High intensity isolated precipitation features Definiti

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- Total Precipitation $Volume >= 8,500 \text{ mm/h km}^2 (90^{\text{th}} \text{ percentile})$
- Number of PFs >=5
- Largest PF \leq = 3 times the average area of PFs

High intensity vs. broad definition of isolated PFs

0.090

0.075

0.060

0.045

- 0.030

- 0.015

0 0 0 0

0.150

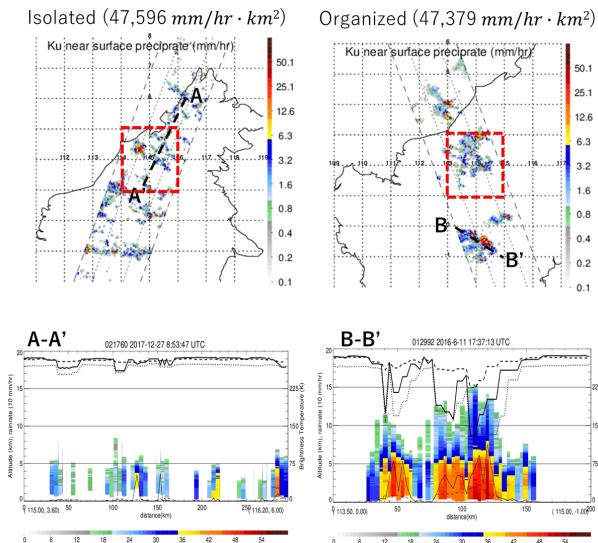
0.125

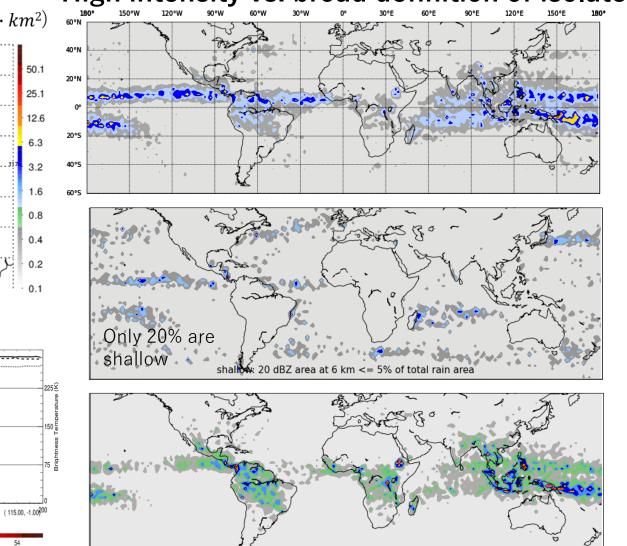
0.100

0.025

0.06

- 0.04

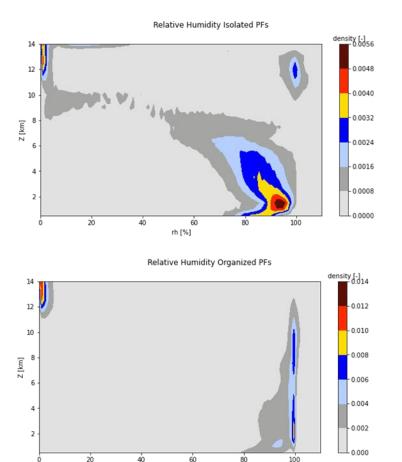




20 dBZ area at 8 km >= 5% of total rain area

What kind of environment favors the formation?

(From ERA5 Reanalysis)



Vertical velocity, CAPE, etc.

60 rh [%]

20

Latent heating

