DESCEND 2016 : update

Meeting details

January 2016 at Harvard University







<u>Meeting details</u>

Report on three areas, with both short- and long-term goals:

- 1) Which existing technologies can be better deployed to help address the science questions
- 2) Are there existing technologies that are unavailable to the scientific community due to logistical or financial constraints (and how might we alleviate those constraints)
- 3) What new technologies are needed to address these long-standing science questions.

Some key overall conclusions

Technologies being developed outside the deep sea research community can offer solutions to long-standing problems.

Some key overall conclusions

Technology solutions to long-standing problems.

- Increased deployment and access to deep submergence vehicle
 - E.g. ROVs and AUVs for near-polar or polar research
 - Dedicated vehicles for forthcoming icebreakers
 - Increased usage of AUV-HOV combination for hypothesis-driven exploration
- Autonomous data collection when appropriate
- Computer-aided data analyses
- Higher-resolution models of deep sea processes
- Continue to push for advances in sensors (OTIC!)

Some key overall conclusions

Cultural changes would benefit deep sea research

- Break down cultural/funding stove-pipes !!
 - Inter-agency collaborations, NOAA, USGS, NSF, ONR
 - Fed. and NON-fed. collaboration, e.g. SOI and NSF
 - Broader engagement with commercial operations
- Improved standardization of and ACCESS todata archives
- Promote interactions with other communities, e.g. coastal investigators
- Coordinated efforts toward OPEN-ACCESS sensor development
- Increased emphasis on societal engagement

DESCEND 2016 REPORT WILL BE OPEN FOR COMMENT THIS WEEK:

Executive summary, detailed report and appendices await your input

Comments will be closed in early January, report to be made available on UNOLS website

WATCH FOR MORE INFO from UNOLS office