
[EE] Evening Poster | A (Atmospheric and Hydrospheric Sciences) | A-CG Complex & General

[A-CG36]Satellite Earth Environment Observation

convener:Riko Oki(Japan Aerospace Exploration Agency), Yoshiaki HONDA(Center for Environmental Remote Sensing, Chiba University), Yukari Takayabu(東京大学 大気海洋研究所, 共同), Tsuneo Matsunaga(Center for Global Environmental Research and Satellite Observation Center, National Institute for Environmental Studies)

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In recent years, we cannot avoid facing issues on global environmental changes that occur in various spatiotemporal scales. The earth environmental observation data by satellites became the necessary basic data to tackle and solve those issues. Due to the recent advancement in the observation sensor technique and the data processing technique, the satellite observation has been showing rapid progress, and the time is changing from examining the accuracy of the observation sensor data to the advancement of the data application, leading to broaden potential users. In these days application became synergetic, so we comprehensively pick

up this topic in the Atmospheric and Hydrospheric Sciences Session of this Union Meeting that enables to comprise the atmospheric, oceanic and land sciences; by combining the intelligence and the knowledge of the party, we propose a session that aims to prompt further studies towards the issues on earth environmental change, the advancement in the data application and future plans of Earth Observation missions.

[ACG36-P21]Tidal-induced small-scale eddy trains in the southeastern Taiwan

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Keywords:eddy, Taiwan, Kuroshio

Interesting small-scale eddy trains are discovered along the coast of the northeastern Taiwan based on observations from sea surface temperature and ocean color satellite imageries acquired with the Moderate Resolution Imaging Spectroradiometer (MODIS) and Sea-viewing Wide Field-of-view Sensor (SeaWiFS). The eddy train is composed of two or three eddies. The eddy is 5-50 km in diameter. The drop of temperature in the eddy is about 1°C and the chlorophyll-a concentration is tenfold than that in the adjust ocean. We hypothesize that the eddy trains are generated by the interaction with the Kuroshio and the tidal forcing in Nan-Wan Bay. The eddy is generated The phenomenon of eddy train is very rare and difficult to monitor in the ocean. We speculate that the eddy train plays an important role for the transport of nutrient and biogenic particles to shelf ecosystems.