

# The 2012 eruption of Havre Volcano, Kermadec Arc A Mt. St. Helens-scale explosive eruption in the deep sea?



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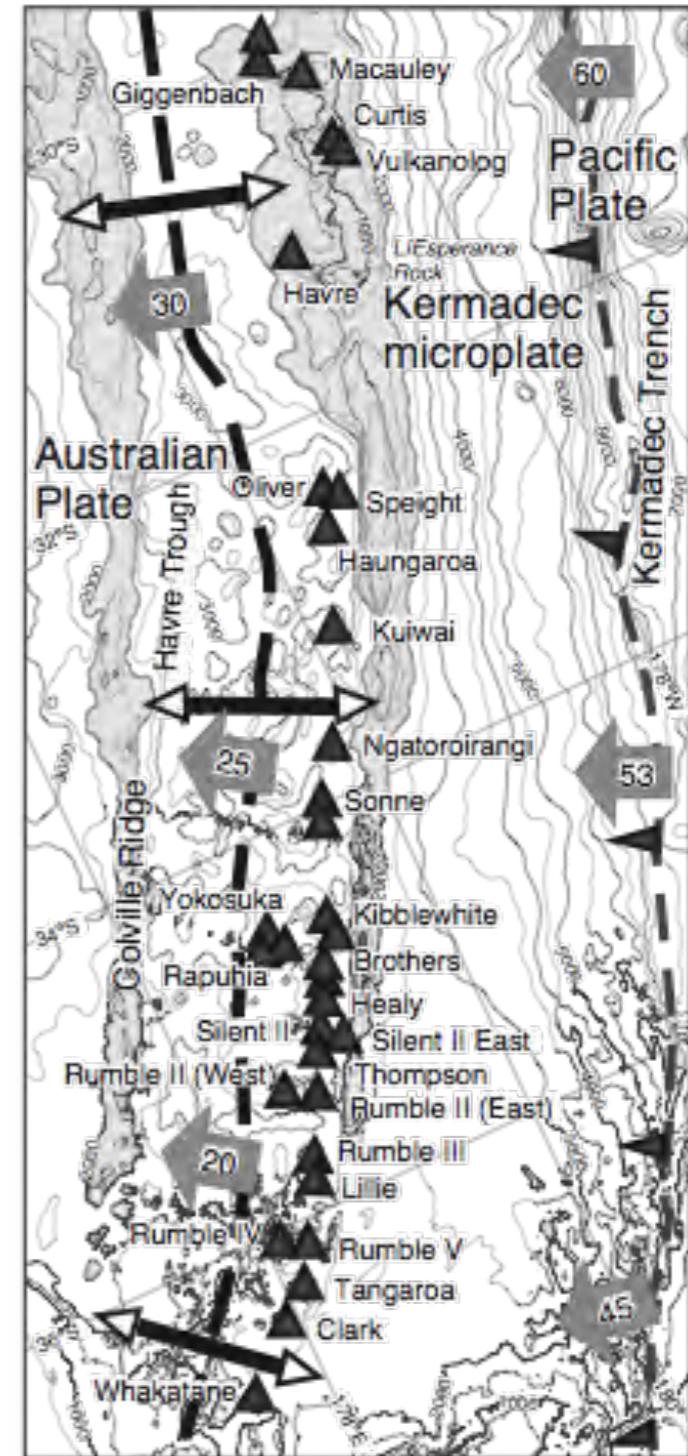
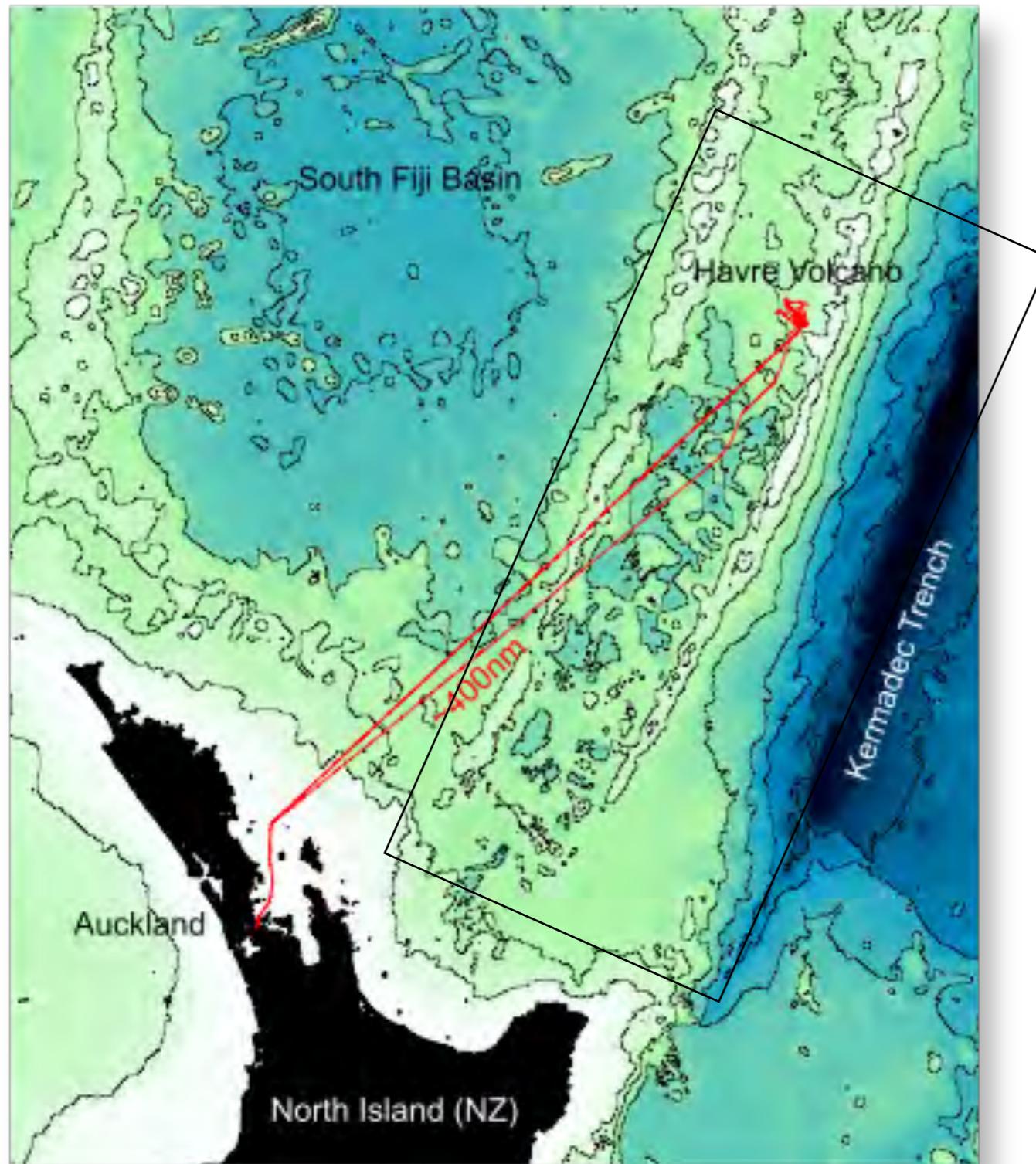
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# Kermadec Arc

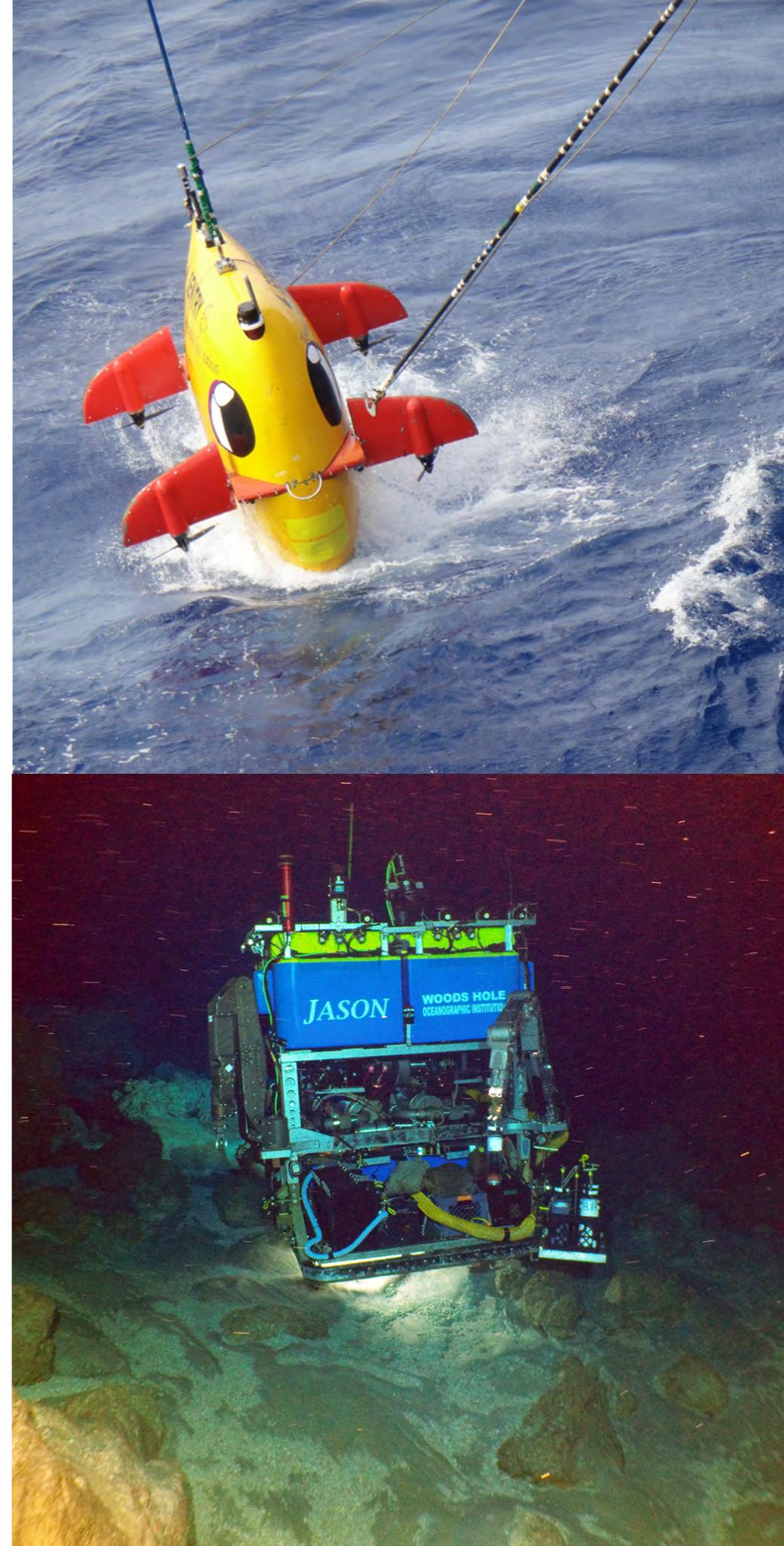


Wright et al., 2006

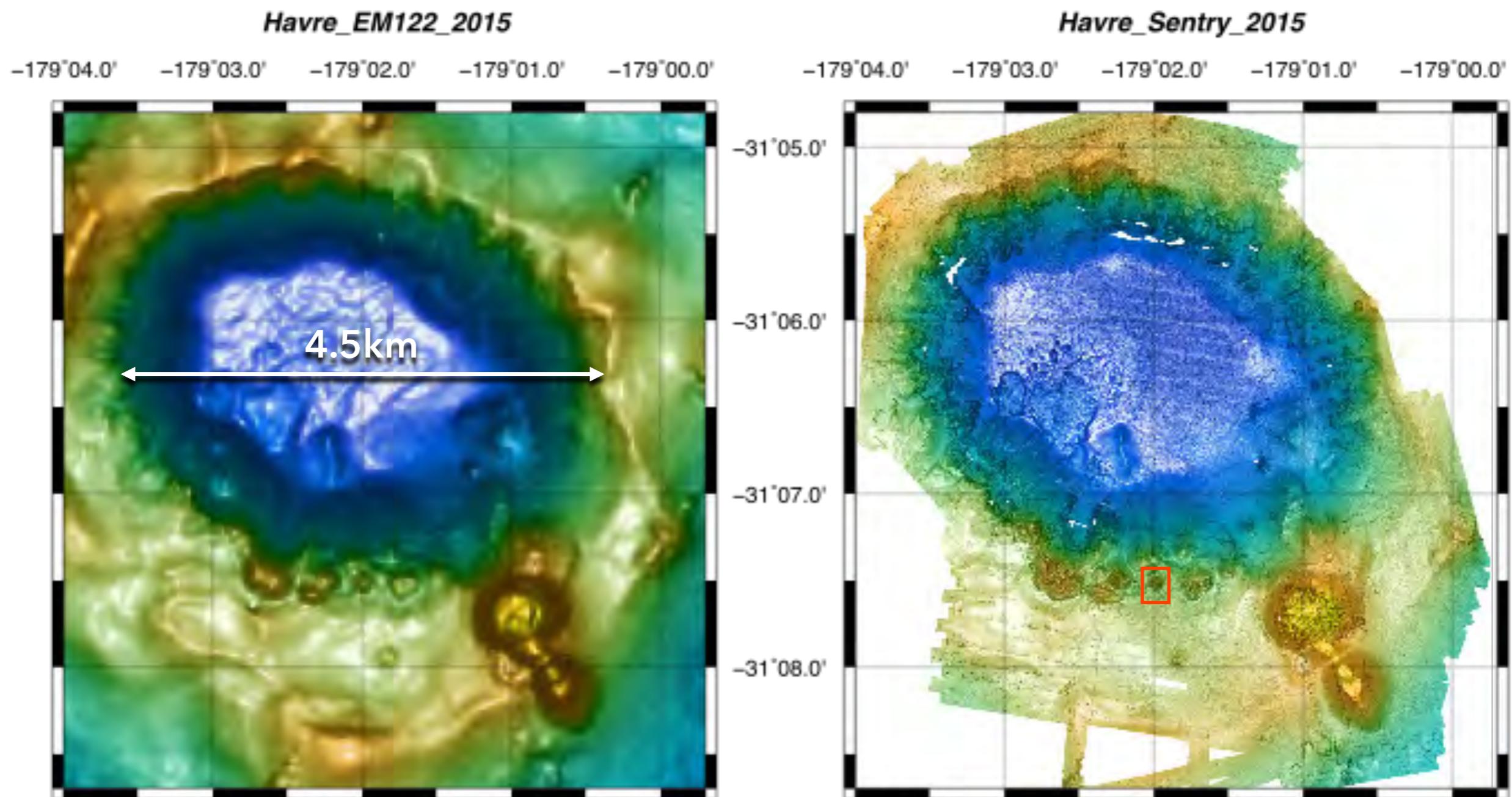
# MESH2015

(Mapping Exploration & Sampling at Havre)

- R/V Roger Revelle (27 Mar - 17 Apr)
- AUV Sentry
  - (12 dives, 56km<sup>2</sup> survey area)
- ROV Jason
  - (12 dives, 240h bottom time)
  - (290 samples of rock, sediment)
  - (heat flow measurements)
- Coring & clamshell grabs
  - (35 cores/grabs, ~20 successful)
- Shipboard magnetics, gravity, bathymetry

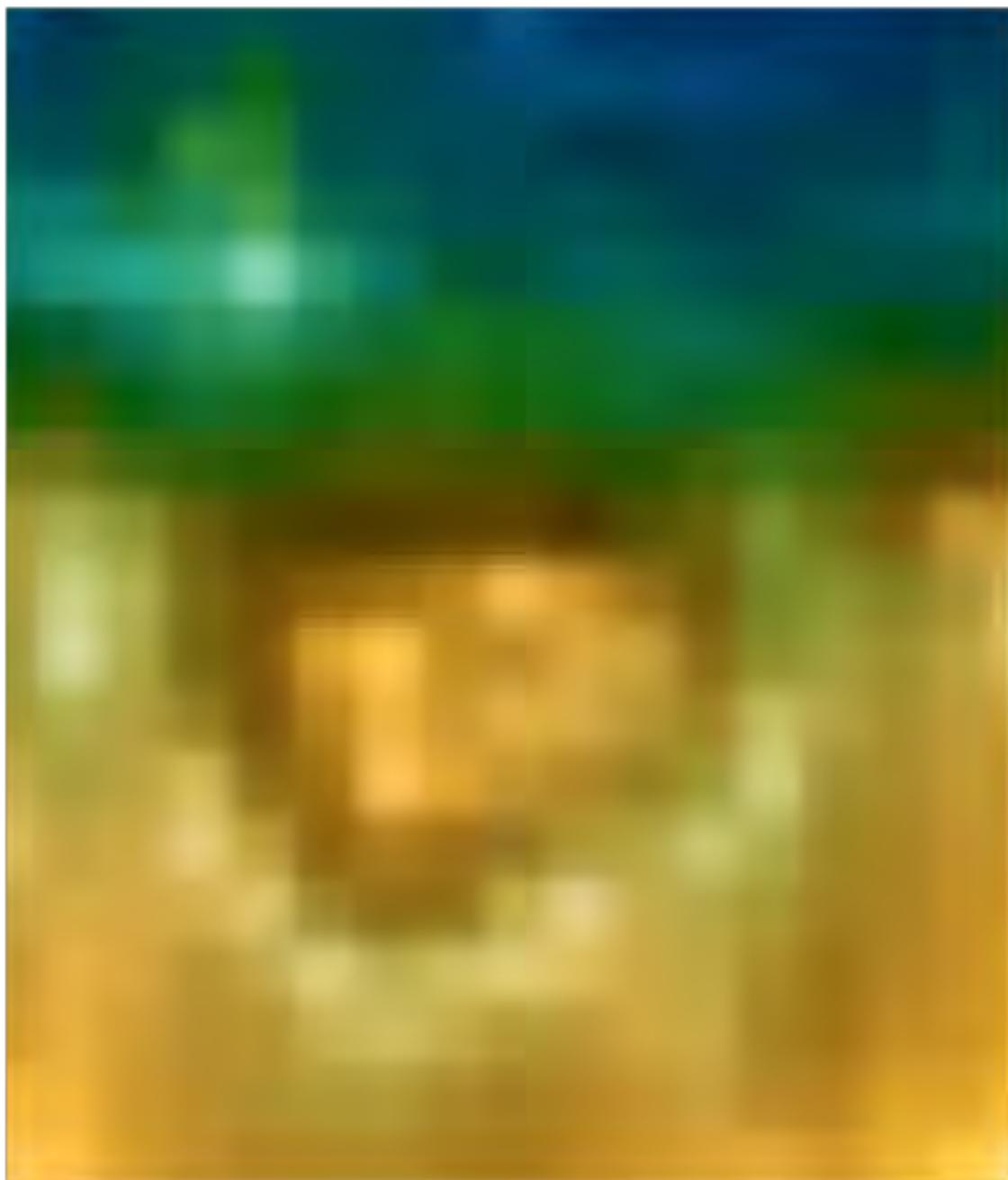


# Sentry data

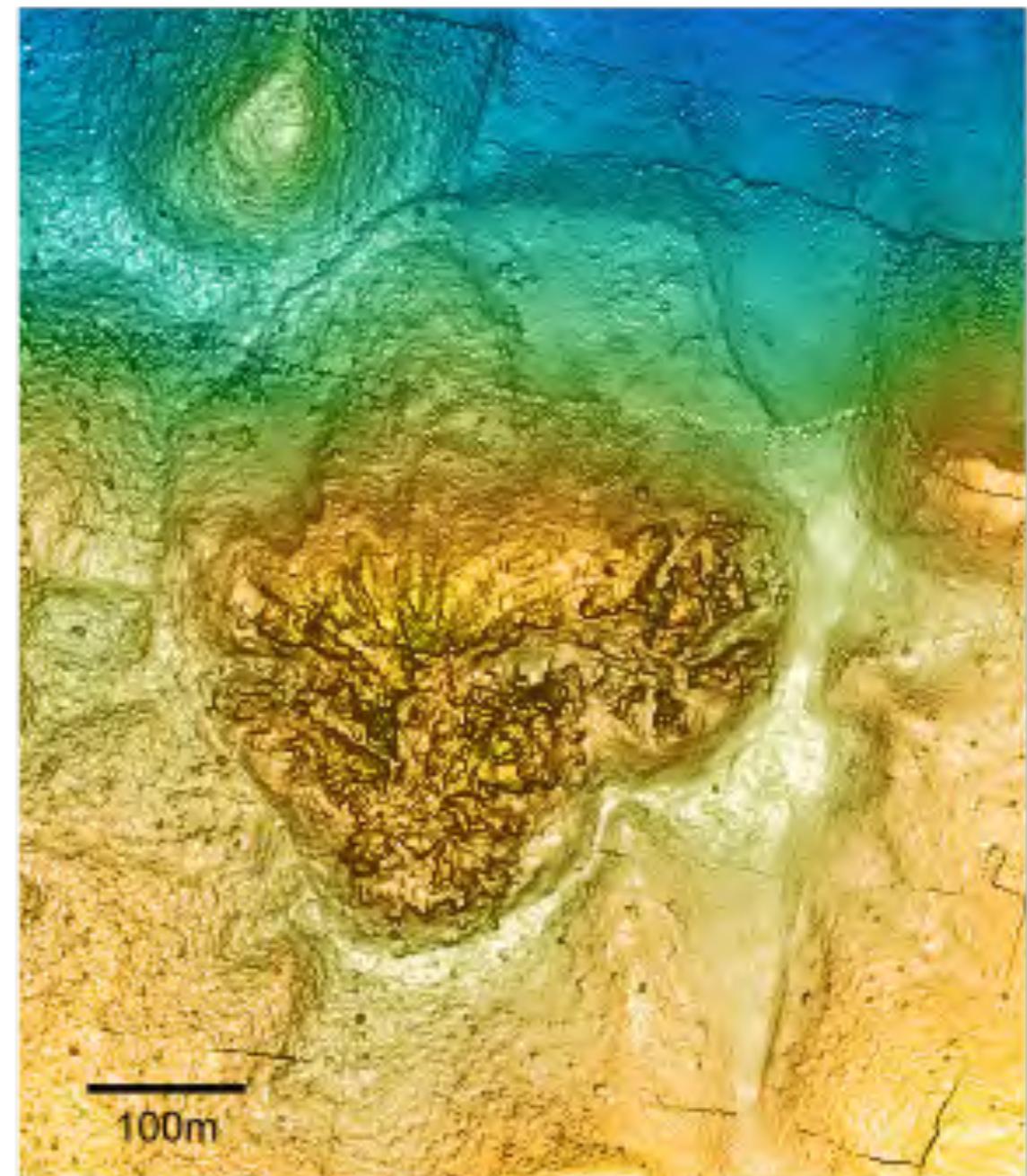


# Sentry data

*Havre\_EM122\_2015*

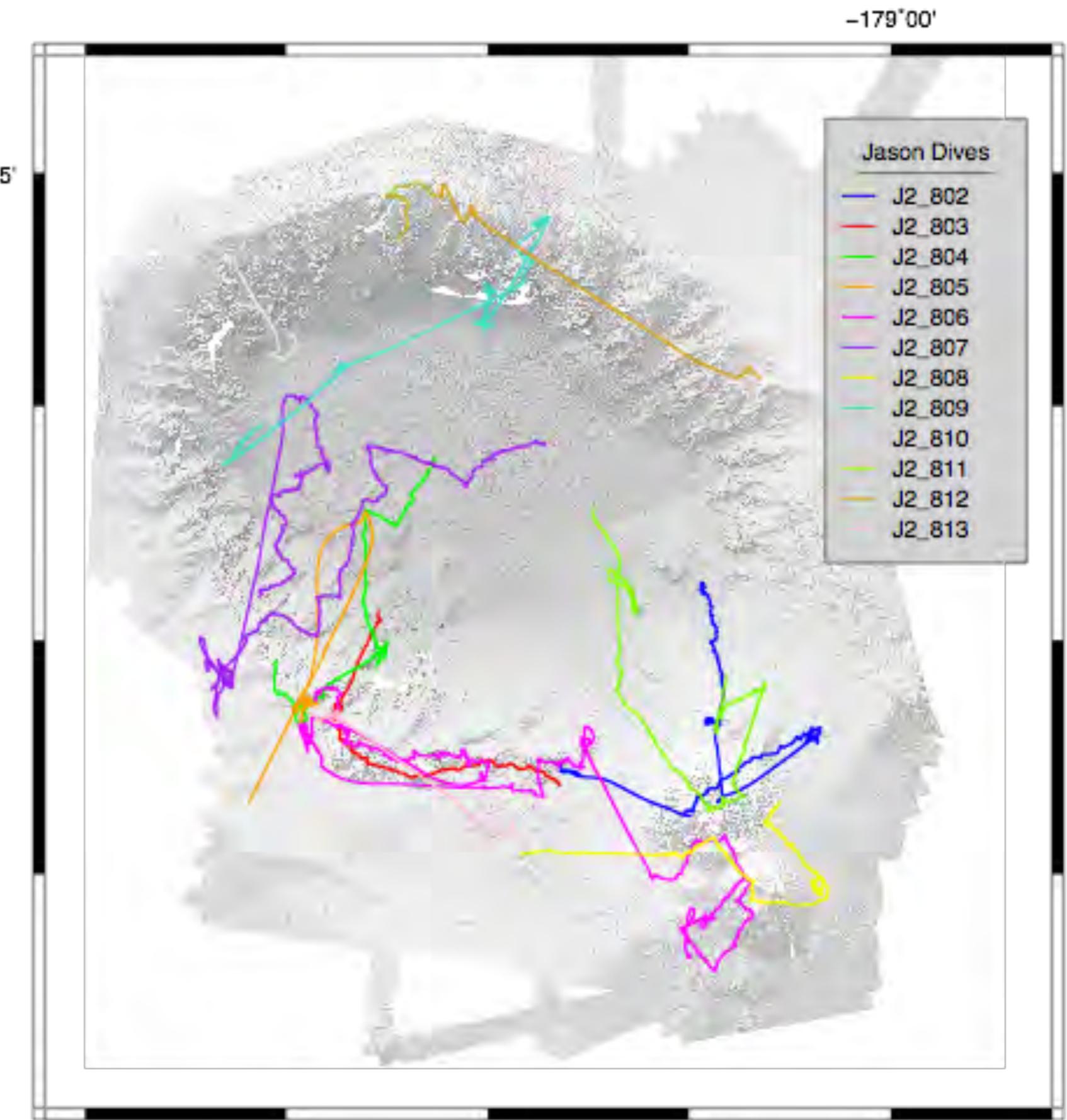


*Havre\_Sentry\_2015*



# Jason dives

- Dive lengths of 6-48h
- Mean turnaround times of 5h
- Jason & Sentry in water at the same time.





Pumice blocks are sub-rounded to angular, some with breadcrust textures, sizes from a few 10s cm to 'SUV'

# Recovering a giant pumice sample

