

UNOLS and New Initiatives

- Ocean Exploration
- Ocean Observatories (in general)
- NEPTUNE (in Particular)

OcEx Panel' view

- Initiative should be multi-agency
- Coordinated through some NOPP type mechanism
- Use a variety of public and private assets (UNOLS ships, Navy/NOAA vessels, private contract ships, etc)

Signature Mission

- Pole-to-pole circumnavigation of globe
- Public outreach facilitated by a flagship
- Reconnaissance studies conducted in advance of flagship (e.g., mapping)
- Observatories established in wake of flagship (4-D explorations)

Flagship

- Flagship equipped for public outreach
- Likely to include deep submergence assets (ROVs, possibly HOV)
- Flagship could be UNOLS operated (converted existing or new asset) or a private leased vessel using an ODP-type structure

Ocean Observatories

- Community considering 3 general categories: cabled, “permanent”, movable
- Moored observatories will require approximately 2 weeks each of UNOLS ship time for servicing
- Likely that ROVs will be needed on at least some of the service vessels

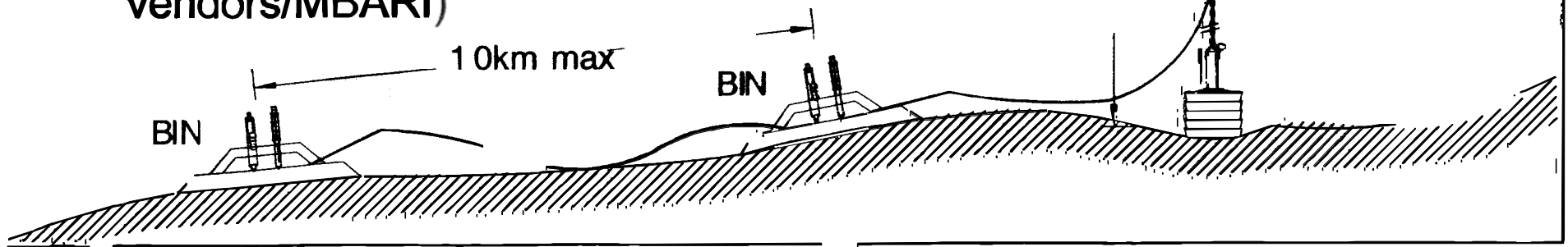
MOOS Mooring System

Design Studies Completed

- ◆ Dynamics Analysis (WHOI)
- ◆ DC 240-400 Volt power distribution concept
- ◆ Solar power baseline design concept
- ◆ Initial testing of seawater battery design
- ◆ Test mooring configuration

Design Studies Underway

- ◆ 100 Watt stage 2 power system
- ◆ Strain and bending relief design (WHOI/MBARI)
- ◆ Final design of riser cable (Cable vendors/MBARI)



NEPTUNE

- Focusing currently on Monterey proof-of-concept (MARS)
- MBARI wants to make *Ventana* ROV time available to non-MBARI investigators (e.g., via NURP?)
- Also important to get other ROVs involved in operations (Jason, ROPOS, etc.)