

Sang-Ho Yun

Jet Propulsion Laboratory
Mail Stop 300-319
4800 Oak Grove Drive
Pasadena, CA 91109

Phone: 818-354-4215
Fax: 818-393-5184
shyun@jpl.nasa.gov
<http://crispytomato.com/shyun/>

EDUCATION

Ph.D.	Geophysics, Stanford University, Stanford, CA Advisors: Howard Zebker, Paul Segall	3/07
M.S.	Electrical Engineering, Stanford University, Stanford, CA (Specialty – Imaging systems & image processing)	3/05
M.S.	Geophysics, Stanford University, Stanford, CA	9/03
M.S.	Earth System Sciences, Seoul National University, Seoul, Korea	8/01
B.S.	Geology, Seoul National University, Seoul, Korea	2/95

RESEARCH EXPERIENCE

Research Staff	Jet Propulsion Laboratory, Pasadena	5/08 – Present
Postdoctoral Fellow	U.S. Geological Survey, Menlo Park	3/07 – 3/08
Research Assistant	Crustal Deformation Group, Stanford (Advisor: Paul Segall)	9/02 – 3/07
Research Assistant	Radar Interferometry Group, Stanford (Advisor: Howard Zebker)	9/01 – 3/07
Geophysicist	Imaging Technology Research Lab (National Lab), Seoul, Korea	3/99 – 5/00
Seismologist	Korea Earthquake Engineering Research Center, Seoul, Korea	9/98 – 2/99
Civil Engineer	SAMBO Geologic Co. Ltd., Seoul, Korea	1/95 – 6/98

TEACHING EXPERIENCE

Teaching Assistant	Crustal Deformation (Part II), Stanford (Paul Segall)	1/06 – 3/06
Teaching Assistant	Crustal Deformation (Part I), Stanford (Paul Segall)	9/05 – 12/05
Teaching Assistant	Radar Remote Sensing, Stanford (Howard Zebker)	1/04 – 3/04
Teaching Assistant	Earthquakes and Volcanoes, Stanford (Beroza & Segall)	9/03 – 12/03
Teaching Assistant	Introduction to Remote Sensing, Stanford (Howard Zebker)	1/03 – 3/03

PUBLICATIONS

Refereed journal articles

Yun, S., Zebker, H., Segall, P., Hooper, A., and Poland, M., “Interferogram formation in the presence

of complex and large deformation”, *Geophysical Research Letters*, Vol. 34(12): L12305, 2007.

Amelung, F., **Yun, S.**, Walter, T., Segall, P., and Kim, S., “Stress control of deep rift intrusion at Mauna Loa volcano, Hawaii”, *Science*, Vol. 316:1026-1030, 2007.

Yun, S., Segall, P., and Zebker, H., “Constraints on magma chamber geometry at Sierra Negra volcano, Galapagos Islands, based on InSAR observations”, *Journal of Volcanology and Geothermal Research*, Vol. 150(1-3):232-243, 2006.

Yun, S., Ji, J., Zebker, H., and Segall, P., “On merging high- and low-resolution DEMs from TOPSAR and SRTM using a prediction-error filter”, *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 43(7):1682-1690, 2005.

Book Chapter

Yun, S., and Zebker, H., “Use of a prediction-error filter in merging high- and low-resolution images”, *Chapter 9 of Signal and Image Processing for Remote Sensing*, CRC Press, Boca Raton, FL, USA, 2006.

PhD Dissertation

A Mechanical Model of the Large-deformation 2005 Sierra Negra volcanic eruption derived from InSAR measurements, Stanford University, Stanford, CA, USA, 2007.

PRESENTATIONS

Talks

Yun, S., September 2007. Volcanic eruptions and satellite radar interferometry, SRI International, Menlo Park, CA. (invited talk)

Yun, S., June 2007. Earthquakes and eruptions at Sierra Negra volcano, Galapagos, Constrained by GPS and InSAR data, USGS, Menlo Park, CA.
archived at <http://earthquake.usgs.gov/regional/nca/seminars/?year=2007> (invited talk)

Yun, S., March 2007. InSAR and volcano deformation modeling, Environmental Geophysics Group, Stanford, CA. (invited talk)

Yun, S., Zebker, H., Segall, P., Hooper, A., and Poland, M., December 2006. 2005 Eruption at Sierra Negra volcano unveiled by InSAR observations, *American Geophysical Union Meeting*, San Francisco, CA.

Yun, S., January 2006. Mechanical modeling of volcanic deformation, USGS, Menlo Park, CA.
archived at <http://earthquake.usgs.gov/regional/nca/seminars/?year=2006> (invited talk)

Yun, S., Amelung, F., Miklius, A., Walter, T., and Segall, P., December 2005. Magma chamber geometry at Mauna Loa volcano from InSAR 2002 – 2004, *American Geophysical Union Meeting*, San Francisco, CA.

Segall, P., and **Yun, S.**, December 2005. Imaging dike intrusion by joint inversion of deformation and seismicity, *American Geophysical Union Meeting*, San Francisco, CA.

Yun, S., Zebker, H., and Segall, P., December 2004. Uplift, subsidence, and trapdoor faulting at Sierra Negra volcano, Galapagos Islands, from InSAR observations and mechanical modeling, *American Geophysical Union Meeting*, San Francisco.

Yun, S., Segall, P., and Zebker, H., December 2003. Inference of magma chamber geometry at Sierra Negra volcano, Galapagos Islands, using a 3D boundary element method with pressure boundary conditions and InSAR observations, *American Geophysical Union Meeting*, San Francisco, CA.

Posters

Lu, Z., **Yun, S.**, Wicks, C., December 2007. Magma plumbing system of Akutan volcano, Alaska inferred from InSAR images and numerical modeling, *American Geophysical Union Meeting*, San Francisco, CA.

Yun, S., Lu, Z., Wicks, C., Poland, M., December 2007. Mechanical modeling of the Father's day dike intrusion along the east rift zone of Kilauea, Hawaii, constrained from ALOS PALSAR interferometry, *American Geophysical Union Meeting*, San Francisco, CA.

Yun, S., Lu, Z., Wicks, C., Poland, M., September 2007. Modeling of the Father's day dike intrusion along the east rift zone of Kilauea, Hawaii, constrained from ALOS PALSAR interferometry, *The SCEC Meeting 2007*, Palm Springs, CA.

Yun, S., Zebker, H., Segall, P., Hooper, A., and Poland, M., July 2007. Interferogram Formation in the Presence of Large Deformation, *NRC Decadal Study DESDynI Science Workshop*, Orlando, FL.

Yun, S., Zebker, H., Segall, P., Hooper, A., and Poland, M., April 2007. Interferogram Formation in the Presence of Large Deformation, *The Envisat Symposium 2007*, Montreux, Switzerland.

Yun, S., Segall, P., and Zebker, H., March 2007. A Mechanical Model of the Large-deformation 2005 Sierra Negra Volcano Eruption Derived from InSAR Measurements, *EarthScope National Meeting*, Monterey, CA.

Amelung, F., and **Yun, S.**, December 2006. Deformation of Kilauea volcano, Hawaii, 1998 – 2006, *American Geophysical Union Meeting*, San Francisco, CA.

Yun, S., Segall, P., Zebker, H., Amelung, F., Miklius, A., and Walter, T., July 2006. What we learned from volcanic deformation, *MYRES II meeting*, Verbania, Italy.

Yun, S., Segall, P., Amelung, F., Miklius, A., and Walter, T., March 2006. Mechanical modeling of volcanic deformation: application to Mauna Loa, *UNAVCO Science Workshop*, Denver, CO.

Segall, P., and **Yun, S.**, June 2005. Deformation-seismicity joint inversion applied to a simulated dike intrusion, *UNAVCO/IRIS Joint Workshop*, Stevenson, WA.

Yun, S., Zebker, H., and Segall, P., March 2005. Mechanical modeling technique constrained by InSAR observations applied to Sierra Negra volcano, Galapagos Islands, *EarthScope National Meeting*, Santa Ana Pueblo, NM.

Yun, S., Ji, J., Zebker, H., and Segall, P., September 2004. TOPSAR DEM interpolation using a prediction error filter and SRTM DEM, *IEEE International Geoscience and Remote Sensing Symposium (IGARSS)*, Anchorage, AK.

U.S. PATENT

Segall, P., and **Yun, S.**, Patent Application S05-410/US filed in December 2006, "Apparatus and Method for Hydraulic Fracture Imaging by Joint Inversion of Deformation and Seismicity", Lumen Intellectual Property Services, Palo Alto, CA.

HONORS AND AWARDS

Special Thanks Award, U.S. Geological Survey	3/08
The Award of a National Academies Research Associateship	10/06
Shell Grant, Stanford University	7/06
Orcutt Fellowship, Stanford University	4/05 – 6/05
Dean Fellowship, Stanford University	9/03 – 6/04
Korean Government Overseas Fellowship, Korea	9/01 – 8/03

MEMBERSHIP

- American Geophysical Union
 - IEEE Geoscience and Remote Sensing Society
 - American MENSA
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