

ECCO Version 4: Fourth Release (1992-2017) ECCO V4r4

<https://podaac.jpl.nasa.gov/ECCO>

This dataset contains ECCO V4r4 ancillary data:

FILENAME	DIRECTORY	DESCRIPTION
README_ancillary_data_ECCO_V4r4.pdf		This file
ancillary_data_doc_ECCO_V4r4.tar	doc	basic documentation of the state estimate
ancillary_data_input_init_ECCO_V4r4.tar	input_init	files required to initialize the model
ancillary_data_input_forcing_ECCO_V4r4.tar	input_forcing	atmospheric boundary conditions and other fields used to force the model
ancillary_data_native_grid_files_ECCO_V4r4.tar	native_grid_files	binary input grid files describing the native model grid geometry
ancillary_data_data_constraints_ECCO_V4r4.tar	data_constraints	observational data that we use to constrain the model. Except for in situ data, the original data are converted to flat binary single precision files that are mapped to the model grid. The in-situ data are saved in NetCDF files.
ancillary_data_output_insitu_ECCO_V4r4.tar	output_insitu	model equivalent of temperature and salinity profile data (e.g., model temperature and salinity where there are Argo profiles)
ancillary_data_atm_flux_forcing_experiments_ECCO_V4r4.tar	atm_flux_forcing_experiments	files related to atmospheric flux-forced experiments
ancillary_data_misc_ECCO_V4r4.tar	misc	miscellaneous files

- References:

ECCO Consortium, Fukumori, I., Wang, O., Fenty, I., Forget, G., Heimbach, P., & Ponte, R. M. (2021, February 10). Synopsis of the ECCO Central Production Global Ocean and Sea-Ice State Estimate (Version 4 Release 4). <https://doi.org/10.5281/zenodo.4533349>

Fukumori, I., O. Wang, I. Fenty, G. Forget, P. Heimbach, and R. M. Ponte, 2017: ECCO Version 4 Release 3, <http://hdl.handle.net/1721.1/110380>. <https://doi.org/1721.1/110380>

Forget, G., J.-M. Campin, P. Heimbach, C. N. Hill, R. M. Ponte, and C. Wunsch, 2015: ECCO version 4: an integrated framework for non-linear inverse modeling and global ocean state estimation. *Geoscientific Model Development*, 8, 3071-3104. <https://doi.org/10.5194/gmd-8-3071-2015>

- Software:

The ECCO V4r4 files were produced using the 'checkpoint66g' versions of the general circulation model (MITgcm and ECCO v4 settings), Python analysis package (ECCOv4-py), and Matlab analysis toolboxes (gcmfaces and MITprof). These software versions are available at http://mitgcm.org/download/other_checkpoints/, <https://github.com/ECCO-GROUP/ECCOv4-py>, and <https://github.com/MITgcm/gcmfaces>.

- Contact Us:

ecco-support@mit.edu (please subscribe via <http://mailman.mit.edu/mailman/listinfo/ecco-support>)

README file revision history:

- README file creation

[Ou Wang and Ian Fenty] [2021/06/28]