

CHARITY MANN

Work

PNSN Pro Tem UO Field Engineer 05/2023 – Current
OHAZ Multi-Hazards Field Technician I 05/2023 – Current

EDUCATION

BS Oregon State University, Geology 09/2020 – 06/2023

RESEARCH EXPERIENCE

Research Lab Assistant - Cascadia 2021 Seismic Node Experiment 2022-2023
Assisting Dr. Anne Trehu with processing and analyzing of collected data in order to model the Cascadia forearc subsurface and collect critical information on the structure of the North American plate for modeling future earthquake ground motion.

ARC-Learn Polar Science Fellowship 2021-2023
Exploring heat forcings of submarine geothermal vents and volcanic activity on local polar sea ice while learning data literacy and integrity, visualization and interpretation, team science, and science communities and communication

Research Field Assistant - Cascadia 2021 Seismic Node Experiment 2022
Assisting Dr. Anne Trehu and USGS Seismologists with installation and removal of nodal seismometers in order to collect data to model the Cascadia forearc subsurface and collect critical information on the structure of the North American plate for modeling future earthquake ground motion.

Research Field Assistant - Ground Motion Monitoring 2022
Assisting Dr. Pieter Share with installation and removal of nodal seismometers for the purpose of monitoring ground motion during the implosion of Oregon State University's Reser Stadium

PRESENTATIONS/RESEARCH PAPERS

Poster Presentation, “Sediment Transport Mechanisms, Depositional Patterns, and Modeling of the 2011 Tohoku-Oki Earthquake and Tsunami,”
Coastal Geomorphology, Department of Geology, Oregon State University; March, 2023

Poster Presentation, “Prediction of Earthquakes Using Geochemical Methods,”
Geochemistry, Department of Geology, Oregon State University; March, 2022

Research Paper, “The Great Tangshan Earthquake of 1976,”
Geology of Earthquakes, Department of Geology, Oregon State University; December 2022

Research Paper, “Implications of Episodic Tremor and Slip in Cascadia,”
Geophysics and Tectonics, Department of Geology, Oregon State University; December, 2022

COMMUNITY SERVICE

Benton County CERT

Community Emergency Response Team (CERT), Benton County, OR, 2023 – Present

American Red Cross

Disaster Emergency Shelter Team, United States, 2018 – Present

Home Fire Campaign Team, Oregon, 2021 – Present

St. Helens Police Department

Community Emergency Response Team (CERT), Columbia County, OR, 2018 – 2020

Turning Point Community Service Center

Board of Directors, Clatskanie, OR, 2016 – 2019

Food Bank Volunteer, Clatskanie, OR 2017 – 2019

Angel Tree – Prison Fellowship

Local Coordinator, Christmas Valley, OR, 2004 – 2005

North Lake County EMS

Emergency Medical Technician, Christmas Valley, OR 2005 – 2008

Interests

My interest is to research avenues for earthquake early warning improvement, increase our understanding of crustal deformation processes, and promote enhancement of earthquake forecasting models for the purpose of disaster mitigation and resiliency planning. Additional interests include all areas of disaster mitigation, subduction zones, episodic tremor and slip, earthquake forecasting, and emergency management.