

Monthly Meeting (February 2021)

Date: February 23, 2021

Time: 2:30 pm - 3:58 pm

Location: Park Seismic LLC

Office Attendees:

In the office: Choon Park

Via Skype: Jin Park, Josefin Starkhammar, and Nils Ryden

1. Payment Method Check

Because we (Team Sweden and Team USA) are paying the bank-wire fees from both ends, we will look for a better way to pay the payment to Norrfee Tech to save the fee.

2. The 1st Joint Field Test (JFT #1) Status

- a. Choon asked Team Sweden how much of the previously proposed the 1st Joint Field Test (JFT #1) with 3 possible modes of execution had progressed with comments that his software (ParkSEIS-HMA) development would significantly depend upon the data from it.
- b. Team Sweden reported that they performed the last (the 3rd) mode today, and they thought it went successful with just one issue they faced. Error messages popped up a few times from ParkSEIS-HMA program during about 2500 field measurements. They were also concerned that the collected data transferring from the PXi system to the project laptop by the ParkSEIS-HMA program was not fast enough.
- c. Although some GPS points are missing, most GPS points are saved to provide meaningful data for mapping purposes.
- d. Timestamps were recorded once every 1 second during the field data collection.
- e. Choon asked Josefin to send all of the raw TDMS files collected today so that he can figure out what caused the problem.
- f. Choon thought he would need to update ParkSEIS-HMA again after confirming and figuring out the source of the problem for which he speculated one possibility of the I/O conflict between successive TDMS file generations. For that theory, Josefin would have to do the snapping experiment with her fingers in the lab.
- g. The actual meanings of the command buttons - Arm/Disarm, Stop/Pause/Resume, Exit/Terminate, etc.- were discussed between Josefin (J) and Choon (C).
- h. The problem with the first file missing was addressed between the two (J & C).
- i. Josefin asked the potential problem with current mode of how to close/shut down PXi system, but Choon confirmed that should be the way. The project computer will only run the ParkSEIS and the PXI will run the its own control software only.
- j. Nils raised a question about the slowness of ParkSEIS-HMA processing time regarding PXI system running out of battery before all the files are transferred. Choon will change the current mode of transferring the collected TDMS files that awaits until each file is processed.
- k. Nils (N) commented the data collected today seemed very good and Choon commented he would add another module to detect false trigger as a QA/QC tool.

- l. Options for software were discussed among all three (N, J, and C) - real time field processing, rough field processing, and full-resolution detailed processing later in the office.
- m. Nils commented that, with GPS showing all measured data points on a map, a separate detailed monitoring of the surveyed paths may not be necessary. The survey may continue to drive forward or back-and-forth within a designated area until a sufficient density of data points is reached.
- n. Nils commented that the today's data seemed one of the best ones collected.
- o. Josefin ordered material for the 2D-array hardware that she will receive next week.
- p. All concluded that the first round of JFT #1 is successful. It is, however, still necessary to figure out what caused the error message.

Agreed:

- Choon needs to figure out what caused the error message in ParkSEIS-HMA program.
- Choon will update the ParkSEIS-HMA and send it to Team Sweden with a readme file for further field tests.