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| WORLD METEOROLOGICAL ORGANIZATION  COMMISSION FOR BASIC SYSTEMS  -----------------------------  SECOND MEETING OF  INTER-PROGRAMME EXPERT TEAM ON CODES MAINTENANCE  OFFENBACH, GERMANY, 28 MAY - 1 JUNE 2018 |  | IPET-CM-II / Doc. 2.2 (6)  17.05.2018  -------------------------  ITEM 2.2  ENGLISH ONLY |

MANUAL ON CODES: TABLE-DRIVEN CODE FORMS

FM 92 GRIB

New “freezing drizzle” precipitation type

*Submitted by Sebastien Villaume, Enrico Fucile (ECMWF)*

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**Summary and Purpose of Document**

A new entry in Code Table 4.201 needed by ECMWF to encode a new precipitation type is proposed.

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**ACTION PROPOSED**

The team is requested to examine and validate the new precipitation type and accept it for FT2-2018.

**DISCUSSIONS**

An upcoming new development in ECMWF’s Integrated Forecasting System (IFS) is to allow supercooled rain from the warm-rain process (collision-coalescence), often referred to as "freezing drizzle" as the precipitation tends to be light. The formation process is very different to supercooled rain formed from melted snow particles in an upper level warm layer, commonly referred to as "freezing rain". Hence it makes sense to have a different precipitation type.

The proposal is to add "Freezing drizzle" as an additional precipitation type in WMO Code Table 4.201 representing supercooled rain from the warm-rain (collision-coalescence) process.

**PROPOSAL**

The following new entry is proposed to be added to table 4.201. The modifications to the table are highlighted in red

**Code table 4.201** – *Precipitation type*

Code figure Meaning

0 Reserved

1 Rain

2 Thunderstorm

3 Freezing rain

4 Mixed/ice

5 Snow

6 Wet snow

7 Mixture of rain and snow

8 Ice pellets

9 Graupel

10 Hail

11 Freezing drizzle

12–191 Reserved

192–254 Reserved for local use

255 Missing