



Supporting Information for

Enhanced Oceanic Environmental Responses and Feedbacks to Super Typhoon Nida (2009) during the Sudden-turning Stage

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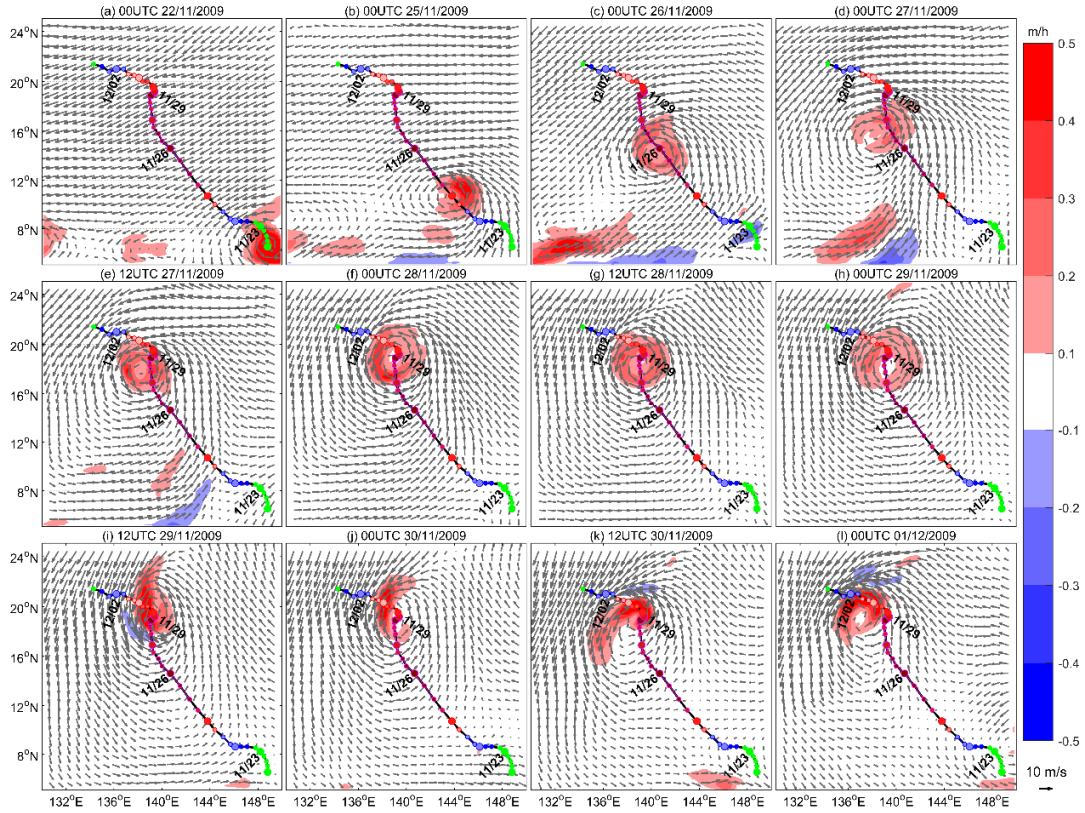


Figure S1. The wind fields at 10 m (arrows) and the Ekman pumping velocity (shaded, positive value is upwelling) during the passage of Typhoon Nida (November 22 - December 1, 2009). The track line color indicated the max-sustained wind.

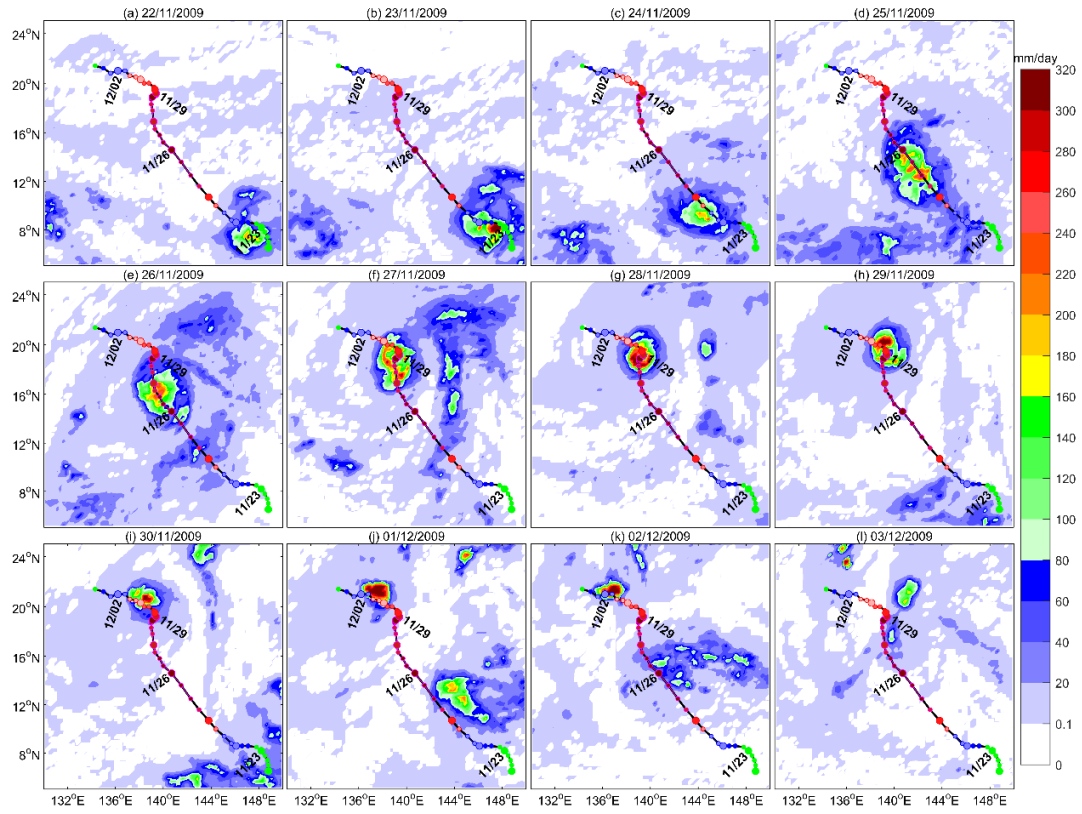


Figure S2. Evolution of daily precipitation during the passage of typhoon Nida (November 22 - December 1, 2009). The track line color indicated the max-sustained wind.

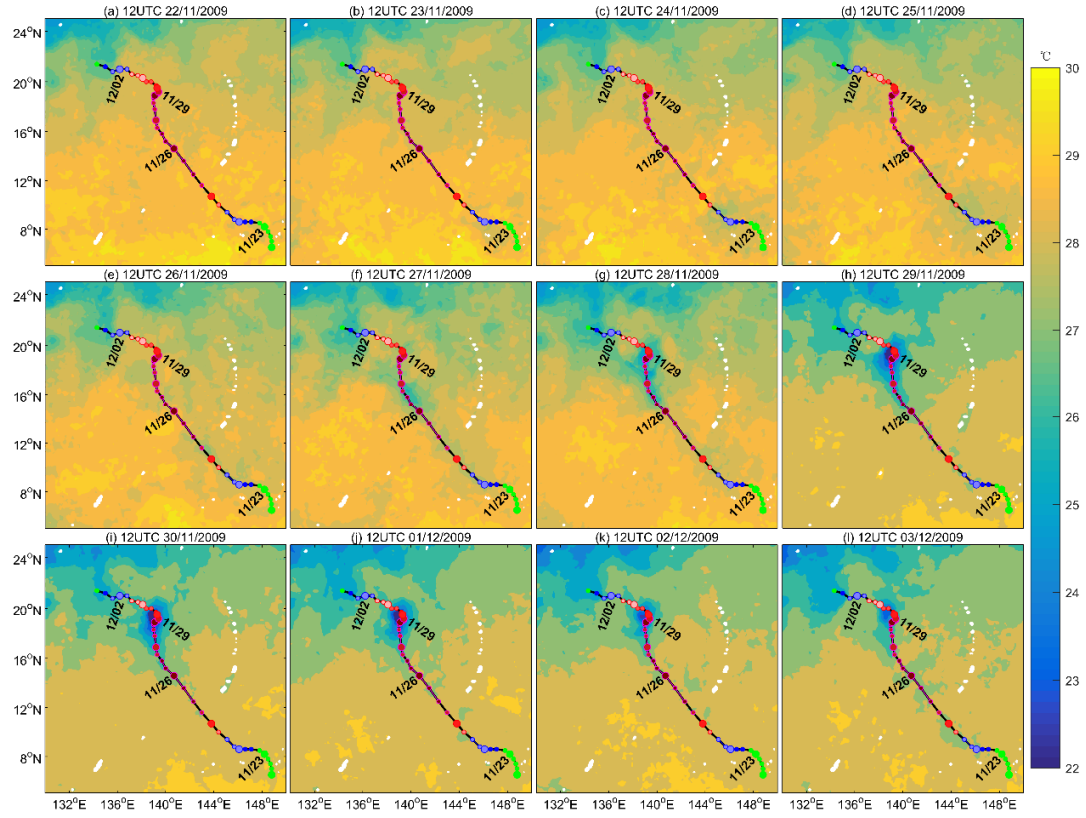


Figure S3. Evolution of daily SST (shaded, °C) during the passage of typhoon Nida (November 22 - December 3, 2009). The track line color indicated the max-sustained wind.

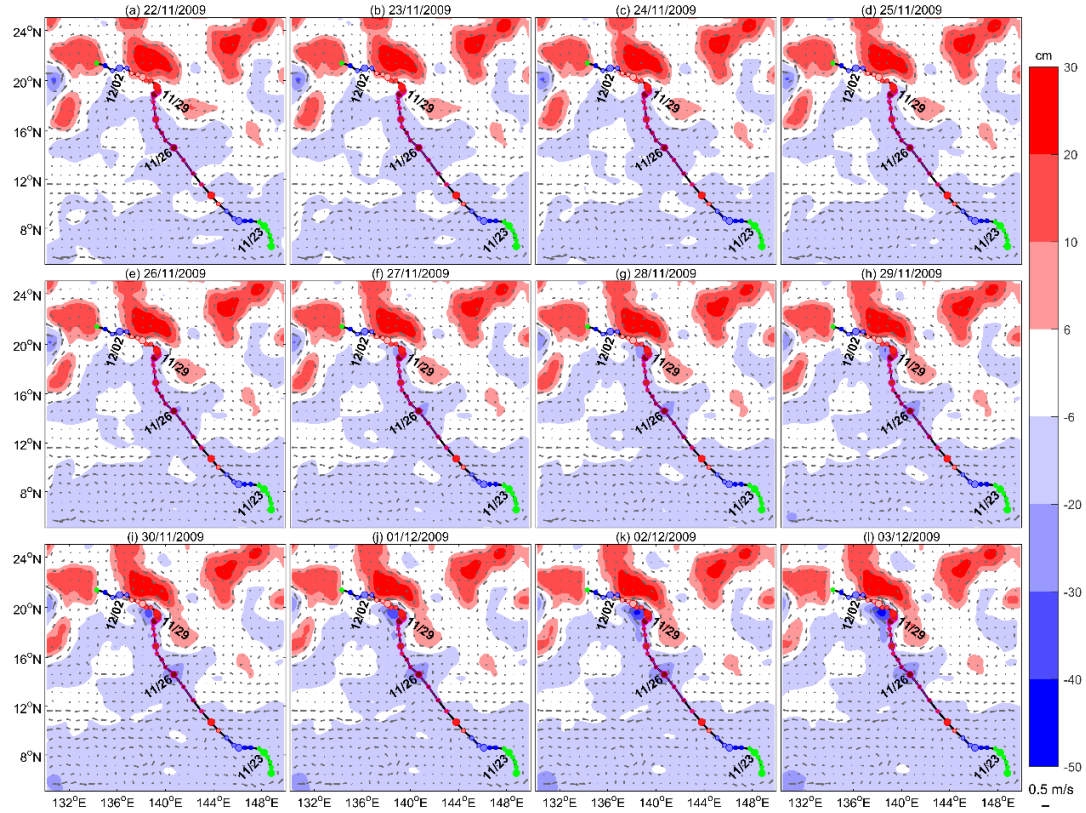


Figure S4. Evolution of the altimeter-derived SSHA (shaded, cm) and surface geostrophic velocity (arrows) during the passage of typhoon Nida (November 22 - December 3, 2009). The track line color indicated the max-sustained wind of typhoon.

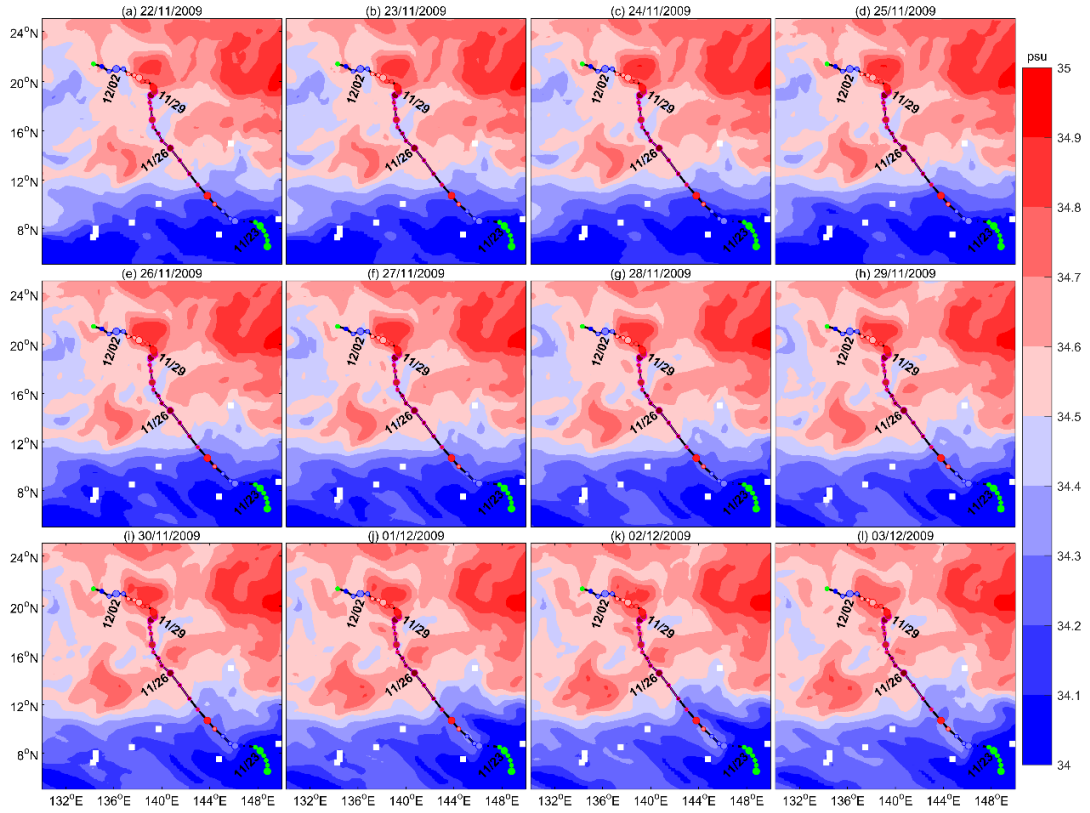


Figure S5. Evolution of daily SSS (shaded, cm) during the passage of typhoon Nida. The track line color indicated the max-sustained wind of typhoon (November 22 - December 3, 2009).

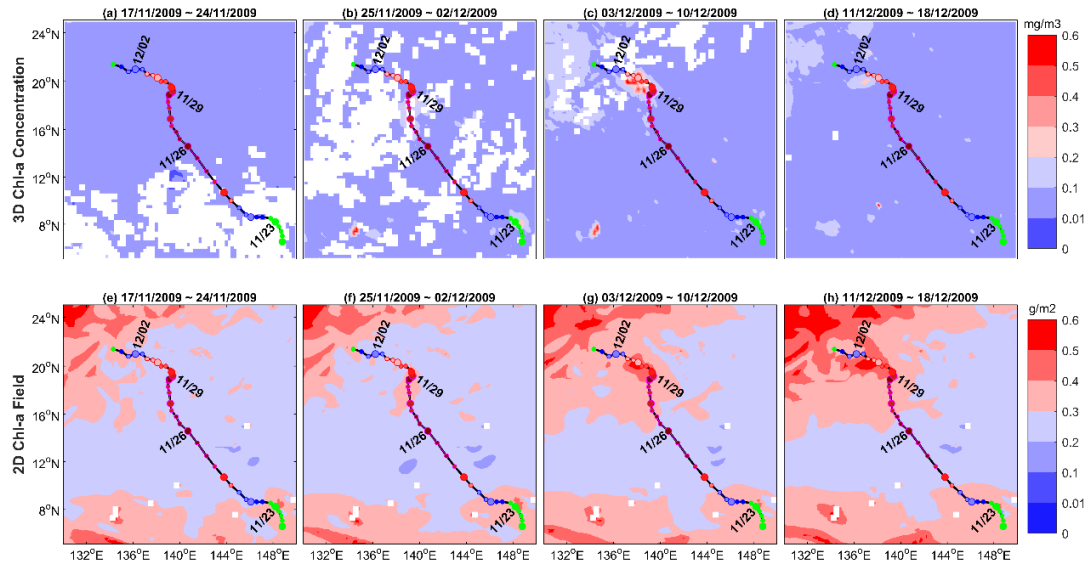


Figure S6. (a - d) Evolution of weekly Chlorophyll concentration (shaded, mg/m^3), (e - h) Evolution of weekly 2D fields of zooplankton (shaded, g/m^2) during the passage of typhoon Nida (November 17 - December 18, 2009). The track line color indicated the max-sustained wind of typhoon.

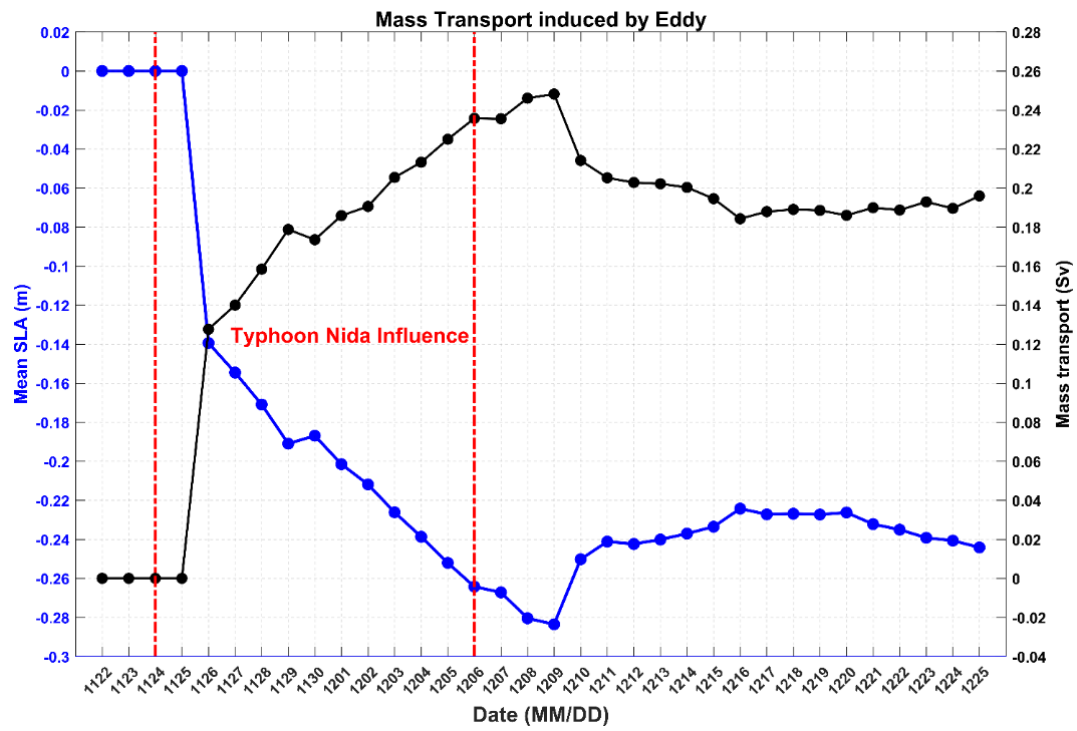


Figure S7. Evolutions of mean SSHA within the cold eddy and the mass transport induced by the cold eddy on the left side of the track in the second Category 5 stage.

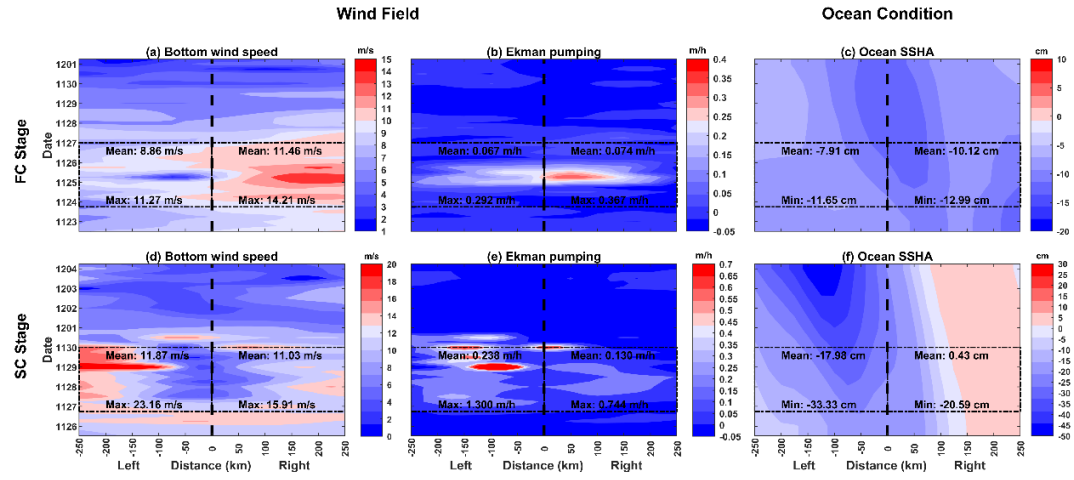


Figure S8. Comparison of typhoon wind field and ocean condition on the left-hand and right-hand side of typhoon track in FC stage and SC stage respectively, extracted from Figure 3 and Figure 4.