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Interannual variation of Kuroshio east of Taiwan Island

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Based on the output data of OGCM for the Earth Simulator (OFES) and using 1.5 layer reduced gravity model the interannual variation of Kuroshio east of Taiwan Island is investigated. It is found that about 80% of total northwards transport east of Taiwan Island in the upper 400m actually enters into the East China Sea (ECS) and volume transport enter into East China Sea is consistent with that east of Taiwan. The variation of northwards transport of the Kuroshio and the Sea Surface Height (SSH) east of Taiwan Island is larger in the interannual scale than it in annual variation, which are mainly influenced by interannual variation of wind stress curl change between 170°E and 160°W. The interanuual variation of SSHA east of Taiwan Island in 1.5 layer model is consistent with that in OFES output data except 1998-2000. The standard deviation of 1.5 layer model SSH takes approximately 50% of that from OFES SSH.