## Multibeam Status

Dale Chayes Lamont Research Engineer Instrument Lab Lamont-Doherty Earth Observatory of Columbia University

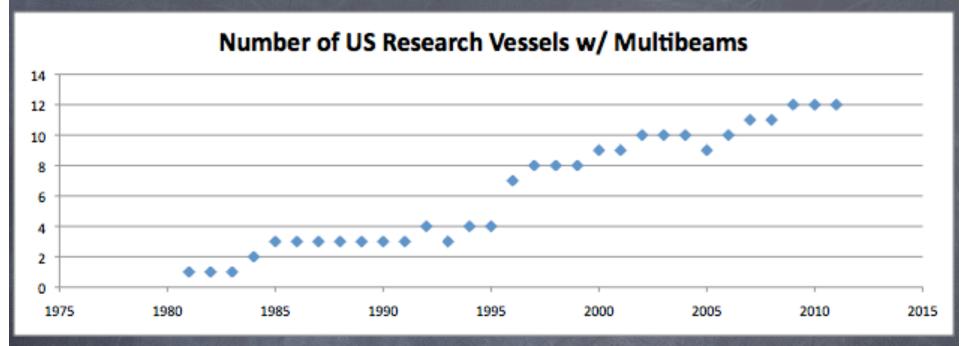
> UNOLS RVTEC Meeting New Orleans November 15, 2011

## Goals (ideas) (from 2009 discussion)

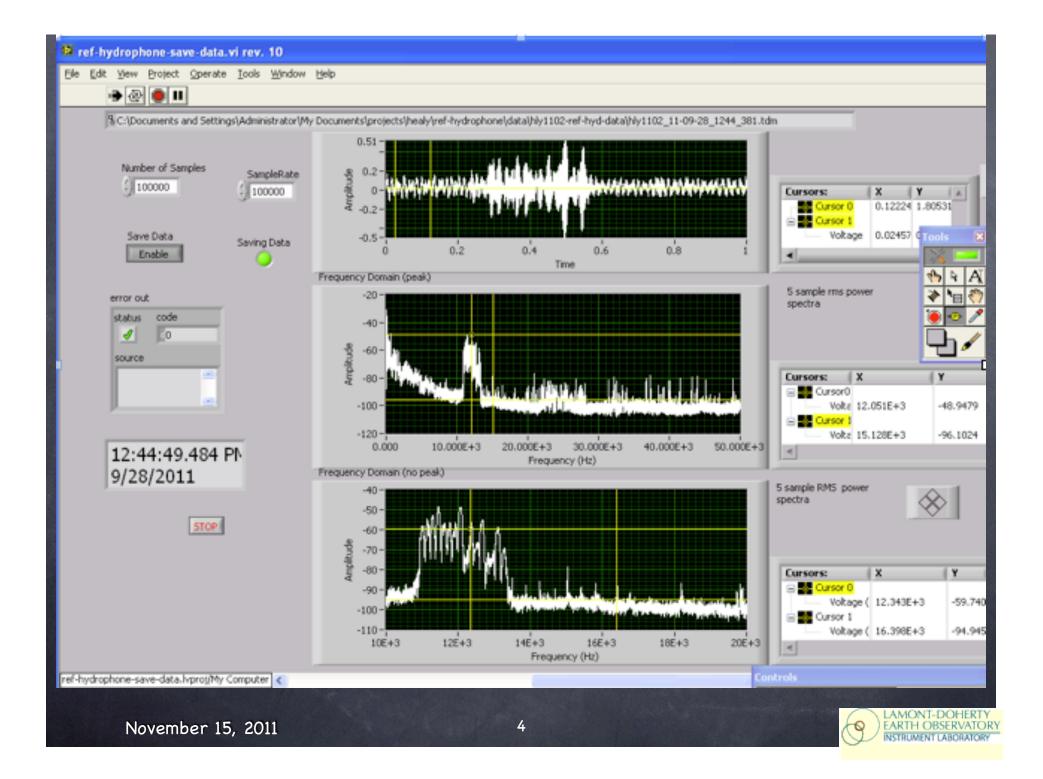
Improve quality of data
Improve quantity of data per year
Stabilize maintenance costs

13 words (meeting Marc's challenge of explaining "it" in less than 25 words)





	1980	1001	1000	1002	1004	1005	1000	1007	1000	1000	1000	1001	1000	1002	1004	1005	1006	1007	1000	1000	2000	2001	2002	2002	2004	2005	2006	2007	2000	2000	2010	2011	2011
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1992	1990	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Blue Heron																																	
Okeanos Explorer																														x	x	x	
Langseth																												x	x	x	x	x	
Sharp																											х	x	x	x	x	x	
Kilo Moana											n												х	х	х	x	х	x	х	х	x	х	
Healy											÷										x	x	x	x	x	x	х	x	x	x	x	х	
Brown																		x	x	x	x	x	x	x	х	x	х	x	x	x	x	x	
Knorr																	х	x	x	x	x	x	x	x	x	x	х	x	x	x	x	x	
Thompson																	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Revelle																	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
КОК																x	x	x	x	x	×	x	×	×	×	×	x	×	×	x	x	x	
Palmer															x	x	Ŷ	x	x	x	Ŷ	x	Ŷ	Ŷ	Ŷ	Ŷ	Ŷ	Ŷ	Ŷ	x	x	x	
Melville													x	x	x	÷	÷	x	x	x	x	x	x	x	÷	x	x	x	x	x	x	x	
Ewing											v	x	x	÷	x	x	÷	x	x	x	x	x		x	x	^	^	^	^	<u>^</u>	^	^	
Atlantis II											X	×	×	×			~			~		~	x	*									
						x	x	x	x	x	x	x	x	x	х																		
Conrad					x	x	x	x	x	x																							
Washington		x	x	x	x	x	x	x	x	x	x	x	x																				
Totals		1	1	1	2	3	3	3	3	3	3	3	4	3	4	4	7	8	8	8	9	<b>9</b>	10	10	10	9	10	11	11	12	12	12	



Ship	MB POC	Manufacturer	Model	Status	Installed	Accepted
Atlantis	Dave Fisichella	SeaBeam	SB2112	Removed		
Atlantis	Dave Fisichella	Kongsberg	EM122	Operational	2011-02	2011-06
Blue Heron	Nigel Wattrus	Reson	SeaBat 7101	Operational	2010-5	?
Healy	Scott Hiller	Kongsberg	EM122	Operational	2010-02-01	2010-06-01
James Clark Ross		Kongsberg	EM120	Operational	2000	
James Cook		Kongsberg	EM122	Operational		
James Cook		Kongsberg	EM710	Operational		
Ka`imikai-o-Kanaloa	Dan Fitzgerald	SeaBeam	SB3012	Operational		
Kilo Moana	Dan Fitzgerald	Kongsberg	EM122	Operational	2002	
Kilo Moana	Dan Fitzgerald	Kongsberg	EM1002	Operational	2000	
Knorr	Dave Fisichella	SeaBeam	SB3012-P1	Operational		
Langseth	Jeff Rupert	Kongsberg	EM122	Operational	2006-06	2009-01
Melville	Woody Sutherland	Kongsberg	EM122	Operational		
Oden	Martin Jakobsson	Kongsberg	EM122	Operational		
Okeanos Explorer		Kongsberg	EM302	Operaional		
Palmer	Scott Walker	Kongsberg	EM120	Operational	2002-11	
Revelle	Woody Sutherland	Kongsberg	EM122	Operational	2000	
Ron Brown		Kongsberg	EM122	Operational	2010	
Sharp	Brian Kidd	Reson	SeaBat 8101	Operational		
Sharp	Tim Deering	Reson	SeaBat 7101	Proposed upgrade		
Sikuliaq	Steve Hartz	Kongsberg	EM710	Planned		
Sikuliaq	Steve Hartz	Kongsberg	EM302	Planned		
Thompson	Jim Postel	Kongsberg	EM302	Operational	2010-10-1	2010-10-20
Thompson	Jim Postel	Atlas	Hydrosweep DS	Scheduled removal		

http://www.ldeo.columbia.edu/~dale/projects/multibeam-support/



## Known/emerging issues

The cheapest way to get the high quality data is to design and execute installations right the first time and support them well

- NSF funded Multibeam Advisory Committee
- Atlantis SB2112 -> EM122
- KM transducer issues
- Healy: SIS workstation graphics cards



## Questions?

Dale Chayes dale@ldeo.columbia.edu

November 15, 2011



7