

## Tendencies and fluxes for budgets

To be activated by switch LBUD23 (and setting the appropriate extra array dimensions NVEXTR and NCEXTR).

| Field (3D)   | Unit<br>(fluxes and tendencies are accumulated) | Grib Code<br>(Table 128) | Extra array field position (callpar) |
|--|---|--------------------------|--------------------------------------|
| u-tendency from explicit dynamics  | m/s <sup>2</sup> * s                            | 91                       | 1                                    |
| v-tendency from explicit dynamics  | m/s <sup>2</sup> * s                            | 92                       | 2                                    |
| T-tendency from explicit dynamics  | K/s * s   | 93                       | 3                                    |
| q-tendency from explicit dynamics  | kg/kg/s * s                                     | 94                       | 4                                    |
| T-tendency from radiation  | K/s * s   | 95                       | 5                                    |
| u-tendency from vert. diff + orog drag + surf processes  | m/s <sup>2</sup> * s                            | 96                       | 6                                    |
| v-tendency from vert. diff + orog drag + surf processes  | m/s <sup>2</sup> * s                            | 97                       | 7                                    |
| T-tendency from vert. diff + orog drag + surf processes  | K/s * s   | 98                       | 8                                    |
| q-tendency from vert. diff + orog drag + surf processes  | kg/kg/s * s                                     | 99                       | 9                                    |
| u-tendency of gravity wave drag (including non-orographic)                                       | m/s <sup>2</sup> * s                            | 100                      | 10                                   |
| v-tendency of gravity wave drag (including non-orographic)                                       | m/s <sup>2</sup> * s                            | 101                      | 11                                   |
| T-tendency of gravity wave drag (including non-orographic) <sup>1</sup> = dissipation wave break | K/s * s   | 102                      | 12                                   |
| u-tendency from convection   | m/s <sup>2</sup> * s                            | 103                      | 13                                   |
| v-tendency from convection   | m/s <sup>2</sup> * s                            | 104                      | 14                                   |
| T-tendency from convection   | K/s * s   | 105                      | 15                                   |
| q-tendency from convection   | kg/kg/s * s                                     | 106                      | 16                                   |
| Precip. flux from convection liquid  | kg/(m <sup>2</sup> s) * s                       | 107                      | 17                                   |
| Precip. flux from convection ice   | kg/(m <sup>2</sup> s) * s                       | 108                      | 18                                   |
| T-tendency from cloud and SL phys.   | K/s * s   | 109                      | 19                                   |
| q-tendency from cloud and SL phys. and negative humidity correction                              | kg/kg/s * s                                     | 110                      | 20                                   |
| Cloud water tendency from vert. diff (with GWD and surf) and cloud                               | kg/kg/s * s                                     | 111                      | 21                                   |
| Cloud ice tendency from vert. diff (with GWD and surf) and cloud                                 | kg/kg/s * s                                     | 112                      | 22                                   |
| Precip. flux from cloud sch. liquid  | kg/(m <sup>2</sup> s) * s                       | 113                      | 23                                   |
| Precip. flux from cloud sch. ice   | kg/(m <sup>2</sup> s) * s                       | 114                      | 24                                   |

<sup>1</sup> Bugged before CY39R1

