

Stephen D. Malone Bibliography - 2013

- Malone, S. D., Temporal analysis of micro-earthquake rates in southeastern Nevada, *Geol. Soc. Amer. Prog.* 64th Ann. Meeting, 77 (abs), 1968.
- Ryall, A., J. Brune, S. D. Malone, and R. F. Roy., Teleseismic P-wave delays from a profile crossing the northern Sierra Nevada-Basin and Range boundary, *Geol. Soc. Amer. Prog.* 64th Ann. Meeting, 77, 1968.
- Malone, S. D., Focal determination of micro-earthquakes using a tripartite seismic array, *Earthquake Notes*, XL, 1969.
- Malone, S. D., Tidal and secular strain observations at Round Mountain, Nevada, *Trans. Amer. Geophys. Un.*, 51, 11 (abs), 1970.
- Boucher, G., S. D. Malone, and F. Homuth, Strain effects of nuclear explosions in Nevada, *Bull. Seismol. Soc. Amer.*, 61(1), 55-64, 1971.
- Malone, S. D., Strain measurements in central Nevada and their relationship to regional tectonics, *Geol. Soc. Amer. Prog.* 67th Ann. Meeting, 3, 2 (abs), 1971.
- Ryall, A., S. D. Malone, W. U. Savage, and R. Batra, Comparison of earthquake characteristics and structure of the crust and upper mantle in the Western Basin and Range Province, *Geol. Soc. Amer. Prog.* 67th Ann. Meeting, 3, 2 (abs), 1971.
- Ryall, A., and S. D. Malone, Earthquake distribution and mechanism of faulting in the Rainbow Mt. Dixie Valley-Fairview Peak area, central Nevada, *J. Geophys. Res.*, 76(29), 7241-7248, 1971.
- Malone, S. D., *Earth strain measurements in Nevada and possible effects on seismicity due to the solid earth tides*, Ph.D. Dissertation, University of Nevada, Reno, Nevada, 139 pp., 1972.
- Ryall, A., B. M. Douglas, S. D. Malone, and W. U. Savage, Use of micro-earthquakes to determine mechanism of faulting, stresses and other source characteristics in Nevada, *Izvestiya, Akademiya Nauk S.S.R.*, Fizika Zemli, No. 12, 1972.
- Malone, S. D., S. W. Smith, and R. Johnson, A long-period digital seismograph net, *Seismol. Soc. Amer. Prog.* 68th Ann. Meeting, (abs), 1973.
- Malone, S. D., Some characteristics of micro-earthquake swarms in the Columbia River Basin, *EOS*, 55, 347 (abs), 1974.
- Weaver, C. S., S. D. Malone, and S. W. Smith, Anomalous seismic events on Cascade volcanoes, *Seismol. Soc. Amer. Prog.* 70th Ann. Meeting, (abs), 1974.
- Malone, S. D., Observations of the static displacement field from a medium-sized nearby earthquake, *EOS*, 56, 1147 (abs), 1974.
- Weaver, C. S., and S. D. Malone, Glacier sources for low frequency seismic events recorded at Mount St. Helens Volcano, *EOS*, 56, 1151 (abs), 1974.
- Rothe, G. H., and S. D. Malone, Details of earthquake swarms in the Columbia Basin, paper presented at Pacific Northwest Meeting of AGU, *EOS*, 56, 1149 (abs), 1974.
- Malone, S. D., G. H. Rothe, and S. W. Smith, Details of micro-earthquake swarms in the Columbia Basin, Washington, *Bull. Seismol. Soc. Amer.*, 65(4), 855-864, 1975.
- Helmberger, D. V., and S. D. Malone, Modeling local earthquakes as shear dislocations in a layered half space, *J. Geophys. Res.*, 80(35), 4881-4888, 1975.
- Malone, S. D., and D. Frank, Increased heat emission from Mount Baker, Washington, Cover article, *EOS*, 56(10), 679-685, 1975.
- Malone, S. D., Seismic and gravity observations on Mount Baker Volcano, presented at Pacific Northwest AGU, *EOS*, 57, 88 (abs), 1976.
- Sato, M., S. D. Malone, R. M. Moxham, and J. E. McLane, Monitoring of fumarolic gas at Sherman Crater, Mount Baker, Washington, *EOS*, 57, 88 (abs), 1976.
- Weaver, C. S., and S. D. Malone, Mount St. Helens seismic events: volcanic earthquakes or glacial noises?, *Geophys. Res. Lett.*, 3(3), 197-200, 1976.
- Malone, S. D., and D. Frank, Monitoring Mount Baker Volcano, *Earthquake Inform. Bull.*, 8, 20, 1976.

- Malone, S. D., Deformation of Mount Baker Volcano by hydrothermal heating, Fall Annual AGU, *EOS*, 57, 1016 (abs), 1976.
- Rohay, A. C., and S. D. Malone, Seismic velocity anomalies in the vicinity of Mount Baker, Washington., *G.S.A.*, Sacramento (abs), 1977.
- Blacic, J. D., and S. D. Malone, Preliminary analysis of microacoustic signals associated with rock fracture, *Geophys. Res. Lett.* 4(10), 477-480, 1977.
- Bor, S. S., S. D. Malone, and S. W. Smith, A spectral ratio technique for estimating the characteristics of seismic attenuation for Eastern Washington, Pacific Northwest AGU, *EOS*, 59, 236 (abs), 1978.
- Malone, S. D., G. Pavlis, and J. D. Blacic, A comparison of near, intermediate and far field spectra for earthquake type sources, Pacific Northwest AGU, *EOS*, 59, 236 (abs), 1978.
- Malone, S. D., Gravity changes accompanying increased heat emission at Mount Baker, Washington, *J. Volcan. Geotherm. Res.*, 6, 241-256, 1979.
- Malone, S. D., and S. S. Bor, Attenuation patterns in the Pacific Northwest based on intensity data and the location of the 1872 North Cascades earthquake, *Bull. Seismol. Soc. Amer.*, 69(2), 531-546, 1979.
- Weaver, C. S., and S. D. Malone, Seismic evidence for discrete glacier motion at the rock-ice interface, *J. Glaciol.*, 23(89), 171-184, 1979.
- Endo, E. T., C. S. Weaver, and S. D. Malone, Coda magnitudes of earthquakes associated with the 1980 eruptions of Mt. St. Helens, *EOS*, 61(6), 1133 (abs), 1980.
- Malone, S. D., E. T. Endo, and C. S. Weaver, Seismicity associated with the 1980 eruptions of Mt. St. Helens, *EOS*, 61(46), 1133 (abs), 1980.
- Weaver, C. S., S. D. Malone, E. T. Endo, and L. L. Noson, Seismicity pattern of the Mt. St. Helens eruptive sequence, *EOS*, 61(46), 1132 (abs), 1980.
- Crosson, R. S., E. T. Endo, S. D. Malone, L. L. Noson, and C. S. Weaver, Eruption of Mt. St. Helens: seismology, *Nature*, 285, 529-531, 1980.
- Noson, L. L., S. D. Malone, E. T. Endo, and C. S. Weaver, Seismicity preceding the May 18 eruption of Mt. St. Helens, *EOS*, 62(6), 62 (abs), 1981.
- Malone, S. D., C. S. Weaver, and E. T. Endo, Seismic details of the May 18, 1980 cataclysmic eruption of Mt. St. Helens, *EOS*, 62(6), 62 (abs), 1981.
- Weaver, C. S., E. T. Endo, S. D. Malone, and L. L. Noson, Predicting Mt. St. Helens eruptions, *EOS*, 62(6), 62 (abs), 1981.
- Endo, E. T., S. D. Malone, L. L. Noson, and C. S. Weaver, Locations, magnitudes, and statistics of the March 20-May 18 earthquake sequence, in 1980 Eruptions of Mt. St. Helens, edited by Peter W. Lipman and Donal R. Mullineau, *U.S. Geological Survey Professional Paper*, No. 1250, 1981.
- Malone, S. D., E. T. Endo, C. S. Weaver, and J. W. Ramey, Seismic monitoring for eruption prediction, in 1980 Eruptions of Mt. St. Helens, edited by Peter W. Lipman and Donal R. Mullineau, *U.S. Geological Survey Professional Paper*, No. 1250, 1981.
- Weaver, C. S., W. C. Grant, S. D. Malone, and E. T. Endo, Post-May 18 seismicity: volcanic and tectonic implications, in 1980 eruptions of Mt. St. Helens, edited by Peter W. Lipman and Donal R. Mullineau, *U.S. Geological Survey Professional Paper*, No. 1250, 1981.
- Malone, S. D., C. S. Weaver, E. T. Endo, and L. L. Noson, Seismic precursors to the eruptions of Mount St. Helens, 1981 IAVCEI Symposium on Arc Volcanism, *The Volcanological Society of Japan* (invited, abs), 1981.
- Malone, S. D., The Mount St. Helens eruptions: seismic monitoring for eruption prediction, Proc. of the Volcanic Hazards Workshop, California Division of Mines and Geology Special Publications Series, 1982.
- Malone, S. D., and C. Boyko, Volcanic earthquakes and the precursors to the 1981 eruptions of Mount St. Helens, *EOS*, 63(45), 1140 (abs), 1982.
- Malone, S. D., and A. Rohay, Crustal structure of the Columbia Plateau Region, Washington, *Earthquake Notes*, 54, 39 (abs), 1982.
- Malone, S. D., Volcanic earthquakes: examples from Mt. St. Helens, *Earthquakes: Observations, Theory, and Interpretation*, North Holland Publishing Co., 436-455, 1983.

- Malone, S. D., C. Boyko, and C. S. Weaver, Seismic precursors to the Mount St. Helens eruptions in 1981 and 1982, *Science*, 221, 1376-1378, 1983.
- Malone, S. D., G. L. Pavlis, Velocity structure and relocation of earthquakes at Mount St. Helens, *EOS*, 64, 895 (abs), 1983.
- Swanson, D. A., T. J. Casadevall, D. Dzurisin, S. D. Malone, C. G. Newhall, and C. S. Weaver, Predicting eruptions at Mount St. Helens, June 1908 through December 1982, *Science*, 221, 1369-1376, 1983.
- Weaver, C. S., J. E. Zollweg, and S. D. Malone, Deep earthquakes beneath Mount St. Helens: evidence for magmatic gas transport?, *Science*, 221, 1391-1394, 1983.
- Scandone, R., and S. D. Malone, Magma supply, magma discharge, and readjustment of the feeding system of Mount St. Helens during 1980, *J. Volcan. Geotherm. Res.*, 23, 121-139, 1984.
- Swanson, D. A., T. S. Casadevall, D. Dzurisin, S. D. Malone, C. G. Newhall, and C. S. Weaver, Forecasts and predictions of Mount St. Helens, U.S.A.: 1975-1983, International Geology Conference, Moscow, USSR, July 1984.
- Malone, S. D., and A. Qamar, Repetitive micro-earthquakes as the source for volcanic tremor at Mount St. Helens, *EOS*, 65, 1001 (abs), 1984.
- Fremont, M. J., S. D. Malone, High precision relative relocations of earthquakes at Mount St. Helens, Washington, *Earthquake Notes*, 55, 23-24 (abs), 1985.
- Glover, D. W., S. D. Malone, and A. C. Rohay, Crustal structure of the Columbia Basin, Washington from borehole and refraction data, *Earthquake Notes*, 55, 23 (abs), 1985.
- Rohay, A. C., D. W. Glover, and S. D. Malone, Time term analysis of upper crustal structure in the Columbia Basin, Washington, *Earthquake Notes*, 55, 23 (abs), 1985.
- Swanson, D. A., T. Casadevall, D. Dzurisin, R. Holcomb, C. Newhall, S. D. Malone, and C. S. Weaver, Forecasts and predictions of eruptive activity at Mount St. Helens, USA, 1975-1984, *J. of Geodynamics*, 3, 397-423, 1985.
- Qamar, A., A. Rathbun, R. Ludwin, R. S. Crosson, and S. D. Malone, Earthquake Hypocenters in Washington and Northern Oregon--1980, Washington State Department of Natural Resources Information Circular, 82, 1986.
- Hofstetter, A., and S. D. Malone, Observation of volcanic tremor at Mount St. Helens in April and May 1980, *Bull. Seis. Soc. Amer.*, 76, 923-938, 1986.
- Malone, S. D., Predicting eruptions of Mount St. Helens using seismic means, *Volcano News*, 1986.
- Raymond, C., and S. D. Malone, Propagating strain anomalies on Variegated Glacier, Alaska, *Jour. Glaciol.*, 1986.
- Malone, S. D., and D. A. Swanson, Twentieth Century Unrest at Cascade Volcanoes, International Volcanological Congress, New Zealand (abs) 1987.
- Qamar, A., A. Rathbun, R. Ludwin, R. S. Crosson, and S. D. Malone, Earthquake Hypocenters in Washington and Northern Oregon--1981, Washington State Department of Natural Resources Information Circular, 83, 1987.
- Qamar, A., R. Ludwin, R. S. Crosson, and S. D. Malone, Earthquake Hypocenters in Washington and Northern Oregon--1982-1986, Washington State Department of Natural Resources Information Circular, 84, 1987.
- Fremont, M. J., and S. D. Malone, High precision relative locations of earthquakes at Mount St. Helens, Washington, *J. Geophys. Res.*, 92, 10223-10236, 1987.
- Weaver, C. S., and S. D. Malone, Overview of the tectonic setting and recent studies of eruptions of Mount St. Helens, Washington, *J. Geophys. Res.*, 92, 10149-10154, 1987.
- Bottari A., Caccamo D., Malone S., Neri G., Statistical analysis of Mt. St. Helens earthquakes. *GNV Boll.* 145-157, 1987
- Barker, S., and S. D. Malone, Magnma body geometry at Mount St. Helens volcano from post-eruptive earthquakes, *EOS*, 69 529 (abs) 1988
- Leet, R. C., and S. D. Malone, Groundwater Pressure oscillations accompanying hydrothermal boiling: implications for seismic monitoring of volcanoes and geothermal systems. *EOS* 69, 1499 (abs) 1988

- Havskov, J., S. D. Malone, R. Crosson, and D. McClurg, Coda Q of the State of Washington. *Seismological Research Letters*, 60, 20 (abs) 1989
- Havskov, J., S. D. Malone, R. Crosson, and D. McClurg, Coda Q of the State of Washington. *Bull. Seis. Soc. Amer.*, 79, 1024-1038, 1989
- Neri, G., and S. D. Malone, An analysis of the earthquake time Series at Mount St. Helens, Washington, in the framework of recent volcanic activity. *Jour. Volcan. Geother. Res.* 38, 257-267, 1989
- Nielsen, E. A., R. B. Waitt, and S. D. Malone, Eyewitness accounts and photographs of the 18 May, 1980 eruption of Mount St. Helens, Wash. I.A.V.C.E.I. General Assembly Program (abs), 1989.
- Havskov, J., S. D. Malone, R. Crosson and D. McClurg, Coda Q of the State of Washington. *Seismological Research Letters*, 60, 20 (abs), 1989.
- Leet, R. C. and S. D. Malone, Simulating volcanic tremor in the lab: the case for boiling groundwater, *EOS*. 70, pp 1194 (abs), 1989
- Miyamachi, H., and S. D. Malone, Relocation of earthquakes at Mount St. Helens using a three-demensional velocity model, *EOS* 70, pp 1195 (abs), 1989
- Moran, S.C., S.D. Malone, Pre-1980 seismicity at Mount St. Helens: is the past the key to the present, *EOS* 71,36 p1067 (abs) 1990
- Malone, Stephen D., Mount St. Helens, the 1980 reawakening and continuing seismic activity, *Geoscience Canada* 17, pp 146-150, 1990.
- Nabelek, J., K. Werner, R. Yeats, and S. Malone, The August, 1990 Woodburn, Oregon earthquake sequence: constraints from broadband regional recording and geological implications, *EOS* 71 41 (abs) 1990 Leet, R.C., S.D. Malone, Boiling in hyrdothermal systems may cause volcanic tremor, *EOS* 71 pp 1675, (abs) 1990
- Moran, Seth C., Stephen D. Malone, Recent micro-seismic activity at Mout. St. Helens and its implications for the evolution of the deeper magmatic system, *EOS* 71, pp 1693, (abs) 1990
- Barker, S.E. and S.D. Malone, Magmatic system geometry at Mount St. Helens modeled from the stress field associated with post-eruption earthquakes. *Jour. Geophys. Res.* 9611, 883-11,894 1991
- Johnson, P.A., S.D. Malone, Cluster analysis of eastern Washington seismicity: a new algorithm, results and geological correlations, *Seis. Soc. Am. Program*, (abs) 1991
- Malone, S.D. A. Qamar, and C. Jonientz-Trisler, Recent seismicity studies at Mount Rainier, Washington, *Seis. Res. Let.*, v62 p 25 (abs) 1991
- Malone, S.D., The HAWK seismic data acquisition and analysis system, *Seis. Res. Let.*, v62 p23 (abs) 1991
- Malone, S.D., S. Moran, S. Barker, Magma system evolution at Mount St. Helens, Washington as determined from seismicity IUGG General Assembly Program IAVCEI-V5 (abs) 1991
- Jiang, Y., A.I. Qamar, and S.D. Malone, Earthquake Relocation near the Blanco Fracture Zone, *EOS* 77,44 p605 (abs) 1991.
- Werner, K., J. Nabelek, R. Yeats, and S. Malone, The Mount Angel fault: Implications of seismic reflection data and the Woodburn, Oregon, earthquake sequence of August, 1990, *Oregon Geology* 54, 112-117, 1991.
- Moran, S., S.D. Malone, and S. Barker, Deep earthquakes at Mount St. Helens: evidence for a collapsing and dilating magma chamber, *EOS* 72,44 p.523 (abs) 1991.
- Swanson, Donald A., Stephen D. Malone, Barbara A. Samora, Mount Rainier: A Decade Volcano, *EOS* 73, 177-185 (review article), 1992
- Malone, S.D., The Washington Regional Seismograph Network response to large seismic events, *EOS* 73,69 (invited abs), 1992
- Malone, S.D., R. Buland, B. Presgrave, W. Ellsworth, A. Michael, T. Ahern, Rapid Exchange of Seismic Data Between International, National and Regional Networks Using the InterNet, *EOS* V74, N16, p216., 1993

- Hill, DP, PA Reasenburg, A Michael, WJ Arabaz, G Beroza, D. Brumbaugh, JN Brune, R Castro, S Davis, D dePolo, WL Ellsworth, J Gomberg, S Harmsen, L House, SM Jackson, MJS Johnston, L Jones, R Keller, S Malone, L Mungula, S. Nava, JC Pechmann, A Sanford, RW Simpson, RB Smith, M Stark, M Stickney, A Vidal, S Walter, V Wong, J Zollweg, Seismicity Remotely Triggered by the Magnitude 7.3 Landers, California, Earthquake, *Science* 260 1617-1649, 1993
- Malone, S.D., Pacific Northwest earthquake hazards based on historic seismicity, Proceedings of the National Earthquake Prediction Evaluation Council May 6-7, 1992 in Portland Oregon U.S.G.S. Open File Report 93-333, 1993
- Madin, I.P., G.P. Priest, M.A. Mabey, S.D. Malone, T.S. Yelin, D. Meier, March 25, 1993, Scotts Mills Earthquake- western Oregon's wake-up call, *Oregon Geology* 55, 51-57, 1993
- Malone, S.D., Regional seismic network recording and analysis under technological change, Proceedings of the U.S.-Japan Conference on Natural Resources (UJNR) Panel on Earthquake Prediction Technology, U.S.G.S. Open-File No 3-542, 105-109, 1993
- Creager, K.C., S. Malone, L. Astiz, R. Benson, T. McSweeney, J. Winchester, IRIS DMC projects at the University of Washington, IRIS Annual Workshop, (abs), 1993
- Swanson, D.S., S.D. Malone, T. Casadevall, *Mount Rainier, a Decade Volcano*, U.S. National Academy of Science Report, 1994
- Ludwin, R.S., A.I. Qamar, S.D. Malone, C. Jonientz-Trisler, R.S. Crosson, R. Benson, S.C. Moran, Earthquake Hypocenters in Washington and Northern Oregon, 1987-1989, and Operation of the Washington Regional Seismograph Network, Washington Division of Geology and Earth Resources, Circular 89, 1994
- Malone, Steve, Seismo-Agri-Business: Harvesting Large Data Sets, IRIS Annual Workshop 1994 Program (extended abs), 1994
- Malone, S.D., A Review of seismic data access techniques over the Internet, *EOS* V75, N43, supplement pg 429, (abs) 1994
- Stromme, S.R., S.D. Malone, Spyder seismic data retrieval and distribution over Internet, *EOS* V75, N43, supplement pg 431, (abs) 1994
- Khazaradze, G., S.D. Malone, Determination of local magnitude using Pacific Northwest Seismic Network broadband data, *EOS* V75, N43, supplement pg 460 (abs) 1994
- Moran, S.C., S.D. Malone, A seismic refraction profile across the central Washington Cascades: preliminary results, *EOS* V75, N43, supplement pg 621 (abs) 1994
- Malone, Steve, Seismology and the information super-highway, *Seismological Research Letters* V66, N1, 28-30, 1995
- Malone, S.D., All seismic networks will be part of a global network: the network is the network, IUGG XXI General Assembly Program, Boulder, CO, (abs) 1995
- Malone Steve, More on seismology and the information super-highway, *Seismological Research Letters* V66, N3, 35-37, 1995
- Moran, S.C., A. Qamar, S.D. Malone, Seismicity at Mount Rainier, Washington, IUGG XXI General Assembly Program, Boulder, CO, (abs) 1995
- Malone, S.D., S.C. Moran, Mount Rainier; Washington, USA: tectonics, seismicity, and hazards, Volcanoes in Town, page 49-52 IAVCEI conference on volcanic hazard in densely populated regions, *Periodico di Mineralogia, Roma* (extended abs), 1995
- Malone, Steve, The Internet - undergoing rapid change, *Seismological Research Letters* V66, N5, 47-48, 1995
- Pullen, J.L., K.C. Creager, S.D. Malone, Broadband array study in the Puget Sound region, Washington, *EOS* V76 no 46 pp F416 (abs) 1995
- Qamar, A., S.D. Malone, P. Lombard, L. Dengler, Automated felt reports from the January 18, magnitude 5, Robinson Point, Washington earthquake, *EOS* V76 no 46 pp F430 (abs) 1995
- Moran, S.C., J.M. Lees, S.D. Malone, P-wave tomography at Mount Rainier, Washington: preliminary results, *EOS* V76 no 46 pp F644 (abs) 1995
- Malone, Steve, SUNWORM: the Pacific Northwest Seismograph Network real-time seismic recording and processing system, *EOS* V76 no 46 pp F395 (abs) 1995

- Malone, Stephen D., Volcanic Earthquake Hazards in the Pacific Northwest, 1996 *GSA abss with Programs*, Cordilleran Section 24, 1996 (abs)
- Moran, Seth C., Jonathan Lees, Steve D. Malone, P-wave tomography in western Washington using regional network recordings of controlled source experiments; results and interpretations. *GSA abss with Program*, v28 7, p195, 1996 (abs)
- Malone, Steve, The International Internet - Global Connectivity, *Seismological Research Letters* V67, N1, 28-29, 1996
- Malone, Steve, Dave Oppenheimer Lind Gee, and Doug Neuhauser, The Council of the National Seismic System and a Composite earthquake Catalog for the United States, IRIS Newsletter XV no1 pp6-9, 1996
- Malone, Steve, SPYDERS (TM) on the Internet, *Seismological Research Letters* V67, N5, 58-63, 1996
- Malone, Steve, The Electronic Seismologist goes to FISSURES, *Seismological Research Letters* V68, N4, 489-492, 1997
- Malone, Steve, "Near" Realtime Seismology *Seismological Research Letters* V67, N6, 52-54, 1997
- Qamar Anthony, Stephen D. Malone, Ruth S. Ludwin, Rapid Earthquake notification in the Pacific Northwest, *Washington Geology* V25, N4 33-36, 1997
- Oppenheimer, D., A. Bittenbinder, B. Bogaert, L. Dietz, W. Ellsworth, E. Jensen, W. Kohler, J. Van Shaack, R. Buland, H. Benz, R. Hansen, C. Weaver, S. Malone, and P. Okubo, CREST: Consolidated Reporting of Earthquakes and Tsunamis, *EOS* V. 78, No. 46, p. F46. 1997 (abs)
- Malone, S., and S.C. Moran, Deep long-period earthquakes in the Washington Cascades, *EOS*, V. 78, No. 46, p. F438. 1997 (abs)
- Johnson, J., S. Malone, Acoustic Air-Wave Propagation From the 1980 Mount St. Helens Eruption, *EOS*, V. 78, No. 46, p. A51D-01. 1997 (abs)
- Malone, Steve, Anthony Qamar, Stress Conditions in the United States Pacific Northwest: Focal Mechanisms, Tectonics, and Geodesy, Earthquake Fault Plane Solutions: Databases, derived parameters, Geodynamic Inferences, Proceedings , Taormina-Messina, Italy, Editors: G. Neri and C. Eva Jan. 1998. (invited)
- Malone, S.D., The Council of the National Seismic System - The first five years, *Seis. Res. Let.* V69, n2, 164. 1998 (abs)
- Gee, L., S. Malone, D. Neuhauser, D. Oppenheimer, R. Buland, The CNSS Composite Catalog. *Seis. Res. Let.* V69, n2, 166. 1998
- Malone, Steve, Of cathedrals, bazaars, and worms, *Seismological Research Letters* V69, N5, 407-409, 1998
- Malone, Steve, The Future of Regional Seismic Networks and the Council of the National Seismic System, IRIS Annual Workshop 1998 Program (extended abs), 1998
- Malone, Steve, A global network of seismograph networks, *EOS* v79 n45, pF561, 1998 (abs)
- Jacob, Stephen, David Oppenheimer, Robert Simpson, Steve Malone, Rapid Earthquake Data Distribution System via the Internet, *EOS* v79 n45 pF570, 1998 (abs)
- Malone, Steve, Seismic Network Recording and Processing Systems -I, *Seismological Research Letters* V70, N2, 175-178, 1999
- Musumeci, C., S.D. Malone, E. Giampiccolo, S. Gresta, Evidence for an Intermittent Supply of Magma at Mount St. Helens, Washington, *Seismological Research Letters* V70, N2, 223, 1999 (abs)
- Moran, S.C., J.M. Lees and S.D. Malone, P-wave velocity structure in the greater Mount Rainier area from local earthquake tomography, *Jour. Geophys. Res* 104, 10,775-10,786, 1999
- Giampiccolo E., C. Musumeci, S. Malone, S. Gresta, E. Privitera, Seismicity and stress tensor inversion in the Central Washington Cascade Mountains (USA), *Bull. Seis. Soc. Am.* V89 811-821, 1999
- Malone, Steve, Seismic Network Recording and Processing Systems (continued), *Seismological Research Letters* V70, N4, 432-434, 1999

- Malone, Steve, U.S. Seismic Networks: A time for change, Opinion editorial in *Seismological Research Letters* V70, N5, 475-477, 1999
- Giampiccolo, E., S. Gresta, S. Malone, C. Musumeci, Focal mechanisms and spectral parameters of earthquakes at Mount St. Helens volcano in the period 1995-1998. *EOS* V80, N46, p665, 1999 (abs).
- Musumeci, C., S. Malone, S. Gresta, Investigating the seismic activity of Mount St. Helens, 1995-1998 through precise relative location of hypocenters, *EOS* V80, N46, p1147, 1999 (abs).
- Moran, Seth C., David Zimbelman, and Stephen D. Malone, A model for the magmatic-hydrothermal system at Mount Rainier, Washington from seismic and geochemistry constraints, *Bull. Volcan* v61 n7 p425-436, 2000
- Musumeci, Carla, Stephen D. Malone, Elisabetta Giampiccolo, Stefano Gresta, Hypocentral distribution, focal mechanisms and the stress field at Mount St. Helens (1995-1998), *Annali de Geofisica* 43, 5, 889-904, 2000
- Lisi, A., S. Malone, G. Thomas, Precise relative locations for aftershocksof the 1996 Duvall, WA earthquake, *Seis. Res. Lett.* V71, n1 p237, (abs) 2000
- Tano, K., S.D. Malone, Aftershock variability in the Pacific Northwest, *Bull. Seis. Soc. Am.* V71, n1, p239, 2000
- Kirkham, Harold, Steve Malone, John Delaney, The NEPTUNE observatory as seismic early warning system. Joint US-Japan conference on earthquake disaster mitigation, Japan, July 10, 2000
- Staff of the PNSN (editor: Malone), Preliminary report on the Mw=6.8 Nisqually, Washington Earthquake of 28 February, 2001. *Seis. Res. Lett.* 72,3 pp352-361, 2001
- Malone, Steve, Shake and Bake - The Physics of Earthquakes and Volcanos in Seattle's backyard, *Proc. American Physics Society*, MAR01-A4.002, 2001
- Oppenheimer, D., A. Bittenbinder, B.Bogaert, R.Buland, L. Dietz, R.Hansen, S. Malone, C. McCreery, T. Sokolowski, C. Weaver The CREST Project: Consolidated Reporting of EarthquakeS and Tsunamis Cordilleran Section of GSA Annual meeting, 2002 (abs)
- Oppenheimer, David, Alex Bittenbinder, Barbara Bogaert, Raymod Buland,, Lynn Dietz, Roger Hanson, Steve Malone, Charles McCreery, Tomas Sokolowski,, Craig Weaver, The Crest Project: Consolidated reporting of earthquakes and tsunami, ITS 2001 Proceedings, NTHMP Review Session, Paper R5, 2002
- Malone, Steve, Real-time data exchange (revisited), *Seismological Research Letters*, v73, n2 p185-187, 2002
- Malone, Stephen. D., The Pacific Northwest Seismograph Network - A multi-hazard data and information system, Cordilleran Section of GSA Annual meeting, 2002 (abs)
- Musumeci, Carla, Stefano Gresta, Stephen D. Malone, Magma System Recharge of Mount St. Helens from precise relative hypocenter location of microearthquakes, *Jour Geophys. Res.* DOI:10.1029/2001JB000629, 2002
- Tusa, A.G., Giampiccolo, E., Gresta, S., Musumeci, C., Malone, S.D., Temporal changes in seismic attenuation at Mount St. Helens, *Seis. Res. Lett* 73,2, 2002 (abs)
- Hill, D.P., S. Prejean, D. Oppenheimer, S.D. Malone, K. Richards-Dinger, Activity remotely triggered in volcanic and geothermal centers in California and Washington by the 3 November 2002 Mw=7.9 Alaska earthquake *Eos Trans. AGU*, 83(47),S72F-1357, 2002 (abs)
- Jones, J.P., S. Malone, Mount Hood Earthquake Activity: Volcanic or Tectonic Origins?, *Eos Trans. AGU*, 83(47), S12A-1179, 2002 (abs)
- Malone, S., Haulter, A., How glacier-quakes can mimic low-frequency volcanic earthquake seismograms, *EGS-AGU-EUG Joint Assembly*, VGP14-1TU2P-0255, 2003 (abs)
- Caruso, F.; Vinciguerra, S.; Latora, V.; Rapisarda, A.; Malone, S., Multifractal analysis of Mt. S.Helens seismicity as an indicator for eruptive activity , *EGS-AGU-EUG Joint Assembly*, NP11-1TH4P-1412, 2003 (abs)
- Malone, S.D., A review of regional seismic network recording and data exchange systems, *Seis. Res. Lett.* V74,2 pp228, 2003 (abs)
- Simpson, David W., Malone, Steve, Prescott, William, Earthscope facilities for investigations

- of Cascadia seismicity, An. Geol. Soc. Am. meeting Paper# 350-14 2003 (abs)
- McCausland, Wendy A. and Malone, Steve, Deep tremor along the Cascadia subduction zone, An. Geol. Soc. Am. meeting Paper# 350-2 2003 (abs)
- Moran, Seth C., Malone, Stephen D., Lees, Jonathan M., Mid-crustal velocity anomalies in the central Washington Cascades: evidence for structures affecting regional tectonics and volcanism?, An. Geol. Soc. Am. Meeting Paper# 550-8 2003 (abs)
- D Y Venezky, C G Newhall, S D Malone, Creating Access to Data of Worldwide Volcanic Unrest, EOS paper U22A-0027, 2003 (abs)
- Prejean,S., D. Hill, E. Brodsky, S. Hough, M. Johnston, S. Malone, D. Oppenheimer, M. Pitt, K. Richards-Dinger, Observations of Remotely Triggered Seismicity on the United States West Coast Following the Mw 7.9 Denali Fault Earthquake, *Bull. Seis. Soc Amer.* V94 no 6B, p348-359. DOI: 10.1785/0120040610, 2004
- Jones, J., Malone, S., Carniel, R., Harris, A. and Johnson, J., Seismic Investigation of the Erta 'Ale Lava Lake, Afar, Ethiopia, *Seis. Res. Lett.* V75,2 pp249, 2004 (abs)
- McCausland, W., S. Malone, K. Creager, M. La Rocca, G. Saccorotti, Array observations and analyses of Cascadia deep tremor, *Eos Trans. AGU*, 85(47),S42B-05, 2004 (abs)
- Malone, Steve, Garry Rogers, Herb Dragert, Dan Johnson, Review of Episodic Tremor and Slip in Cascadia, *Eos Trans. AGU*, 85(47),S53A-0188, 2004 (abs)
- La Rocca, M., S. Malone, G. Saccorotti, W. McCausland, G. Galluzzo, E. Del Pezzo, Small Aperture Array Resolution Capabilities for Use in Locating Deep Tremor, *Eos Trans. AGU*, 85(47),S53A-0190, 2004 (abs)
- Moran, S.C., S.D. Malone, Seismicity associated with the first month of the 2004 eruption of Mount St. Helens, *Eos Trans. AGU*, 85(47),V31E-02, 2004 (abs)
- Tusa, G., S.D. Malone E. Giampiccollo, Stefano Gresta, Carla Musumeci, Attenuation of short-period P-waves at Mount St. Helens, *Bull. Seis. Soc. Amer.* V94 p1441-1455, 2004
- Filson, J.R., W.J. Arabasz, H.M. Benz, R. Buland, L.S. Gee, S.D. Malone, D. Oppenheimer, The origins of the Advanced National Seismic System, *Seis. Res. Lett.* V76,2 pp211, 2005 (abs)
- Qamar, A., S.D. Malone, S. Moran, Rapid Analysis of Earthquake Data during the 2004-2005 Dome-building Eruption of Mount Saint Helens, *Seis. Res. Lett.* V76,2 pp229, 2005 (abs)
- Moran, S.C., J.W. Vallance, A.I. Qamar, S.D. Malone, The 2004-2005 Eruption of Mount Saint Helens: Possible Links between Seismicity and Physical Changes in the New Lava Dome, *Seis. Res. Lett.* V76,2 pp259, 2005 (abs)
- Oppenheimer, David H.; Bittenbinder, Alex N.; Bogaert, Barbara M.; Buland, Raymond P.; Dietz, Lynn D.; Hansen, Roger A.; Malone, Stephen D.; McCreery, Charles S.; Sokolowski, Thomas J.; Whitmore, Paul M.; Weaver, Craig S. The seismic project of the National Tsunami Hazard Mitigation Program, *Natural Hazards*, Vol. 35, #1, pp.59-72, 2005
- Thelen, W.A., S.D. Malone, Azimuthal Patterns in High-frequency Energy Observed at Mount Saint Helens, Washington: Implications for Near-surface Structure *Seis. Res. Lett.* V76,2 pp259, 2005 (abs)
- Thomas, G., A. Qamar, A. Barberopoulou, P.C. Lindquist, S.D. Malone, Pacific Northwest Seismograph Network (PNSN) as Part of ANSS, *Seis. Res. Lett.* V76,2 pp229, 2005 (abs)
- Tusa, G., S. Gresta, A. Brancato, S.D. Malone, Source Parameters of Microearthquakes at Mount St. Helens (USA) *Seis. Res. Lett.* V76,2 pp266, 2005 (abs)
- Filson, J.R., W.J. Arabasz, H.M. Benz, R. Buland, L.S. Gee, S.D. Malone, D. Oppenheimer, The origins of the Advanced National Seismic System, *Seis. Res. Lett.* V76,2 pp211, 2005 (abs)
- Qamar, A., S.D. Malone, S. Moran, Rapid Analysis of Earthquake Data during the 2004-2005 Dome-building Eruption of Mount Saint Helens, *Seis. Res. Lett.* V76,2 pp229, 2005 (abs)
- Moran, S.C., J.W. Vallance, A.I. Qamar, S.D. Malone, The 2004-2005 Eruption of Mount Saint Helens: Possible Links between Seismicity and Physical Changes in the New Lava Dome, *Seis. Res. Lett.* V76,2 pp259, 2005 (abs)
- Thelen, W.A., S.D. Malone, Azimuthal Patterns in High-frequency Energy Observed at Mount Saint Helens, Washington: Implications for Near-surface Structure *Seis. Res. Lett.*

V76,2 pp259, 2005 (abs)

- Thomas, G., A. Qamar, A. Barberopoulou, P.C. Lindquist, S.D. Malone, Pacific Northwest Seismograph Network (PNSN) as Part of ANSS, *Seis. Res. Lett.* V76,2 pp229, 2005 (abs)
- Tusa, G., S. Gresta, A. Brancato, S.D. Malone, Source Parameters of Microearthquakes at Mount St. Helens (USA) *Seis. Res. Lett.* V76,2 pp266, 2005 (abs)
- Jones, J., S.D. Malone, Mount Hood earthquake activity: volcanic or tectonic origin?, *Bull. Seis. Soc. Amer.*, 95, 818-832, 2005
- McCausland, W., S. Malone, and D. Johnson, Temporal and spatial occurrence of deep non-volcanic tremor: From Washington to northern California, *Geophys. Res. Lett.*, 32, L24311, doi:10.1029/2005GL024349, 2005
- Vinciguerra, S., D. Elsworth, S. Malone, 2005 The 1980 pressure response and flank failure of Mount St. Helens (USA) inferred by seismic scaling exponents. *Jour. Volc. Geoth. Res.* V-144 p155-168
- Tusa, Giuseppina, Stephen D. Malone Elisabetta Giampiccolo, Stefano Gresta, Carla Musumeci, Microearthquake source parameters and seismic attenuation at Mount St. Helens. *Geophysical Journal International*. (2005)
- La Rocca, Mario, Wendy McCausland, Danilo Galluzzo, Steve Malone, Gilberto Saccorotti Edoardo Del Pezzo, Array measurements of deep tremor signals in the Cascadia subduction zone. *Geophy. Res. Let.* 2005 doi:10.1029/2005GL023974, 2005
- Malone, Steve, Volcanic earthquakes at Mount St. Helens: evidence for a stick-slip seismic source, *Geological Society of America abss with program*, Vol 37, (abs) 96158, 2005
- Wells, Ray E., Blakely, Richard, Dragert, H., Kao, H., McCausland, W., and Malone, S, Coseismic slip and deep tremor in subduction zones and its relation to crustal structure revealed by gravity anomalies, *Geological Society of America abss with Programs*, Vol. 37, No. 4, Paper 9-5 2005 (abs)
- Malone, Steve (University of Washington, Seattle, WA, United States); McCausland, Wendy; Johnson, Dan, Observations of deep, non-volcanic tremor in Cascadia, *Open-File Report - U. S. Geological Survey*, 2005, pp.43-44, 2005
- Ranf, R.T., M.O. Eberhard, S. Malone, Post-Earthquake Prioritization of Bridge Inspections, *Earthquake Spectra*, EERI, 2006
- Tusa, Giuseppina, Alfonso Brancato, Stefano Gresta, Stephen D. Malone, Source parameters of microearthquakes at Mount St. Helens. *Geophysical Journal International* doi:10.1111/j.1365-246X.2006.03025.x, 2006
- Jones, J.; Carniel, R.; Harris, A. J. L.; Malone, Seismic characteristics of variable convection at Erta Ale lava lake, Ethiopia, *Journal of Volcanology and Geothermal Research*, Vol. 153, 1-2, pp.64-79, 2006
- Thelen, W.; Malone, Steve; Qamar, A.; Pullammanappallil, Satish, Improvements to absolute locations from an updated velocity model at Mount St. Helens, Washington, *Seismological Research Letters*, Vol. 77, #2, pp.238-239, 2006
- Iverson, Richard M. Daniel Dzurisin, Cynthia Gardner, Terrence Gerlach, Richard LaHusen, Michael Lisowski, Jon Major, Stephen D. Malone, James Messerich, Seth Moran, John Palister, Anthony Qamar, Steven Schilling James Vallance, Dynamics of seismogenic volcanic extrusion at Mount St. Helens in 2004-05, *Science* Vol 444/23 doi:10.1038/nature05322, 2006
- Scandone, Roberto; Cashman, Katharine V.; Malone, Stephen D., Magma supply, magma ascent and the style of volcanic eruptions, *Earth and Planetary Science Letters*, Vol. 253, #3-4, pp.513-529, 2007
- Rubinstein, Justin L.; Vidale, John E.; Gomberg, Joan; Bodin, Paul; Creager, Kenneth C.; Malone, Stephen D., Triggering of grinding tremor by the strong shaking of the 2002 Denali earthquake, *Program - Geological Society of America*, Vol. 39, I#4, pp.83, 2007 (abs)
- Thelen, W. A.; Malone, S. D.; Moran, S. C., High or low? Frequency games at Mount St. Helens, *Seismological Research Letters*, April 2007, Vol. 78, #2, pp.255, 2007 (abs)
- Johnson, Jeffrey B., Stephen D. Malone, Ground-coupled acoustic airwaves from Mount St. Helens provide constraints on the May 18, 1980 eruption, *Earth Plan. Sci. Let.* 258 16-31,

2007

- Rubinstein, Justin L., John Vidale, Joan Gomberg, Paul Bodin, Kenneth C. Creager, Stephen D. Malone, Non-volcanic tremor driven by large transient shear stresses, *Nature*, 448,2 doi: 10.1038/nature06017, 2007
- Malone, Steve, A Warning about Early Warning, (Opinion) *Seis Res Letts.* Vol 79,5, 2008
- Qamar, Anthony, Steve D. Malone, Seth C. Moran, William P. Steele, Weston Thelen, Near-real-time information products for Mount St. Helens – Tracking the ongoing eruption, in *A Volcano Rekindled: The Renewed Eruption of Mount St. Helens, 2004-2006*, U.S. Geological Survey Professional Paper 1750, 2008.
- Moran, S.C., S.D.Malone, A.I. Qamar, W.A.Thelen, A.K. Wright, J. Caplan-Auerbach, Seismicity associated with renewed dome building at Mount St. Helens, 2004-2005, in *A Volcano Rekindled: The Renewed Eruption of Mount St. Helens, 2004-2006*, U.S. Geological Survey Professional Paper1750, 2008.
- Mario La Rocca, Danilo Galluzzo, Steve Malone, Wendy McCausland, Gilberto Saccorotti,† and Edoardo Del Pezzo, Testing Small-Aperture Array Analysis on Well-Located Earthquakes, and Application to the Location of Deep Tremor, *Bull. Seis. Soc. Amer.*, 98,2 620-635 2008
- Honn Kao, Kelin Wang, Rong-Yuh Chen, Ikuko Wada, Jiangheng He, and Stephen D. Malone, Identifying the Rupture Plane of the 2001 Nisqually, Washington, Earthquake *Bulletin of the Seismological Society of America*,; 98: 1546 – 155, 2008
- Mario La Rocca, Kenneth C. Creager, Danilo Galluzzo, Steve Malone, John E. Vidale, Justin R. Sweet, Aaron G. Wech, Cascadian tremor located near plate interface constrained by S minus P wave times, *Science V323*, 620-621, 2009
- McCausland, Wendy, Kenneth Creager, Mario La Rocca and Stephen D. Malone, Short-term and long-term tremor migration patterns of the Cascadia 2004 tremor and slow slip episode using small aperture seismic arrays, *Jour. Geophy. Res.* Vol. 115, B00A24, doi: [10.1029/2008JB006063](https://doi.org/10.1029/2008JB006063), 2010
- Thelen, W.A., S.D. Malone, M.E. West, Response time and cumulative moment magnitude: A new tool for forecasting eruptions? *Geophys. Res. Lett.*, 37, L18301, doi: [10.1029/2010GL044194](https://doi.org/10.1029/2010GL044194)
- Moran, S.C., S. D. Malone, T. L. Murray, D. H. Oppenheimer, and W. A. Thelen, Seismic monitoring at Cascade Range volcanoes; what we've learned, where we are, where we need to be *Seismological Research Letters*, v. 81, p. 350, 2010
- W. A. Thelen and Steve D. Malone, Analysis of a "new" seismic dataset from the 1980 eruption of Mount St. Helens, *Seismological Research Letters*, v. 81, p. 381, 2010
- Nichols, M.L., S.D. Malone, S.C. Moran, W. Thelen, J.E. Vidale, Deep long-period earthquakes beneath Washington and Oregon volcanoes; *Jour. Vol. Geoth. Res.* V200 p 116-128, DOI:[10.1016/j.jvolgeores.2010.12.005](https://doi.org/10.1016/j.jvolgeores.2010.12.005), 2011
- Crider, Juliet G., David Frank, Stephen D. Malone, Michael P. Poland, Cynthia Werner, Jacqueline Caplan-Auerbach, Magma at depth: A retrospective analysis of the 1975 unrest at Mount Baker, Washington, USA; *Bull. Vol. V73 N2 p175-189*. DOI: [10.1007/s00445-010-0441-0](https://doi.org/10.1007/s00445-010-0441-0), 2011
- Thelen, Weston, Steve Malone, Michael West, Multiplets: their behavior and utility at dacitic and andesitic volcanic centers, *Journal of Geophysical Research*, 116(B8), 2011
- J. L. Rubinstein, G. C. Beroza, J. Brown, M. Brudzinski, Kevin Chao, J. Gomberg, Steve Malone, D. Oppenheimer, Z. Peng, S. Prejean, H. Savage, D. Shelly, Aaron Wech, and M. West, Widespread triggering of earthquakes and tremor by the 2011 M9.0 off-Tohoku earthquake, *Seismological Research Letters*, May 2011, v. 82, p. 461, 2011
- S. D. Malone and J. E. Vidale, Developing earthquake early warning in the US is currently a waste of time and money, *Seismological Research Letters*, March 2011, v. 82, p. 308, 2011
- Bodin, P., J. E. Vidale, J. H. Luetgert, S. D. Malone, A. A. Delorey, W. P. Steele, D. A. Gibbons, L. K. Walsh, Seismic Monitoring with NetQuakes: The First 75 in the Pacific Northwest, AGU Fall Meeting Abstracts Dec. 2011

- J.P. Jones, R. Carniel, S.D. Malone, Decomposition, location, and persistence of seismic signals recovered from continuous tremor at Erta 'Ale, Ethiopia, *Journal of Volcanology and Geothermal Research*; 213-214:116-129. DOI:10.1016/j.jvolgeores.2011.07.007, 2012
- J.P. Jones, R. Carniel, S.D. Malone, Subband decomposition and reconstruction of continuous volcanic tremor, *Journal of Volcanology and Geothermal Research*; 213-214:98-115. DOI:10.1016/j.jvolgeores.2011.07.006, 2012
- Cakir, R., Dragovich, J. D., Walsh, T. J., Lees, J. M., Yun, S. H., Malone, S., Anderson, M.L., Active Fault Identification and Mapping using Multidisciplinary data and Methods in Northeast Seattle area and analysis of May 02, 1996 (M5.4) Duvall Earthquake, *Seismological Research Letters*, March 2013, v. 84 #2, p. 377-338, 2013
- Thelen, W., Kate Allstadt, Silvio DeAngelis, Steve Malone, Seth Moran John Vidale, Shallow repeating seismic events under an alpine glacier at Mount Rainier, Washington, *Jour. Glaciol* V59 #214 p345-356, doi:10.3189/2013JoG12J111, 2013
- Vidale, J.E., D.A. Schmidt, S.D. Malone, A.J. Hotovec-Ellis, S.C. Moran, K.C. Creager and H. Houston, Deep long-period earthquakes west of the volcanic arc in Oregon: Evidence of the serpentine dehydration in the fore-arc mantle wedge. *Geophys. Res. Letts.* 41, 370-376, doi:10.1002/2013GL059118. 2014
- Allstadt, Kate, Stephen D. Malone, Swarms of repeating stick-slip icequakes triggered by snow loading at Mount Rainier volcano, *Jour. Geophys. Res. Earth Surf.* 119, doi: 10.1002/2014JF003086. 2014
- Allstadt, K. E., Shean, D. E., Campbell, A., Fahnstock, M., and Malone, S. D.: Observations of seasonal and diurnal glacier velocities at Mount Rainier, Washington using terrestrial radar interferometry, *The Cryosphere Discuss.*, 9, 4067-4116, doi:10.5194/tcd-9-4067-2015, 2015
- Malone, Stephen, Kelley Hall, John Vidale, Lynn Simmons, How to recognize a “Beast Quake” and a “Dance Quake”, *Seismo. Res. Lett.* v86-3, 106-108, doi: 10.1785/0220150053, 2015
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Submitted or in Press

Special talks, seminars and presentations in past 15 years

- Invited talk at 18th Symposium of the International School of Geophysics at Erice, Italy titled: *Magma recharge of quiescent volcanic systems – evidence from Cascadia*, Jul. 11, 2001
- Presentation at the National Implementation Committee meeting of the Advanced National Seismic System (ANSS) in Golden, CO, Sep 5, 2001 on *Status of the PNW*
- Invited talk to the Geological Survey of Canada on *Episodic magma recharge at Cascade volcanos*, Vancouver, BC, Nov 8, 2001
- Invited presentation to the Oregon Seismic Safety Policy Advisory Council on *Assessment of seismic monitoring in the State of Oregon*. Jan 8, 2002
- Invited presentation to the Idaho Disaster Services on an *Assessment of seismic monitoring in the Pacific Northwest*, Jan 17, 2001
- Invited presentation to the Washington State Seismic Safety Committee on an *Assessment of seismic monitoring in the State of Washington*, Feb 7, 2002
- Invited talk to the Northwest Geological Society on *Episodic magma recharge at Cascade volcanos*, Feb 12, 2002
- Invited talk in seminar series at the Cascade Volcano Observatory, in Vancouver on *Episodic magma recharge at Cascade volcano*, Feb 12, 2001
- Invited talk to the Cordilleran Section of the GSA entitled: *The Pacific Northwest*

Seismograph Network – A multi-hazard data and information system, May 13, 2002

- Invited presentation at the Burke Museum on *Earthquakes and Volcanos – the latest research*, May 23, 2002
- Several invited talks on volcano monitoring for civic and governmental organizations such as the Mount St. Helens National Monument and Mount Rainier National Park.
- Informal presentation on volcano monitoring to the Consortium of U.S. Volcano Observatories - May, 2002.
- Invited presentation at the IRIS Annual Workshop on the role of the Seismological Society of America and its relationship to IRIS - June, 2002
- Presentation at the annual regional coordinators of the ANSS workshop on design issues for a future coordinated national seismic system –July, 2002
- Informal presentation and poster at the *Earthscope Volcano Systems Planning Workshop* on coordination between Earthscope and regional networks in the Pacific Northwest – Nov, 2002
- Consultant on volcano monitoring to the *Consortium of U.S. Volcano Observatories* - Sep, 2003.
- Presentation at the regional coordinators of the ANSS workshop on shared support of regional seismic networks –Feb, 2004
- Organized a special theme session at the Annual IRIS workshop on “Explosive Volcanism” and provided the introductory background information.
- Invited Public lecture in the “Ocean to Stars” series, Predictions in the Environment for the UW Alumni organization called “Earthquakes and Volcanoes: can they be predicted?”, also video taped and broadcast at 4 times. Kane Hall, UW Mar, 2005
- Invited presentation on “Current eruption of Mount St. Helens” INGV, Rome, Italy, May 2, 2005
- Invited presentation on “25 years of activity at Mount St. Helens” University of Pisa, Italy, May 18, 2005.
- Invited Public Lecture in the ESS “Pacific Northwest Earth Science Lecture Series” on “Mount. St. Helens: What’s next?”, also video taped for later broadcast, Kane Hall, UW June, 2005.
- Presentation at the Annual IRIS Workshop on “Array techniques for studying deep tremor”. June 20, 2005.
- I organized a special theme session at the Annual IRIS workshop on “Explosive Volcanism” and provided the introductory background information. Portland, Or June 21, 2005.
- Invited presentation to the USGS Earthquake Program Scientific Advisory Committee, Seattle, WA Sep 27, 2005
- Invited presentation to the ANSS Steering Committee on PNSN operations, Denver, CO Nov 21, 2005
- Presented a poster on “Source Scaling of volcanic earthquakes at Mount St. Helens” for the *Cities on Volcanoes -IV* meeting in Quito, Ecuador, Jan 24, 2006.
- Invited keynote presentation on “Playing catchup with volcano monitoring: Mount St. Helens, then and now, at the NVEWS workshop, Portland, OR Feb 22, 2006.
- Washington DNR Regional conference, Yakima, Invited presentation on "Eastern Washington Seismicity". Oct 16, 2007
- NSF/EathScope, Workshop on Cascadia, Invited presentation on "Earthquake Research and Monitoring in the Pacific Northwest. Apr. 7, 2008
- National Earthquake Conference annual meeting, Invited Presentation on "Monitoring Volcanoes for Science and Hazard Mitigation". Apr. 25, 2008
- IRIS Annual Workshop, Invited presentation on "The Many Roles of a Regional Seismic Network; Examples from the PNSN. Jun. 6, 2008
- Mount Rainier National Park, Invited evening presentation on "Predicting the next eruption of Mount Rainier". Jul. 2008
- Report to the Consortium of US Volcano Observatories on “Status of monitoring the Cascade Volcanoes, Menlo Park, CA. Nov 18, 2008

- Organized the steering committee meeting and a presentation for the VOVOdat (WOVO database of volcanic unrest), San Fransisco, CA, Dec 15, 2008
- Invited presentation on non-volcanic tremor at the Northwest Scientific Association 81 annual meeting. Mar. 27, 2009
- 2010 IRIS/SSA Distinguished lecturer. Title: *Predicting Earthquakes and Volcanic Eruptions: What can and can't be done.* Lecture given at:
 - INGV Bologna, Italy, Oct 13, 2009
 - Seismic Risk Symposium, Messina, Italy, Mar. 13, 2010
 - National Science Teachers Association Conf, Philadelphia, PA. Mar 19, 2010
 - Oregon Museum of Science and Industry, Portland, OR. Apr. 20, 2010
 - American Museum of Natural History, New York, NY. May 6, 2010
 - Las Alamos National Labs, Las Alamos, NM. May 24, 2010
 - The Merc Playhouse, Twisp, WA. Sep 7, 2010
 - Waubonsee Community College, Sugar Grove, IL. Sep 30, 2010
 - Rice University, Houston, TX. Nov. 16, 2010
 - University of Nevada, Las Vegas, NV. Nov 30, 2010
- Canadian Avalanche Association annual workshop invited presentation on: "Seismic Avalanches - Some are seismic some are not" May 5, 2011
- University of Nevada, Reno - invited talk for the Burt Slemmons Lecture Series on " The winter, 2013 Magnitude 6.5 Puget Sound Earthquake that no one will feel", Feb. 4, 2013
- Canadian Avalanche Center forecasters training workshop invited presentation: "When scientists go to prison: The L'Aquila earthquake verdict" Nov. 18, 2013
- Boise State University, Department of Geology and Geophysics invited presentation on: "The Magnitude 6.5 Puget Sound Earthquake of winter, 2014 that no one will feel" Mar. 10, 2014
- Boise State University, Department of Geology and Geophysics: "When seismologists go to prison: The L'Aquila earthquake verdict" Mar. 11, 2014
- Auburn University Department of Geology and Geography invited talk on "The seismic monitoring of Mount St. Helens - then and now" , Oct 23, 2014
- Johnston Ridge Observatory, Mount St. Helens National Monument. Invited talk for the 35th Anniversary of the 1980 Eruption of Mount St. Helens, "Rumblings Under Mount St. Helens: Then and Now", May 18, 2015
- Canadian Avalanche Association professional training workshop, Squamish, BC. 2 invited talks on "Decision Making Under Escalating Geophysical Pressures" and "When Scientists Almost go to Prison", Nov. 7, 2015