



## 赤道海洋对罕见台风“画眉”的响应

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**摘要** 利用GHRSSTL4、QuikSCAT、OAFLUX以及SeaWIFSL3资料分析了近赤道罕见台风“画眉”生成前后海表温度SST及其感热通量、潜热通量和叶绿素a浓度的变化。在台风“画眉”生成之前, 中南半岛沿海海表平均温度较其他区域低, 并且在南海盛行东北风, 在台风生成区有一明显的气旋性涡旋存在。南海北部地区潜热通量和感热通量均较大, 而在台风的生成区域仅感热通量较大。台风“画眉”使其路径右侧的区域发生海表温度降低, 相对于其他强度较强的台风降温较小, 海表温度在马来半岛以东洋面以及马六甲海峡降低明显, 降低约2—2.5℃。与高纬度的台风类似, 台风“画眉”使中南半岛沿岸以及马来半岛与苏门答腊岛之间的地区叶绿素a浓度相对于台风前增大0.6mg·m<sup>-3</sup>以上。

**关键词:** 罕见台风“画眉” 感热 潜热 叶绿素a浓度 海洋响应

**Abstract:** We use GHRSS L4, QuikSCAT, OAFLUX and SeaWIFS L3 data sets to analyze the change of sea surface temperature (SST), sensible heat flux, latent heat flux and chlorophyll - a concentration in the equatorial ocean where Typhoon Vamei passed through. Before Typhoon Vamei was generated, there was a significant cyclonic vortex over the equatorial region of the southern South China Sea, the average SST in the coastal region of South China Peninsula was lower than other regions, and northeasterly wind prevailed in this area. The latent heat flux and sensible heat flux were larger in the genesis location of Typhoon Vamei. As usual, the cooling occurred on the right side of the track of Typhoon Vamei. The SST decreased by about 2 - 2.5 °C. However, compared to higher-latitude typhoons, the cooling was much small in this case. The region where SST decreased significantly was between the east of the Malay Peninsula and the Strait of Malacca. Similar to higher-latitude typhoons, Typhoon Vamei increased chlorophyll- a concentration in the coastal area between Sumatra and the Malay Peninsula by 0.6 mg·m<sup>-3</sup> or more compared to the pre-typhoon value.

**Keywords:** Typhoon Vamei, sensible heat flux, latent heat flux, chlorophyll - a concentration, oceanic response

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