modificationDate=1524131335445&api=v2) | [time3.1horizonal4.1vertical5.0.grib3.txt](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.1horizonal4.1vertical5.0.grib3.txt?version=1&modificationDate=1524132991779&api=v2) | [Template 3.1 – Forecast time interval](https://software.ecmwf.int/wiki/pages/viewpage.action?pageId=83399688)[Template 4.1 - Rotated latitude/logitude regular grid on ellipsoidal planet](https://software.ecmwf.int/wiki/pages/viewpage.action?pageId=81892966)[Template 5.0 - Vertical level](https://software.ecmwf.int/wiki/display/DGOV/Template%2B5.0%2B-%2BVertical%2Blevel) |
| [time3.1horizonal4.1vertical5.1.grib3](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.1horizonal4.1vertical5.1.grib3?version=1&modificationDate=1524131335444&api=v2) | [time3.1horizonal4.1vertical5.1.grib3.txt](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.1horizonal4.1vertical5.1.grib3.txt?version=1&modificationDate=1524134391437&api=v2) | [Template 3.1 – Forecast time interval](https://software.ecmwf.int/wiki/pages/viewpage.action?pageId=83399688)[Template 4.1 - Rotated latitude/logitude regular grid on ellipsoidal planet](https://software.ecmwf.int/wiki/pages/viewpage.action?pageId=81892966)[Template 5.1 - Vertical layer](https://software.ecmwf.int/wiki/display/DGOV/Template%2B5.1%2B-%2BVertical%2Blayer) |
| [time3.1horizonal4.2vertical5.0.grib3](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.1horizonal4.2vertical5.0.grib3?version=1&modificationDate=1524131335442&api=v2) | [time3.1horizonal4.2vertical5.0.grib3.txt](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.1horizonal4.2vertical5.0.grib3.txt?version=1&modificationDate=1524132852132&api=v2) | [Template 3.1 – Forecast time interval](https://software.ecmwf.int/wiki/pages/viewpage.action?pageId=83399688)[Template 4.2 - Stretched latitude/logitude regular grid on ellipsoidal planet](https://software.ecmwf.int/wiki/pages/viewpage.action?pageId=81892971)[Template 5.0 - Vertical level](https://software.ecmwf.int/wiki/display/DGOV/Template%2B5.0%2B-%2BVertical%2Blevel) |
| [time3.1horizonal4.2vertical5.1.grib3](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.1horizonal4.2vertical5.1.grib3?version=1&modificationDate=1524131296782&api=v2) | [time3.1horizonal4.2vertical5.1.grib3.txt](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.1horizonal4.2vertical5.1.grib3.txt?version=2&modificationDate=1524132991785&api=v2) | [Template 3.1 – Forecast time interval](https://software.ecmwf.int/wiki/pages/viewpage.action?pageId=83399688)[Template 4.2 - Stretched latitude/logitude regular grid on ellipsoidal planet](https://software.ecmwf.int/wiki/pages/viewpage.action?pageId=81892971)[Template 5.1 - Vertical layer](https://software.ecmwf.int/wiki/display/DGOV/Template%2B5.1%2B-%2BVertical%2Blayer) |
| [time3.1horizonal4.3vertical5.0.grib3](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.1horizonal4.3vertical5.0.grib3?version=1&modificationDate=1524131277461&api=v2) | [time3.1horizonal4.3vertical5.0.grib3.txt](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.1horizonal4.3vertical5.0.grib3.txt?version=1&modificationDate=1524132852128&api=v2) | [Template 3.1 – Forecast time interval](https://software.ecmwf.int/wiki/pages/viewpage.action?pageId=83399688)[Template 4.3 - Stretched and rotated latitude/logitude regular grid on ellipsoidal planet](https://software.ecmwf.int/wiki/pages/viewpage.action?pageId=81892978)[Template 5.0 - Vertical level](https://software.ecmwf.int/wiki/display/DGOV/Template%2B5.0%2B-%2BVertical%2Blevel) |
| [time3.1horizonal4.3vertical5.1.grib3](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.1horizonal4.3vertical5.1.grib3?version=1&modificationDate=1524131266626&api=v2) | [time3.1horizonal4.3vertical5.1.grib3.txt](https://software.ecmwf.int/wiki/download/attachments/104235175/time3.1horizonal4.3vertical5.1.grib3.txt?version=1&modificationDate=1524132852125&api=v2) | [Template 3.1 – Forecast time interval](https://software.ecmwf.int/wiki/pages/viewpage.action?pageId=83399688)[Template 4.3 - Stretched and rotated latitude/logitude regular grid on ellipsoidal planet](https://software.ecmwf.int/wiki/pages/viewpage.action?pageId=81892978)[Template 5.1 - Vertical layer](https://software.ecmwf.int/wiki/display/DGOV/Template%2B5.1%2B-%2BVertical%2Blayer) |