

SMART Radar



- C-band (5.5 cm), Doppler radar jointly owned by Texas A&M and University of Oklahoma
- 2.54 m antenna, $\sim 1.5^\circ$ beamwidth (circular)
- International 4700 dual-cab diesel truck (~ 2.6 m wide, ~ 10 m long, ~ 4.1 m tall, $\sim 11,800$ kg) with 10-kW diesel generator
- Reflectivity, radial velocity, and spectrum width measured out to 150 km radius

Potential SMART-R Maldives Deployment

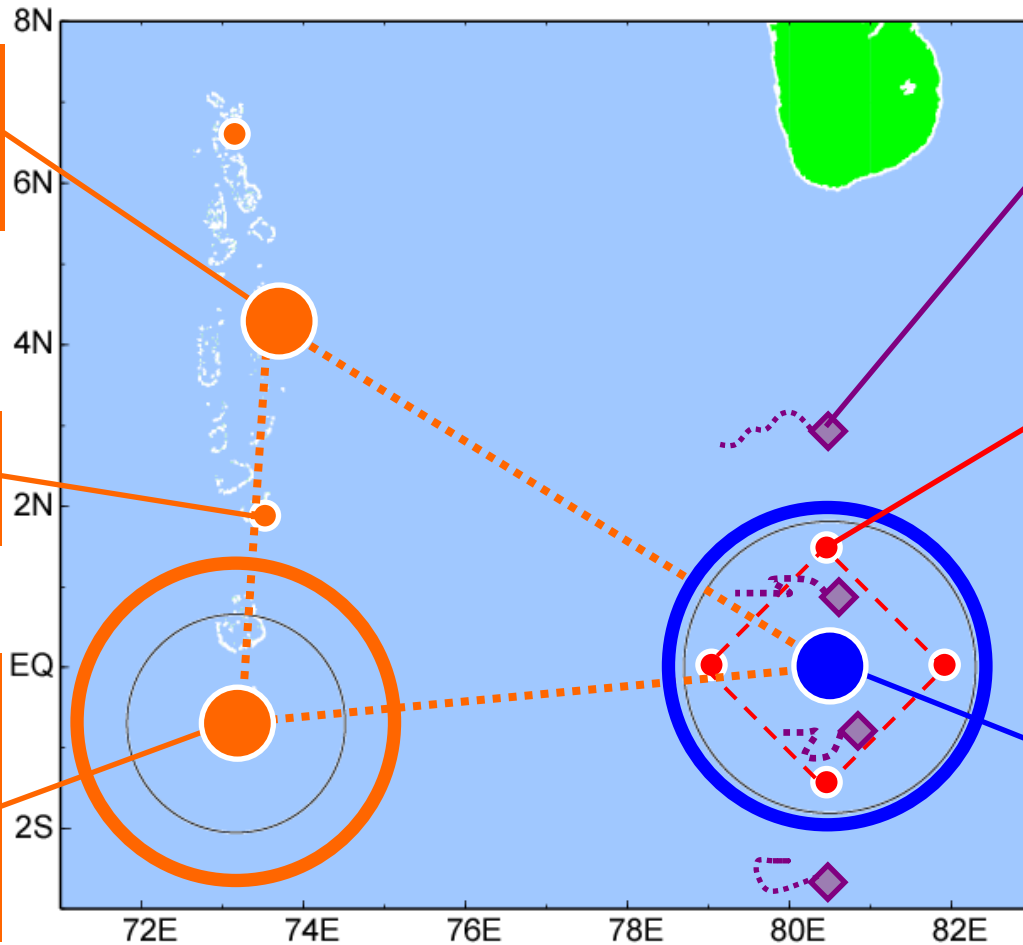
- SR1 is available for entire CINDY2011/DYNAMO time frame
- Will provide 3-D observations of convection and area rainfall useful for budget studies
- SR1 can be shipped with its truck (more difficult to ship, but more flexibility on-site) or can possibly be containerized without the truck (easier to ship, less flexibility on-site)
- SR1 has been run for extended periods in Texas and Costa Rica, but needs operators (which can be trained on-site)
- Experience from MISMO X-band deployment on Gan Island will be useful

MISMO Observation Network: Oct.24 – Nov.25

Hulhule Is.
Radiosonde
AWS, GPS

Kadhdhoo Is.
AWS, GPS

Gan Is.
Doppler Radar
Radiosonde
AWS, GPS,
Ceilometer, etc.



Float
Temp / Salinity

Mooring Buoys
Surface Met.
Temp, Salinity,
Current, etc.

R/V Mirai
Doppler Radar
Radiosonde
Wind Profiler
CTD
etc.

Gan Island (0.7S, 73.2E)



Gan Met Office
AWS, GPS, Ceilometer, Disdrometer,
Microwave Radiometer, Radiosonde



Doppler Radar Site
Doppler Radar, Sodar,
Sky View Camera

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360 View (from the top of the tower)

9月9日(レーダー設置時)



10月21日(観測開始直前)



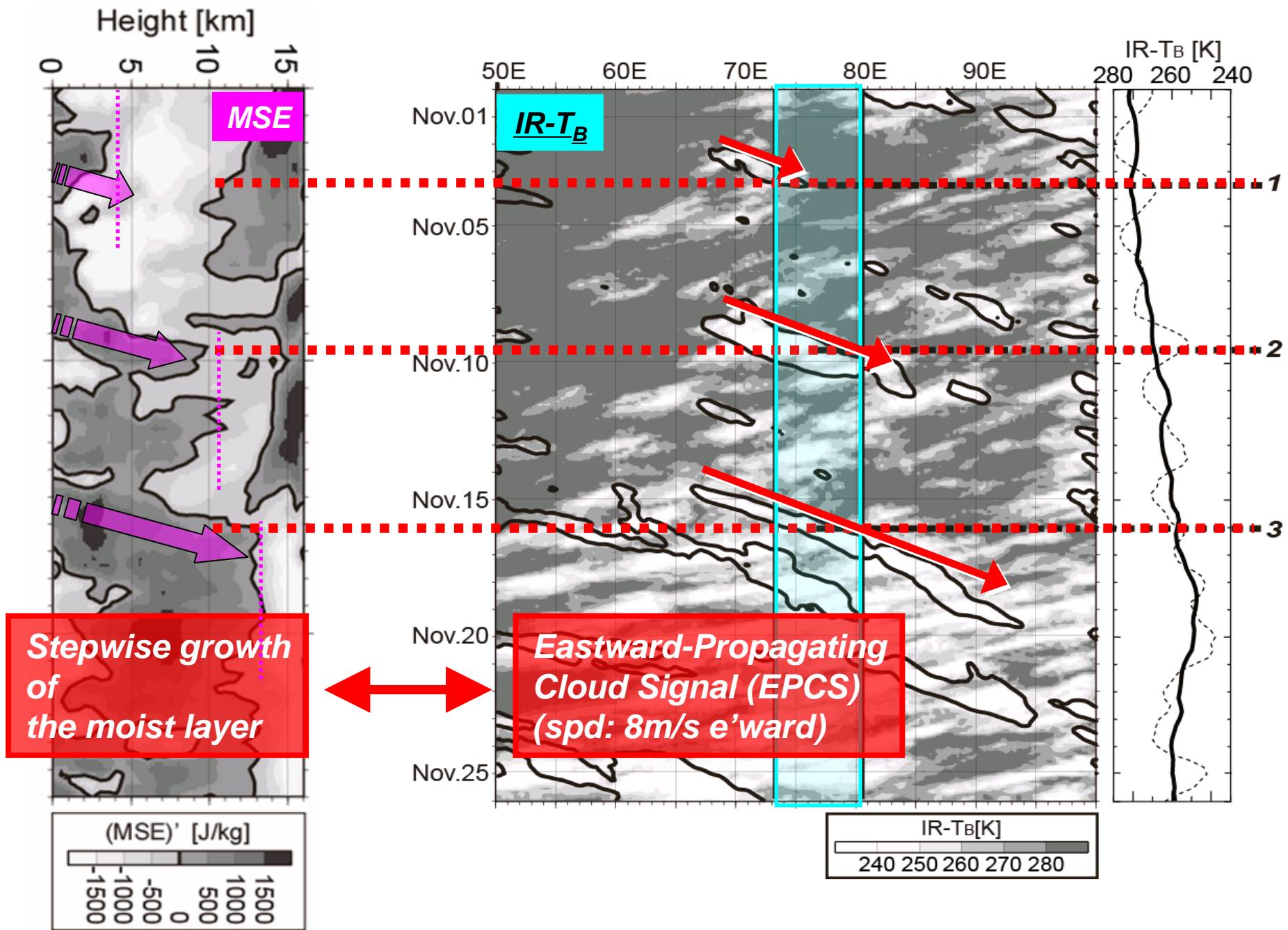
南

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Stepwise Moistening \leftrightarrow Eastward-Propagating Cloud

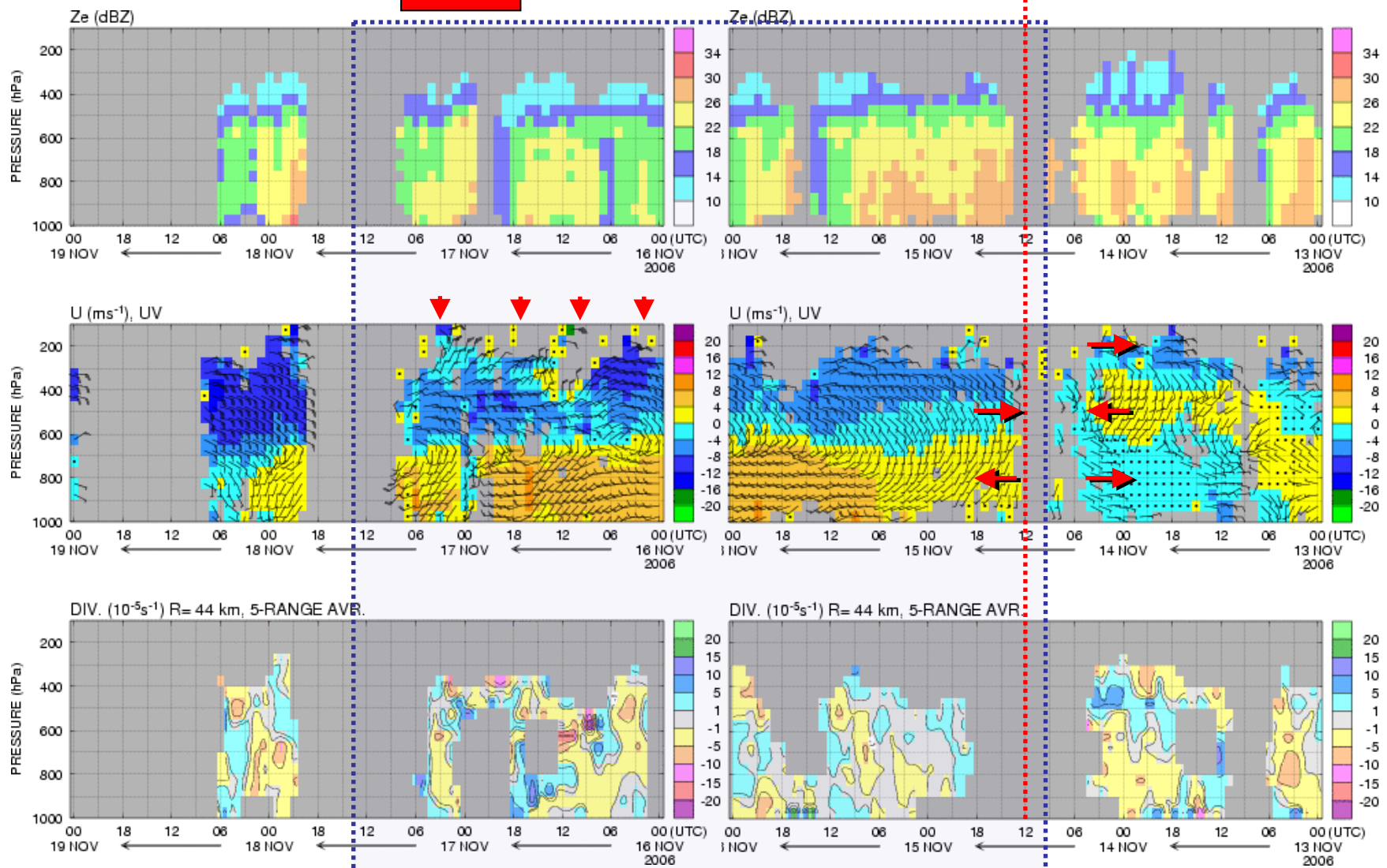


EVAD (CYLBIN) @ Gan Is.

topic-1

topic-2

topic-3



Example on PPIs

