

Central MC (Malaysia, Thailand,  
Singapore, others)

# Common scientific interests

- Aerosol-cloud interaction
- Diurnal cycle interaction with large-scale processes, e.g. MJO
- Equatorial wave, Rossby wave, Kelvin wave, initial gravity wave
- Monsoon, cold surge
- Local circulation, squall line, sea-breeze
- Local convection
- IOD/ENSO
- Air quality
- Scale interaction of various processes
- Extreme rainfall
- Regional air-sea-land interaction
- Borneo vortex
- Andaman low
- ITCZ migration
- Tropical cyclone
- Heat wave

# Level of understanding

- Many else need to understand
- Proper collaboration with scientists around other places

# Collaboration opportunity and coordination

- Thailand: Royal navy, TMD (using existing infrastructure)
- Malaysia: Newton fund – Cranfield -> 3 hourly radiosondes ascend for one 3 weeks, during SW and NE monsoon in Klang Valley. Bachok, 3 hourly when there is a surge. (can share data)
- Kuching LIDAR (?), microwave radiometer, data publicly available. Can work side-by-side in Klang Valley.
- Singapore willing to collaborate, no problem to share experiences and simulations. Open to collaboration proposals.
- Land observations along equatorial line.
- Met Malaysia willing to provide assistance.
- 3 institutions, MMD, UKM (Mersing marine station), UM (Bachok marine station) can house instruments.

# Modeling – Observation integration

- Diurnal measurement for profile not enough
- Diurnal surface measurement not utilized.
- Need data sharing, how to share the data?
- Validating model via accessing convection structure, radar is important. Radar should be shared, e.g. regional radar mosaic. Improve local forecast: use radar for data assimilation. Make the data available during YMC period.
- UK Met has different partnership with met service and university.
- Willingness to share data to improve the model.

# Data availability and gaps

- Diurnal profile
- Ocean measurement nearby Malaysia?
- Application through university/meteorology department to fly in Malaysia airspace is easier, ocean is more difficult.

# Possible funding sources

- Met Malaysia has no extra funding
- Write proposal for capacity building
- Taiwan willing to provide training on radar data
- APPC, Busan, annual training workshop.  
Propose a workshop on Maritime Continent.