

July 28, 2003

Revised on August 24, 2004

**Memorandum on the collaboration between ESC/FRCGC and IPRC
for the analysis of the OFES outputs**

OFES Project Leaders

(1) In order to make the best use of the OFES output data, the OFES group of ESC/FRCGC agreed to open the dataset for the IPRC researchers and start close collaborations with the IPRC scientists. At the present initial stage, our collaborative activities will be pursued based not on a formal collaborative agreement but on an informal cooperation between OFES and IPRC scientists .

(2) To maintain the priority to use the OFES data for the OFES group, we would like to apply the following rules for the cooperation.

- (a) We set a 2-year priority period for the OFES output data. The start of the priority period is set separately for each product (e.g. 50-years climatological integration, CFC Tracer experiment, etc.).
- (b) During the above priority period, access to OFES data is limited to OFES collaborative projects. IPRC scientists may initiate such projects, in which case they must take responsibility for the data access under the supervision of project leaders listed below. The analysis of the output should be conducted as collaborative works with the OFES group.
- (c) The project leaders (listed below) on both sides will coordinate activities in order to avoid duplications in data analysis. Relevant information on the submissions of papers, proposals, and conference presentations must be reported to the leaders in advance.
- (d) Papers and presentations, which include the OFES data analysis, must have at least one co-author from the OFES group. In addition, as a temporary measure to ensure ESC's credit for the involvement of this collaborative activity, please include at least one ESC researcher (for instance, Sasaki) as co-author(s) of the papers and presentations.
- (e) Since the manpower of the OFES group is quite limited, we ask the IPRC scientists to come to ESC/FRCGC for data handling.
- (f) The 'e-ofes' mailing-list can be used for the exchange of information related to the OFES activities. The mailing-list address is;

e-ofes@es.jamstec.go.jp

(g) An introductory paper (Masumoto et al., 2004) of the OFES climatological integration was published in *Journal of the Earth Simulator*, and an introductory paper (Sasai et al., 2004) for the OFES CFC tracer experiment was published in GRL. Please include these references in your paper.

(3) Our activities of using the Earth Simulator was formally approved by the committee for project selection as a sub-activity of AFES/OFES/CFES project in ESC. Therefore, our research outcomes will be reported properly to ESC (by the Japanese researchers).

(4) The contents of this memorandum may be changed depending on the future situation.

(5) Project leaders:

General strategy: Sakuma (FRCGC)

Joint AFES/OFES/CFES project : Ohfuchi (ESC)

OFES project :

ESC : Sasaki

FRCGC : Masumoto/Ishida/Nonaka

IPRC : Xie/Richards

References

- Masumoto, Y., H. Sasaki, T. Kagimoto, N. Komori, A. Ishida, Y. Sasai, T. Miyama, T. Motoi, H. Mitsudera, K. Takahashi, H. Sakuma and T. Yamagata (2004): A fifty-year eddy-resolving simulation of the world ocean: Preliminary outcomes of OFES (OGCM for the Earth Simulator). *J. Earth Simulator*, 1, 35-56.
- Sasai, Y., A. Ishida, Y. Yamanaka, H. Sasaki (2004): Chlorofluorocarbons in a global ocean eddy-resolving OGCM: Pathway and formation of Antarctic Bottom Water. *Geophys. Res. Lett.*, 31(12), L12305, doi:10.1029/2004GL019895.