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| WORLD METEOROLOGICAL ORGANIZATION  COMMISSION FOR BASIC SYSTEMS  -----------------------------  THIRD MEETING OF  INTER-PROGRAMME EXPERT TEAM ON DATA REPRESENTATION MAINTENANCE AND MONITORING  BEIJING, CHINA, 20 - 24 JULY 2015 |  | IPET-DRMM-III / Doc.2.2(1)  (22.06.2015)  -------------------------    ITEM 2.2    ENGLISH ONLY |

**New parameters in GRIB2 Code Table 4.2**

*Submitted by Simon Elliott (EUMETSAT)*

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**Summary and Purpose of Document**

This document proposes some new table entries in GRIB2 Code Table 4.2.

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**ACTION PROPOSED**

The meeting is requested to review the proposed new entries and approve them for validation.

**DISCUSSION**

At the request of its users, EUMETSAT has introduced quality control information values to its atmospheric divergence and multi-sensor precipitation estimate products. These data are being disseminated via the EUMETCast DVB multicast service, but are currently using inappropriate entries in Code Table 4.2, Product Discipline 3 (space products), Parameter category 1 (quantitative products).

**PROPOSAL**

At the request of its users, EUMETSAT has introduced quality control information values to its atmospheric divergence and multi-sensor precipitation estimate products. These data are being disseminated via the EUMETCast DVB multicast service, but are currently using inappropriate entries in Code Table 4.2, Product Discipline 3 (space products), Parameter category 1 (quantitative products).

In order to standardize the GRIB encoding of the data, the following changes to Code Table 4.2 are proposed:

**Code Table 4.2, Product Discipline 3 – Space products, Parameter category 1: quantitative products**

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| --- | --- | --- | --- |
| Action | Number | Parameter | Units |
| Add | 24 | Quality of atmospheric divergence (confidence) | % |
| Add | 25 | Quality of multi-sensor precipitation estimate (correlation between co-located IR and microwave data) | Dimensionless |
| Add | 26 | Quality of multi-sensor precipitation estimate (standard deviation between co-located IR and microwave data) | kg m–2 s–1 |
| Change | 24 – 191 | Reserved | Not applicable |
| To | 27 - 191 | Reserved | Not applicable |

#### Conclusion

Atmospheric divergence and multi-sensor precipitation estimate products are currently derived operationally by EUMETSAT and encoded in GRIB. These products have been enhanced by the addition of quality information values. The GRIB encoding of these additional parameters is being performed using wrongly defined code table entries. This paper proposes the allocation of official code table entries.

The meeting is invited to consider the proposed new code table entries, and to endorse their addition to the existing tables for validation.