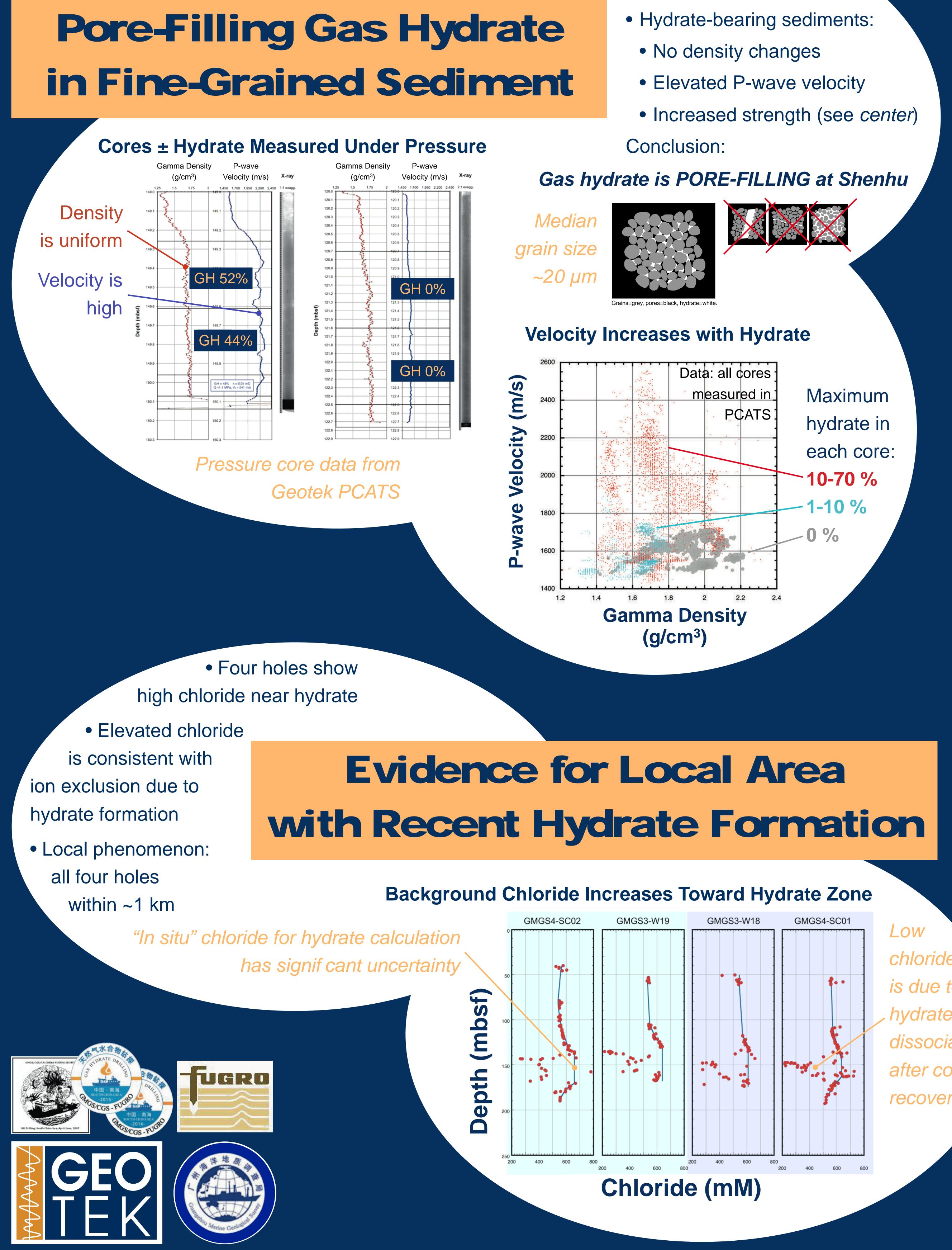
Concentrated Gas Hydrate in the Shenhu Area, South China Sea: Results From Drilling Expeditions GNGS 3 & GNGS 4

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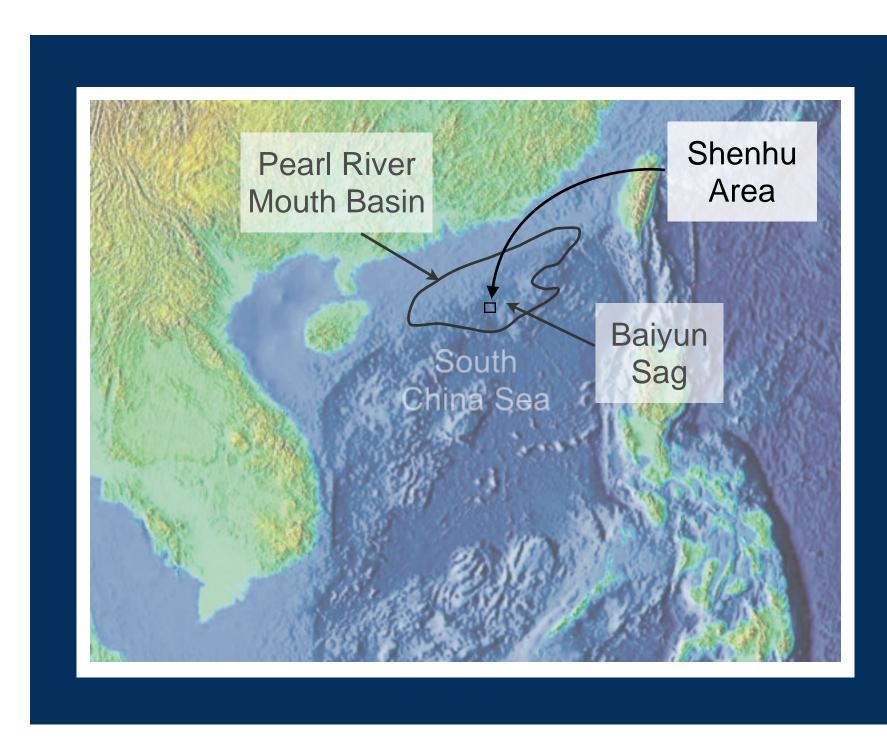
*melanie@geotek.co.uk

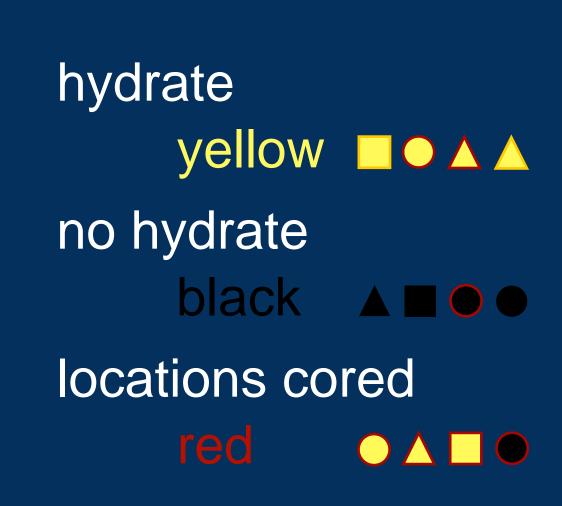


concentrated (25-70%)

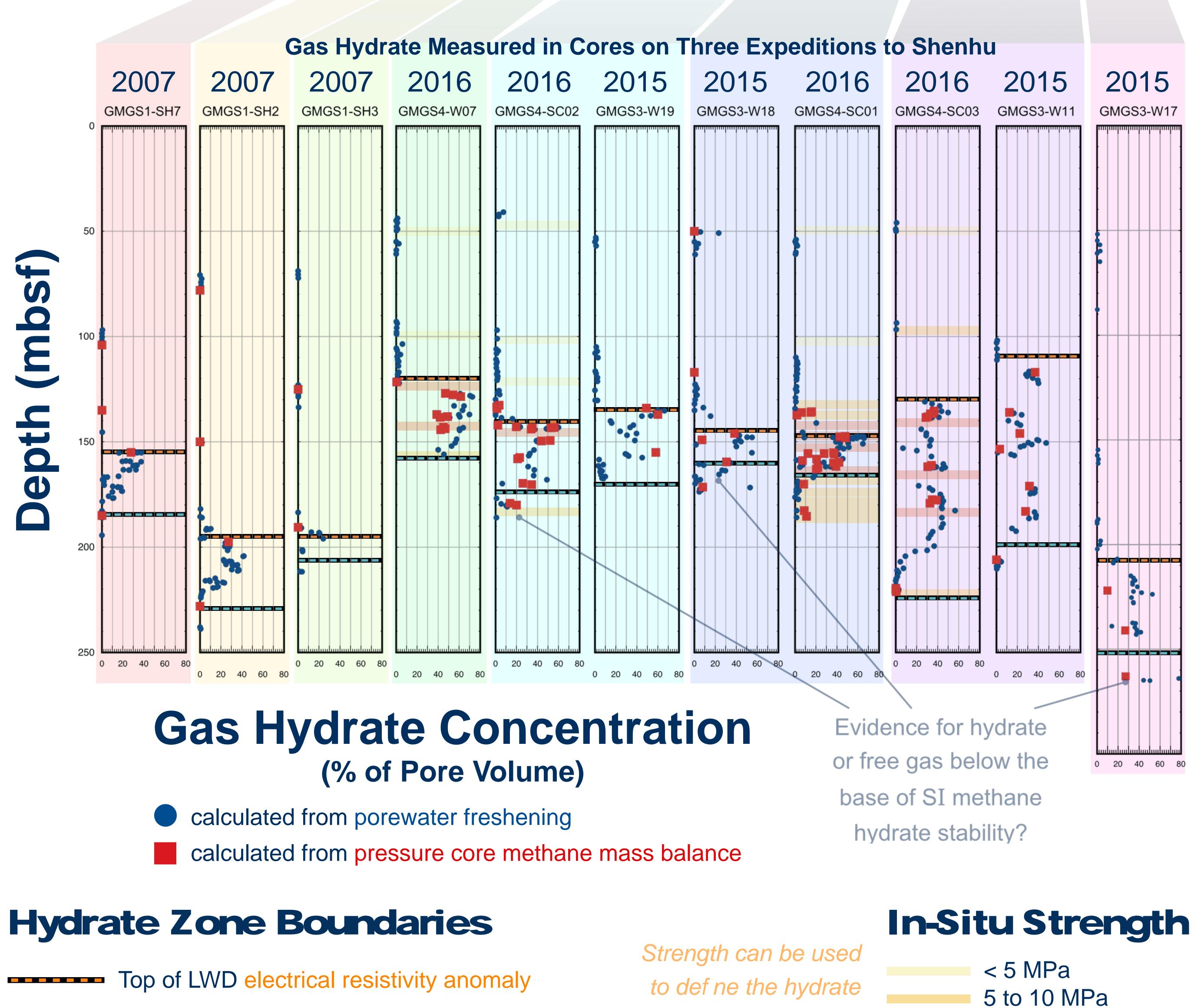
Hydrate is

cnioriae is due to recovery





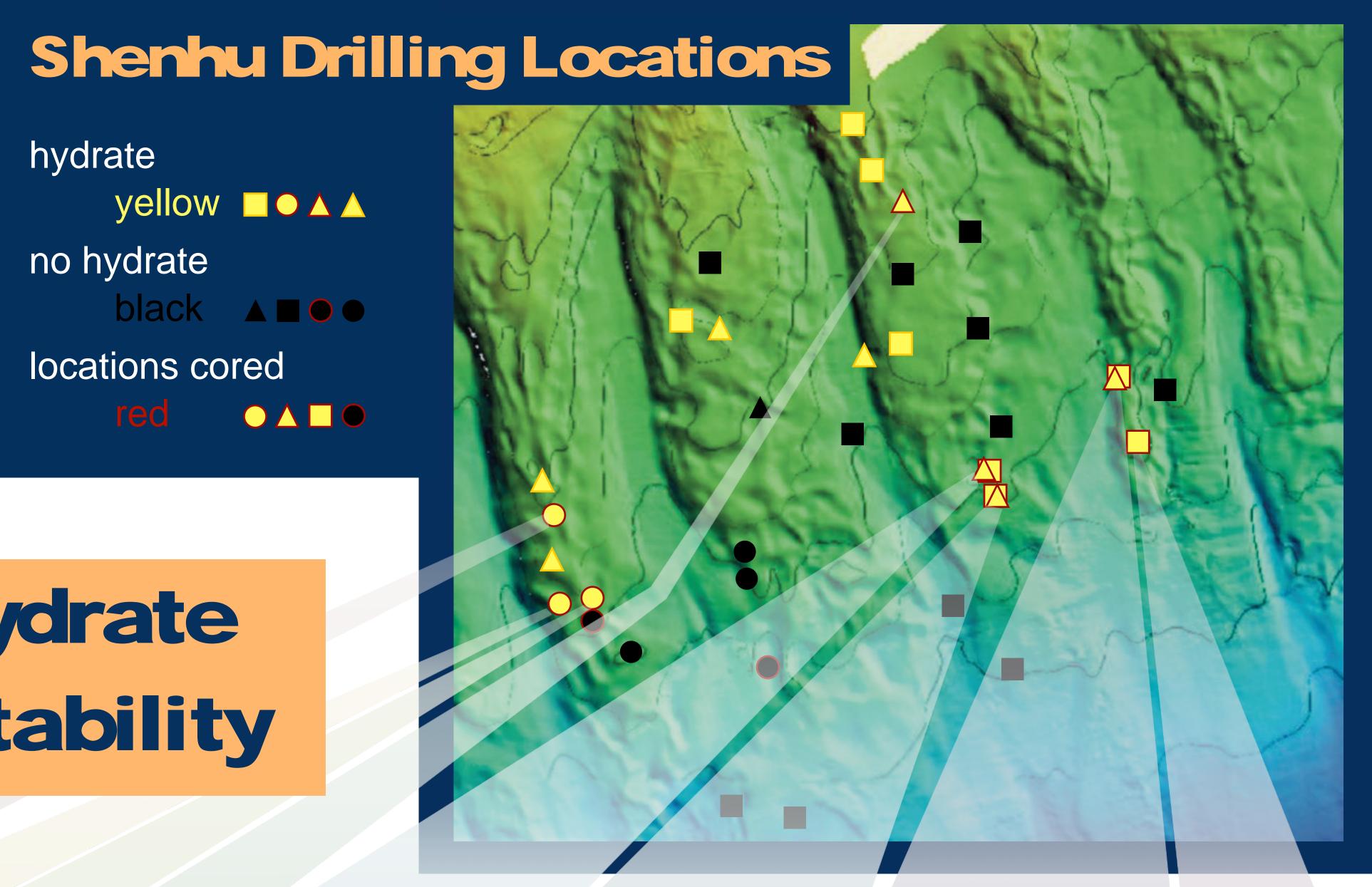
Thick Layers of Hydrate Atop the Base of Stability

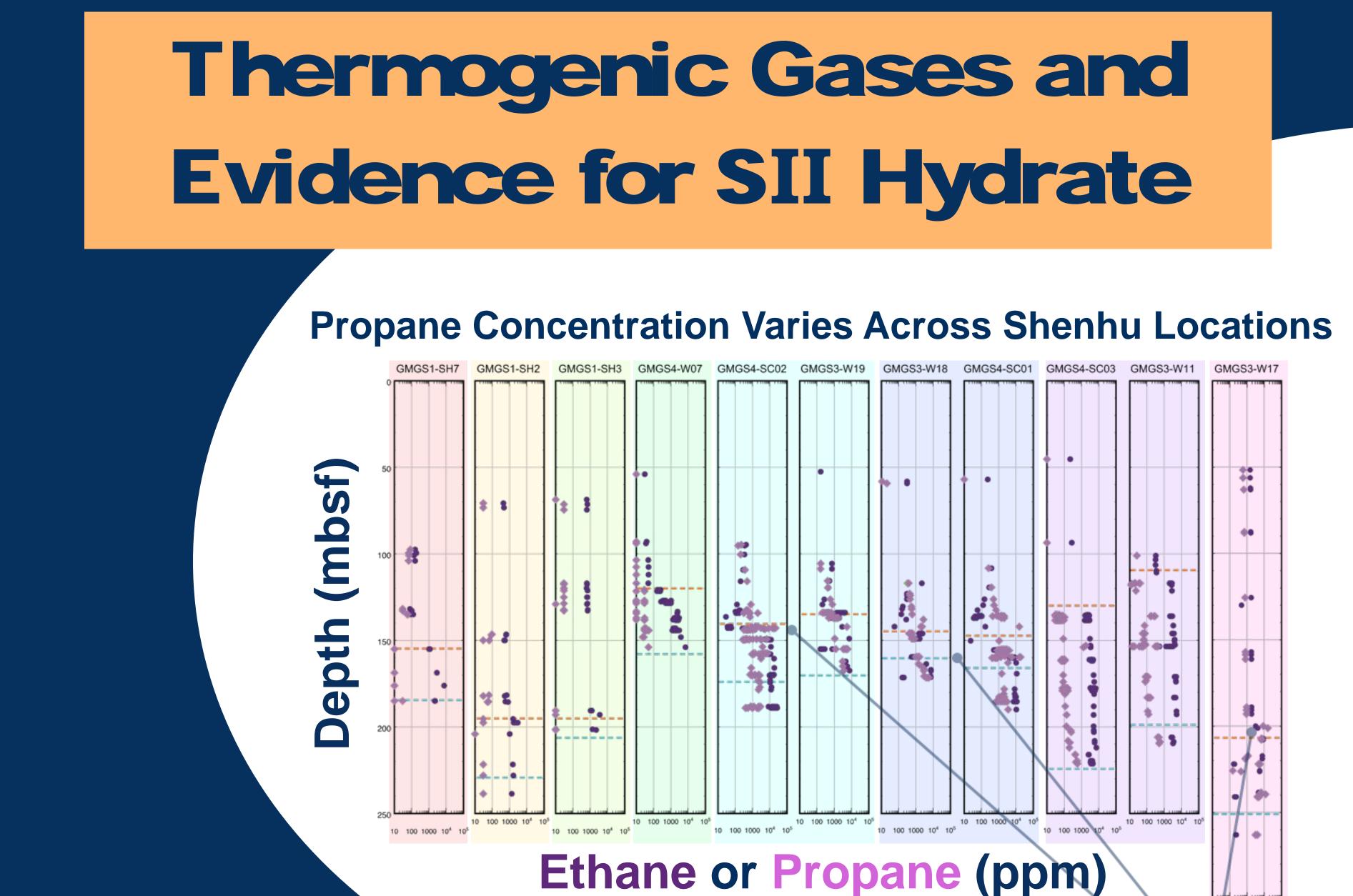


zone at Shenhu

> 10 MPa

Calculated base of SI methane hydrate stability





- Hydrate is concentrated (25-70%)
- Hydrate zone matches LWD logs (electrical resistivity, acoustic P-wave)
- Hydrate zone has a sharp top
- Hydrate zone ends at base of stability (SI CH₄) at most locations
- Hydrate-bearing sediments show increased strength

Low magnitude suppor pore-f lling morpholog

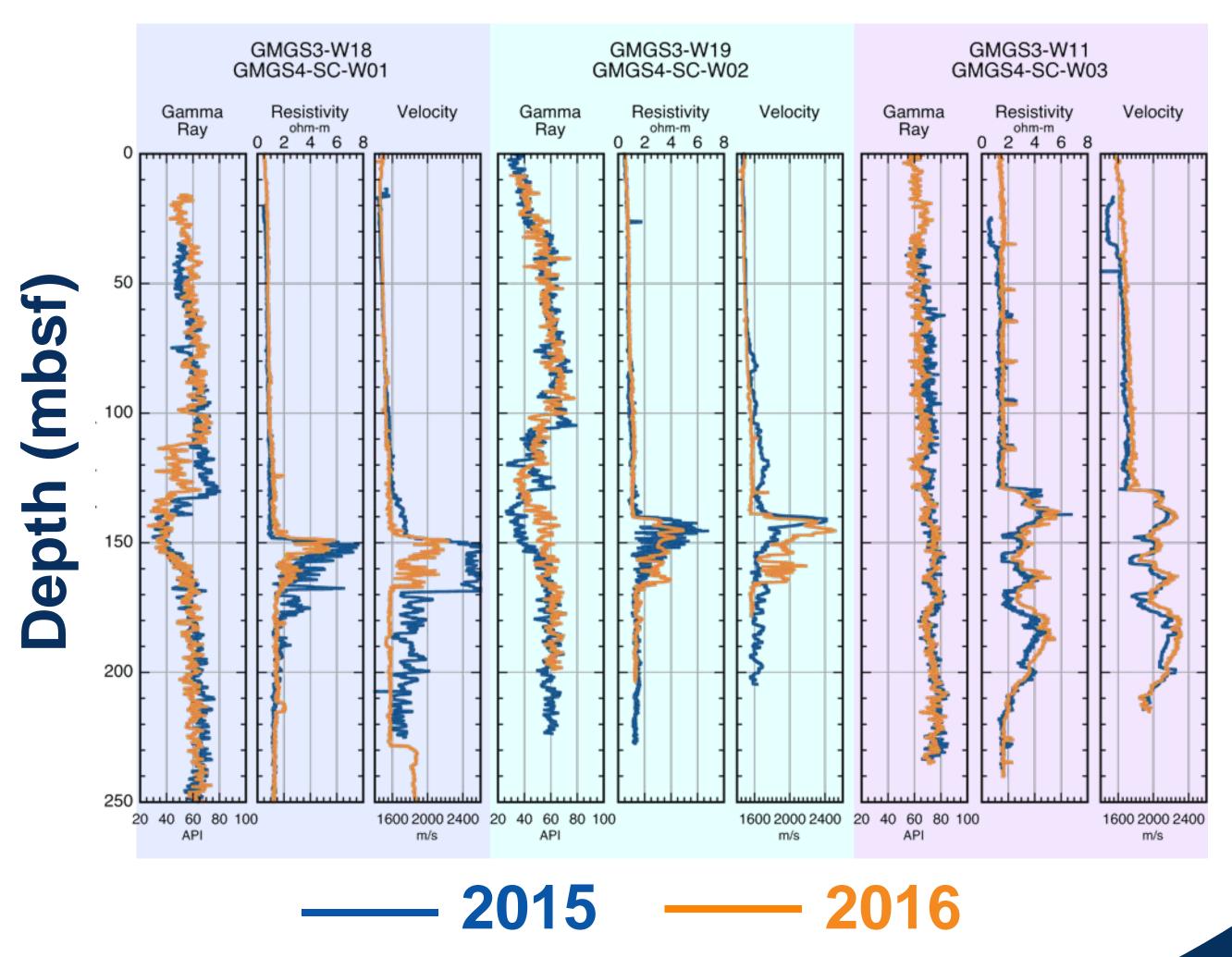
¹Guangzhou Marine Geological Survey, China; ²Geotek Ltd., United Kingdom

- Propane at three locations exceeds 1000 ppm
- possible SII methane-propane hydrate
- Same three locations show hydrate below the base of SI CH₄ hydrate stability (see *center*)
- two locations also show recent hydrate formation (see lower left)

Propane >1000 ppm; outane, isobutane, isopentane 100-1000 ppm

Laterally Continuous Hydrate Deposits

Logging-While-Drilling Data Comparison for Three Re-Occupied Sites



- Vertical offsets applied as required
- Prof les are similar to *extremely* similar

Many thanks to the crew of the D/V Fugro Voyager and the science parties of GMGS3 & GMGS4.