FDSN Working Group V

PORTABLE INSTRUMENTATION

Meeting Notes: 16 July, 2019. 12:00-13:00

Attendees:

Bruce Beaudoin	PASSCAL	Paul Friberg	ISTI
Tim Ahern	IRIS	Seiji Tsuboi	JAMSTEC
Javier Quinteros	GFZ	Renate Hartog	PNSN
John Clinton	ETH Zurich	Chad Trabant	IRIS
Lucid Margherit	INGV	Sid Hellman	ISTI
Peter Danecek	INGV	Mark Chadwick	GNS
Jeremy Fee	USGS	Mouse Reusch	PNSN
Will Yech	USGS	Jerry Carter	IRIS

Wayne Crawford (the Working Group Chair) was unable to attend, so Bruce Beaudoin chaired the meeting

Agenda

The agenda was reviewed and accepted by the group

The minutes from the 2017 meeting in Kobe were accepted unanimously

2017 Action Items

Four action items from 2017 were reviewed:

Action Item 2017.01: Identify a small working group to develop proposal for SOH channels. – Beaudoin, Haslinger This has been completed

Action Item 2017.02: Send list out of current methods used by various parks to correct clock drift for feedback. – Crawford No update

Action Item 2017.03: Put together a small working group to develop a short decimation summary paper. Suggested that it would be useful to engage the ObsPy group. – Crawford
No update

Action Item 2017.04: Send out request for new and updated content for the Web Page (QC tools, stationXML, inventory) - Beaudoin This has been completed

SOH recommendations (Prague 2015)

The small working group from the Action Item 2017.01 made SOH data logger recommendations (based on the straw man from 2015), but no comments were known to have been received.

John Clinton claimed to have make a comment, Bruce stated that comments could still be accepted.

John was very happy with the document and will resubmit his suggestion (names for SOH channels)

There was discussion on how to proceed with the proposal – either send it to another working group for consideration and approval or keep it in WG-5.

John Clinton suggested sending the doc to WG 1 and 2 at the same time.

Chad suggested using a process being proposed by WG-2 for approvals.

It was decided to keep this in WG-5 and inform WG-1 and 2 members so that they can comment. If the new approval process is approved, it will follow that process.

It was also suggested to send the SOH proposal to equipment manufacturers for their comments.

Action Item 2019.01: Move to review and evaluation specifically engaging WGI and WGII
Responsible: Beaudoin

Action Item 2019.02: Distribute SOH proposal for comment to equipment manufacturers
Responsible: Beaudoin

Moving stations

A few moving station examples that inform the use cases include:
Mermaids and deployments on Icebergs, Ice Flows, Glaciers, and potentially Balloons

Chad Trabant described the problem of communicating moving station location information to the user and how a data center might have to present the information; he thought that it would be best to start by identifying use cases.

In the discussion that followed, several ideas were discussed: one possibility is to add a time series with the location as a channel – but how do you then present that information to a user when searching for data? Perhaps a flag that indicates whether or not the metadata location is for a fixed station.

The problem of station locations was the main focus, but it was also recognized that orientations are also a problem.

It was suggested that a flag was needed to identify if a station location if orientation is calculated or measured.

Tim Ahern presented a strawman based on the Mermaid experience for location data collection. The goal is to have a simple method to capture location information for later use. Tim's strawman was to capture information in a GeoCSV file that would include the known positions and the algorithm to compute locations (a DOI for Mermaid deployments). The GeoCSV could be kept in an ALO channel (administrative, location and orientation). Tools would be used to then generate Station XML. Feedback from PASSCAL and EarthScope Oceans think this might work.

The ensuing discussion brought out the following points:
- Position could be an irregularly spaced time series.
- Would assigning a location of data provided by a data center depend on the time spanned in the request?
- How this might apply to DAS data was mentioned.
- The details of how the information captured could be used at a data center is not known and several questions were raised (although StationXML could indicate that movable station information was available).

Several suggestions were made on how to present this information when provided to a user in miniSEED3 or StationXML.

Action Item 2019.03: Form a group to establish requirements for documenting moving stations via time-referenced location and orientation records
Responsible: Beaudoin, Ahern

Adjourn at 13:00