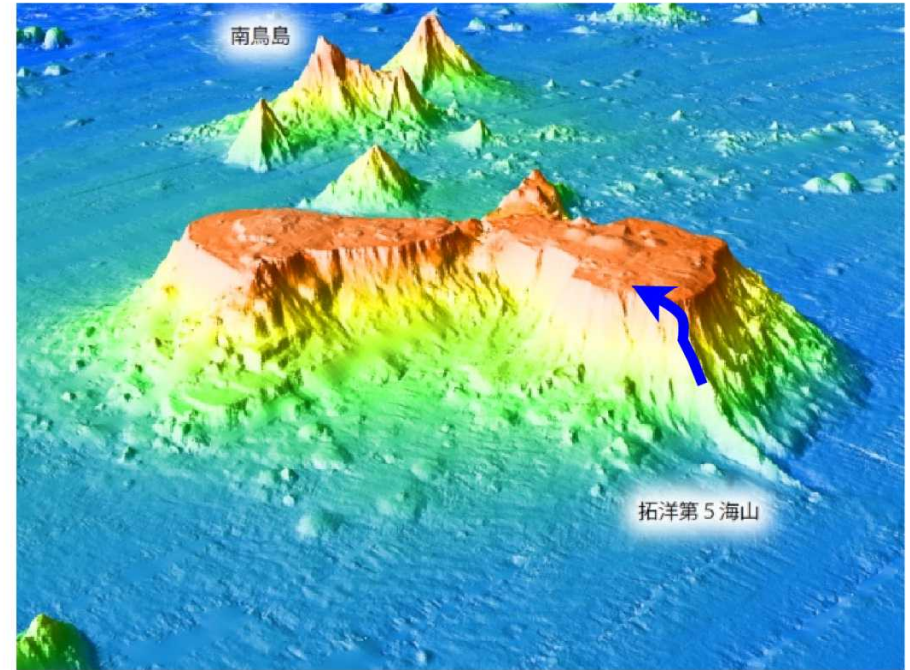
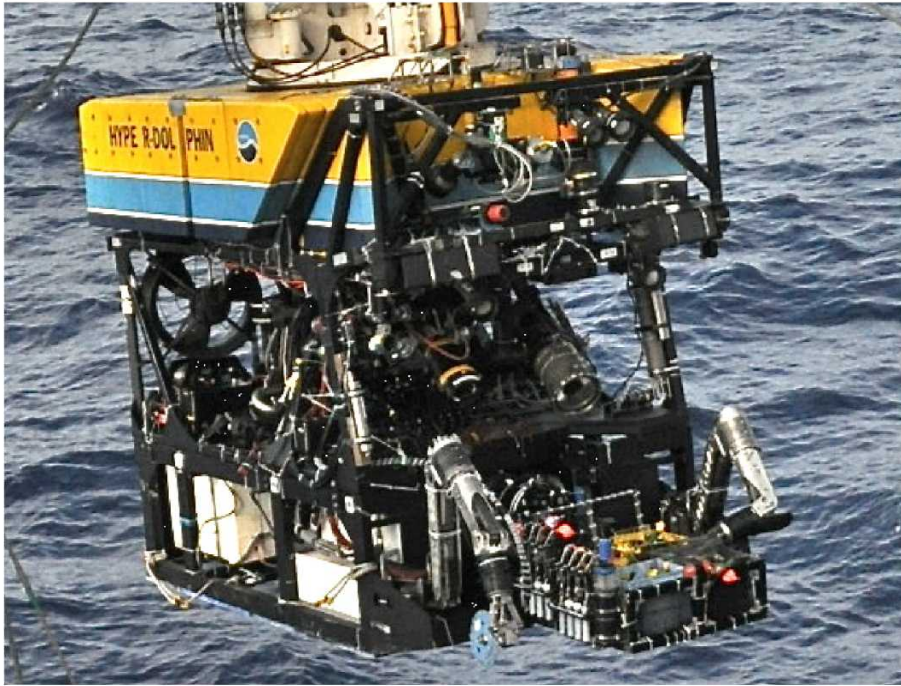
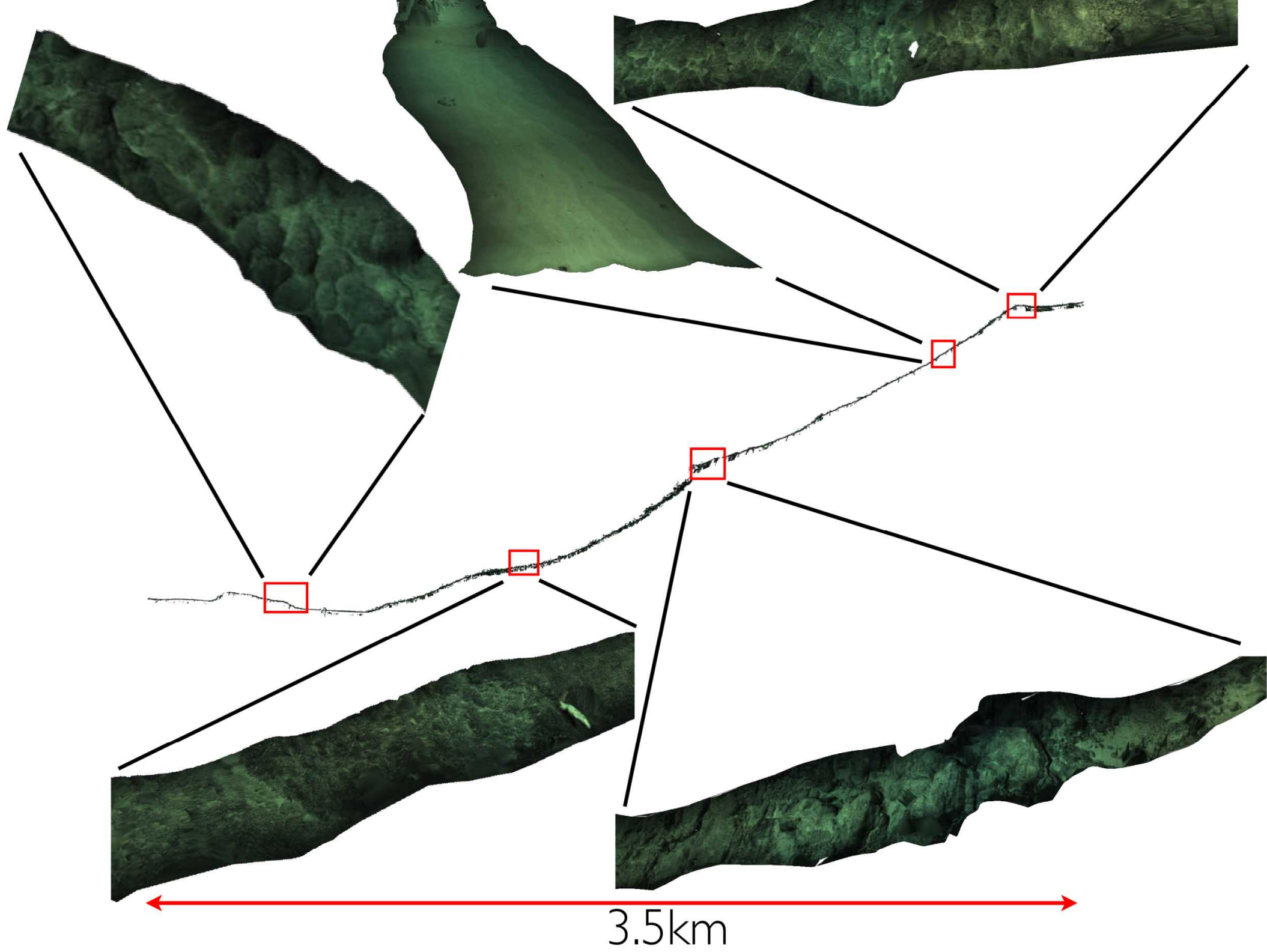


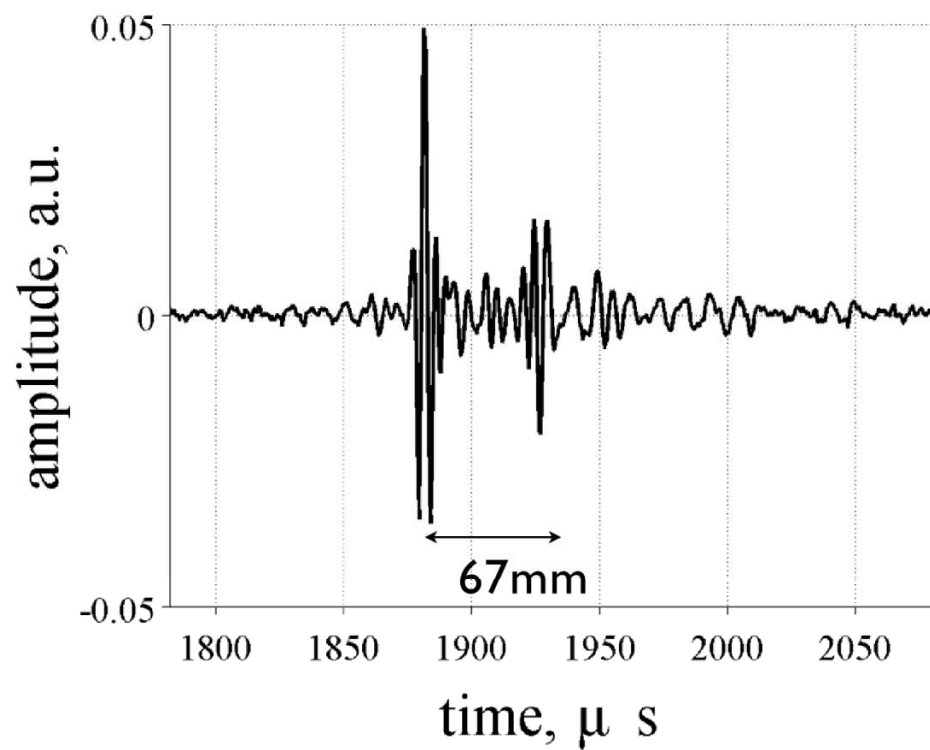
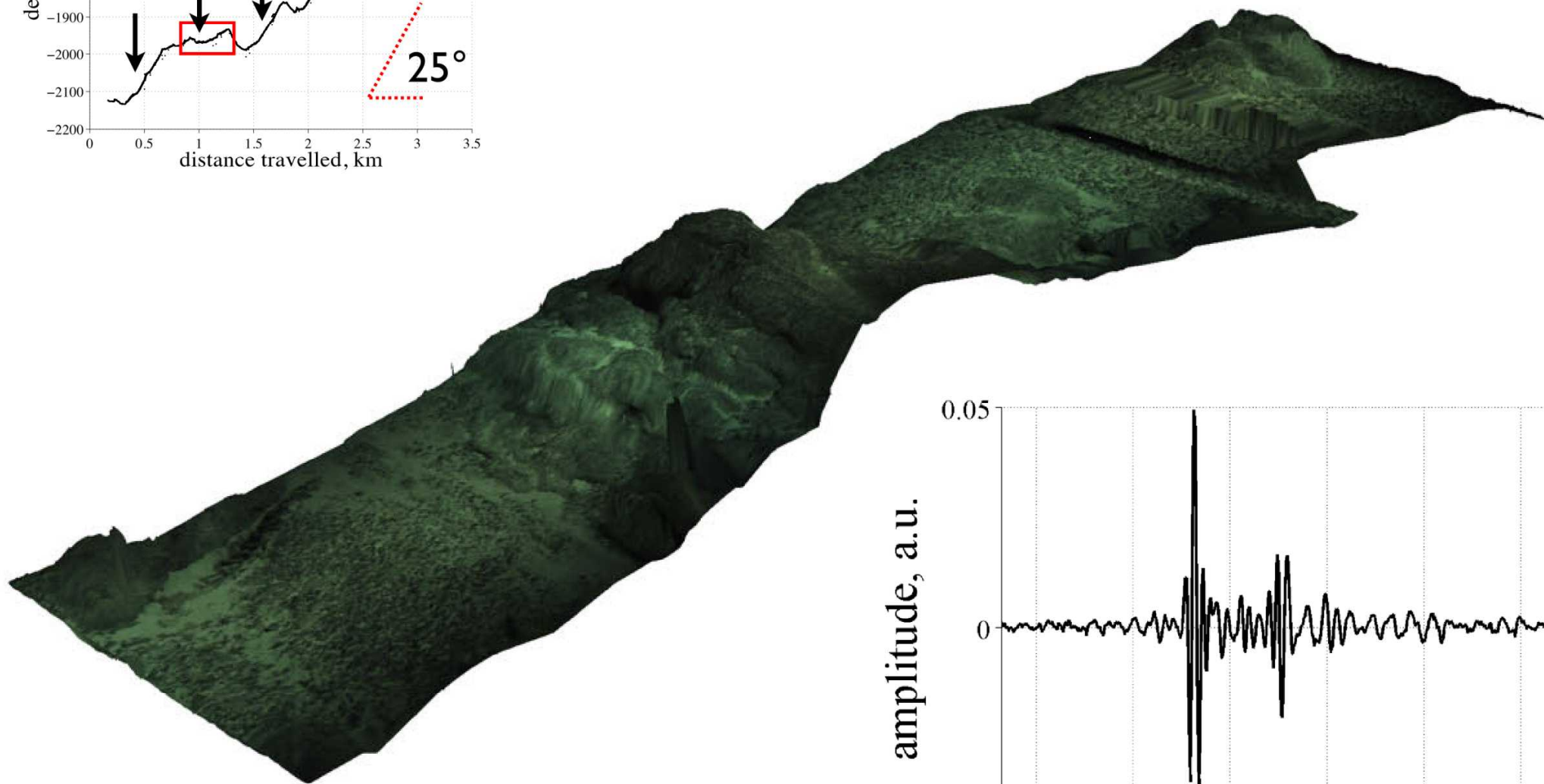
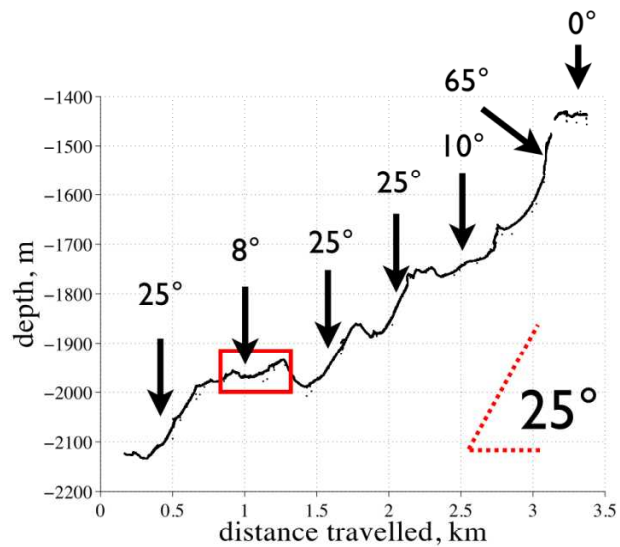
# NT12-05: Daigo Takuyo

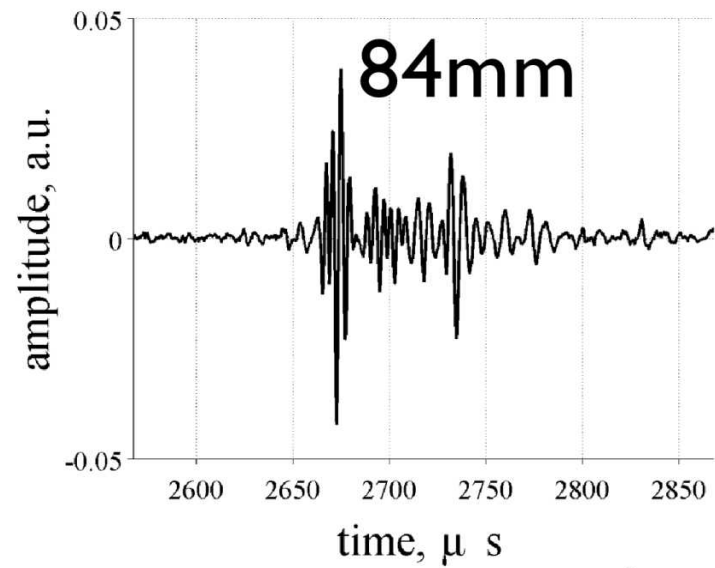
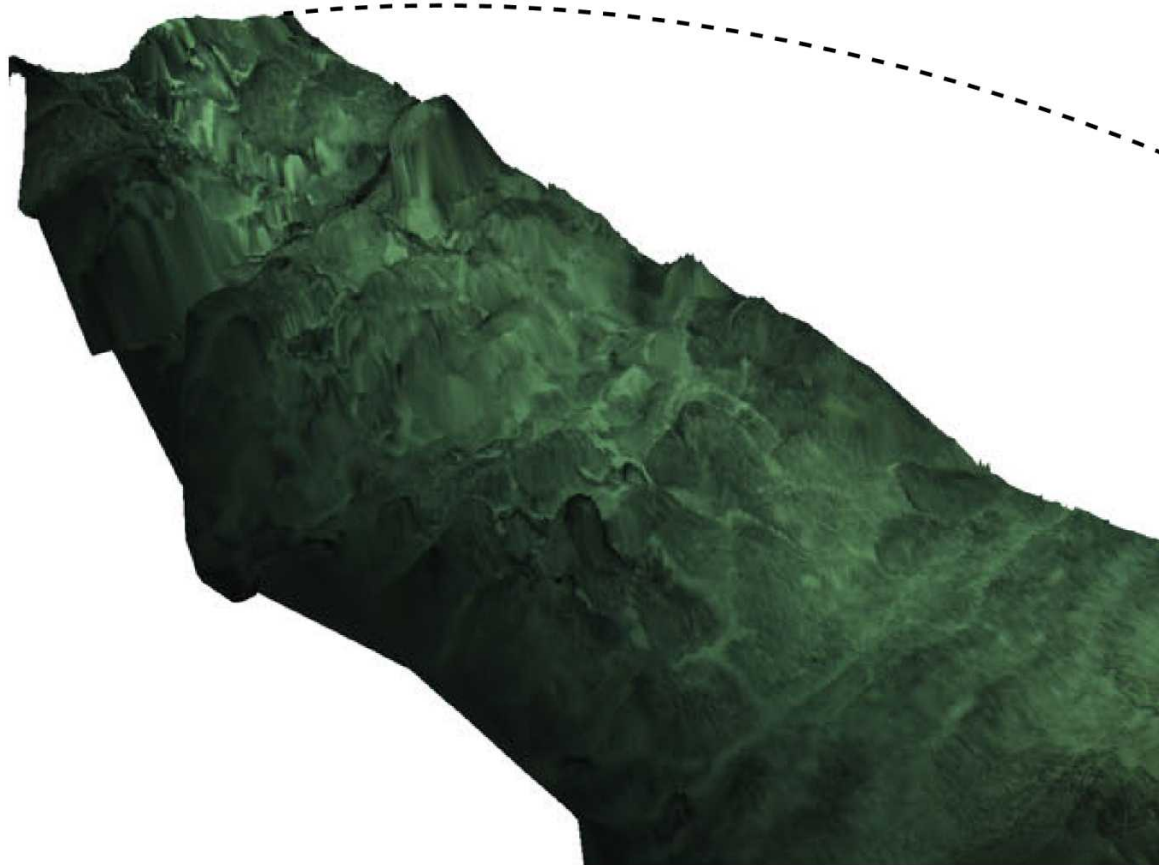


- Acoustic and visual mapping of slopes
- Continuous measurements on slopes of seamount

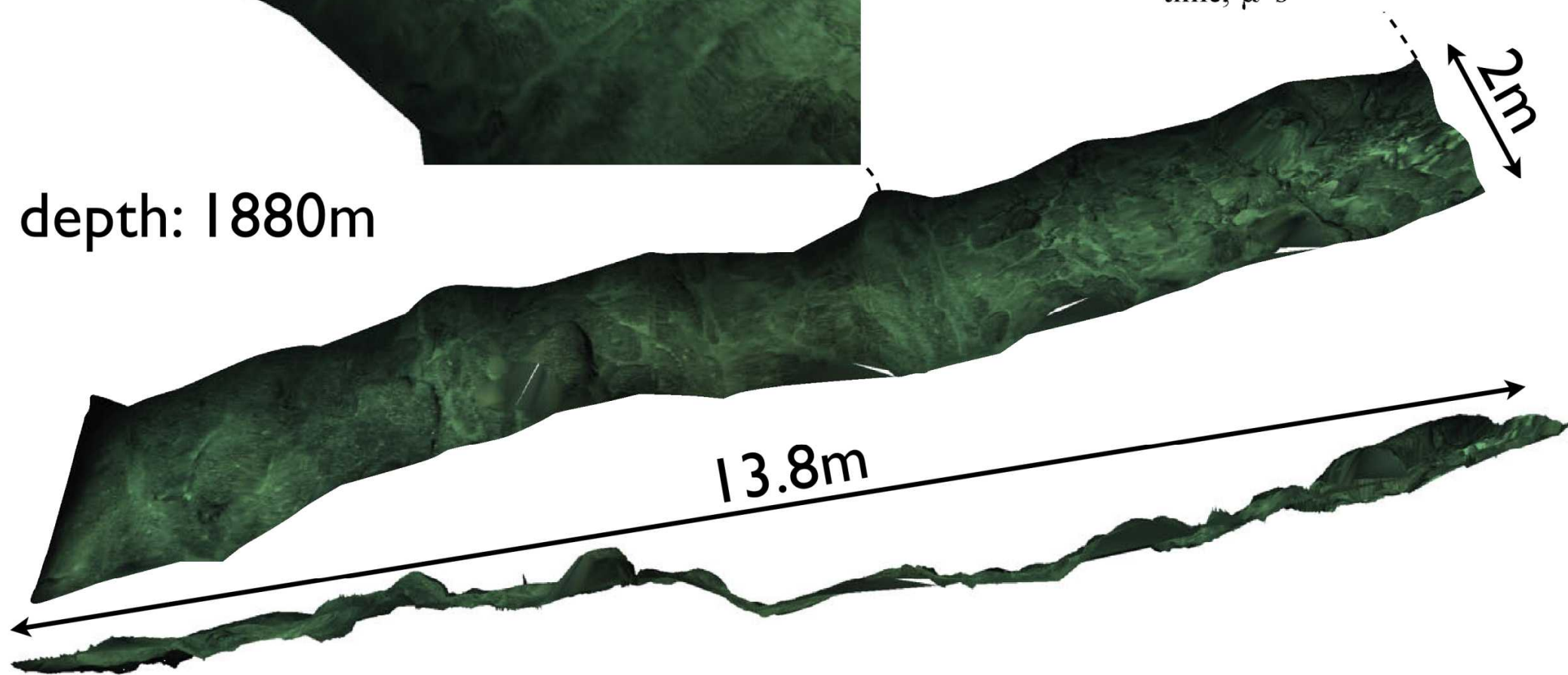


depth: 1980m





depth: 1880m



# Summary

- Continuous acoustic manganese crust thickness measurement at sea

Development of 3000m depth rated probe

Confirmation of thickness with samples

Use of gimbal for measurement on slopes

- Combination of acoustic and visual data

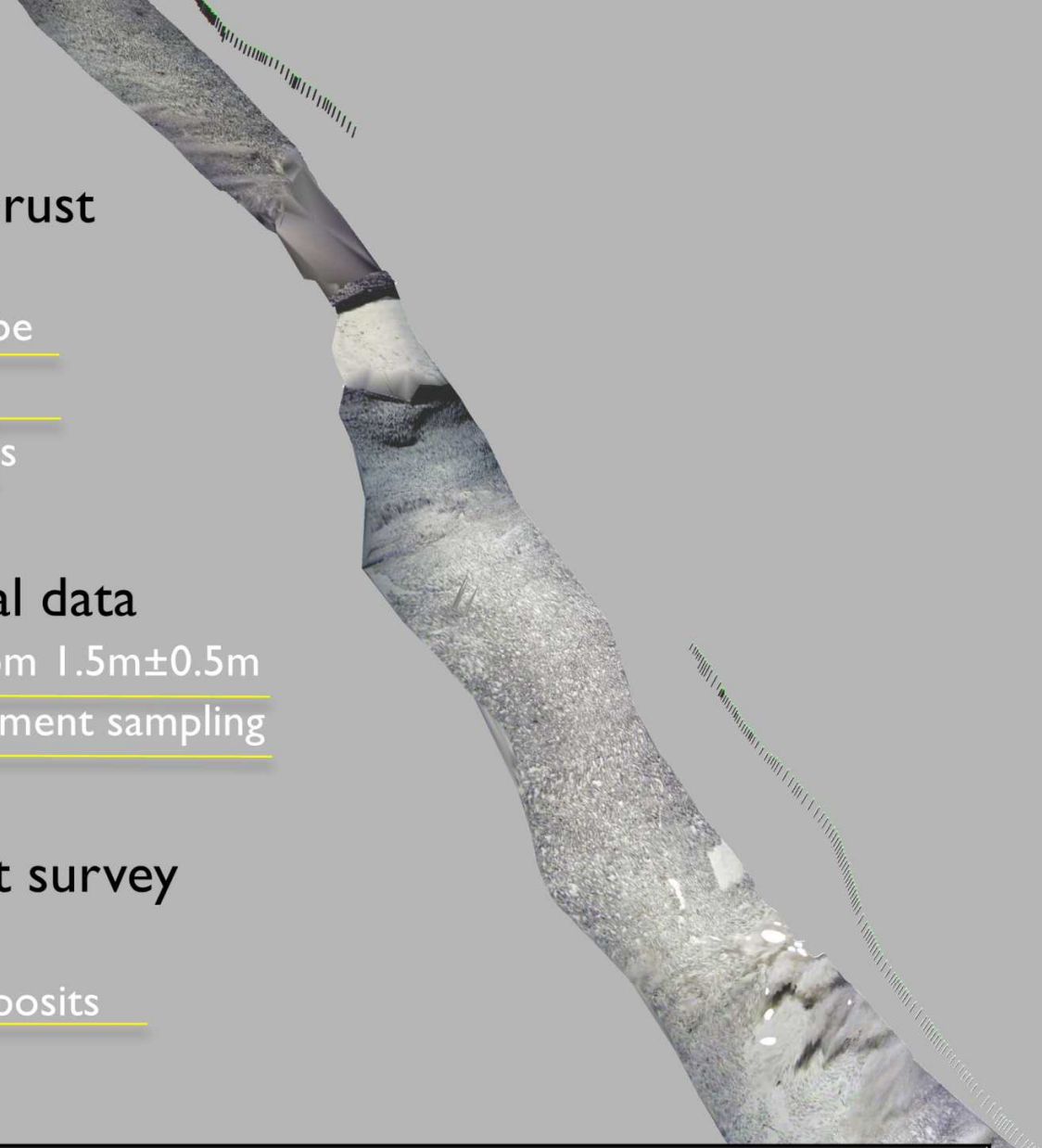
Mmeasurements over 3.5km distance from 1.5m±0.5m

Effective tool for crust survey to complement sampling

- Basis for efficient manganese crust survey

Interpolation of sample data

More accurate estimate of volume of deposits



Data set	Scanned area [m <sup>2</sup> ]	Exposed crust [%]	Sediment [%]	Transition [%]	<sup>1</sup> Av. crust thickness [mm]	Mass of crust [tonnes]	<sup>2</sup> Crust per area of crust [kg/m <sup>2</sup> ]	<sup>3</sup> Crust per area [kg/m <sup>2</sup> ]
A	44.57 <sup>+4.84</sup> <sub>-4.70</sub>	80.8	5.8	9.6	103.0 <sup>+6.28</sup> <sub>-6.28</sub>	7.12 <sup>+1.41</sup> <sub>-1.25</sub>	197.8 <sup>+16.0</sup> <sub>-15.6</sub>	159.8 <sup>+13.0</sup> <sub>-12.6</sub>
B	30.00 <sup>+3.26</sup> <sub>-3.16</sub>	41.3	0.4	40.5	104.8 <sup>+6.39</sup> <sub>-6.39</sub>	2.49 <sup>+0.49</sup> <sub>-0.44</sub>	201.2 <sup>+16.3</sup> <sub>-15.9</sub>	83.0 <sup>+6.7</sup> <sub>-6.5</sub>
C	97.53 <sup>+10.58</sup> <sub>-10.29</sub>	21.8	37.1	29.6	68.1 <sup>+4.15</sup> <sub>-4.15</sub>	2.78 <sup>+0.55</sup> <sub>-0.49</sub>	130.8 <sup>+10.6</sup> <sub>-10.3</sub>	28.5 <sup>+2.3</sup> <sub>-2.2</sub>