



## **Studying of sensitivity of the couple model on data assimilation in the tropical zone of Pacific ocean**

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Numerical experiments based on the coupled model “ECHAM-HOPE” are considered and analyzed in the paper. Initial fields for computations performed over time-periods from one month up to one year have been constrained with TOGA-TAO temperature profiles assimilation. The perturbations of the initial fields and their propagation are analyzed after certain time-intervals of computations. It is shown that the maximum impact of perturbations is localized at the selected regions of the World Ocean, such as “energy active zones” in the middle latitudes and in the tropical Pacific. The mechanism of the transformation of these perturbations is also investigated. Different statistics of the ensemble experiments are presented.