
[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-P08] The changing effect of the CP and EP types of El Niño in the South China Sea

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El Niño events are one of the most principal impacts that affect the global climate, especially in the Tropical oceans. Previous studies have suggested the interannual variations on the traditional El Niño. However recent studies show the interannual variability connected with two type of El Niño, namely the Central-Pacific (CP) type of El Niño and Eastern-Pacific (EP) type of El Niño. During the CP type of El Niño, the maximum sea surface temperature anomalies are confined in the central equatorial Pacific. In order to focus on the influences on the El Niño events in the South China Sea thermal variability, we should consider various influences of the CP and EP types of El Niño.

In this study, surface wind, precipitation, sea level press, air temperature, sea surface temperature and multiple satellite datasets has been used to analyze the interannual variations in the South China Sea. We estimate various thermal variability and indentify how well the two types of El Niño are influences on climate changes in the South China Sea. The composite for the EP El Niño events indicates a strong increase in the sea surface temperature anomaly over the South China Sea region. During the EP El Niño, the strength of the SST anomalies increases by as much as 0.4°C. However the decrease SST can be found in most part of the South China Sea during the CP El Niño.