

## Appendix E: Pressure levels for atmospheric variables

The pressure levels defined in the CMIP6 Data Request and brought into the ESM-BCV list are given below:

- 19 pressure levels (plev19) – 100 000, 92 500, 85 000, 70 000, 60 000, 50 000, 40 000, 30 000, 25 000, 20 000, 15 000, 10 000, 7000, 5000, 3000, 2000, 1000, 500, and 100 hPa; and
- 8 pressure levels (plev8) – 100 000, 85 000, 70 000, 50 000, 25 000, 10 000, 5000, and 1000 hPa.

The usage and the range of levels may be modified in CMIP7 following detailed discussion of scientific requirements, led by the atmosphere theme of the CMIP AR7 Fast Track Data Request (see <https://wcrp-cmip.org/cmip7/cmip7-data-request/public-consultation/>, last access: 4 December 2024).

**Code and data availability.** The python script used to harvest information from the ESGF for Fig. 4 is available in Juckes (2025a) (<https://doi.org/10.5281/zenodo.15190399>). The prioritisation data are available as an Excel workbook in Juckes (2025b) (<https://doi.org/10.5281/zenodo.14701274>).

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