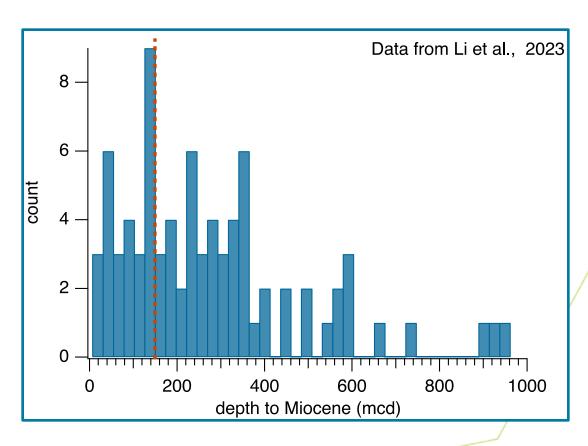
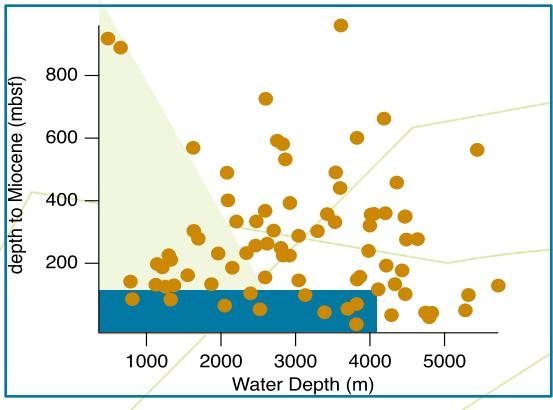
Contamination? Core diameter Speed of recovery? Continuous Core? Crustal coring Borehole observatories

Single vessel option

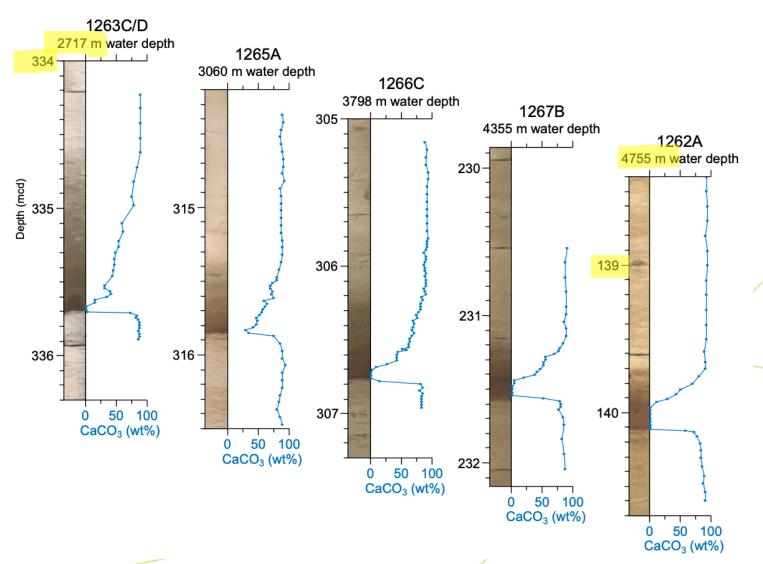
Given the menu of alternative platform options, what does a single vessel do
a) that cannot be done with alternative platforms or b) better than alternative platforms?

15 Ma mid-Miocene Climatic Optimum





Depth Transects



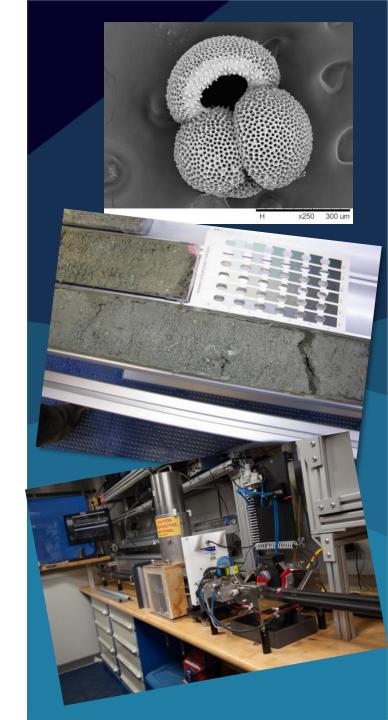
Programmatic coherence

Standard Measurements become Global Datasets

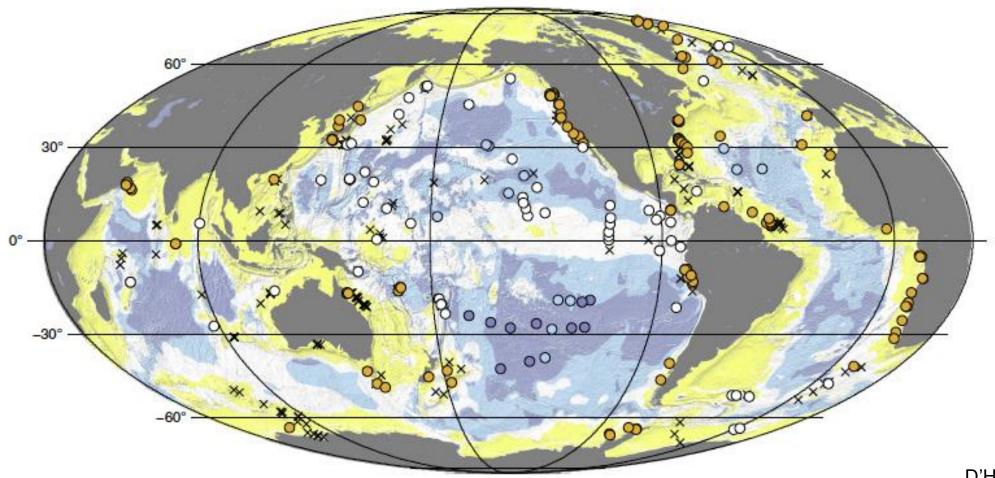
Ephemeral Measurements: Measurements or sampling of properties that degrade rapidly once on board the ship. (mBio sampling, alkalinity, salinity, pH...)

Minimum Measurements: Defined as measurements that shall be conducted in all boreholes and on all cores in IODP (biostratigraphic information, core description, density, magnetic susceptibility...)

Standard Measurements: Defined as standard measurements that shall, whenever practicable and appropriate, be carried out across all platforms and/or shore-based labs



Subseafloor distributions of oxygen and sulfate



Recovery after catastrophe

Immediate future

Determine areas of highest science priority for ocean drilling

5-7 year timescale

- Conceptual design for a new vessel, supported by community
- Shorebased laboratory facility that allows for continuity of data and instrument advancement/development
- Site surveys
- Proposal development
- Enabling infrastructure