

**CURRICULUM VITAE  
OF  
DR. SHIMON WDOWINSKI  
DEPARTMENT OF EARTH AND ENVIRONMENT**

**EDUCATION**

<i>Degree</i>	<i>Institution</i>	<i>Field</i>	<i>Dates</i>
Ph.D.	Harvard University	Geophysics	06/1990
M.S.	Harvard University	Engineering Sci.	06/1987
M.Sc.	Hebrew University	Geology	06/1985
B.Sc.	Hebrew University	Earth Sciences	06/1984

**FULL-TIME ACADEMIC EXPERIENCE**

<i>Institution</i>	<i>Rank</i>	<i>Field</i>	<i>Dates (Month &amp; Year)</i>
FIU	Professor	Earth Sci.	08/2019-present
FIU	Associate Professor	Earth Sci.	08/2016-07/2019
U. of Miami	Research Professor	Geosciences	06/2015-07/2016
U. of Miami	Research Associate Professor	Geosciences	01/2005-05/2015
Tel Aviv U.	Associate Professor	Geophysics	10/1998-12/2004
Tel Aviv U.	Assistant Professor	Geophysics	10/1994-09/1998
SIO, UCSD	Postdoc Researcher	Geodesy	10/1990-03/1993
Harvard U.	Postdoc Researcher	Geophysics	07/1990-09/1990

**PART-TIME ACADEMIC EXPERIENCE**

<i>Institution</i>	<i>Rank</i>	<i>Field</i>	<i>Dates (Month &amp; Year)</i>
U. of Miami	Post-doc Associate	Geosciences	09/2001-12/2004
U. of Miami	Adjunct Associate Professor	Geosciences	10/2000-08/2001
U. of Miami	Adjunct Assistant Professor	Geosciences	10/1998-09/2000

**NON-ACADEMIC EXPERIENCE**

<i>Place of Employment</i>	<i>Title</i>	<i>Dates</i>
Geological Survey of Israel	Researcher	04/1993-09/1994
Geological Survey of Israel	Geologist	06/1984-05/1985

**EMPLOYMENT RECORD AT FIU**

<i>Rank</i>	<i>Dates</i>
Professor	08/2019-present

## PUBLICATIONS IN DISCIPLINE

**Books** – N/A

### Articles

- 2021 Orhan, O., T. Oliver-Cabrera, S. Wdowinski, S., Yalvac, and M. Yakar, (2021), Land Subsidence and Its Relations with Sinkhole Activity in Karapınar Region, Turkey: A Multi-Sensor InSAR Time Series Study, *Sensors* 21, no. 3: 774. <https://doi.org/10.3390/s21030774>.
- Hong, S. H., Wdowinski, S., & Kim, S. W. (2021). Extraction of Absolute Water Level in the Florida Everglades Using TanDEM-X Bistatic Science Phase Observations with a Large Perpendicular Baseline, *Geoscience and Remote Sensing Letters*, accepted.
- Havazli, E. and S. Wdowinski (2021), Detection Threshold Estimates for InSAR Time Series: A Simulation of Tropospheric Delay Approach. *Sensors*. 2021; 21(4):1124. <https://doi.org/10.3390/s21041124>
- 2020 Li, S., S. Wdowinski, Y-J Hsu, and B. H. Shyu, (2020), Earthquake Interactions in Central Taiwan: Probing Coulomb stress effects due to  $M_L \geq 5.5$  earthquakes from 1900 to 2017. *Journal of Geophysical Research: Solid Earth*, 125, e2019JB019010. <https://doi.org/10.1029/2019JB019010>.
- Bock, Y. and S. Wdowinski (2020), GNSS Geodesy in Geophysics, Natural Hazards, Climate, and the Environment, in Position, Navigation, and Timing Technologies in the 21st Century: Integrated Satellite Navigation, Sensor Systems, and Civil Applications, *IEEE, 2021*, 741-820, doi: 10.1002/9781119458449.ch28.
- Govorčín, M., S. Wdowinski, B. Matoš, and G. J. Funning, (2020), Geodetic source modeling of the 2019,  $M_w$  6.3 Durrës, Albania earthquake: partial rupture of a blind reverse fault, *Geophysical research letters*, 47, e2020GL088990. <https://doi.org/10.1029/2020GL088990>.
- Solano Rojas, D.E., S. Wdowinski, E. Cabral-Cano, and B. Osmanoglu (2020), Detecting differential ground displacements of civil structures in Fast Subsiding Metropolitans with Interferometric SAR and BandPass Filtering, *Scientific Reports*, 10(1), 1-14.
- Liao, H., S. Wdowinski, and S. Li, Regional-scale hydrological monitoring of wetlands with Sentinel-1 InSAR Observations: Case Study of the South Florida Everglades, (2020), *Remote Sensing for Environment*, 251, <https://doi.org/10.1016/j.rse.2020.112051>
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- 2019 Govorčín, M., B. Pribičević, and S. Wdowinski, S. (2019). Surface Deformation Analysis of the Wider Zagreb Area (Croatia) with Focus on the Kašina Fault, Investigated with Small Baseline InSAR Observations. *Sensors*, 19(22), 4857.
- 2018 Jaramillo, F., I. Brown, P. Castellazzi, L. Espinosa, A. Guittard, S-H Hong, V. Rivera-Monroy, S. Wdowinski, (2018), Assessment of hydrologic connectivity in an ungauged wetland with InSAR observations, *Environmental Research Letters*, vol. 13, no. 2, 024003.

- Jaramillo, F., Licero, L., Åhlen, I., Manzoni, S., Rodríguez-Rodríguez, J.A., Guittard, A., Hylin, A., Bolaños, J., Jawitz, J., Wdowinski, S. and Martínez, O., (2018), Effects of Hydroclimatic Change and Rehabilitation Activities on Salinity and Mangroves in the Ciénaga Grande de Santa Marta, Colombia. *Wetlands*, pp.1-13.
- Hong, S. H., Wdowinski, S., Amelung, F., Kim, H. C., Won, J. S., & Kim, S. W. (2018). Using TanDEM-X pursuit monostatic observations with a large perpendicular baseline to extract glacial topography. *Remote Sensing*, *10*(11), 1851.
- Brothelande, E., Amelung, F., Yunjun, Z., and Wdowinski, S. Geodetic evidence for interconnectivity between Aira and Kirishima magmatic systems, Japan. *Scientific reports*, *8*(1), 9811, 2018
- 2017 Torres, Y., K. Premaratne, F. Amelung, and S. Wdowinski (2017), An Efficient Polyphase Filter Based Resampling Method for Unifying the PRFs in SAR Data, *IEEE Transactions on Geoscience and Remote Sensing*, vol. 55, no. 8, pp.1-14 doi: 10.1109/TGRS.2017.2713600
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- 2015 Weber, J. C., H. Geirsson, J. L. Latchman, K. Shaw, P. La Femina, S. Wdowinski, M. Higgins, C. Churches, and E. Norabuena (2015), Tectonic inversion in the Caribbean-South American

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- Wdowinski, S. and Y. Bock, The evolution of the central Andean topography: A viscous flow model of continental lithosphere overriding a subduction zone. EOS, Trans. Am. Geophys. Un., 72, 346, 1991.
- 1990 Wdowinski, S., Continuum models of continental deformation (Ph.D. thesis), Harvard University, 1-137, 1990.
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- 1985 Wdowinski, S., The geology of the southern Hebron Mountains (M.Sc. thesis - in Hebrew), Geol. Surv. Isr., Report GSI/25/85, 1-68, 1985.
- Wdowinski, S., Correlation between the upper Judea Group formations in the Judea Mountains and the Negev, Israel Geol. Soc. Ann. Meeting, 102-103, 1985.

- 1984 Wdowinski, S., The lithostratigraphy of the Upper Judea Group in the Ira Mts. and its correlation with that of the Judea Mts. and the northern Negev, Geol. Surv. Isr., Current Research, 42-45, 1984.

### **CREATIVE WORK - N/A**

(List date and type of work and/or place of presentation. If the creative work has received recognition, such as design award, competition prize, exhibition or publication by others, or critical review, indicate the level of recognition as well as the peer-review context and process.)

### **WORKS IN PROGRESS**

#### **Papers submitted to journals for consideration**

Zhang, B., S. Wdowinski, D., Gann, and S-H Hong, (2021) Spatiotemporal variations of wetland scattering: The role of water depth and vegetation characteristics in Sentinel-1 SAR dual-polarization amplitude observations, Remote Sensing of Environment, in revisions.

Oliver-Cabrera, T., S. Wdowinski, and S. Kruse, (2021), Detection of Sinkhole Activity in Central Florida Using InSAR Time Series Observations, Remote Sensing of Environment, submitted.

Robinson, T., B. Rodgers, T. Oliver-Cabrera, C. Downs, S. Kruse, S. Wdowinski, S. Jazayeri, S. Esmaili, H. Kiflu, (2021), Complex relationships between surface topography, ground motion, and cover sediments in covered karst, west-central Florida, USA, Geomorphology, submitted.

#### **Other completed papers**

Solano Rojas, D.E., S. Wdowinski, E. Cabral-Cano, and B. Osmanoglu, (2020) Differential subsidence in Mexico City and implications to its Collective Transport System (Metro), submitted, Science Advances, 2019.

Osmanoglu, B., S. Wdowinski, T.H. Dixon, and E. Cabral-Cano, 3-D phase unwrapping for satellite radar interferometry, II: Time Series Generation, in preparations, 2020.

Solano Rojas, D.E., E. Havazli, E. Cabral-Cano, and S. Wdowinski, Remotely-triggered Slip in Mexico City Induced by the September 2017 Mw=7.1 Puebla Earthquake, in preparations, 2020.

Zhang, B., Wdowinski, S., Oliver-Cabrera, T., Koirala, R., Jo, M. J., and Osmanoglu, B.: Mapping the Extent and Magnitude of Severe Flooding Induced by Hurricane Irma with Multi-temporal Sentinel-1 SAR and InSAR Observations, in preparations, 2020.



## **FUNDED RESEARCH**

- Gaiser, E. et al., “FCE IV: Coastal Oligotrophic Ecosystems Research”, NSF, 12/01/2020-11/30/2024, \$4,750,800.
- Wdowinski, S., “Assessing Forest Structure Status of Mangrove Forests in Everglades National Park Following Hurricane Irma”, FIU ForEverglades Student Research Fund, 12/01/2019-11/30/2020, \$20,500.
- Wdowinski, S., “Coastal flooding hazard in Florida: Evaluating the contribution of local subsidence”, Florida Office of Insurance Regulation, 07/01/2018-06/30/2022, \$327,227.
- Price, R. et al., “Scholarships for a Future Generation of Geoscientists at FIU”, National Science Foundation, 07/01/2018-06/30/2023, \$1,000,000.
- Gann, D., K. Zhang, P. Olivas, S. Wdowinski, and J. Richards, “Optimization of LiDAR Data Processing Algorithms for Wetland Graminoid Marsh and Prairie Vegetation”, National Park Service, 04/01/2018-03/31/2020, \$198,708 [CoPI portion: \$9,492].
- Wdowinski, S. and S. Kruse, Supplementary funding for the project “Collaborative research: Detection and mechanics of sinkhole activities in central Florida”, NSF, 11/08/2017-11/07/2018, \$11,444.
- Freymueller, J. and S. Wdowinski, Workshop funding for organizing the workshop “Hydro-Geodesy: Hydrological applications of geodetic techniques”, Earthscope (NSF), 09/01/2017-03/31/2018, \$8,000.
- Wdowinski, S., K. Larson, A. Borsa, and D. Cayan, Workshop funding for organizing the workshop “Hydro-Geodesy: Hydrological applications of geodetic techniques”, NASA, 10/15/2016-11/30/2017, \$12,000.
- Wdowinski, S., Z. Peng, and K. Ferrier, “Cascading hazards: Understanding triggering relations between wet tropical cyclones, landslides, and earthquakes”, NASA, 06/27/2017-06/26/2020, \$1,197,930.
- Wdowinski, S. and S. Kruse, “Collaborative research: Detection and mechanics of sinkhole activities in central Florida”, NSF, 09/01/2016-08/30/2018, \$235,000.
- Wdowinski, S. and S. Kruse, “Space based detection of sinkhole activity in central Florida”, NSF, 09/01/2014-08/30/2016, \$90,000.
- Amelung, F. and S. Wdowinski, “A new Mass Balance estimation method from Altimetry and InSAR: Application to the Greenland Ice Sheet and Arctic Ice Caps”, NASA, \$521,928 [CoPI portion: \$50,495].
- Erickson, C.L., S. Wdowinski, and J. Thayn, “Flood Regimes and Carbon Cycling in Anthropogenic Landscapes of the Bolivian Amazon”, NASA, 09/01/2013-08/31/2017, \$290,745 [sub-award from U. Penn: \$191,009].
- Gaiser, E. et al., “FCE III: Coastal Oligotrophic Ecosystems Research”, NSF, 12/01/2012-11/30/2018, \$5,879,998 [sub-award from FIU: \$81,570].
- Wdowinski, S., “Applications of InSAR Time Series Imagery for Subsidence Hazards and Water Resources Exploitation in Four Mexican Metropolitans”, NASA, 08/01/2012-07/31/2016, \$453,805.

Wdowinski, S., "Development of Advanced Algorithms for 3-D InSAR Unwrapping using Non-Linear Filters", NASA, 06/01/2012-05/31/2016, \$436,519.

Premaratne, K., F. Amelung, and S. Wdowinski, "High-Resolution InSAR for Geo-Engineering Applications", UM collaborative research exchange forum, 09/01/2012-08/31/2013, \$80,000 [CoPI portion: \$20,000].

Wdowinski, S., "RAPID: Monitoring postseismic crustal deformation in Haiti with TerraSAR-X observations", NSF, 08/01/2010-07/31/2012, \$28,206.

Wdowinski, S., "Space-based monitoring of forest and wetland 3-D vegetation structure", UM Provost award, 10/01/2010-09/30/2011, \$14,616.

Amelung, F., T. Dixon, and S. Wdowinski, "Acquisition of a Linux computer cluster for Space Geodetic Research", NSF, 06/01/2009-5/31/2010, \$75,000 for cluster purchase.

Miralles-Wilhelm, F. et al., "Water-SCAPES: Science of Coupled Aquatic Processes in Ecosystems from Space", NASA, 08/01/2008-07/31/2013, \$4,999,999 [sub-award from FIU: \$749,966].

Amelung, F. and S. Wdowinski, "Integration of InSAR time-series with continuous GPS. Application to the Western Basin and Range", NSF, 09/01/2008-08/31/2011, \$299,188 [CoPI portion: \$48,878].

Amelung, F. and S. Wdowinski, "Determining surface subsidence characteristics in urban areas by means of persistent scatterer InSAR", NASA, 08/01/2007-07/31/2011, \$84,000 [CoPI portion: \$19,455].

Wdowinski, S., "Space-based remote sensing of water level changes – Interferometric Synthetic Aperture Radar measurements", South Florida Water Management District, 05/01/2007-04/30/2008, \$70,740.

Wdowinski, S., "Space-based hydrology of the Everglades", FIU, 02/01/2007-10/31/2007, \$71,000.

Wdowinski, S., "Wetland Hydrology from Space", National Institute for Water Research, 09/01/2004-08/31/2006, \$158,000.

Wdowinski, S., "Neotectonic structure and recent tectonic activity in the lower Jordan Valley", Israel Ministry of Infrastructure, 10/01/2000-09/30/2001, \$10,000.

Wdowinski, S., "Evaluating the petroleum potential of the southeastern Mediterranean Basin", Gordon Center for Energy Studies (Tel Aviv University), 10/01/2000-09/30/2001, \$2,500.

Wdowinski, S., "Monitoring crustal deformation across the Dead Sea Fault using GPS observation", Sackler Foundation, Tel Aviv University, 10/01/2000-09/30/2001, \$6,600.

Wdowinski, S. and Y. Bock, "Establishment of automated near real-time system for downloading GPS data from the GIL network permanent stations", Survey of Israel, 10/01/2000-09/30/2001, \$40,000.

Bear, G., Wdowinski, S., and Y. Meltzer, "Establishment of an integrated INSAR-GPS system for studying 10 years of crustal deformation along the Dead Sea Fault System", Survey of Israel, 10/01/1999-09/30/2003, \$230,000 [CoPI portion: \$80,000].

Wdowinski, S. and P. Alper, "Mapping atmosphere water vapor content using GPS observations", Sackler Foundation, Tel Aviv University, 10/01/1999-09/30/2000, \$10,000.

- Wdowinski, S. and P. Alper, “Mapping atmospheric water vapor content using GPS observations”, Tel Aviv University, 10/01/1999-09/30/2000, \$7,000.
- Wdowinski, S., and Y. Bock “Establishment of Global Positioning System Infrastructure in Israel for Geodetic and Geophysical Applications”, Israel Space Agency, 10/01/1997-09/30/2000, \$200,000.
- Wdowinski, S., and Y. Bock “Establishment of Global Positioning System Infrastructure in Israel for Geodetic and Geophysical Applications”, Survey of Israel, 10/01/1997-09/30/2000, \$150,000.
- Sivan, D. and S. Wdowinski, “Holocene sea level changes”, Natural Center for Cooperation between Science and Archaeology, 10/01/1997-09/30/1998, \$7,600 [CoPI portion: \$3,800].
- Wdowinski, S., “A new theory of intraplate tectonics”, Tel Aviv University, 10/01/1997-09/30/1998, \$3,500.
- Wdowinski, S., “Numerical models of continental extension”, Tel Aviv University, 10/01/1996-09/30/1997, \$3,500.
- Wdowinski, S., “Detection of coseismic deformation induced by the 1995 Nuweiba earthquake”, Tel Aviv University, 10/01/1996-09/30/1997, \$3,200.
- Wdowinski, S., “Seismic hazard assessments using GPS observations”, Gordon Center for Energy Studies (Tel Aviv University), 10/01/1996-09/30/1997, \$4,000.
- Wdowinski, S., “Geodetic measurements using GPS observations”, Keshet (Tel Aviv University), 10/01/1996-09/30/1997, \$14,000.
- Wdowinski, S., “Preliminary calculations of Israel-Sinai plate velocity using GPS data”, Israel Ministry of Energy, 10/01/1995-09/30/1997, \$20,000.
- Wdowinski, S., “The development the Dead Sea Rift and its implications on oil prospect in the Dead Sea Basin”, Gordon Center for Energy Studies (Tel Aviv University), 10/01/1994-09/30/1995, \$2,000.

## **PATENT DISCLOSURES, APPLICATIONS, AND AWARDS – N/A**

## **PROFESSIONAL HONORS, PRIZES, FELLOWSHIPS**

- 2018 FIU Top Scholar – Established Faculty with significant grants.
- 2017 FIU College of Art, Sciences, and Education (CASE) Award for Research.
- 1990-1992 Ida and Cecil Green scholarship for postgraduate research in Geophysics, IGPP, Scripps Institution of Oceanography, UCSD.

## **OFFICES HELD IN PROFESSIONAL SOCIETIES**

- AGU – Canvassing committee, Geodesy Section, member (2017-present).
- AGU – Honor selection committee, Geodesy Section, member (2015-2016).
- UNAVCO – Geodetic Data Services Advisory Committee, Chair (2015-2018).
- UNAVCO – WInSAR Advisory Committee, member (2011-2014).
- UNAVCO – Education & Outreach Advisory Committee, Chair (2010-2012).

UNAVCO – Board member (2008-2009).

MAeSUREs - Advisory Committee, member (2009-2014).

Served as an expert in the two panels of the Israeli parliament (Knesset) discussing Earthquake mitigation and preparations (2000-2001).

International Association of Seismology and Physics of the Earth's Interior (IASPEI) Commission on Geodynamics and Tectonophysics, 1995-1999.

International Association of Geodesy (IAG) Special Study Group, Continuous GPS networks, 1995-1999.

## **OTHER PROFESSIONAL ACTIVITIES AND PUBLIC SERVICE**

### **Editorial responsibilities:**

Sensor, Editorial Board, 2019-present.

Journal of Geophysical Research (JGR), associate editor, 2009-2015.

Tectonophysics, associate editor, 2002-present.

Journal of Geodynamics, Guest editor for Special Issue on Geodetic Earth System, 2012-present.

Israel Journal of Earth Sciences, guest editor for a special issue on “Geodetic studies in Israel”, 2000-2001.

Israel Journal of Earth Sciences, associate editor, 1999-2005.

Israel Geological Society, 1999-2000, organizing committee.

## **TEACHING**

### **Classes taught:**

#### **Florida International University,**

Geospatial measurement techniques/Adv. in Earth and Environmental Sciences,  
2019-20

Geophysical data analysis, 2018-19

Introduction to GIS, 2017-18

Environments of a changing planet, 2016-17, 2017-18, 2018-19, 2019-20, 2020-21

Geological Excursion/Adv. Field Excursion, 2017-18, 2019-20

#### **University of Miami,**

Geophysics, 2005-06, 2007-08, 2008-09

Structural Geology, 2010-11, 2011-12

Natural disasters: Hollywood versus reality, 2006-07, 2007-08, 2008-09, 2009-10, 2010-11

Mathematical methods for geo-scientists, 2007-08, 2009-10, 2010-11, 2011-12, 2013-14,  
2015-16

Hydrological Hazards, 2015-16, 2016-2017

#### **Tel Aviv University, 1994-2004 (courses taught)**

Physics of the earth, 1994-95

Structural geology, 1995-96; 1996-97; 1997-98; 1998-99; 1999-2000, 2000-2001, 2003-2004

Potential methods, 1995-96.

Mathematical methods for geophysicists, 1995-96; 1996-97; 1997-98; 1998-99; 1999-2000.

Geodynamics, 1996-97; 1998-99; 2000-2001.

Tectonics Seminar, 1995-96; 1996-97; 1997-98; 1998-99; 1999-2000; 2000-2001; 2003-2004

Principles and applications of GPS technology, 1997-98; 1998-99; 2000-2001.

Geology of Israel, 1998-1999; 1999-2000; 2000-2001.

### **Mentoring:**

#### **Ph.D THESIS**

	<b><u>Year</u></b>	<b><u>Student's Name</u></b>	<b><u>Title of Thesis</u></b>	<b><u>Academic Institution</u></b>
Member	1995-1999	Uri Basson	Imaging of active fault zone in the Dead Sea Rift: Evrona Fault Zone as a case study	Tel Aviv University
Member	2005-2008	Gina Schmalzle	The earthquake cycle of strike-slip faults	University of Miami
Member	2005-2009	Kim Outerbridge	Slow Slip Beneath the Nicoya Peninsula, Costa Rica and Its Effect on the Interseismic Cycle	University of Miami

Chairman	2005-2011	Batuhan Osmanoglu	Applications and development of new algorithms for displacement analysis using InSAR time series	University of Miami
Chairman	2006-2012	Yan Jian	Detection of nonlinear crustal movements using Global Positioning System	University of Miami
Member	2006-2012	Scott Backer	Investigating the dynamics of basaltic volcanic magmatic systems with space geodesy	University of Miami
Member	2008-2013	Estelle Chaussard	Characterization of Volcanic and Land Subsidence Hazards at Regional Scales: Contributions from Space Geodesy	University of Miami
Member	2009-2014	Fernando Greene	Surface Deformation measured with Interferometric Synthetic Aperture Radar: Case Studies of Basin and Range and Garlock-San Andreas Faults	University of Miami
Member	2010-2014	Marco Bagnardi	Dynamic of magma supply, storage and migration at basaltic volcanoes: Geophysical studies of the Galapagos and Hawaiian volcanoes	University of Miami
Member	2010-2014	Qiong Zhang	Subsurface structure and dynamic triggering of earthquakes	University of Miami
Member	2010-2014	Luis Perez	Development of a methodology that couples satellite remote sensing measurements to spatial-temporal distribution of soil moisture in the Vadose zone of the Everglades National Park	Florida International University
Member	2010-2014	Mehrnoosh Mahmoudi	Numerical Modeling of Spatial and Temporal Patterning of Water and Vegetation in Wetland Ecosystems	Florida International University

Chairman	2010-2015	Emanuelle Feliciano-Bonilla	Multi-scale remote sensing assessments of forested wetlands: Applications to the Everglades national park	University of Miami
Member	2011-2015	Harash Fattahi	Geodetic imaging of tectonic deformation with InSAR	University of Miami
Member	2011-2015	Wenliang Zhao	Small deformation detected from InSAR time-series and their applications to surface and near-surface loading	University of Miami
Member	2012-2016	Peng Li	Innovations in seismic tomography, their applications and induced seismic events in carbon sequestration	University of Miami
Member	2012-2017	Yoangel Torres	Tunnel detection and localization using interferometric SAR data	University of Miami
Member	2012-2017	Anieri Morales-Rivera	Geophysical characterization and modeling of volcanic systems	University of Miami
Chairman	2013-2018	Dario Solano-Rojas	Geological hazard assessments for Mexico City and its surroundings based on synthetic aperture radar interferometry (InSAR) observations	University of Miami
Chairman	2013-2018	Talib Oliver-Cabrera	InSAR applications for environmental and hazard monitoring	University of Miami
Chairman	2014-2019	Emre Havazli	Quantifying the effect of tropospheric delay on InSAR and its application for crustal deformation	University of Miami
Member	2014-2019	Yunjun Zhang	Geodetic imaging of volcanic deformation with time series radar interferometry	University of Miami
Chairman	2017-	Boya Zhang		Florida International University
Member	2017-	Tonian Robinson		University of Southern Florida
Chairman	2018-	Selena Chavez		Florida International University

Member	2020-	Jonathan Rodemann	Florida International University
Member	2020	Juan Ignacio Martin de Blas	University of Copenhagen

### **MASTERS THESIS**

	<b><u>Year</u></b>	<b><u>Student's Name</u></b>	<b><u>Title of Thesis</u></b>	<b><u>Academic Institution</u></b>
Chairman	1995-1998	Noa Bechor	Current tectonic movements in the Israel-Sinai sub-plate using GPS observations	Tel Aviv University
Chairman	1996-1998	Shahak Pe'eri	Continuous geodetic monitoring of crustal deformation along the Dead Sea Fault, utilizing a permanent GPS network	Tel Aviv University
Chairman	1998-1999	Shaul Bar-Ner	The precision of site velocity calculated from GPS field campaigns	Tel Aviv University
Chairman	1998-2001	Uri Shatner	Geodetic monitoring of surface deformation along the western shores of the Dead Sea using GPS and InSAR observations	Tel Aviv University
Member	1998-2001	Edna Barko	Combined geometric process to recover the thematic ability of hyperspectral airborne scanner	Tel Aviv University
Chairman	1998-2001	Shmuel Na'aman	Ionospheric contribution to geomagnetic variations: the August 11 <sup>th</sup> solar eclipse as a case study	Tel Aviv University
Chairman	1999-2001	Aya Mor	Remote sensing of atmospheric water vapor using the GIL network of permanent GPS stations in Israel	Tel Aviv University
Member	2005- 2006	Bernando Bieler	Hydrologic Modeling and Remote Sensing of Water Flow and Vegetation in Wetlands	University of Miami
Member	2007- 2008	Amy Cohen	Monitoring the hydrologic cycle of the Florida Everglades using ERS,	University of Miami



Member	2011- 2012	Yu Wang	RADARSAT, and JERS Synthetic Aperture Radar Detecting vegetation recovery patterns after hurricanes in south Florida using NDVI time series	University of Miami
Chair	2018- 2019	Lajhon Campbell	Deformation analysis of the South American continent.	Florida International University
Chair	2019-	Daniela Villalba		Florida International University

### **Post-doctoral researchers**

	<b><u>Year</u></b>	<b><u>Name</u></b>	<b><u>Research field</u></b>	<b><u>Academic Institution</u></b>
Advisor	2004-2006	Sang-Wan Kim	Space-based monitoring of wetland hydrology	University of Miami
Advisor	2007-2010	Sang-Hoon Hong	Space-based monitoring of wetland hydrology	University of Miami
Advisor	2014-2015	Gina Schmalzle	Vertical crustal movements in western US	University of Miami
Advisor	2018-2019	Dario Solano- Rojas	Urban subsidence	Florida International University
Advisor	2018-2020	Talib Oliver- Cabrera	Space-based detection of sinkhole activities	Florida International University
Advisor	2018-2020	Heming Liao	Environmental applications of InSAR	Florida International University
Advisor	2018-2021	Shanshan Li	Cascading hazards	Florida International University