Replacement of UNOLS Fleet

	2008	2025 (Gray ships are NSF and Navy planned vessels)
Global Class		
Ocean Class		
Intermediate Class		
Regional Class		
Regional/ Coastal Class		
Local Class		
Total Ships	23	14
Total Berths	492	331
Available Ship Days	5085	3270

Retirement UNOLS Fleet
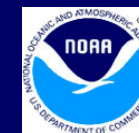
SHIP/CLASS	BUILT	Conv/ Mid Life	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Global Class																	
Melville	1969	1991	----	----	----	----	----	----	--X								
Knorr	1970	1989	----	----	----	----	----	----	----	--X							
Thomas G. Thompson	1991		----	----	----	----	----	----	----	----	----	----	----	----	----	--X	
Roger Revelle	1996		----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Atlantis	1997		----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Marcus G. Langseth	1991	2007	>---	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Ocean Class																	
Kilo Moana	2002		----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Intermediate Class																	
Seward Johnson	1985	1994	----	----	----	----	----	----	----	--X							
Wecoma *	1976	1994	----	----	--X												
Endeavor *	1976	1993	----	----	--X												
Oceanus *	1976	1994	----	----	--X												
New Horizon	1978	1996	----	----	----	----	----	----	----	--X							

Future UNOLS Fleet

SHIP/CLASS*	BUILT/Conv	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Global Class																			
Melville	1969	▓	▓	▓	▓	▓	▓	▓											
Knorr	1970	▓	▓	▓	▓	▓	▓												
Thomas G. Thompson	1991	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓			
Roger Revelle	1996	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓
Atlantis (Submersible Support Ship)	1997	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓
Marcus G. Langseth (Seismic Ship)	2008	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓	▓
Total Global Ships		6	6	6	6	6	6	6	5	4	4	4	4	4	4	3	3	3	3
Ocean Class																			
Kilo Moana	2002	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
ARRV	2014							█	█	█	█	█	█	█	█	█	█	█	█
OC #1	2014							█	█	█	█	█	█	█	█	█	█	█	█
OC #2	2015								█	█	█	█	█	█	█	█	█	█	█
Total Ocean Ships		1	1	1	1	1	1	3	4	4	4	4	4	4	4	4	4	4	4
Intermediate Class																			
Seward Johnson	1985	▒	▒	▒	▒	▒	▒	▒											
*Wecoma**	1976	▒	▒	▒															
*Endeavor**	1976	▒	▒	▒															
*Oceanus**	1976	▒	▒	▒															
New Horizon	1978	▒	▒	▒	▒	▒	▒	▒											
Total All UNOLS Ships		**23**	**22**	**22**	**19**	**17**	**18**	**18**	**19**	**15**	**15**	**15**	**15**	**15**	**15**	**14**	**14**	**14**	**14**

* Ships approaching the end of their projected service life will be evaluated to assess their condition.
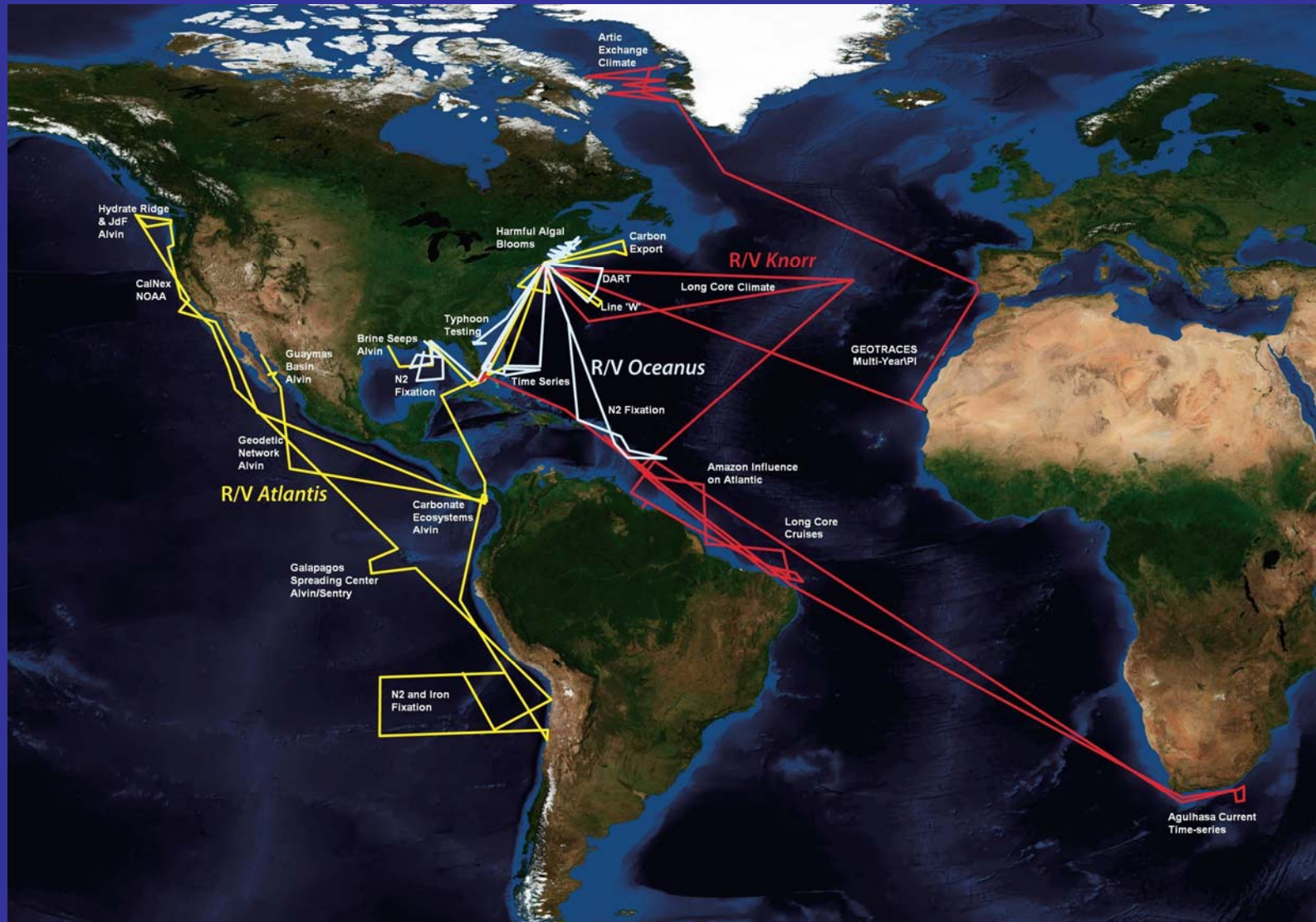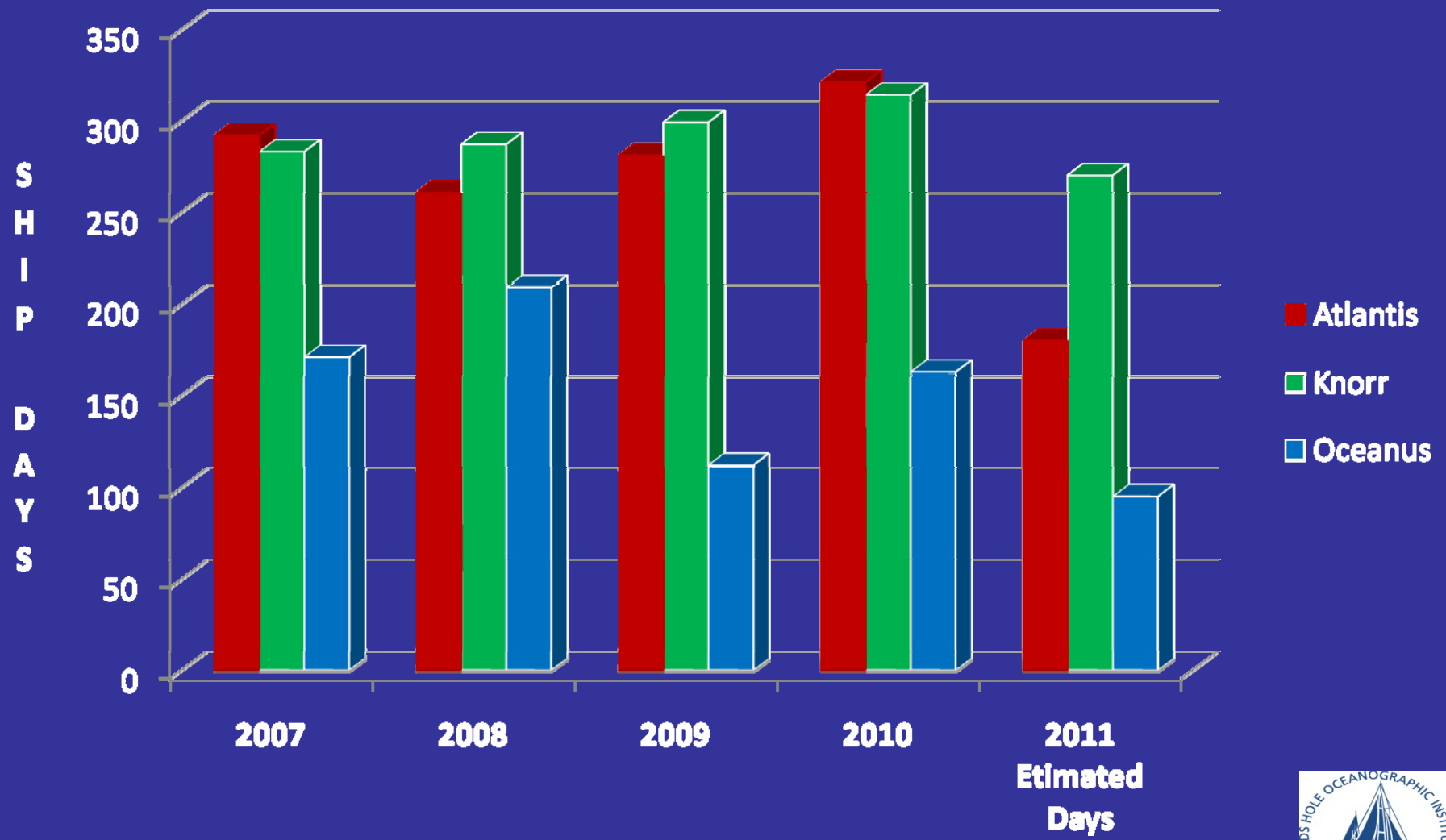
Evolution of UNOLS Fleet
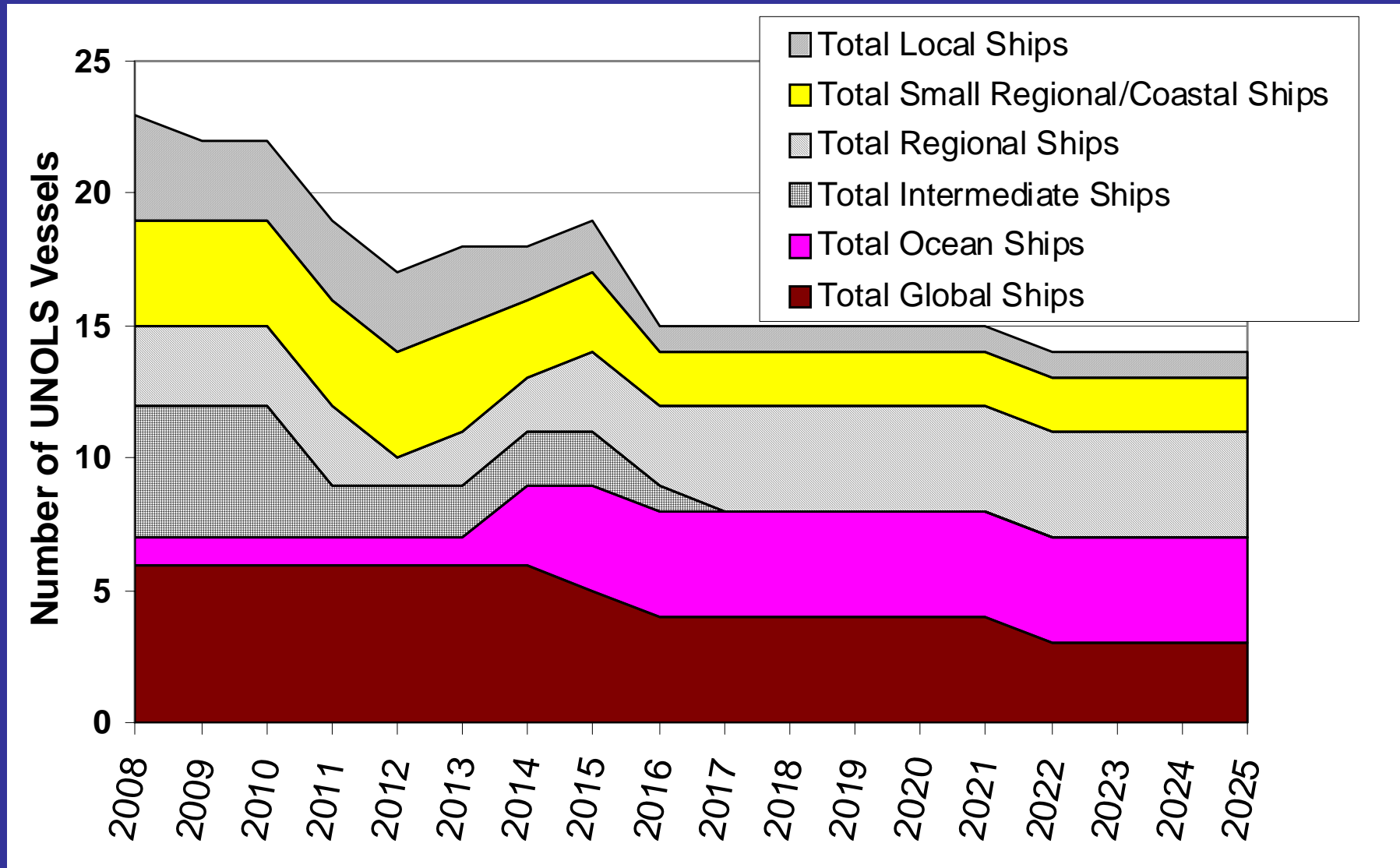
WHOI Vessels

WHOI Vessel Utilization   2007 - 2011

- US Navy (ONR) will build two new oceanographic research vessels following AARV model
- "Ocean" class = ~220 feet, 40 day endurance, 25 scientists
- WHOI (27) and Scripps (28)
- Procurement is for construction support, operation and maintenance
- Operations to begin 2014
- Will likely accelerate retirement of *Knorr*, *Oceanus* and *Melville*
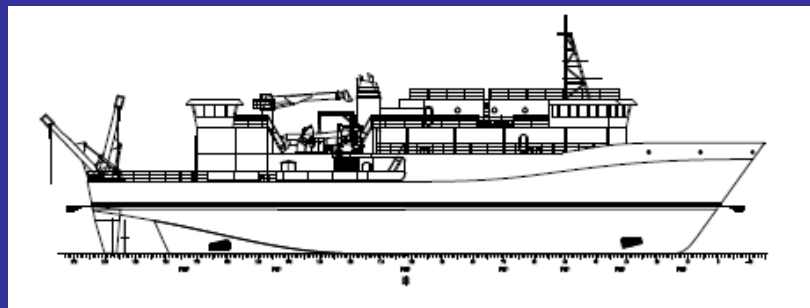
Fleet

- Age
- Utilization
- Mission
- Bandwidth
- Cost
- Coordination with NOAA

Vehicles

- Utilization
- *Alvin/Sentry*
- *Alvin* Transition
- Science missions and OOI
- Upgrades and next generation