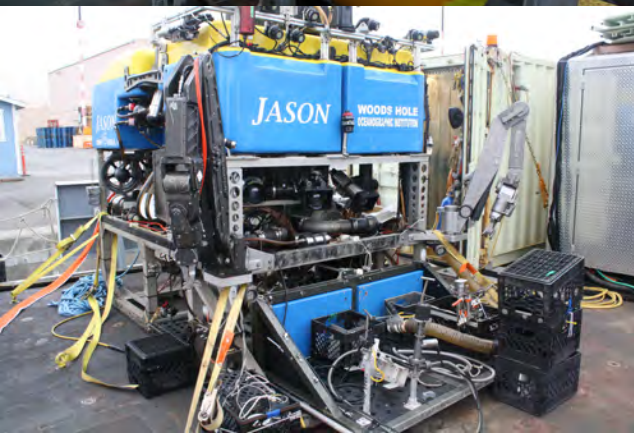
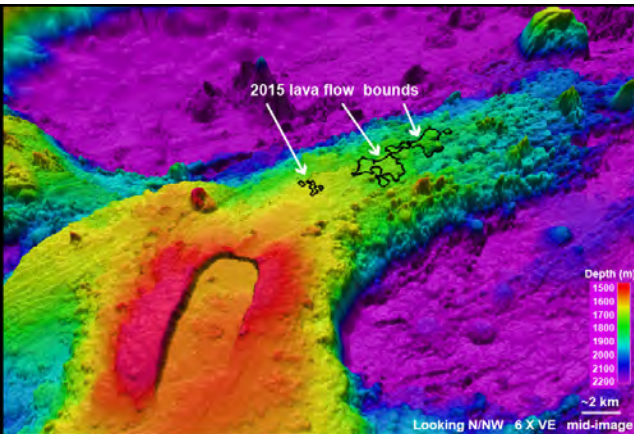


Axial 2015 Expedition (TN327) – Axial Seamount

R/V Thompson – August 14-29, 2015
Seattle-Seattle

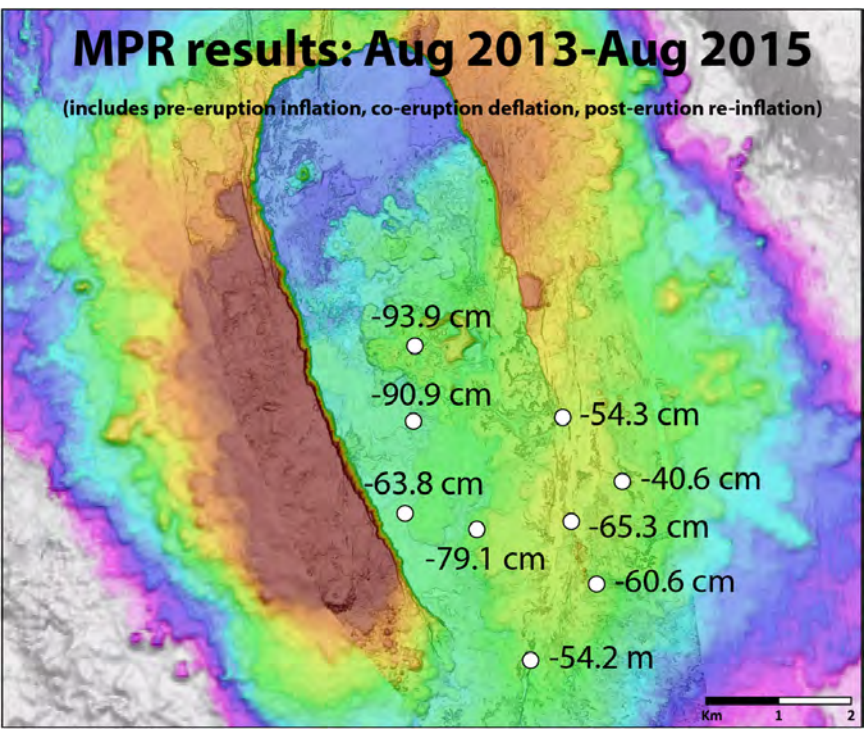
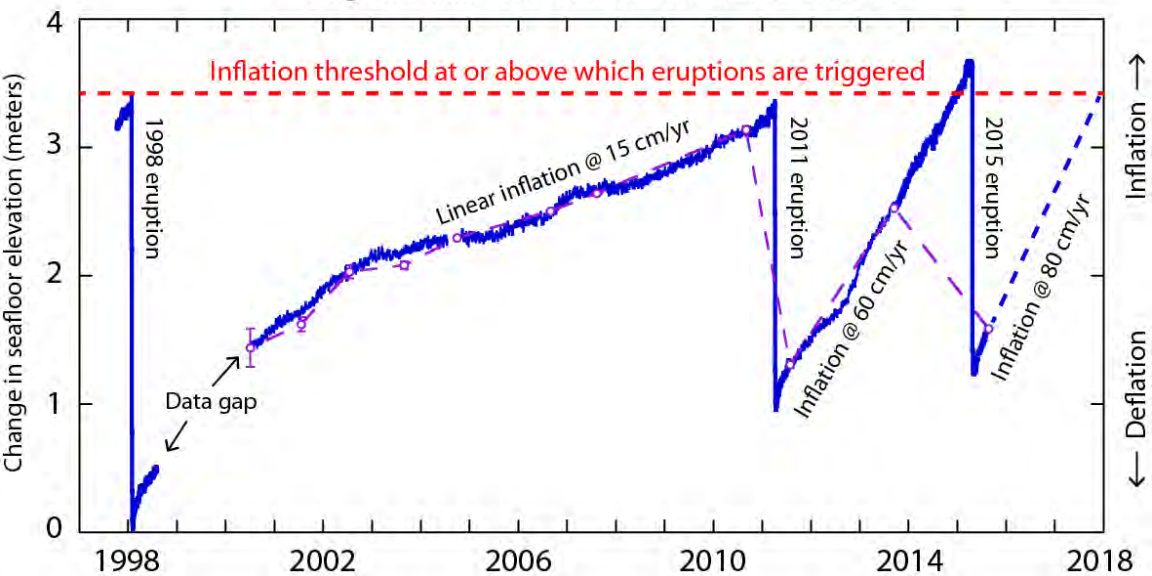
Main goals using Jason & Sentry:

- Inflation/deflation time-series monitoring (Nooner/Chadwick; Funding from NSF)
- Time-series fluid and microbial sampling (Butterfield/Holden/Huber: Funding from NOAA-PMEL & Moore Foundation)
- Response to April 2015 eruption (All PIs: Funding from NSF-RAPID & NOAA-PMEL)
- 6 ROV Jason dives
- 6 AUV Sentry dives
- CTD casts/tows, mooring turn-arounds



See Nooner et al. poster OS43A-2015

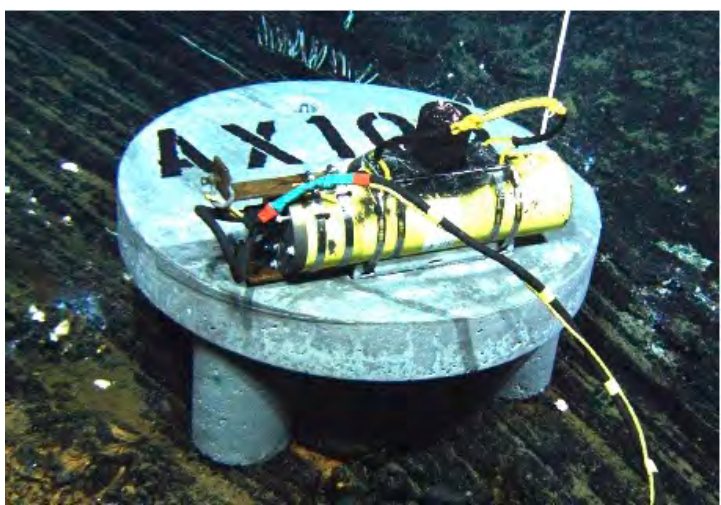
Long-term inflation/deflation record in Axial caldera



BPR = Bottom Pressure Recorder



MPR = Mobile Pressure Recorder



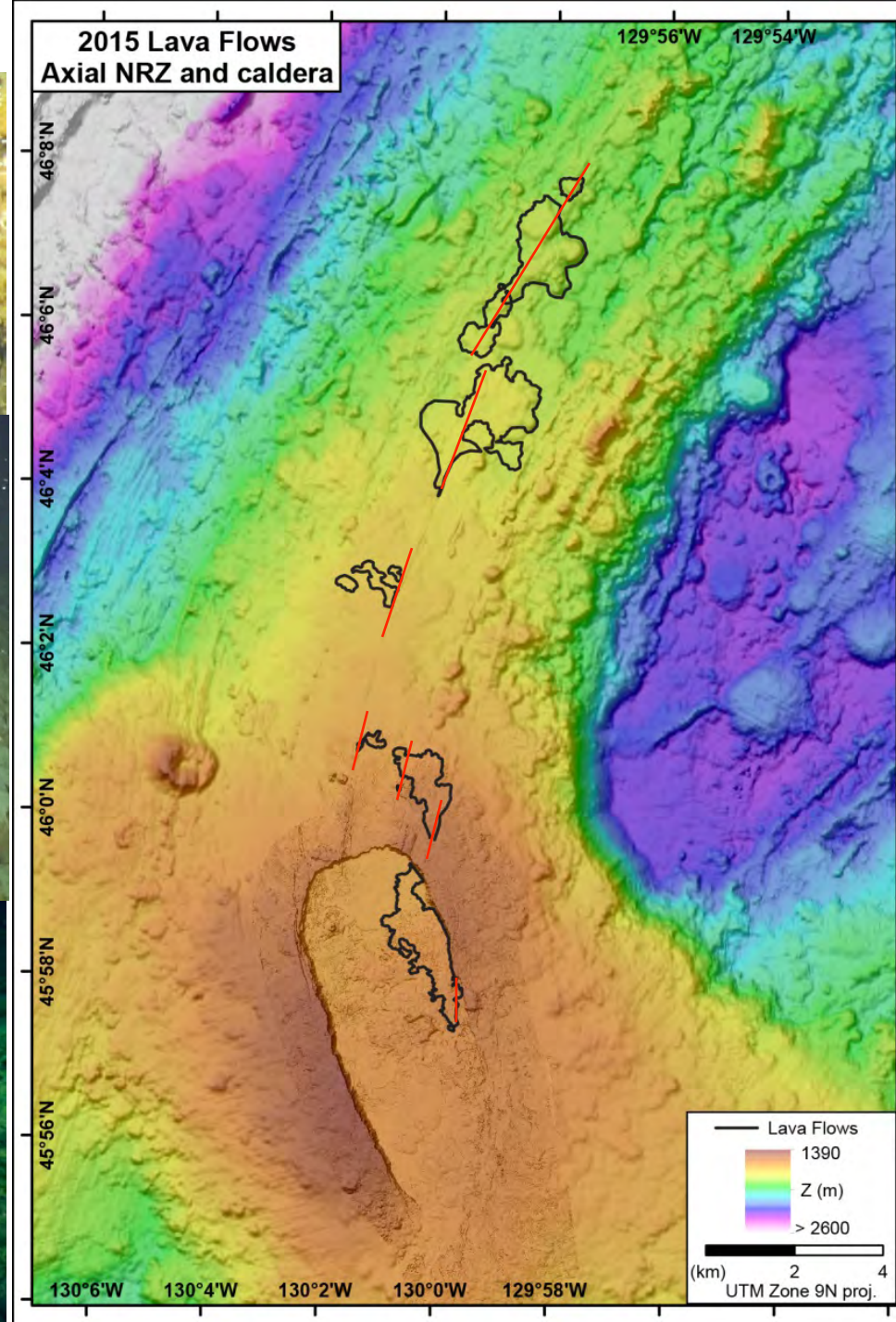
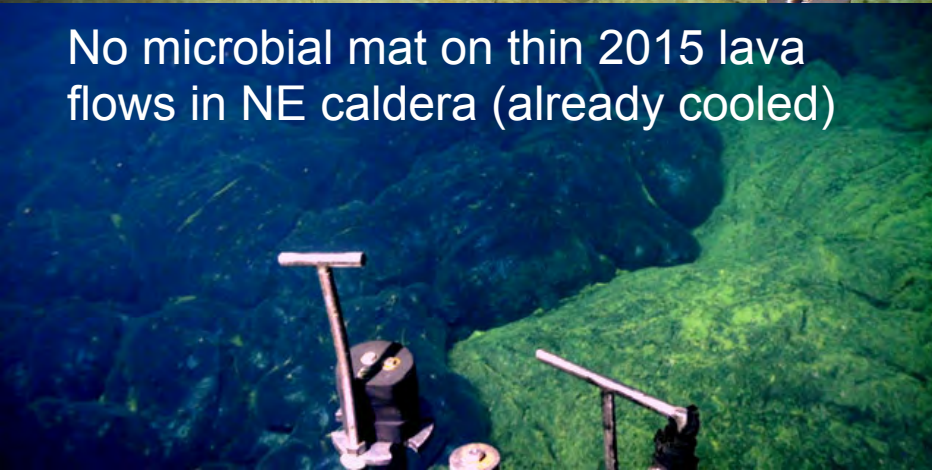
Tubeworms colonized vents on 2015 lava



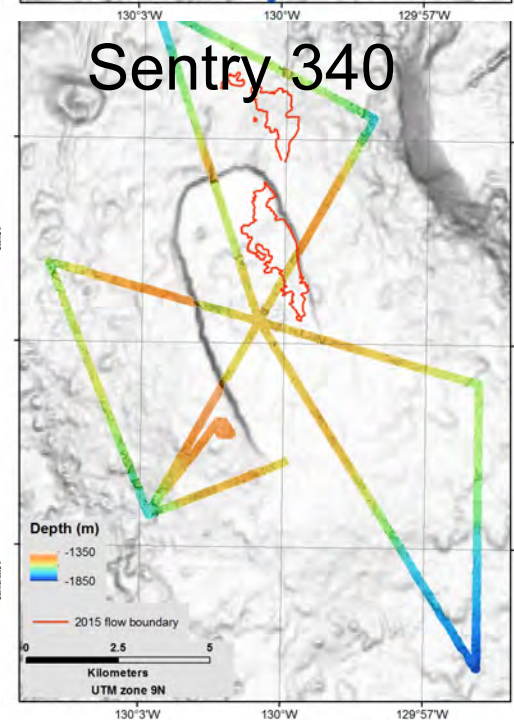
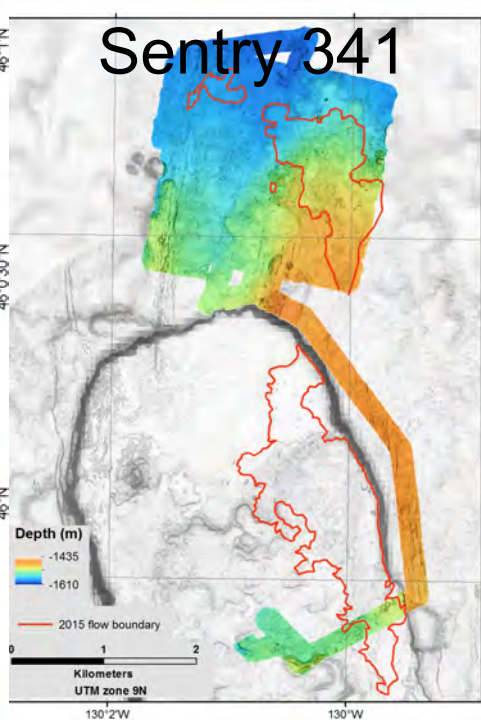
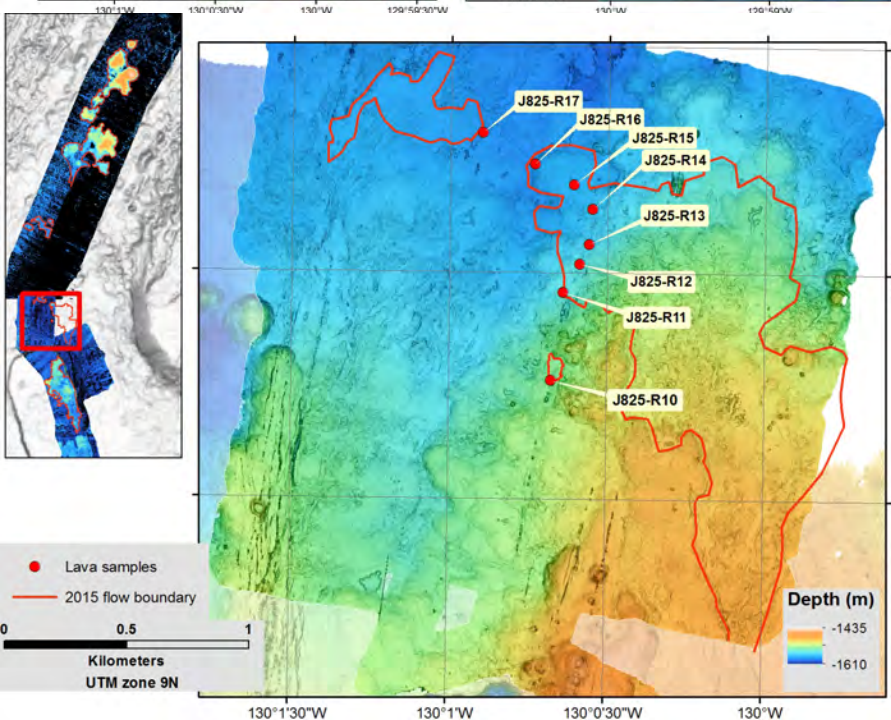
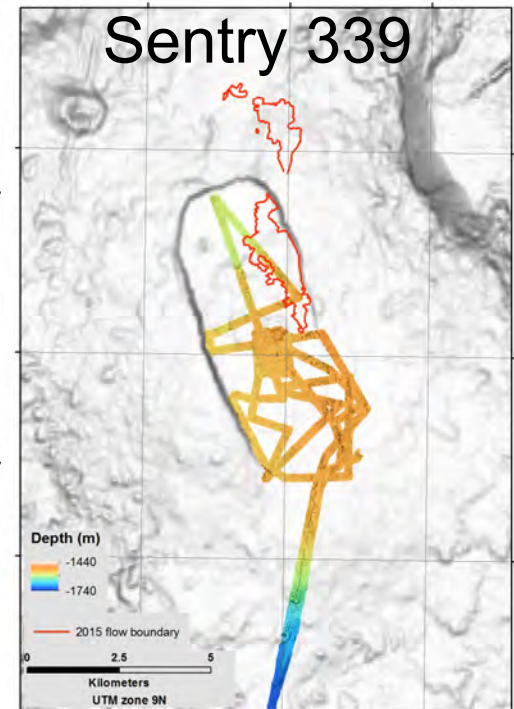
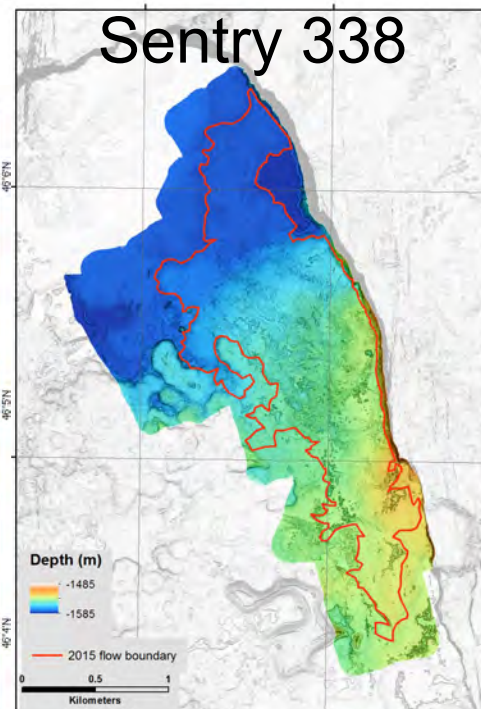
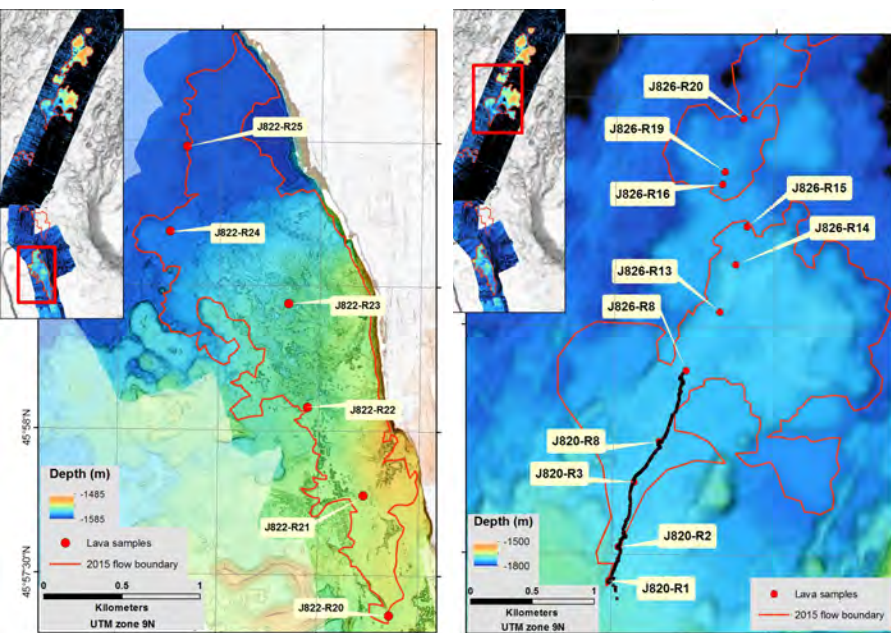
Thick microbial mat on thickest 2015 lava flows on NRZ (still cooling)



No microbial mat on thin 2015 lava flows in NE caldera (already cooled)



Lava samples & Sentry dives



Axial Seamount Expedition 2015

R/V Thompson | ROV Jason and AUV Sentry | Seattle-Seattle, August 14-29

Cruise Success

Saturday August 29, 2015

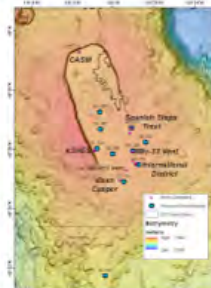
By Rachel Teasdale



Axial Seamount 2015 Expedition video summary of the highlights and results from the expedition. Video by Jesse Crowell in association with Saskia Madlener at 77th Parallel Productions. Music: "Arboles by Podington Bear, https://freemusicarchive.org/music/Podington_Bear/Encouraging/Arboles"

Cruise Success!

As the Axial Seamount 2015 Expedition comes to an end, the science team aboard the R/V Thompson is thrilled with the extensive work completed since departing Seattle on August 14. Chief Scientist Bill Chadwick was able to work around the three days of bad weather that prevented the launch of ROV Jason and AUV Sentry, and with creative rescheduling, efficient ROV Jason and AUV Sentry operations and flexibility of the R/V Thompson crew we were



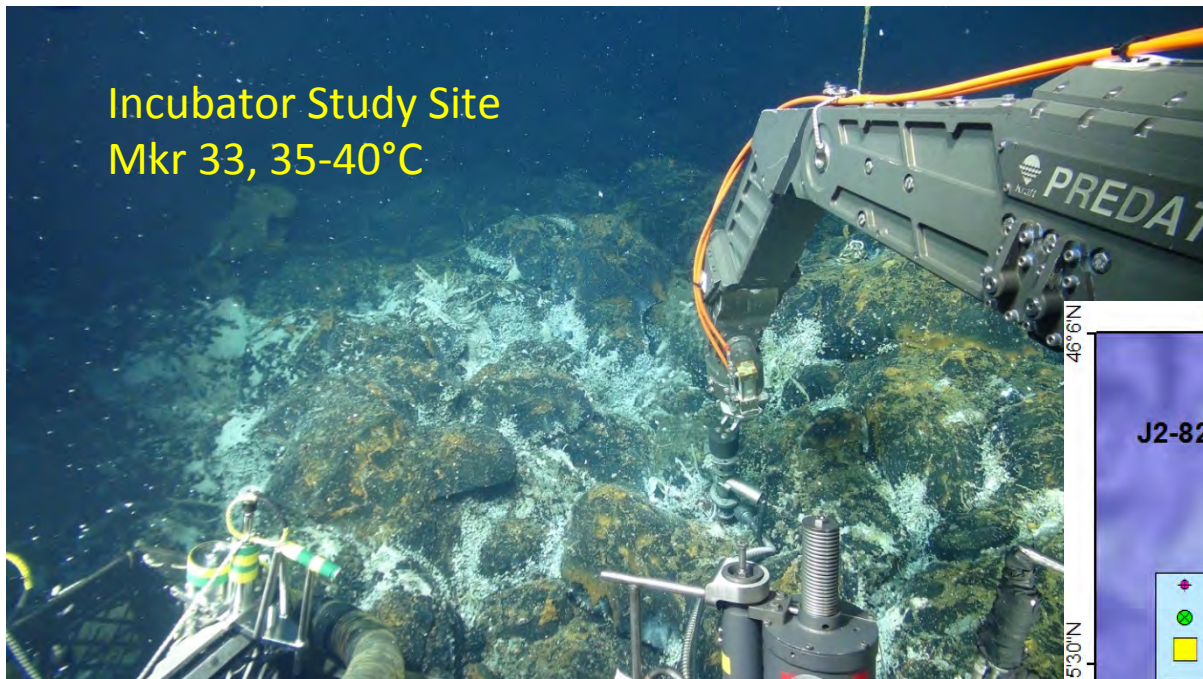
POSTINGS FROM SEA

▼ 2015 (24)

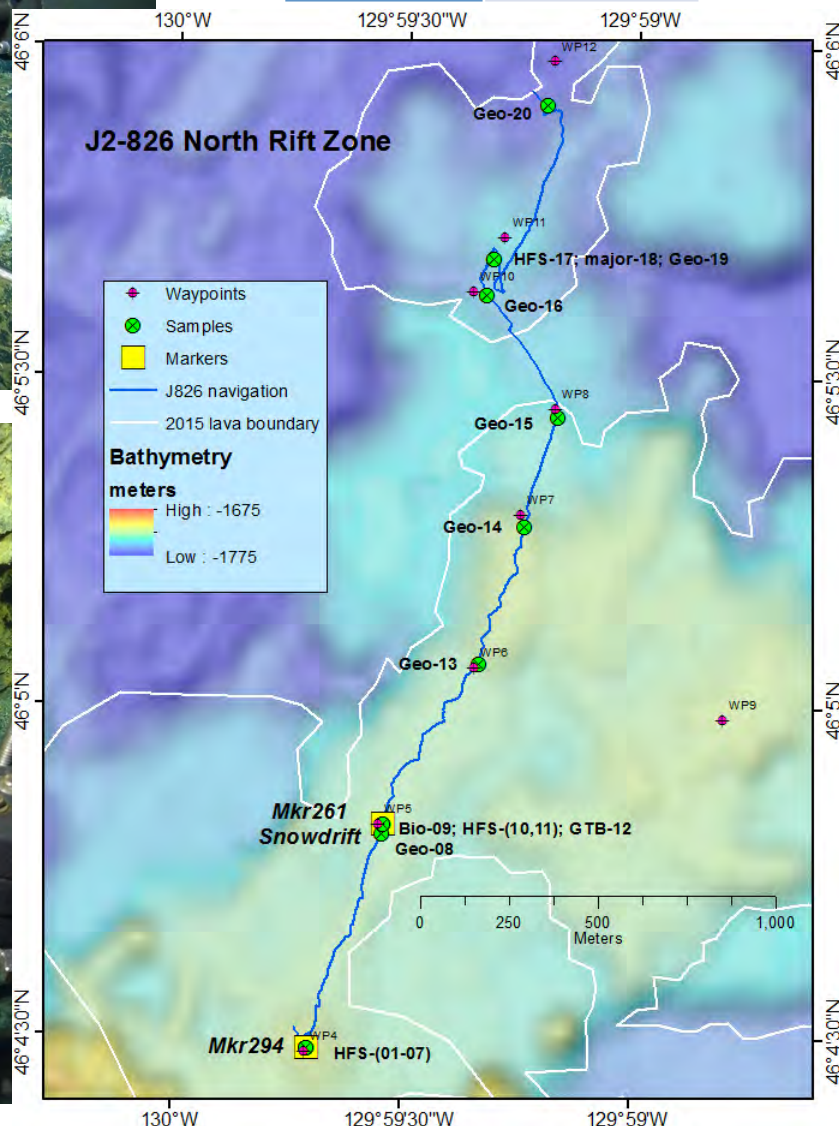
▼ August (24)

- Cruise Success
- Last 2 Jason Dives
- Dive 3 & 4 Highlights
- Making Lava Maps
- Facilitating Science
- Forecasting Eruptions
- Skyping from Sea
- Detecting Deformation
- Pressure Dive
- Second Jason Dive
- Incubator Experiments
- Myth-Busting
- The Weather
- First Jason Dive
- Jason and Medea
- CTD Tow-yo
- AUV Sentry
- The 2015 Eruption
- Launch of the SS Morningstar
- Life At Sea
- Departure and Looking Ahead
- Axial 2015 Introduction
- Scientists
- R/V Thompson Crew

Incubator Study Site
Mkr 33, 35-40°C



Sample Type	Quantity
Ti Majors	6
Gas-Tight	9
HFPS bag/ piston	38
RNA	8
Incubation	8



North Rift Zone
New Lava Flow
Time-Series Chemistry Site
20°C

