The Mesoscale feature of the Interaction between Typhoon Morakot (2009) and the Southwesterly Flow

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Motivation

• The present of the interaction between the typhoon circulation and the southwesterly flow

• Its mesoscale features during the invasion of the typhoon Morakot (2009) by the observation of the ground-based Doppler radar network in the southern Taiwan.
Houze, 2010 (Adapted liberally from Willough by 1988.)
After invasion at 0600 UTC 8 Aug

Before landfall at 1100 UTC 7 Aug
The characteristics of rainbands before landfall
2009 AUG 07 16:16 UTC 1km SYNTHSIZED WIN.
The characteristics of rainbands after invasion
Hence and Houze (2008)
Summary

• The increase of radial component of the VAD analyzed winds suggests the presence of the southwesterly at low levels

• The characteristics of rainbands is comparable with the conceptual model proposed by Hence and Houze (2008).
Thank you for your attention

May the peace from God be with you