

Shore-based Data Analysis Plan For NSF-OCE 0636439 and 0732761, “SGER:Detailed Lava Surface Age Map and Pre-eruptive Magma Aging for the 2005-6 Volcanic Eruption at 9° 46’-9° 56’N EPR”, PI, Ken Rubin, 7/1/2007 thru 5/31/2009

Anticipated Data Products:

- High resolution 210Po-210Pb eruption ages of lava samples (16 to 18 samples)
- 210Pb-226Ra data on lava samples with which to pre-eruptive constrain magma chamber residence times

Specific types of analyses expected to be done on each sample or with each data set.

- 210Po, 210Pb on all samples.
- 226Ra activities on 12 samples (see “other U-series” in the table below).
- Also, 230Th, 234U, 238U activities are being measured on those same 12.

The samples are listed below, along with preliminary age results, which were previously submitted to the DMO

sample	expedition	collecti on year	collected by	region	<2yrs old?	Other U- series
4205-5	AT15-06	2006	Alvin	southerly, near A-vent	yes	X
4205-6	AT15-06	2006	Alvin	Southerly, south of U-vent	yes	X
4282-2	AT15-13	2006	Alvin	southerly	yes	X
D48a	KN182-13	2006	dredge	just south of bullseye	yes	
D48B	KN182-13	2006	dredge	just south of bullseye	uncertain	
J268-06	AT15-17	2007	Jason	OBS 206 site	yes	
4206-2	AT15-06	2006	Alvin	bullseye, near bio9	yes	X
6nh-tc4-1r1	TCS06NH	2006	Camera sled	bullseye	no	
4203-2	AT15-06	2006	Alvin	bullseye, near P-vent	yes	X
J268-01	AT15-17	2007	Jason	OBS 212 site	yes	
4202-6	AT15-06	2006	Alvin	bullseye, Q-vent	yes	X
4202-4	AT15-06	2006	Alvin	bullseye, M-vent	yes	X
4204-2	AT15-06	2006	Alvin	north, on axis	yes	X
4204-4b	AT15-06	2006	Alvin	north, off axis	yes	X
4204-5	AT15-06	2006	Alvin	north, off axis	yes	X
4204-8	AT15-06	2006	Alvin	north, off axis	yes	X
D1a	TCS06NH	2006	dredge	north, off axis	yes	
4296-2	AT15-14	2006	Alvin	north, off axis	yes	X

Sample requests

Can be submitted to Ken Rubin (krubin@hawaii.edu) or Mike Perfit (perfit@geology.ufl.edu)

Expected Data Delivery Date for outstanding derived data:

“Final” 210Po ages: June 2009; other data: July-Aug 2009. Post-doc currently working on data. Preliminary results were presented at the [EPR workshop](#) in Fall 2008.