

# Cloud Microphysics Impacts on Hurricane Simulations

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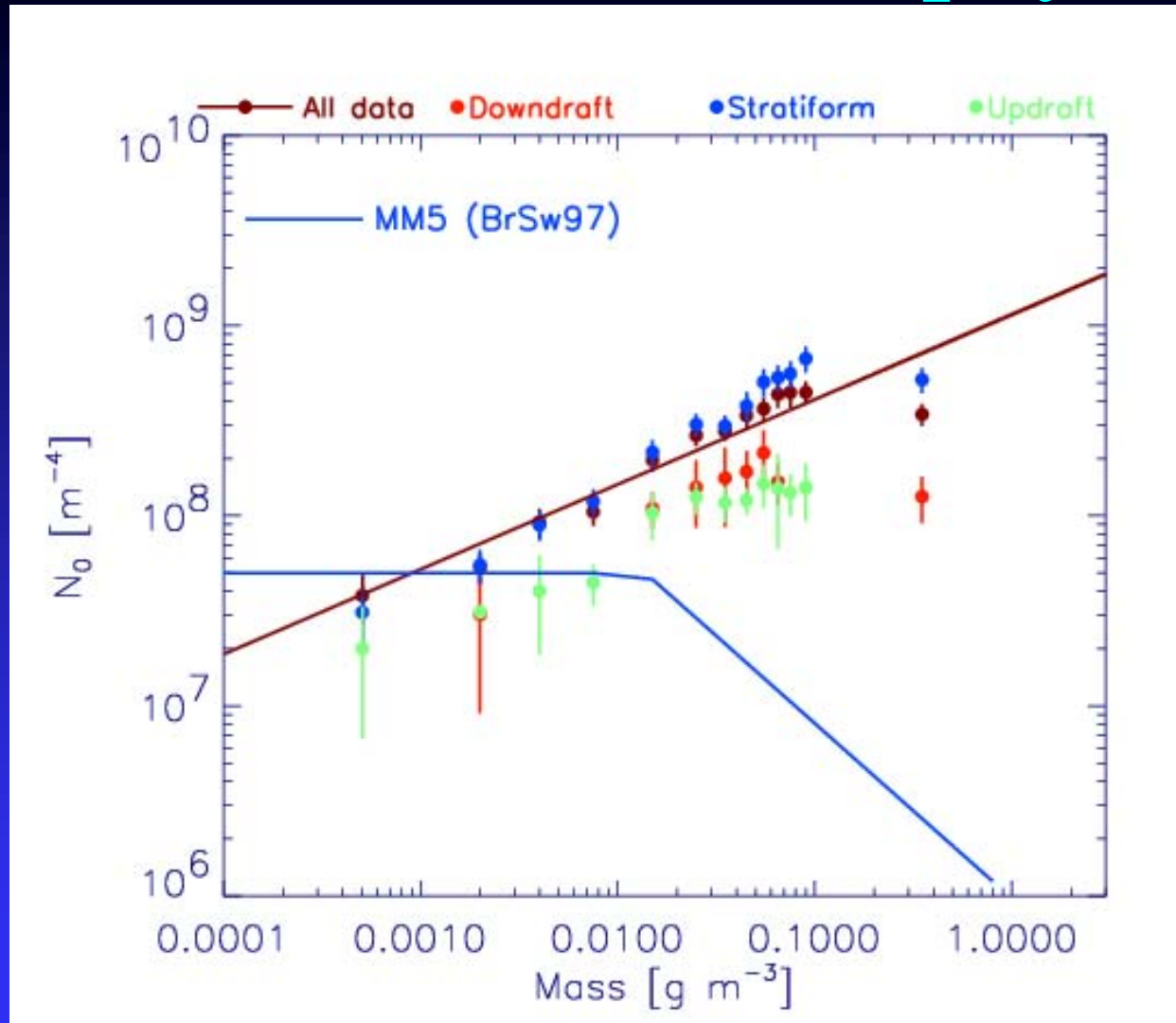
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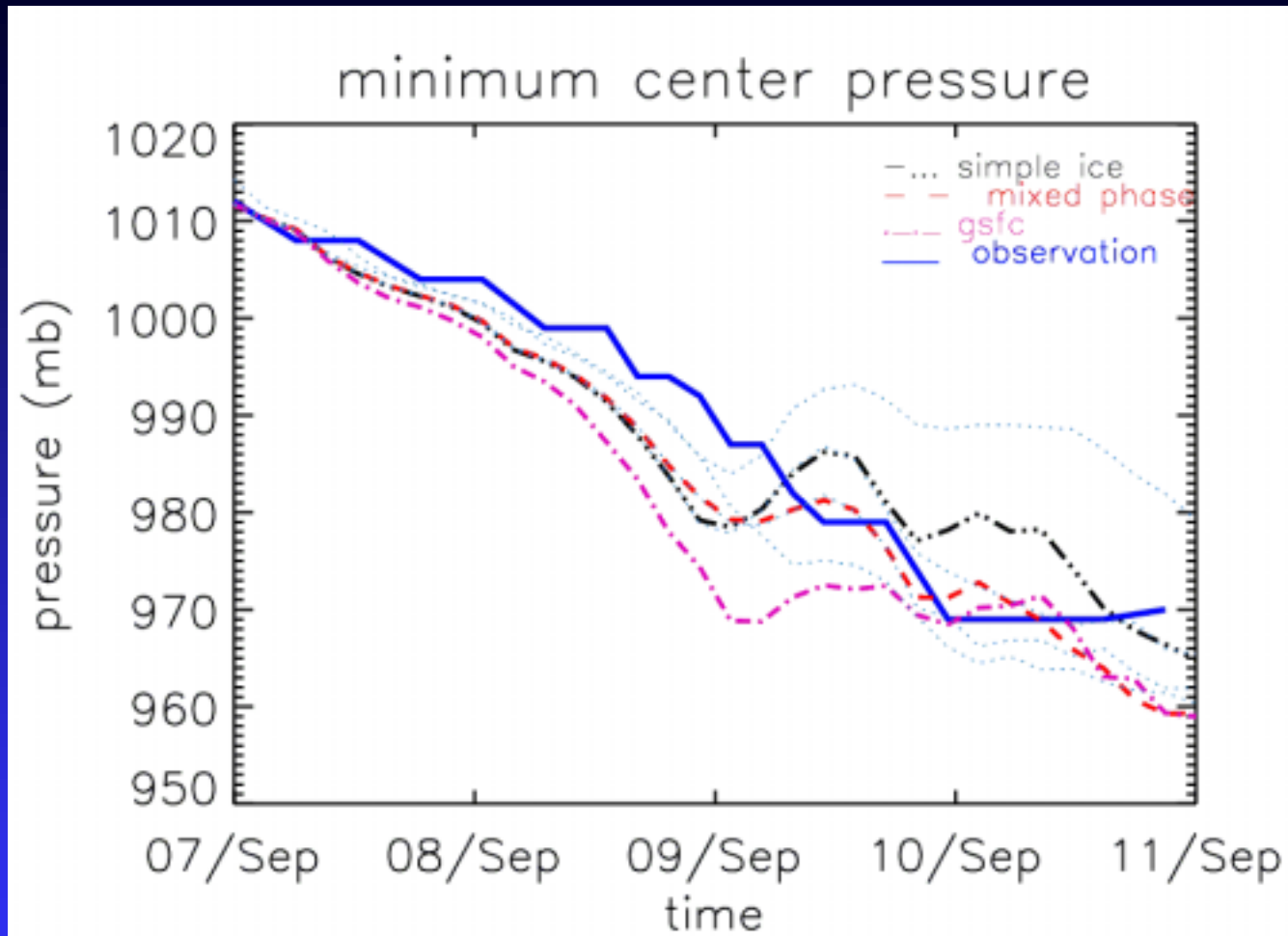
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# Observations of Microphysics



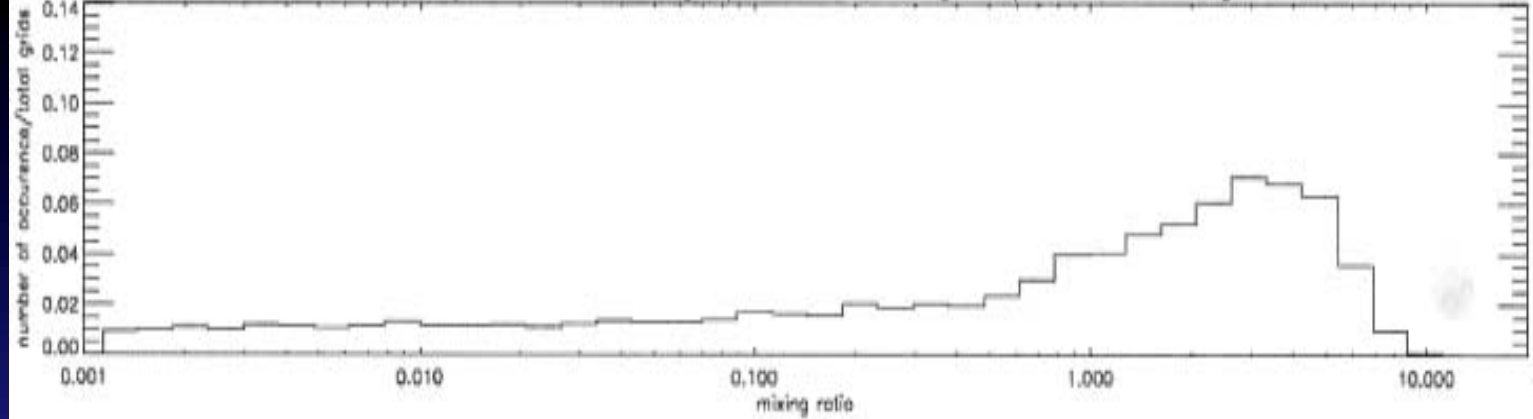
- NOAA measurements
- Dependence of phase, shape/size distributions on  $w$
- New representation of fall-out for MM5

# Model simulations

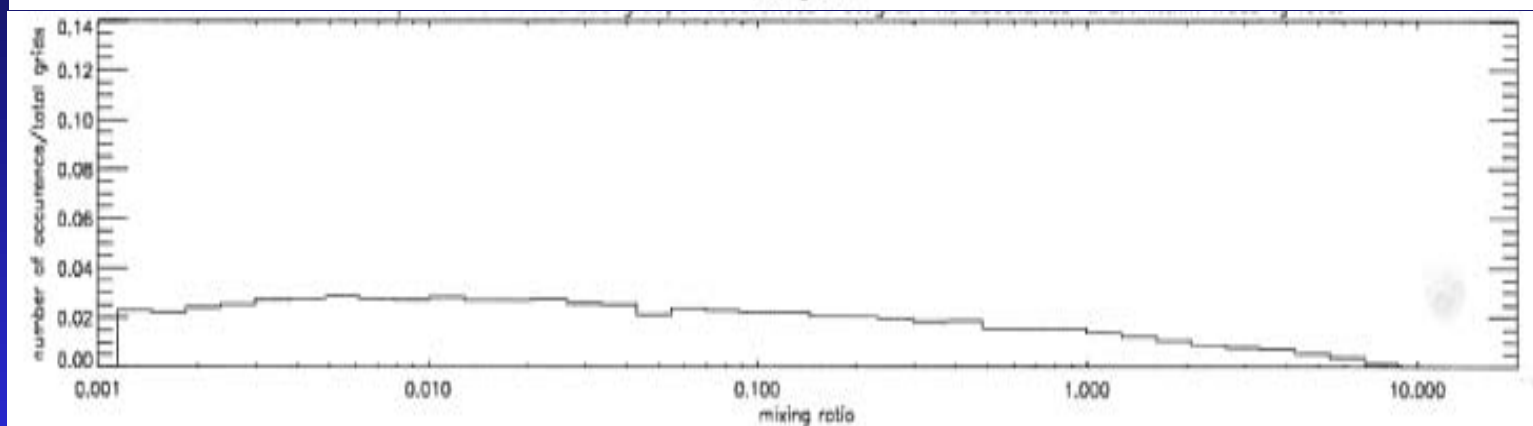


- Simulations of Erin at 2 km resolution
- Impacts of convective/ pbl/ $\mu$ physics schemes, domain & grid resolution
- Comparisons with CAMEX observations

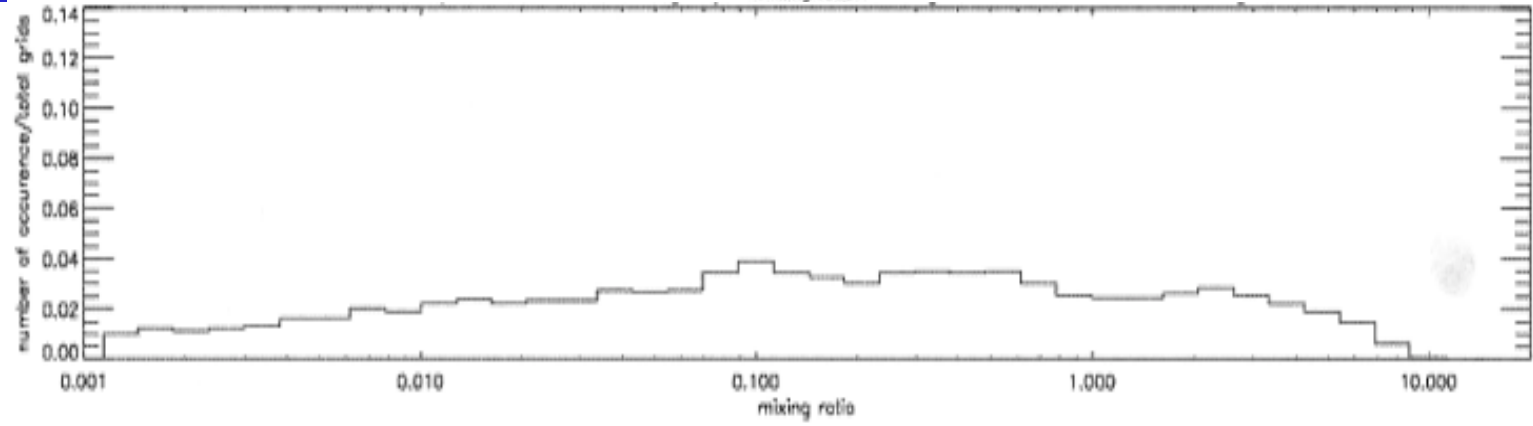
Updraft



Stratiform



Downdraft



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Graupel mixing ratios sorted by w

# Cloud Tops

Heights from MISR

Compare with MM5

