

Influence of Topography on Tropical Cyclone Motion and Rainfall Li-Huan Hsu and Hung-Chi Kuo National Taiwan University **Robert G. Fovell** UCLA Atmospheric & Ocean Sciences

and slow down the translation speed of typhoon.



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• Fig.7 is the rainfall amount pattern during landfall and the moving vectors of PVT analysis. We combined the effect of VA and DH term as DH*. The direction of DH* pointing to the rainfall and tend to slow down TC moving speed by cancel out HA term in type2 track. Rainfall amount during landfall



Figure 7: Rainfall amount pattern during landfall and the moving vectors of PVT analysis in the experiments of (a), (c) type2 track, (b), (d) type4 track. Blue vector is the component of HA term and red vector is the DH* term which is the composite of DH and VA term.

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 Potential voricity tendency analysis is applied in the situation of TC across Taiwan terrain. The DH and VA term due to topographic rainfall make an important contribution to TC motion and are responsible for the slowing down

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