



Impact of climate change on oceanic Earth rotation excitation.

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Measurements of Earth's rotation is very precise and can be converted to observation of the oceanic angular momentum. The oceanic angular itself momentum is closely related to the eustatic sea level, the oceanic distribution of mass, i.e. salinity and temperature, and to the state of the current system. We want to study this relation in the context of climate change. To this end, we calculated and analyzed the oceanic angular momentum from coupled climate GCM simulations. These simulations represent different scenarios of possible climate change. The differences in oceanic excitation between these scenarios themselves and with respect to a reference simulation were characterized. We discuss whether these differences originate in changes of the inertia tensor or in changes of the currents of the ocean.