

Dr. Dannie Hidayat
Senior Research Fellow
Volcano Group, Earth Observatory of Singapore,
Nanyang Technological University
50 Nanyang Avenue, N2-01b-30b
Singapore 639798
Email: dhidayat@ntu.edu.sg
Tel: +65-65921774
Fax: +65-67901585

Research Interests

- Seismology
- Volcanology
- Geophysics
- Geological hazards assessment

Teaching experiences

- Feb-May 2012** An informal advising is given to Akshat Dave, a B.S. student in the Computer Engineering department for his senior final project in designing low cost low power seismic and deformation monitoring.
- Apr 2011** An informal advising is given to Ji Wen Bin, a M.S. student in EEE department for his MSc signal processing project.
- 13 Apr 2011** A tutorial on operating Nanometrics broadband seismograph, 5.8 radio telemetry, and EOS datalogger was given to CVGHM staff on 13 April.
- 10 Feb 2010** An informal lecture on seismometry had been given to Dr. I. Mc Loughin research group and students. A few tutoring sessions had been given to the students on designed on low-cost volcano/earthquake monitoring device.
- 8-12 Feb 2010** A tutorial and discussion of volcano deformation data modeling were conducted for two PHIVOLCS colleagues (Dr. T. Bacolcol and Mr. P. Alanis) for Mayon Volcano deformation data.
- 1999-2000** Teaching Assistant, GEOSC-40 Sea Around Us, Department of Geosciences, Penn State University.

Professional Appointments

- 2009 – present** Senior Research Fellow, Earth Observatory of Singapore, Nanyang Technological University
- 2004 – 2009** Post-Doctorate Research Scholar, Department of Geosciences, Penn State University, Pennsylvania, USA.
- 1994 – 1996** Research Assistant, R & D center for Geotechnology,

Indonesian Institute of Sciences (LIPI), Bandung, Indonesia.

Education

Pennsylvania State University	Geosciences	Ph.D	2004
<i>Ph.D. thesis:</i> <i>Source mechanisms of Very-Long-Period signals at Merapi Volcano, Indonesia, and Soufriere Hills Volcano, Montserrat, B.W.I.</i>			
State University of New York (SUNY) at Binghamton	Geophysics	B.S.	1994
<i>B.S. thesis:</i> <i>Modeling the seismic source and tsunami generation of the December 12, 1992 Flores Island, Indonesia, earthquake</i>			

Relevant Professional, Field and Research Experiences

2009-present	Senior Research Fellow, Volcano Group, Earth Observatory of Singapore-NTU: Participate and support EOS Volcano Group projects, and assist/aid to EOS Volcano Group collaborators to provide training and supervision on volcano monitoring from installation to data analysis.
Dec 2008	Session convener and session chair: American Geophysical Union (AGU) Fall Meeting 2008; San Francisco.
Dec 2007	Offshore-onshore tomography and magma-chamber seismic imaging experiment on the island of Montserrat, as part of SEA-CALIPSO team involved on designed experiment, instrument deployment, acquisition, maintenance, data processing and interpretation.
Summer 2006	Experiment on broadband seismic and deformation experiment at Semeru volcano, Indonesia. (Designed experiment and data acquisition)
May-June 2005	California Institute of Technology – Indonesian Institute of Sciences (LIPI): seismic and deformation monitoring along the west coast of Sumatra and its islands (region affected by the gigantic earthquake and tsunami of December 2004).
2004 – 2009	Deployment and maintenance of state-of-art seismic (including: borehole strain-meters and barometers, borehole seismometers, and broadband seismometers) and deformation monitoring (including: GPS and tiltmeter) systems in Montserrat, West Indies, plus data acquisition, modeling, and interpretations.

- Participate on the CALIPSO borehole observatory project and SEA-CALIPSO at Soufriere Hills Volcano, Montserrat, BWI.
- Experiment on broadband volcano-seismology, seismo-acoustics experiments, and modeling geophysical flows.
- July, 2002** (B.W.I.) Geophysical field work and data processing, Montserrat
- Jan - Mar 2001** Broadband seismic experiment, Merapi volcano, Indonesia. (Designed experiment and acquired data)
- July-August 2000** IAVCEI graduate fieldwork: Southwest Pacific volcano fieldwork, Philippines.
- 1999-2000** Teaching Assistant, GEOSC-40 Sea Around Us, Department of Geosciences, Penn State University.
- Jan - Mar 1998** Broadband seismic experiment, Merapi and Semeru volcanoes, Indonesia. (Designed experiment and data acquisition)
- July 1997** Seismic experiment, Semeru volcano. (Short period instrumentation designed experiment and acquired data on explosion earthquakes)
- May - June 1997** University of Hawaii at Hilo. (Participant in post-graduate studies in assessing volcanic hazards and monitoring active volcanoes)
- 3-15 Feb 1997** Japan US-Italy Cooperative Experiment. (Participant in large-scale seismic arrays and broadband experiment at Kilauea volcano; co-leaders: B. Chouet, USGS, and Y. Ida, ERI, Japan)
- 25&26 Jan 1997** IAVCEI General Assembly Puerto Vallarta, Mexico. (Participant in short course of Gravity-driven flows of volcanic origin: Avalanches, debris flows, lahars and pyroclastic flows from dome collapse)
- 17-19 Jan 1997** IAVCEI General Assembly Puerto Vallarta, Mexico. (Participant in short course of The Physics of Explosive Volcanism)
- 1994 - 1996** Indonesian Institute of Sciences, Bandung, Indonesia. (Research Geophysicists, investigation of earthquake and tsunami in Indonesia along with tectonics, field work and data processing)
- Summer 1991,1993** SUNY at Binghamton, Binghamton, NY. (Research Aide, training and data processing of large subduction and back-arc earthquakes, in particular the 1992 Ms=7.2 Flores Earthquake)

Grants and Invitations

1. 1995: International Toray Science Foundation (ITSF)-Japan, principal investigator, research grant in Identification of High Possible Areas being hit by Tsunami event in Java island, Indonesia.
2. 1997-2001: National Science Foundation (NSF)-USA, research assistant, research grant in Broadband seismic and deformation study at Merapi and Semeru Volcano, Indonesia.
3. 2001-2004: National Science Foundation (NSF)-USA, research assistant, research grant in Seismic and deformation monitoring at Soufriere Hills Volcano, Montserrat, British West Indies.
4. 2004-2008: National Science Foundation (NSF)-USA, post-doctorate research scholar, research grant in CALIPSO (Caribbean Andesite Lava Island-volcano Precision Seismo-geodetic Observatory) project in Montserrat island, British West Indies.
5. 2004-2008: National Science Foundation (NSF)-USA, post-doctorate research scholar, research grant in Validation of a numerical Granular Flow Simulation Model for Pyroclastic Flows and Debris Avalanches.
6. 2005-present: joint collaboration National Science Foundation (NSF)-USA and Natural Environment Research Council (NERC)-UK, post-doctorate research scholar, research grant in SEA-CALIPSO An Offshore/Onshore Tomography and Magma-Chamber Seismic Imaging Experiment on Montserrat.
7. 2009-present: Joint research collaboration with Centre of Volcanology and Geological Hazard Mitigation on Gede and Salak Volcano and collaboration with the Philippines Institutes on Volcanology and Seismology on Mayon Volcano, particularly on volcano seismological and deformation researches. In addition, conduct Volcano Exploratory project to develop low-cost monitoring equipment which is being tested in Volcano Laboratories.

Professional memberships

- American Geophysical Union (AGU)
- International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI)
- Asia Oceania Geosciences Society (AOGS)

Publications

- S. Hautmann, **D. Hidayat**, N. Fournier, A.T. Linde, I. S. Sacks, C.P. Williams (2013). Pressure changes in the magmatic system during the December 2008/January 2009 extrusion event at Soufriere Hills Volcano, Montserrat (W.I.), derived from strain data analysis. *J. Volcanol. Geotherm. Res.*, 250, 34-41.
- K. A. Macpherson, **D. Hidayat**, S. H. Goh (2012). Crustal thickness and velocity structure beneath Singapore's seismic network, *Journal of Asian Earth Sciences*, *in press*.

- Voight, B., Sparks, R.S.J., Shalev, E., Minshull, T., Paulatto, M., Annen, C., Kenedi, C., Hammond, J., T.J. Henstock, Brown, L., E. Kiddle, Malin, P., Mattioli, G., Ammon, C., Arias-Dotson, E., Belousov, A., Carothers, L., Clarke, A., Dean, S., Ellett, L., Elsworth, **D., Hidayat**, D., Herd, R., Johnson, M., Lee, A., Miller, V., Murphy, B., Peirce, C., Ryan, G., Saldana, S., Snelson, C., Stewart, R., Syers, R., Widiwijayanti, C., Young, S.R., Zamora, W. (2012), The SEA-CALIPSO volcano imaging experiment at Montserrat: plans, campaigns at sea and on land, scientific results, and lessons learned, Geological Society Memoirs 2-710, Soufriere Hills Volcano Special Volume, *in press*.
- K. A. Macpherson, **D. Hidayat**, S. H. Goh (2012). Receiver function structure beneath four seismic stations in the Sumatra region, *Journal of Asian Earth Sciences*, 46, 161-176, ISSN 1367-9120, 10.1016/j.jseaes.2011.12.005.
- Chardot, L., B. Voight, R. Foroozan, S. Sacks, A. Linde, R. Stewart, **D. Hidayat**, A. Clarke, D. Elsworth, N. Fournier, J.-C. Komorowski, G. Mattioli, R. S. J. Sparks, and C. Widiwijayanti (2010), Explosion dynamics from strainmeter and microbarometer observations, Soufrière Hills Volcano, Montserrat: 2008–2009, *Geophys. Res. Lett.*, 37, L00E24, doi:10.1029/2010GL044661
- Voight, B., **D. Hidayat**, S. Sacks, A. Linde, L. Chardot, A. Clarke, D. Elsworth, R. Foroozan, P. Malin, G. Mattioli, N. McWhorter, E. Shalev, R. S. J. Sparks, C. Widiwijayanti, and S. R. Young (2010), Unique strainmeter observations of Vulcanian explosions, Soufrière Hills Volcano, Montserrat, July 2003, *Geophys. Res. Lett.*, 37, L00E18, doi:10.1029/2010GL042551
- Voight B., Sparks, R.S.J., Hammond, J., Shalev, E., Malin, P., Kenedi, C., Minshull, T.A., Paulatto, M., Mattioli, G., **Hidayat**, **D.**, Widiwijayanti, C. (2010). Active Source Seismic Experiment Peers Under Soufriere Hills Volcano. *EOS*, Transaction, American Geophysical Union, 91(28), 245, doi:10.1029/2010E028002.
- Shalev, E., C. L. Kenedi, P. Malin, V. Voight, V. Miller, **D. Hidayat**, R. S. J. Sparks, T. Minshull, M. Paulatto, L. Brown, and G. Mattioli (2010), Three-dimensional seismic velocity tomography of Montserrat from the SEA-CALIPSO offshore/onshore experiment, *Geophys. Res. Lett.*, 37, L00E17, doi:10.1029/2010GL042498
- Linde, A. T., S. Sacks, **D. Hidayat**, B. Voight, A. Clarke, D. Elsworth, G. Mattioli, P. Malin, E. Shalev, S. Sparks, and C. Widiwijayanti (2010), Vulcanian explosion at Soufrière Hills Volcano, Montserrat on March 2004 as revealed by strain data, *Geophys. Res. Lett.*, 37, L00E07, doi:10.1029/2009GL041988
- Voight, B., C. Widiwijayanti, G. Mattioli, D. Elsworth, **D. Hidayat**, and M. Strutt (2010), Magma-sponge hypothesis and stratovolcanoes: Case for a compressible reservoir and quasi-steady deep influx at Soufrière Hills Volcano, Montserrat, *Geophys. Res. Lett.*, 37, L00E05, doi:10.1029/2009GL041732
- Widiwijayanti, C., Voight B., **Hidayat D.**, Schilling, S.P (2008). Objective rapid delineation of areas at risk from block-and-ash pyroclastic flows and surges, *Bull. Volcanol.* DOI 10.1007/s00445-008-0254-6.
- Mattioli G.S., Voight B., Linde A.T., Sacks I.S., Watts, P., Widiwijayanti, C., Young S.R., **Hidayat D.**, Elsworth D., Malin P.E., Shalev E., Van Boskirk E., Johnston W., Sparks, R.S.J., Neuberg, J., Bass V., Dunkley P., Herd R., Syers, T., Williams, P, Williams, D., 2007. Unique and remarkable dilatometer measurements of pyroclastic flow-generated tsunamis, *Geology*, 35(1), pp 25-28.
- Voight B., Linde A.T., Sacks I.S., Mattioli G.S., Sparks R., Elsworth D., **Hidayat D.**, Malin P.E., Shalev E., Widiwijayanti C., Young S.R., Bass V., Clarke A.,

- Dunkley P., Johnston W., McWhorter N., Neuberg J., Williams P., 2006, Unprecedented pressure increase in deep magma reservoir triggered by lava-dome collapse. *Geophysical Research Letters* 33(3), L03312, doi:10.129/2005GL024870.
- Hidayat D.**, Chouet B., Voight B., Dawson P., Ratdomopurbo A., 2003. Correction to "Source mechanism of very-long-period signals accompanying dome growth activity at Merapi volcano, Indonesia," *Geophys. Res. Lett.*, 30, no.10, p. 9-1 - 9-3.
- Hidayat D.**, Chouet B., Voight B., Dawson P., Ratdomopurbo A., 2002. Source mechanism of very-long-period signals accompanying dome growth activity at Merapi volcano, Indonesia, *Geophys. Res. Lett.*, 29, no.23, p.33-1 - 33-4.
- Voight, B., Young, K. D., **Hidayat, D.**, Subandriyo, Purbawinata, M. A., Ratdomopurbo, A., Suharna, Panut, Sayudi, D. S., LaHusen, R. G., Marso, J., Murray, T. L., Dejean, M., Iguchi, M., Ishihara, K., 2000. Deformation and seismic precursors to dome-collapse and fountain-collapse nuees ardentes at Merapi Volcano, Java, Indonesia; 1994-1998, *J. Volc. And Geotherm. Res.*, 100, no.1-4, p. 261-287.
- Hidayat D.**, Ratdomopurbo A., Ebeling C., Voight B., Langston C., 2000. Broadband seismic experiment at Merapi Volcano, Java, Indonesia: Very-long-period pulses embedded in multiphase earthquakes, *J. Volc. And Geotherm. Res.*, 100, no.1-4, p. 215-231.
- Clarke A.B., **Hidayat D.**, Voight B., 1997. Navier-Stokes Revisited: A review of the physics of explosive volcanism, *IAVCEI Commission on Explosive Volcanism Newsletter*, 10-13, 1997.
- Widiwijayanti C., Deverchere J., Diament M., Sebrier M., Harjono H., **Hidayat D.**, 1996. Aftershock sequence of the 1994, Mw 6.8, Liwa earthquake (Indonesia) : Seismic rupture process in a volcanic arc -, *Geophys. Res. Lett.*, vol. 23, no. 21, pp: 3051-3054, Oct 1996.
- Hidayat D.**, Barker J., Satake K., 1995. Modeling the Seismic Source and Tsunami Generation of the December 12, 1992 Flores Island, Indonesia, Earthquake, *Pure and Appl. Geophys.*, vol. 144, nos. 3/4 (1995), pp.537-554.

Conference Abstracts:

- D. Hidayat**, H. Gunawan, M. Hendrasto, A. Basuki, F. Schwandner, S. Marcial, S. Kunrat (2012). Tectonics or magma intrusion? – new results from multi-parameter study at Gede Volcano, West Java, Indonesia, Cities on Volcanoes 7, Colima, Mexico, 19-23 November 2012, Abstract 2P1.5-12.
- D. Hidayat**, C. Clarito, R. Valerio, E. Laguerta, A. Baloloy, S. Marcial (2012). New deformation monitoring at Mayon volcano, a collaborative project EOS-PHIVOLCS, and comparison with previous recording, Cities on Volcanoes 7, Colima, Mexico, 19-23 November 2012, Abstract 2P1.4-13.
- Florian M. Schwandner, **Dannie Hidayat**, Edgardo Laguerta, Alejandro Baloloy, Ramses Valerio, Sergio S. Marcial, Ramil Vaquilar, Maria Carmencita Arpa, Teresito Bacolcol, Chris Newhal (2012), A Multi-sensor Monitoring Network at Mayon Volcano, Philippines, the AOGS - AGU (WPGM) Joint Assembly 2012, Abstract SE105-A010.
- Ahmad Basuki, **Dannie Hidayat**, Iyan Mulyana (2012) New Seismic and Ground Deformation Monitoring System in Gede Volcano, West Java, Indonesia: New

Insight in Volcano Tectonic Activity Around the Volcano, the AOGS - AGU (WPGM) Joint Assembly 2012, Abstract SE105-A014.

- Dannie Hidayat**, Ahmad Basuki, Agus Budianto, Hetty Triastuty, Sergio S. Marcial, Anna Mathovani, Florian M. Schwandner, Syegi Kunrat, Iyan Mulyana (2012), Tectonics or Magma Intrusion? -- New Results from Multi-parameter Study at Gede Volcano, West Java, Indonesia, the AOGS - AGU (WPGM) Joint Assembly 2012, Abstract SE105-A021.
- F. M. Schwandner, **D. Hidayat**, E. P. Laguerta, A. V. Baloloy, R. Valerio, R. Vaquilar, M. C. Arpa, S. S. Marcial, and M. L. Novianti A multidisciplinary monitoring network at Mayon volcano, Philippines: A collaborative effort between PHIVOLCS and EOS, Abstract EGU2012-6828, 2012 European Geophysical Union General Assembly.
- D. Hidayat**, E. Laguerta, A. Baloloy, R. Valerio, S. S. Marcial (2011). Developing geophysical monitoring at Mayon volcano, a collaborative project EOS-PHIVOLCS. Eos Abstract V53E-2684 presented at 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 Dec.
- D. Hidayat**, M. Hendrasto, A. Budianto, H. Triastuti (2011). Crustal Velocity Structure under Mt. Sinabung, N. Sumatra, Indonesia, Inferred from Receiver Function Analysis, IUGG 2011 General Assembly, Melbourne, 28 June – 7 July 2011, Abstract JV12-4571.00.
- K. A. Macpherson; **D. Hidayat**; S. Goh (2010). Receiver function structure beneath a broad-band seismic station in south Sumatra. Eos Trans. AGU, XX(XX), Fall Meet. Suppl., Abstract S13A-1979.
- M. Y. Walling; K. A. Macpherson; **D. Hidayat**; K. Megawati (2010). Crustal Velocity Structure under Singapore Inferred from Receiver Functions Study. Eos Trans. AGU, xx(xx), Fall Meet. Suppl., Abstract S13A-1981.
- C. Widiwijayanti; B. Voight; **D. Hidayat**; A. Patra; E. Pitman (2010). Titan2D simulations of dome-collapse pyroclastic flows for crisis assessments on Montserrat. Eos Trans. AGU, xx(xx), Fall Meet. Suppl., Abstract V13A-2342.
- S. I. Sacks; S. Hautmann; A. T. Linde; **D. Hidayat** (2010). Rapid Gas Transport from Deep Magma Chambers (2010). Eos Trans. AGU, xx(xx), Fall Meet. Suppl., Abstract V52C-05.
- D. Hidayat**; E. Laguerta; A. Baloloy; S. Marcial; C. Widiwijayanti (2010). Broadband Seismic Monitoring of Mayon Volcano, the Philippines. Eos Trans. AGU, xx(xx), Fall Meet. Suppl., Abstract V53B-2242.
- Voight, B, L. Chardot, **D. Hidayat**, A.T. Linde, S.I. Sacks, A.B. Clarke, R. Faroozan, O. Melnik, S. Sparks, R. Stewart, M. de' Michieli Vitturi (2009), Conduit evacuation dynamics for Vulcanian explosions, *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract V32B-08
- Chardot, L, B. Voight, R. Stewart, A.T. Linde, S. I. Sacks, **D. Hidayat**, N. Fournier (2009), Conduit dynamics for Vulcanian explosions at Soufriere Hills Volcano, Montserrat, from strainmeter data, *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract V32B-07
- Sacks, S I, **D.Hidayat**, A.T. Linde, B. Voight (2009), Initiation of Magma Fragmentation Leading to Vulcanian Explosions, *Eos Trans. AGU*, 90(52), Fall Meet. Suppl., Abstract G41A-0710
- Chardot, L, B. Voight, R. Stewart, A. Linde, S.I. Sacks, **D. Hidayat**, N. Fournier (2009), Vulcanian explosion dynamics in 2008-09 at Soufriere Hills Volcano, Montserrat, from strainmeter data. *Geological Society of America Abstracts with Programs*, Vol 41, No 7, p. 660.

- Hidayat, D.**, B. Voight, B. Chouet, A. Linde, S. Sacks, A. Ratdomopurbo (2009), Volcano broadband seismic and strainmeter studies: implications on source mechanisms and structures, with examples from the East and West Indies, *AOGS 2009 6th Annual Meeting and Geosciences World Community Exhibition*, Singapore, 11-15 August, 2009, SE66-A016.
- Widiwijayanti, C., B. Voight, G. Mattioli, C. Ammon, D. Elsworth, R. Foroozan, **D. Hidayat**, W. Sevilla, T. Minshull, M. Paulatto, E. Shalev, S. Sparks, A. Linde, S. Sacks, A. Clarke, V. Miller, P. Malin, C. Kenedi, L. Brown (2009) Geodetic and geophysical constraints on the magmatic system at Soufrière Hills Volcano, Montserrat, West Indies, *AOGS 2009 6th Annual Meeting and Geosciences World Community Exhibition*, Singapore, 11-15 August, 2009, SE66-A015.
- Widiwijayanti, C., B. Voight, **D. Hidayat**, S.P. Schilling (2009) Rapid objective delineation of areas at risk, *AOGS 2009 6th Annual Meeting and Geosciences World Community Exhibition*, Singapore, 11-15 August, 2009, SE66-A009.
- Hidayat, D.**, B. Voight, E. Shalev, T. Minshull, R.S.J. Sparks, K.L. Kenedi, L. Brown, C. Snelson, G.S. Mattioli, C. Widiwijayanti, M. Paulatto, R. Stewart, P.E. Malin, C. Ammon, D. Elsworth, W. Sevilla, S. De Angelis (2009) The SEA-CALIPSO volcano imaging experiment on Montserrat: Ideas for imaging experiments in the Asia-Southwest Pacific region, *AOGS 2009 6th Annual Meeting and Geosciences World Community Exhibition*, Singapore, 11-15 August, 2009, SE66-A020.
- Hidayat, D.**, Taira, T., Sacks, S., Linde, A.T., Pressure Oscillation in Magma Chamber due to Replenishment During Volcanic Eruptions, (2008) *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract V51C-2042.
- Shalev, E., Kenedi, C.L., Malin, P., Voight, B., Miller, V., **Hidayat, D.**, Brown, L., Minshull, T., Sparks, S., Lee, A., Mattioli, G., Stewart, R., Herd, R., Saldana, S., Paulatto, M. (2008) 3-D Seismic Velocity Tomography of Montserrat From the SEA-CALIPSO Offshore/Onshore Experiment, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract V53C-03.
- Linde, A.T., Sacks, S., Hidayat, D., Voight, B., (2009) The Montserrat Soufriere Hills Explosion of March 2004: Magma Geometry and Incompressibility from Borehole Strain Data., *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract V53C-02.
- Hidayat, D.**, Sacks, S., Linde, A., Voight, B., Widiwijayanti, C., Elsworth, D., Mattioli, G., Malin, P., Shalev, E. (2008). Understanding Vulcanian Explosions at Soufriere Hills Volcano, Montserrat, using Dilatometer Data, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract V53C-01.
- Hidayat, D.**, Widiwijayanti, C, Voight, B, Patra, A, Pitman, E (2007). TITAN2D analyses of dome-collapse pyroclastic flows on Montserrat, *Eos, Transactions, American Geophysical Union*, vol. 88, no. 52, SUPPL., Abstract V31B-0499.
- Linde, A T, Sacks S, Sturkell, E, **Hidayat, D.** Strain changes and constraints on magma reservoir incompressibility; co-eruptive examples from Hekla and Montserrat, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract V11D-0818.
- Sacks I., **Hidayat D.**, Linde A., 2006. Volcanic Activity Triggering due to Induced Pressure Changes in Magma Chambers, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract V51G-01.
- Taira T., Sacks I., Linde A., **Hidayat D.**, 2006. Pressure Oscillations in Magma Chambers due to Replenishment during Volcanic Eruptions, *Eos Trans. AGU*, 87(36), Jt. Assem. Suppl., Abstract V41A-01.
- Widiwijayanti C., **Hidayat D.**, Voight B., Patra A., Pittman E.B., 2006. Modelling

- Pyroclastic Flows with Titan2D, *Cities on Volcanoes 4th Meeting, Quito, Ecuador*.
- Voight B., Malin P., Brown L., Sparks R.S.J., Shalev E., Ammon C., Clarke A.B., Elsworth D., **Hidayat D.**, Linde A.T., Mattioli G.S., Miller V., Neuberg J., Sacks I.S., Widiwijayanti C., Young S.R., Loughlin S., Bass V., Syers T., Williams P., SEA-CALIPSO 'Onshore-Offshore' Seismic Experiment to image Magma Reservoir on Montserrat, *Soufriere Hills Volcano-Ten Years On, Scientific Conference, Montserrat, B.W.I., July, 2005*.
- Van Boskirk E., Mattioli G., Voight B., Widiwijayanti C., Elsworth D., **Hidayat D.**, Watts P., Linde A., Sacks S., Malin P., Shalev E., Neuberg J., Sparks R.S.J., Pyroclastic Flow Induced Tsunami Captured by Borehole Strainmeter: Observations and Theory, *Soufriere Hills Volcano-Ten Years On, Scientific Conference, Montserrat, B.W.I., July, 2005*.
- Sacks, S., AT Linde, **D Hidayat**, D Elsworth, C Widiwijayanti, B Voight, SR Young, GS Mattioli, PE Malin, E Shalev, The Dome Collapse of July 2003 and Other Activity: Insights from Borehole Strain Data, *Soufriere Hills Volcano-Ten Years On, Scientific Conference, Montserrat, B.W.I., July, 2005*.
- Widiwijayanti C., **Hidayat D.**, Voight B., Patra A., Pitman E.B., Modelling pyroclastic flows and debris avalanches on Montserrat with TITAN2D, *Soufriere Hills Volcano-Ten Years On, Scientific Conference, Montserrat, B.W.I., July, 2005*.
- Taira, T, Linde, A T, Sacks, I S, Shalev, E, Malin, P E, Nielsen, J M, Voight, B, **Hidayat, D**, Mattioli, G S, Locations of long-period seismic events beneath the Soufriere Hills Volcano, Montserrat, W.I., inferred from a waveform semblance method, *Eos Trans. AGU*, 86(18), Fall Meet. Suppl., Abstract V23A-10.
- Linde A., Sacks I. **Hidayat, D.**, Voight, B., Malin P., Shalev E., Mattioli G., Young S.R., Elsworth D., 2005. The Explosion of March 2004 at Montserrat: Constraints From Borehole Strain Data, *EOS Trans. AGU* 2004, 86(52), Fall Meet. Suppl., Abstract V53B-1571.
- Mattioli, G. S.; Voight, B.; Linde, A. T.; Sacks, I. S.; Watts, P.; **Hidayat, D.**; Young, S. R.; Widiwijayanti, C.; Shalev, E.; Malin, P. E.; Elsworth, D.; Williams, P.; van Boskirk, E.; Thompson, G.; Syers, T.; Sparks, R. S.; Schleigh, B.; Norton, G.; Neuberg, J.; Miller, V.; McWhorter, N.; Johnston, W.; Dunkley, P.; Clarke, A. B.; Bass, V., The CALIPSO Borehole Project at Soufriere Hills Volcano, Montserrat, BWI: Status and Scientific Overview of Prodigious Dome Collapse of July 2003. *Eos. Trans. AGU*, 86(18), Fall Meet. Suppl., Abstract V34A-05, 2005.
- Van Boskirk E.J., Voight B., Watts P., Widiwijayanti C., Mattioli, G.S., Elsworth D., **Hidayat D.**, Linde A., Malin P., Neuberg J., Sacks S., Shalev E., Sparks, R.S.J., Young, S. R., Pyroclastic Flow Generated Tsunami Waves Detected by CALIPSO Borehole Strainmeters at Soufriere Hills, Montserrat During Massive Dome Collapse: Numerical Simulations and Observations, *Eos Trans. AGU*, 85(47), Fall Meet. Suppl., Abstract OS23B-1315, 2004
- Widiwijayanti, C., Voight, B.; **Hidayat, D.**, Patra, A., Pitman, E. , Validation of TITAN2D flow model code for pyroclastic flows and debris avalanches at Soufrière Hills Volcano, Montserrat, BWI, *Eos Trans. AGU*, 85(47), Fall Meet. Suppl., Abstract V43B-1428, 2004.
- Hidayat, D.**, Voight, B., Chouet, B.A., Jolly, A., Bass, V., Williams, C., Syers, R., 2004. Source mechanisms of strong vulcanian explosions at Soufriere Hills Volcano, Montserrat, B.W.I., from moment tensor inversions of very-long-period data, *EOS Trans. AGU*, 2004, 85(17).
- Voight B., Mattioli G.S., Linde A.T., Sacks I.S., Watts P., **Hidayat D.**, Young S.R.,

- Widiwijayanti C., Shalev E., Malin P.E., Elsworth D., Williams P., Van Boskirk E., Thompson G., Syers T., Sparks R.S.J., Schleigh B., Norton G., Neuberg J., Miller V., McWhorter N., Johnston W., Dunkley P., Clarke A.B., Bass V., Collapse of lava dome on Montserrat, July 2003 with unique CALIPSO geophysical measurement of pyroclastic flows and PF-generated tsunami waves, *IAVCEI General Assembly, Pucon, Chile*, 2004.
- Widiwijayanti, C.; Voight, B., **Hidayat, D.**, Patra, A., Pitman, E. , Validation of TITAN2D flow model code for pyroclastic flows and debris avalanches on Montserrat , *IAVCEI General Assembly, Pucon, Chile*, 2004.
- Mattioli G.S., Linde A.T., Sacks I.S., Malin P.E., Shalev E., Elsworth D., **Hidayat D.**, Voight B., Young S.R., Dunkley P.N., Norton G., Herd R., 2003. Prototype PBO Instrumentation of CALIPSO Project Captures World-Record Lava Dome Collapse on Montserrat Volcano, *EOS Trans. AGU*, 85(34), pp. 317, 323, 325.
- Hidayat D.**, Voight B., Mattioli G.S., Young S.R., Linde A.T., Sacks I.S., Malin P.E., Shalev E., Elsworth D., Widiwijayanti C., Herd R., Thompson G., Bass V., 2003. Seismo-acoustics, VLP and ULP signals, and other comparisons of surface broadband and CALIPSO borehole data at Soufriere Hills Volcano, Montserrat, B.W.I., *EOS Trans. AGU*, 2003.
- Voight B., Mattioli G.S., Young S.R., Linde A.T., Sacks I.S., Malin P.E., Shalev E., **Hidayat D.**, Elsworth D., Widiwijayanti C., Miller V., Sparks R.S.J., Neuberg J., Bass V., Dunkley P., Edmonds M., Herd R., Jolly A., Norton G., Thompson G., 2003. CALIPSO Borehole Instrumentation Project at Soufriere Hills Volcano, Montserrat, BWI: Overview and Prospects, *EOS Trans. AGU*, 2003.
- Young S.R., Voight B., Mattioli G.S., Linde A.T., Sacks S.I., Malin P.E., Shalev E., **Hidayat D.**, Elsworth D., Sparks R.S.J., Neuberg J., Dunkley P., Norton G., Herd R., Edmonds M., Thompson G., Jolly A. and Bass V., 2003. Linking surface activity to the deep volcanic plumbing system: the CALIPSO borehole observatory project on Montserrat, *EOS Trans. AGU*, 2003.
- Mattioli G.S., Linde A.T., Sacks I.S., Malin P.E., Shalev E., Elsworth D., **Hidayat D.**, Voight B., Young S.R., Dunkley P.N., Norton G., Herd R., 2003. CALIPSO Borehole Instrumentation Project at Soufriere Hills Volcano, Montserrat, BWI: Data acquisition, telemetry, integration, archival, and analysis systems, *EOS Trans. AGU*, 2003.
- Shalev E., Malin P.E., Sacks I.S., Linde A.T., Voight B., Mattioli G.S., Young S.R., Elsworth D., **Hidayat D.**, 2003. CALIPSO Borehole Station Observations Before and During the July 2003 Montserrat Eruption, *EOS Trans. AGU*, 2003.
- Dunkley P., Voight B., Edmonds M., Herd R., Strutt M., Thompson G., Bass V., Aspinall W.P. , Neuberg J., Sparks R.S.J., Mattioli G., **Hidayat D.**, Elsworth D., Widiwijayanti C., 2003. The Rise and Fall of the Soufriere Hills Volcano Lava Dome, Montserrat, BWI, July 2001-July 2003: Science, Hazards, and Volatile Public Perceptions, *EOS Trans. AGU*, 2003.
- Hidayat D.**, Voight B., Ratdomopurbo A., Fort M., Nandaka I.G.M., Subandriyo, 2002. Broadband seismic monitoring at Merapi Volcano, Java, Indonesia, during the January-March 2001 eruption Mount Pelee 1902-2002 *Symposium on Explosive Volcanism in Subduction Zones, Saint-Pierre*. Programme, p. 80.
- Hidayat D.**, Chouet B., Voight B., Dawson P., Ratdomopurbo A., 2001. Sources of multiphase and very-long-period signals accompanying dome growth and collapse activity at Merapi volcano, Indonesia, *EOS AGU Trans.*, 81(48), F1314.
- Rose W. I, Teasdale R., Bailey J., Chertkoff D., Coombs M., Eisinger, C., **Hidayat, D.**, Riley C., Rodriguez L., Sahetapy-Engel S., Wardell J., Witter J., Young K.,

Southwest Pacific volcano tour, July 2000; prototype for coordinated, multi-university graduate programs in volcanology, *Eos, AGU Trans.*, 81(48), Suppl., pp.1254, 28 Nov 2000.

Hidayat D., Voight B., Nyblade A., Langston C., Ratdomopurbo A., Subandrio, Ebeling C., 2002. Merapi Broadband Seismic Experiment, Java: Insights on dome-growth-related multiphase-type earthquakes, abstract in *IAVCEI General Assembly 2000, Bali, Indonesia*: 29.

Hidayat D., Voight B., Suratman, Wildan A., 2000. Broadband Seismic Observations at Semeru Volcano, East Java, Indonesia, abstract in *IAVCEI General Assembly 2000, Bali, Indonesia*: 30.

Voight, B., Young, K.D., **Hidayat, D.**, Subandrio, Purbawinata, M.A., Ratdomopurbo, A., Suharna, La Husen, R., Marso, J., Iguchi, M., Ishihara, K., 2000. Precursors to pyroclastic flows at Merapi Volcano, Java, 1994-1998, abstract in *IAVCEI General Assembly 2000, Bali, Indonesia*: 48.

Hidayat D., Clarke A.B., Young K.D., Voight B., Nyblade A., Surono, 1997. Seismological Characteristics of Semeru Volcano, East Java, Indonesia, in Relation to the 1994 Eruption, abstract in *IAVCEI General Assembly, Puerto Vallarta, Mexico*, p. 135, 1997.