## ChilePEPPER LDEO APG response

- 6/20/2013 Anne Trehu sent summary of instrument performance for the ChilePEPPER experiment to Brent Evers and Bob Woodward. 2 LDEO APG instruments (SO2 and SO3) lose sensitivity to frequencies >0.001 Hz over a period of one week. The instruments started losing sensitivity after 100 days of deployment and 10 days of deployment, respectively. The problem is more severe for SO3 than for SO2, which retains some sensitivity to earthquake-generated signals in spite of this problem.
- 6/20/2013 Brent Evers mentioned that the pressure sensors are oil filled tubes coupled to pressure ports. Debris in and viscosity of the oil at different depth and temperatures might play a significant role in the response function of these instruments.
- 6/20/2013 Spahr Webb is working on investigating the issue. He has not seen anything like it in the Cascadia YR1 data. He notes that some corrosion was observed when the instruments were recovered in Chile. There was apparently a difference in the tubing between the CI and ChilePEPPER experiments. Anne Trehu suggests processing the OBS data through PQLX.