

Doerte Mann

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EDUCATION

Ph.D.	Geophysics, University of Alaska Fairbanks, USA Thesis: "Deformation of Alaskan volcanoes measured using SAR interferometry and GPS" (Advisor: Jeff Freymueller)	8.02
Diplom	Geophysics, University of Kiel/GEOMAR, Germany Thesis: "Fluid flow and heat transport through fractures in accretionary wedges applied to the Cascadia subduction zone" (Advisor: Nina Kukowski)	8.96
	University of Concepción, Chile Project: "Ash distribution after the 1992 eruption of Lonquimay volcano, Chile"	2.92 - 2.93
Vordiplom	Geophysics, University of Kiel, Germany	10.90
Abitur	Gymnasium Fallersleben, Germany	5.88

RESEARCH AND PROFESSIONAL EXPERIENCE

Field Engineer	Unavco, Plate Boundary Observatory, Northern California	7.06 – 9.08
Postdoctoral Scholar	Department of Geophysics, Stanford University, USA Developing new schemes for volcano deformation modeling	9.02 – 4.05
Research Assistant	Geophysical Institute, University of Alaska Fairbanks and Alaska Volcano Observatory, USA Geodetic data (GPS, InSAR) acquisition, processing and modeling	9.97 - 8.02
	Member of the Alaska Volcano Observatory (AVO) crisis response team during the eruption of Shishaldin volcano, Alaska	4.99
Research Assistant	GEOMAR Research Center for Marine Geosciences, Kiel, Germany; FE modeling of stress and fluid flow in subduction zones	9.96 - 8.97
Intern	Alfred Wegener Institute for Polar and Marine Research, Bremerhaven, Germany; Reflection seismic data processing	2.91 - 4.91

FIELD EXPERIENCE

Reconnaissance, installation and maintenance of continuous GPS stations in Northern California and Alaska for the Plate Boundary Observatory	7. 06 – 9.08
Planning and conduction of GPS campaign surveys and permanent site installations on volcanoes in Alaska (Westdahl, Fisher, Kanaga, Great Sitkin, Okmok, Redoubt)	1998 - 2002
Installation of seismic monitoring stations on Alaskan volcanoes	1998 - 2002
GPS survey in Ecuador, with Univ. of South Carolina and Inst. Geográfico Militar, Ecuador	2.99
Reflection and refraction seismic surveys and deep sea bathymetry along the Cascadia subduction zone and across the North Pacific, RV Sonne	4.95 - 5.95, 10.95
Reflection and refraction seismic survey in the Weddell Sea, Antarctica, RV Polarstern	1.95 - 3.95

PRACTICAL EXPERIENCE

Computers:	Platforms: Unix, Mac and PC Software: ASF SAR and InSAR software, GIPSY GPS software, Matlab, GMT Programming: some C, html
Languages:	German (native), English (fluent), Spanish (fair)
Other:	Wilderness First Aid, CPR, welding

AWARDS

- Outstanding student paper, Annual Meeting of the German Geophysical Society DGG (1997)
- Jack Kleinman Grant for Volcano Research, for GPS fieldwork at Westdahl volcano, Alaska (2000)
- Transatlantic idea contest ("USAbLe"), Körber foundation, Germany: Idea presentation (2000) and journalistic writing award (2002)

REFERENCES

Available on request

PUBLICATIONS

(Some of these can be downloaded at <http://www.geo-explorer.net/doerte/professional/articles.html>)

Miyagi, Y., J. Freymueller, F. Kimata, T. Sato, and **D. Mann**, Rapid inflation of Okmok caldera, Alaska, detected by GPS campaigns 2000-2003, *Earth Planets Space*, 56, 29-32, 2004.

Mann, D. and J. Freymueller, Volcanic and tectonic deformation of Unimak Island in the Aleutian Arc, Alaska, *Journal of Geophysical Research*, 108, 10.1029/2002JB001925, 2003.

Mann, D., Deformation of Alaskan volcanoes measured using SAR interferometry and GPS, PhD thesis, University of Alaska Fairbanks, 122 pp., 2002.

Mann, D., J. Freymueller, and Z. Lu, Deformation associated with the 1997 eruption of Okmok volcano, Alaska, *Journal of Geophysical Research*, 107, 10.1029/2001JB000163, 2002.

Lu, Z., **D. Mann**, J. Freymueller, and D. Meyer, Synthetic aperture radar interferometry of Okmok volcano, Alaska: Radar observations, *Journal of Geophysical Research*, 105, 10791 - 10806, 2000.

Lu, Z., Wicks, C., Dzurisin, D., Thatcher, W., Freymueller, J.T., McNutt, S., and **D. Mann**, Aseismic inflation of Westdahl volcano, Alaska, revealed by InSAR. *Geophys. Res. Letters*, 27, 1567-1570, 2000.

Lu, Z., **D. Mann**, and J. Freymueller, Satellite Radar Interferometry Measures Deformation at Okmok Volcano, *EOS Transactions AGU*, 97, no. 39, 461/467-468, 1998.

Mann, D. and N. Kukowski, Numerical modelling of focussed fluid flow in the Cascadia accretionary wedge, *Journal of Geodynamics*, 27, 359-372, 1999.

Mann, D., N. Kukowski, and E. Flueh, Die interne Struktur von Subduktionszonen, *Geowissenschaften*, 15(9), 273-277, 1997.

SELECTED CONFERENCE ABSTRACTS

Mann, D. and P. Segall, Distributed versus point source models of volcano deformation, AGU Fall Meeting, San Francisco, December 2004.

Mann, D. and P. Segall, Search for magma beneath Long Valley caldera: New approaches in deformation modeling, IUGG Meeting, Sapporo, Japan, July 2003.

Mann, D., J. Freymueller, and Z. Lu, Magma supply, storage and pathways from deformation studies at Alaskan volcanoes, AGU Fall Meeting, San Francisco, December 2002.

Mann, D. and J. Freymueller, GPS campaign measurements set the stage for scientific goals of Earthscope: results and expectations from Unimak Island in the Aleutian Arc; Earthscope workshop on active magmatic systems, Vancouver, WA, November 2002.