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| WORLD METEOROLOGICAL ORGANIZATION  COMMISSION FOR BASIC SYSTEMS  -----------------------------  SECOND MEETING OF  INTER-PROGRAMME EXPERT TEAM ON CODES MAINTENANCE  OFFENBACH, GERMANY, MAY 28 - JUNE 1 2018 |  | IPET-CM-II / Doc. 2.2 (5)  (16. 05. 2018)  -------------------------  ITEM 2.2  ENGLISH ONLY |

Additions to GRIB2 templates and tables

**New GRIB2 Code Table 4.2 entries**

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**Summary and Purpose of Document**

This document proposes new GRIB2 Code Table 4.2 parameters.

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**ACTION PROPOSED**

The meeting is requested to review the proposed new parameters and approve them for implementation within the November 2018 fast-track (FT2018-2) update to the WMO Manual on Codes.

**DISCUSSION**

The tables annexed herewith contain proposed additions to Table 4.2 of the GRIB2 section of the Manual on Codes, for peak wave direction and swell fields.

Primary and secondary swells parameters are commonly produced by ocean wave models and made available for use by public and private marine interests. The third swell is added to the proposal for future use (plans exist for making this parameter available for exchange from the Canadian wave modelling system).

As an example use-case, secondary swell is a parameter often used in forecasts intended for offshore platform operations.

**PROPOSAL**

Please see Annex.

Annex

Proposed new entries for Code Table 4.2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Product Discipline** | **Parameter Category** | **Parameter number** | **Units** |
| Peak wave direction | 10 | 0 (Waves) | 46 | s |
| Significant wave height of first swell partition | 10 | 0 (Waves) | 47 | m |
| Significant wave height of second swell partition | 10 | 0 (Waves) | 48 | m |
| Significant wave height of third swell partition | 10 | 0 (Waves) | 49 | m |
| Mean wave period of first swell partition | 10 | 0 (Waves) | 50 | S |
| Mean wave period of second swell partition | 10 | 0 (Waves) | 51 | S |
| Mean wave period of third swell partition | 10 | 0 (Waves) | 52 | S |
| Mean wave direction of first swell partition | 10 | 0 (Waves) | 53 | deg |
| Mean wave direction of second swell partition | 10 | 0 (Waves) | 54 | deg |
| Mean wave direction of third swell partition | 10 | 0 (Waves) | 55 | deg |

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