

## Earth system and climate modeling activities toward CMIP6 in Japan: a review

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There are three groups in Japan planning to contribute to Coupled Model Intercomparison Project (CMIP6): Meteorological Research Institute (MRI) of Japan Meteorological Agency (JMA); Team MIROC, which is a joint effort among JAMSTEC, the University of Tokyo, and NIES; and NICAM development team consisting of UT, RIKEN and JAMSTEC. The first two groups are joining most of the endorsed MIPs with their different model versions combined, while the NICAM team joins CMIP6 in a more selective manner due to the immense computer resource requirement. The third generation of the Earth Simulator, whose theoretical computational speed is 1.3PFlops, will be used for most of the CMIP6 experiments, while the K computer may be utilized for some NICAM experiments. Many activities in Japan for CMIP6 are supported by SOUSEI project funded by MEXT, which is coming to an end in March, 2017. A forum has been set up to involving both scientists and funding agency to discuss overall direction of climate science beyond SOUSEI project.

Keywords: Earth system model, Climate projection, CMIP6