

Stephen D. Malone

Resume 2016

Stephen D. Malone
1912 N.E. 63rd Street
Seattle, WA 98115

Birth: July 3, 1944 St. Petersburg, Florida, U.S.A.

Education:

- B.A. Physics, Occidental College, Los Angeles, CA (1966)
- Ph.D. Geophysics, University of Nevada, Reno, NV (1972)

Positions:

- Graduate Research Assistant, Seismology Lab. University of Nevada
- Research Associate, Geophysics Program, University of Washington (1972-1974)
- Senior Research Associate, Geophysics Program, University of Washington (1975-1985)
- Research Professor, Dept. Earth & Space Sciences, University of Washington (1985-2007)
- Research Professor Emeritus, Earth & Space Sciences, University of Washington (2007-)

Other Scholarly Positions:

- Director of the Pacific Northwest Seismograph Network (PNSN) (1995-2007)
- Elected President of the Seismological Society of America (2003-2005)
- Pacific Northwest coordinator of the Advanced National Seismic System (2000-)
- IRIS Executive Committee (2000-2003)
- Elected Vice President of the Seismological Society of America (2001-2003)
- Elected board member of the Seismological Society of America (1996-1999 and 1999-2002)
- Council of the National Seismic System: elected Vice-chairman & Chairman (1995-1999)
- Committee on Seismology of the National Research Council (1995-2000)
- Associate editor of the Journal of Volcanology (1989-2007)

Publications

Over 95 publications in refereed journals and over 160 abstracts or un-refereed articles

Specialties

- Specialist in volcano seismology, volcanic eruption prediction and volcanic hazard evaluation.
- Specialist in seismic network operation, real-time detection and notification for seismic events, automated seismic processing and digital signal processing.
- Specialist in deep non-volcanic tremor and associated slow-slip earthquakes.
- Specialist in the seismic monitoring of glacier motion.
- Specialist in seismicity and tectonics investigations of the Pacific Northwest.

Dr. Malone has been studying Northwest volcanoes since the early 1970s when he joined the faculty at the University of Washington following his graduate studies in geophysics at the University of Nevada in Reno. After studying glacier-quakes on Mount Rainier and Mount St. Helens and a thermal transient on Mount Baker his topic really heated up in 1980 with the explosive eruptions of Mount St. Helens. Dr. Malone was in charge of the seismic monitoring during and since the beginning of this activity and pioneered the use of volcanic earthquakes to predict eruptions at Mount St. Helens subsequent to the May 18, 1980 big one. He also studies regular tectonic earthquakes and earthquake hazards but continues to be fascinated by volcanic earthquakes and participates as a critical member of the US Geological Survey Mount St. Helens monitoring team of the Cascades Volcano Observatory.

Dr. Malone has participated in all aspects of earthquake seismology, particularly related to regional seismic network monitoring. He participated in the development of much of the computer processing systems used by regional networks in the US writing some of the software himself. He was effectively the director of the Pacific Northwest Seismic Network from the early 1990s until his retirement in 2007.

Dr. Malone is a member of the American Geophysical Union and the Seismological Society of America, of which he was vice president and then president. He was vice chairman and chairman of the Council of the National Seismic System and a member of the National Research Council Committee on Seismology. He has contributed chapters to two books on volcano seismology, published over 100 articles in professional journals and has been an associate editor of the Journal of Volcanology and Geothermal Research