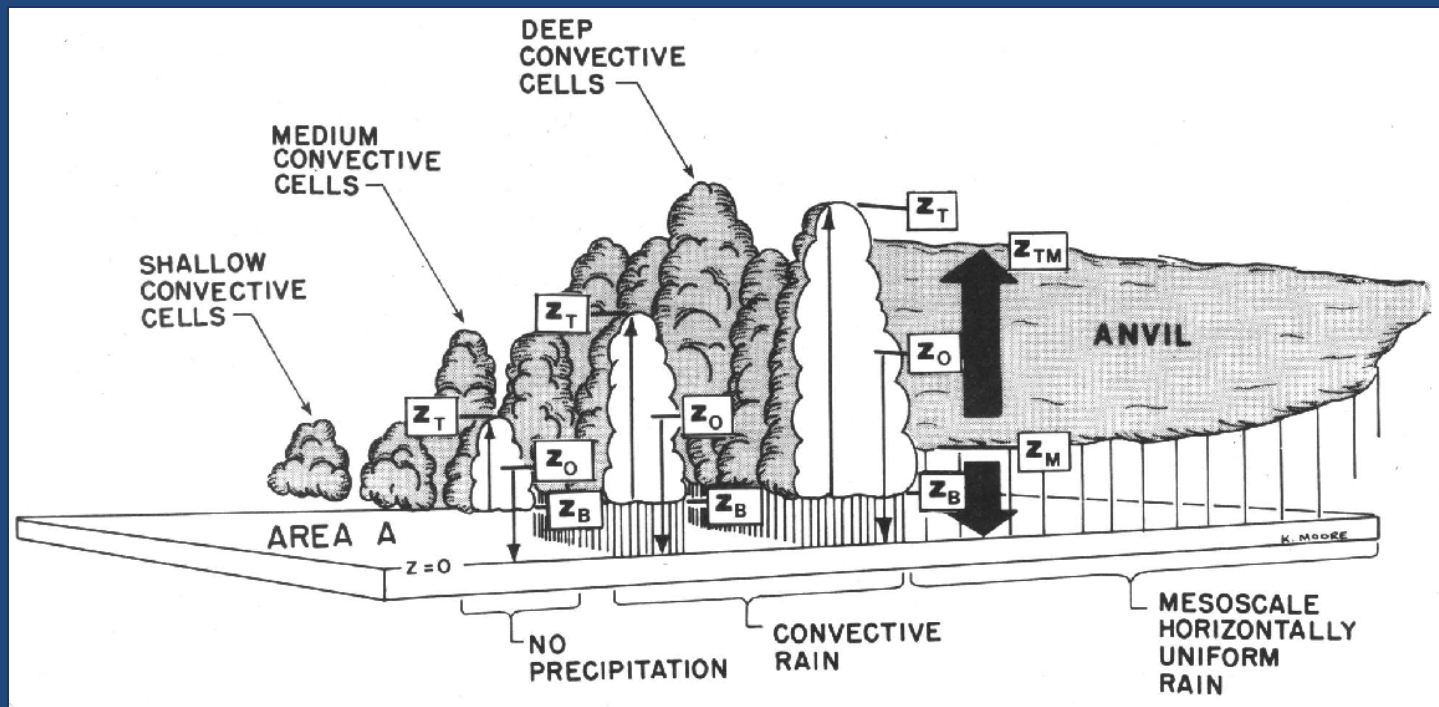


The DYNAMO/AMIE Radar Plan



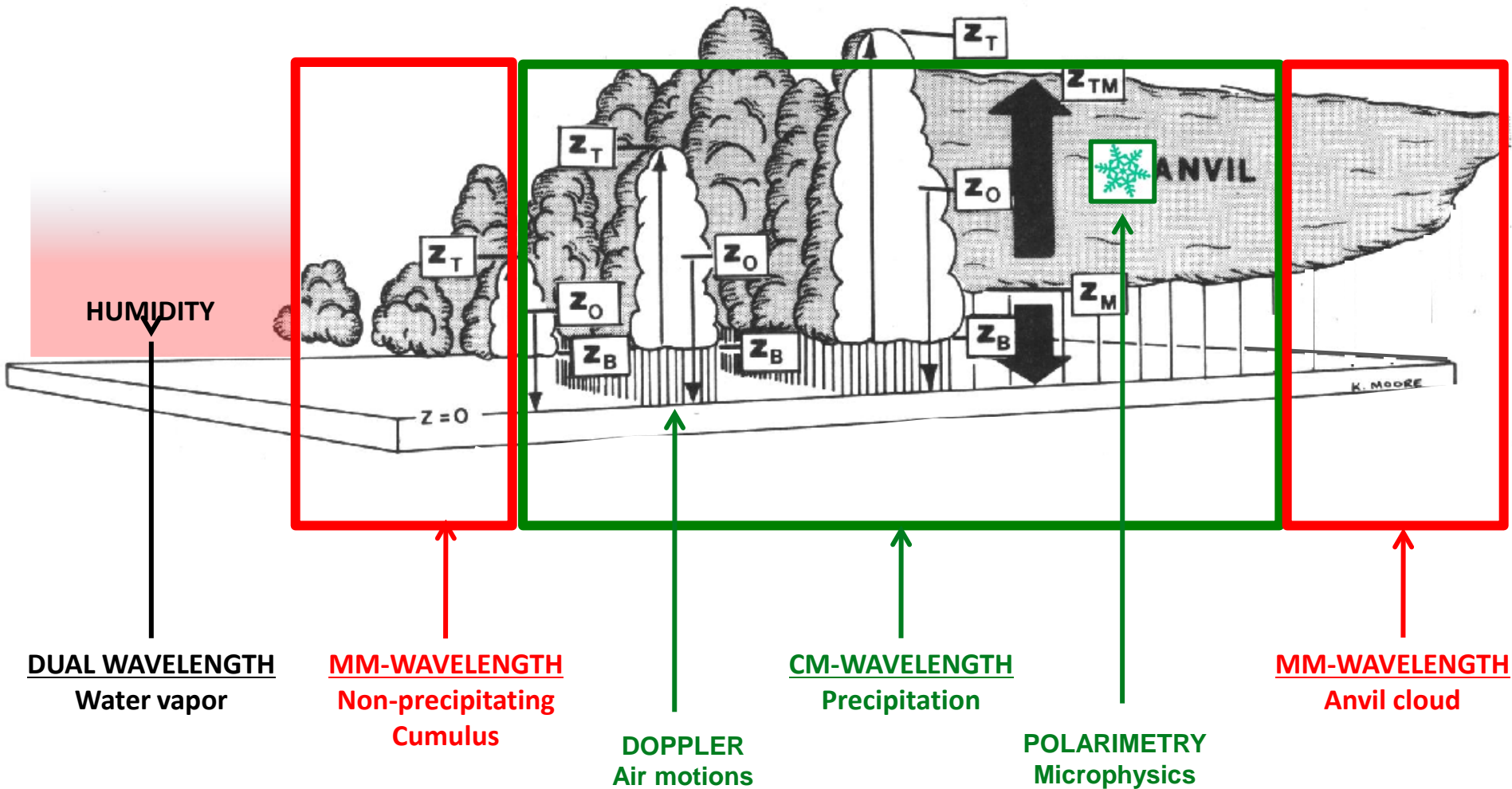
R. Houze, C. Long, S. McFarlane, C. Schumacher,
S. Rutledge, S. Ellis, M. Katsumata

ASR Meeting, San Antonio, 30 March 2011

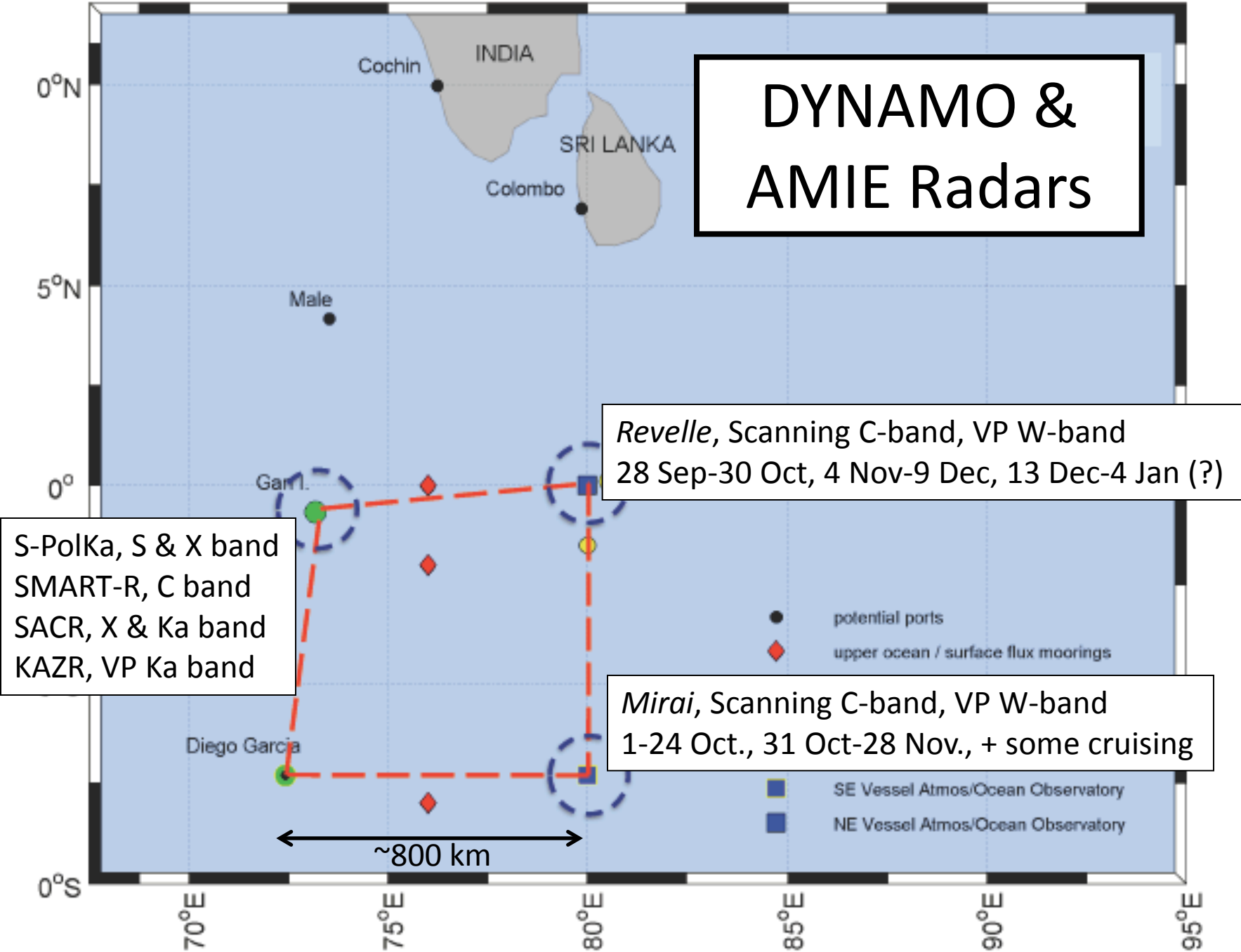
DYNAMO/AMIE Objective

- Determine the evolution of the cloud population and humidity field in the region where the MJO disturbance develops
- Do this with radar!

This has never been done!



DYNAMO & AMIE Radars



Island Radar "Supersite"

B Spit

SMART-R: 3-D PPI scanning,
precipitation & Doppler velocity

S Wharf

S-PolKa: PPI & RHI scanning for polarimetric
microphysics, Doppler, dual λ humidity & CLW
SACR: mixed scanning by PPI, BLRHI, zenith RHI,
for non-precipitating cu and anvils

A Airport

KAZR: VP Ka band for non-
precipitating clouds

Addu Atoll

4.28 mi

Imagery Dates: Jan 28, 2005 - Mar 5, 2005

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Data SIO, NOAA, U.S. Navy, NGA, GEBCO

lat -0.651142° lon 73.145890° elev -90 ft

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Eye alt 13.19 mi

Summary

Ship and island radars will determine the evolution of the cloud population and humidity field during the buildup of the initiating disturbance of the MJO

This effort links with the Manus part of AMIE, which will sample the MJO disturbance after it has been initiated over the Indian Ocean