

Status:  In progress  Completed

Question from the Community

Name	Anne Sheehan
Date of Community Member Contact	7/13/16
Dates of OMO/IIC Contact	7/13/16, 7/14/16, 7/22/16
Completion date	9/23/16
Experiment	HOBITSS
IIC Affected & Contact	LDEO
Stations Affected	All stations in YH.2014-2015 Possibly stations in 7D.2014-2015
Contact Information	Anne Sheehan Anne.Sheehan@Colorado.EDU University of Colorado at Boulder

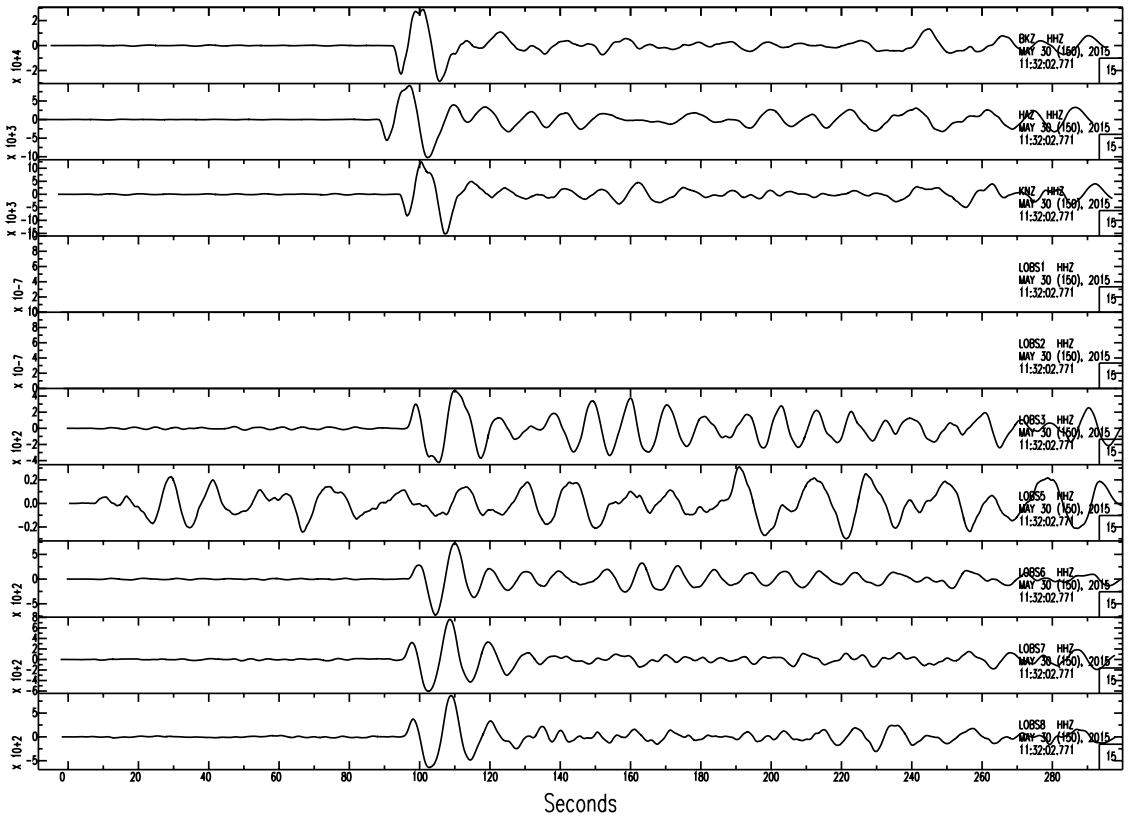
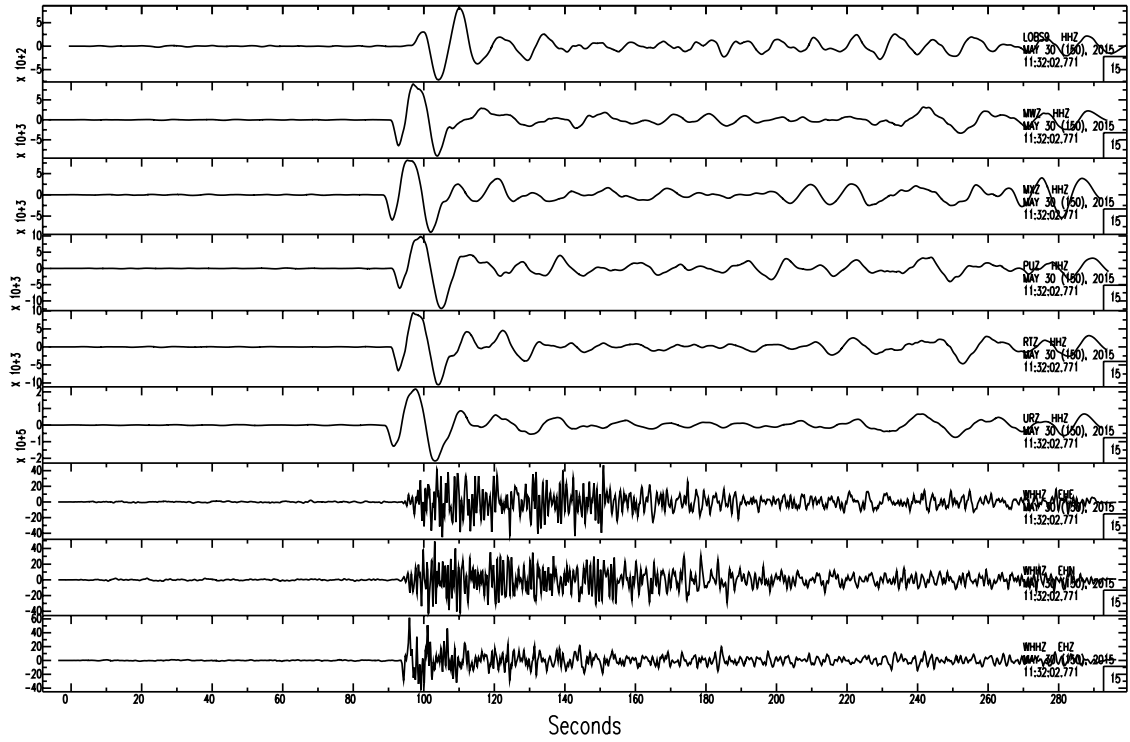
Summary:

Possible polarity reversal in HOBITSS stations on vertical channels. LDEO stations in Cascadia Year 4 2014-2015 may also be affected. Attached plots on page 2 from Martha Savage by way of Anne Sheehan.

Steps Taken:

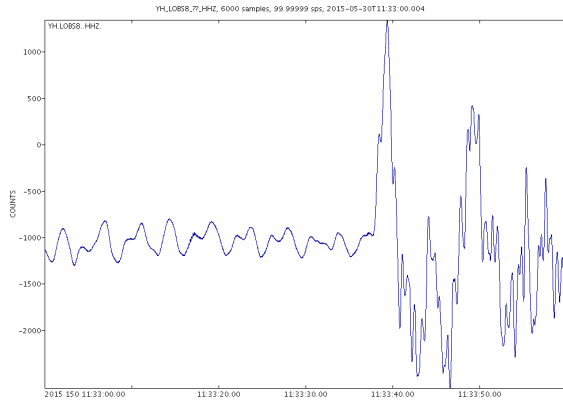
Date	Action
7/13	Andrew Barclay responded to inquiry.
7/14	Kasey Aderhold investigated polarities of both HOBITSS and Cascadia OBS and land stations. Figures on page 3-4.
7/19	Discussed question in person at LDEO site visit with Brent, Kasey, Andrew, and Jim.
7/20	Kasey received plots from Helen Janiszewski with vertical and APG component comparison for Cascadia Y4 stations, attached to end of this document.
7/22	Kasey requested data and confirmed polarities for HOBITSS and Cascadia Y4. Kasey sent in-progress community question form to PIs of HOBITSS.
7/28	Email from Andrew to Kasey to update on stations and discuss remedy, noted G02D as unaffected.
7/28	Email from Kasey to Andrew to include both G02D and G19D as unaffected by the polarity issue. Discussed SEED notation for remedy, discouraged changing the metadata.
8/10	Email from Anne to Kasey asking about the impact on horizontals.
8/11	Email from Kasey to Anne confirming that we are working on determining if the horizontals were also affected.

8/15	Email from Andrew to Kasey to update on cause of polarity flip.
8/19	Report sent from Andrew to Kasey to summarize findings. Email from Kasey to Andrew noting G19D as a polarity reversal again. Email from Andrew to Kasey confirming that noise obscured the arrival in his procedure and agreeing that it was not affected. Email from Kasey to Andrew asking about engineering/maintenance differences between G02D/G19D and other stations; if we can determine if stations like FS15D and G25D needed to be flipped since they did not have resolvable arrivals.
8/20	Email from Andrew to Kasey summarizing all findings in both Cascadia and HOBITSS, confirming that there were not records of which connectors were rewired, reviewed stations without previous observations, added Gorda station BB631 into corrections and attached a revised report.
8/22	Email from Brent to LDEO to determine if issue can be tracked well and that there are enough resources to work out a solution in a reasonable amount of time.
8/23	Several e-mails and phone calls in between Brent, Kasey and Andrew about handedness to decide whether horizontals needed to be flipped or changed to preserve the left-handed standard.
8/30	Email from Andrew to Mea to announce imminent delivery of the data. Mea confirms the old archive can be removed and the new one autoarchived.
9/19	Last resubmitted channels archived. Mea e-mails to confirm archival has completed for Cascadia.
9/20	Mea confirms Z5.BB631 has completed the archival process.
9/23	Kasey reviewed data for Cascadia Y4, HOBITSS, and Gorda and sends upload verifications to Andrew. Announcement about the polarity change in Cascadia data will be announced via OBSIPtec and recorded on the OBSIP website. Community question form will be sent to PIs.

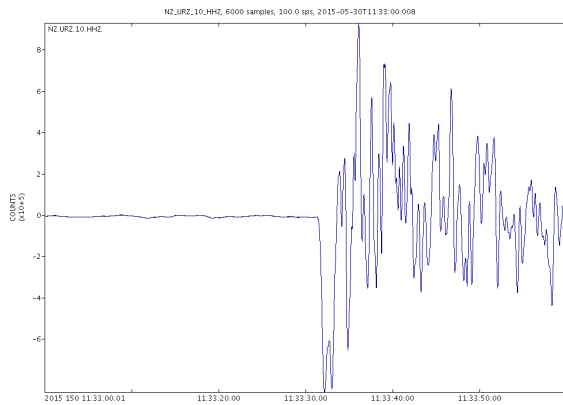


Event: Bonin Islands Region 2015-05-30 M7.8 Depth 664km, seismograms are all 1 minute in length from 2015-05-30 11:33:00.0 to 11:34:00.0 UTC.

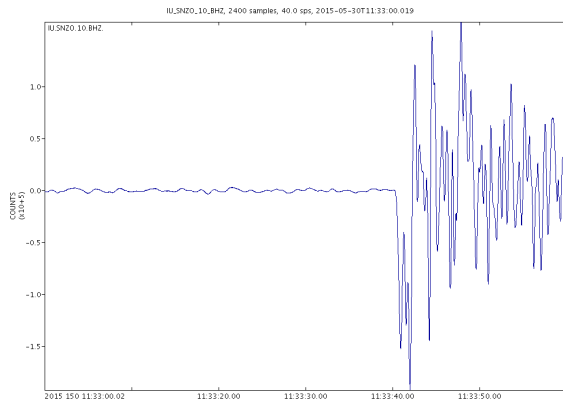
New Zealand Stations  
Ocean LDEO OBS Station YH.LOBS8.HHZ



Land New Zealand Network Station NZ.URZ.HHZ



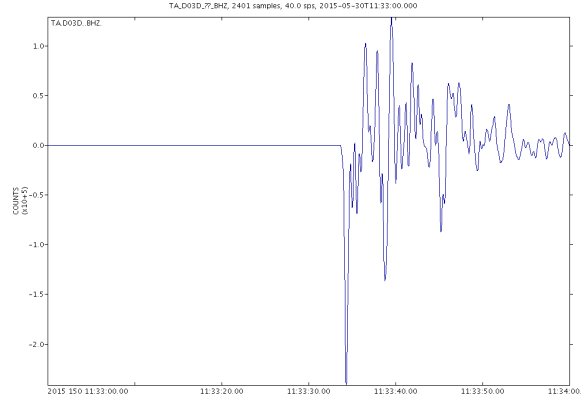
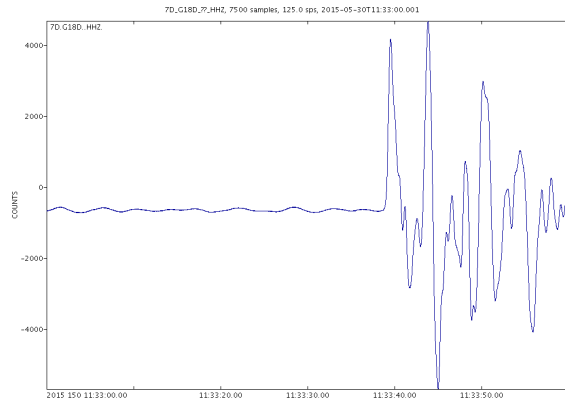
Land GSN Network Station IU.SNZO.BHZ



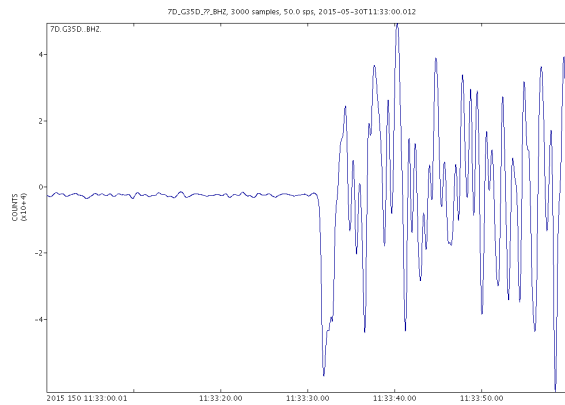
Cascadia Stations

Land TA Station TA.D03D.BHZ

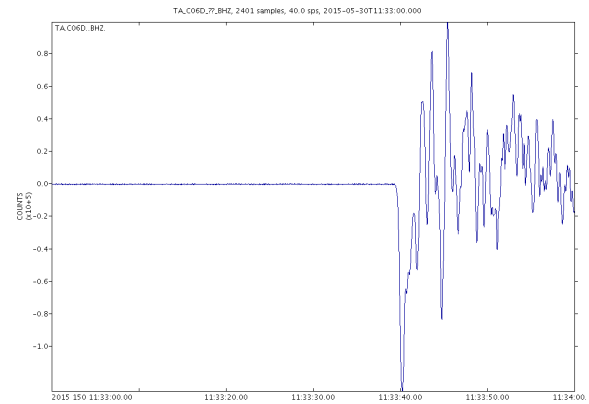
Ocean LDEO OBS Station 7D.G18D.HHZ



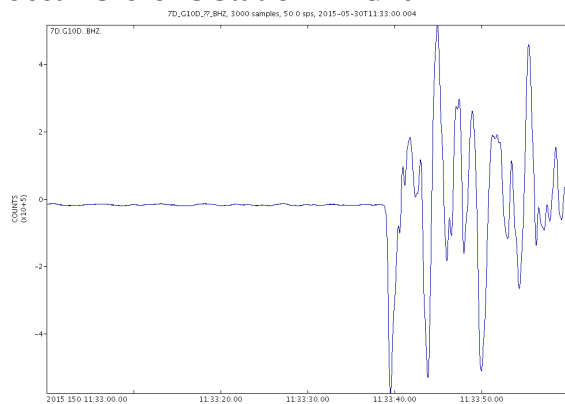
Ocean WHOI OBS Station 7D.G35D.BHZ



Land TA Station TA.C06D.BHZ



Ocean SIO OBS Station 7D.G10D.BHZ



Land GSN Station IU.COR.BHZ

