NDSF AUV Sidescan Data Processing Capacity
## June 10, 2021 letter from
Dan Fornari & Ross Parnell-Turner

- AUV Sentry sidescan is high quality and valuable

- AUV Sentry sidescan is underutilized by PI's

- Results from processing using a commercial software package (SonarWiz) are better than processing with the open source package used for AUV Sentry multibeam data (MB-System)

Edgetech 2205 Chirp Sidescan (120 kHz) + Subbottom Profiler (4-24 kHz)

- PI's using Sentry should have access to full quality processing of sidescan data, even if mapping is outside their expertise.

- Suggest some possible solutions
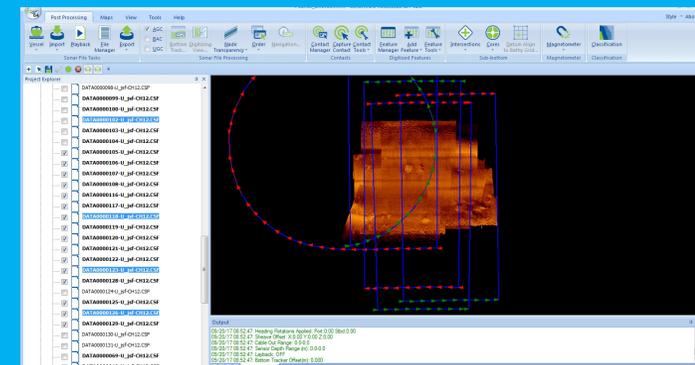
Ross and Dan are correct

SonarWiz

Wu et al., Extent and Volume of Lava Flows erupted at 9°50'N, East Pacific Rise in 2005–2006 from Autonomous Underwater Vehicle Surveys, in press, G-cubed.

MB-System

Maier et al., Submarine-fan development revealed by integrated high-resolution datasets from La Jolla Fan, offshore California, U.S.A. Journal of Sedimentary Research. 2020;90(5):468-479. doi:10.2110/jsr.2020.22
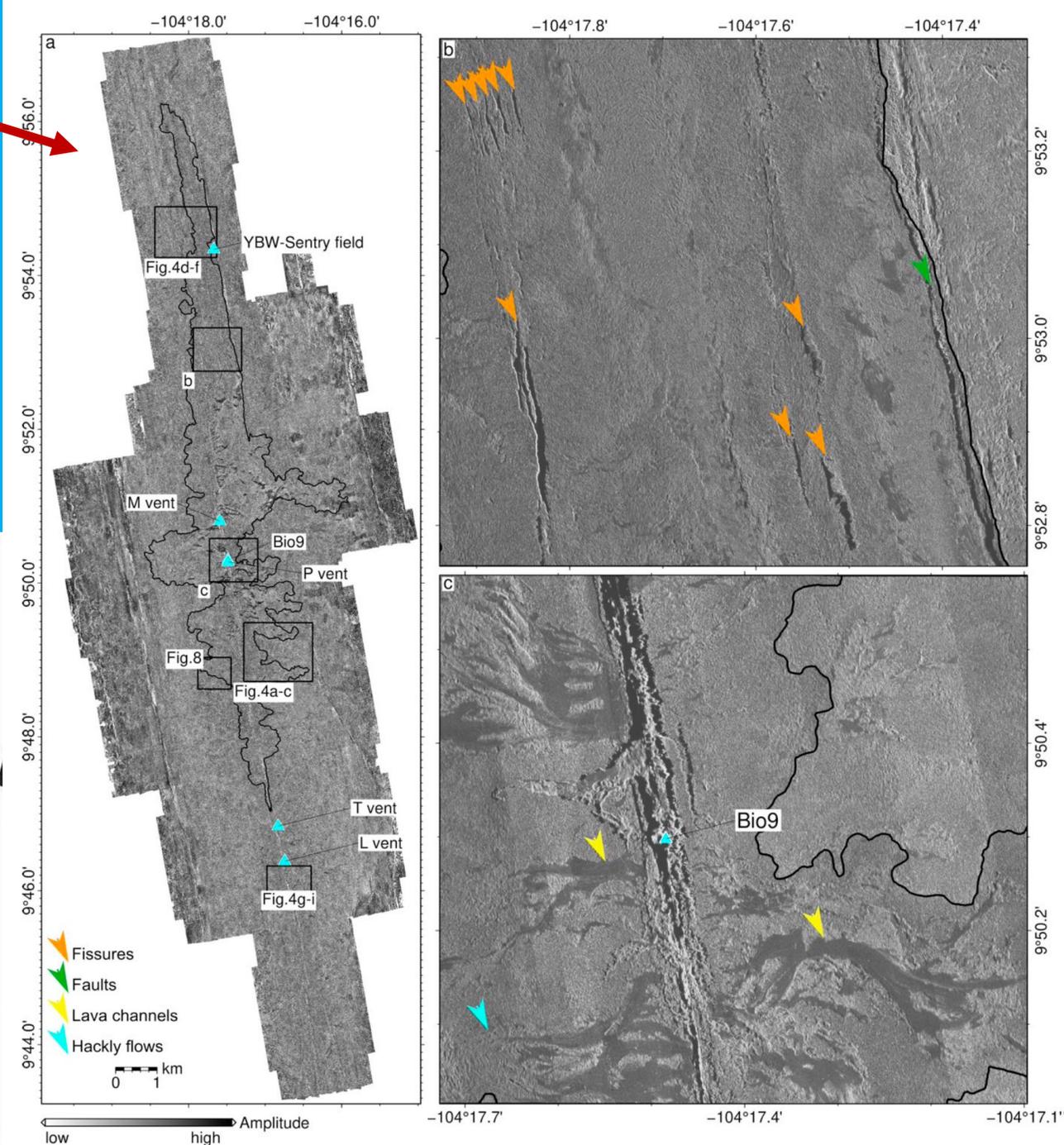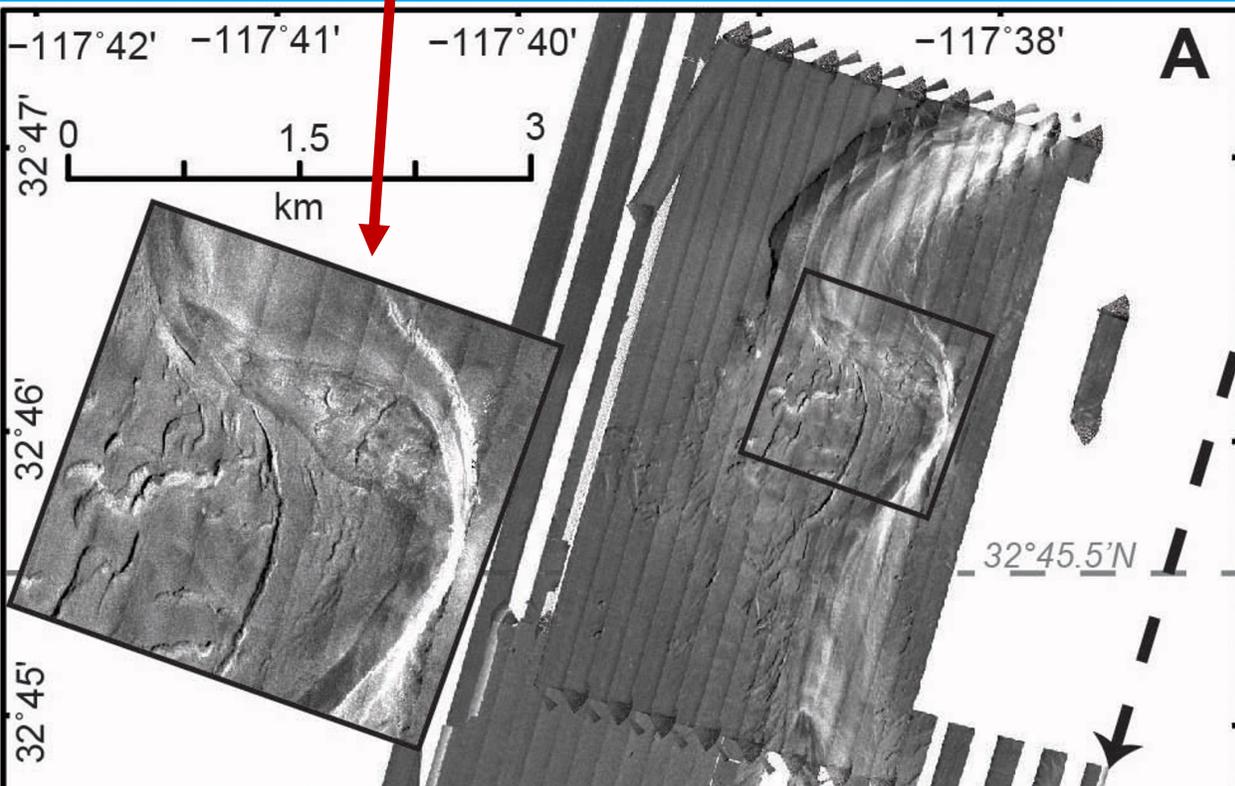
Figure 3. (a) 20 cm-resolution sidescan imagery collected with EdgeTech 2200m sonar

Suggestions

- Sidescan processing becomes part of NDSF facility. WHOI-NDSF personnel process sidescan postcruise.

- WHOI-NDSF maintains multiple software licenses that can be "checked out" for use by PI's at their home institutions. Requires training of scientists doing the processing, and so builds expertise in the community.

- Routinely process AUV sidescan data using expert commercial contractors.

- Note: There are many relevant commercial software packages. SonarWiz may be the best choice right now, but that will probably change with time. Don't worry about the specific software choice, worry about creating a structure that enables best use of these expensive data.