

Curriculum Vitae

Prof. Shira Raveh-Rubin

A. PERSONAL DETAILS

Date and Place of Birth: 12 May 1980, Jerusalem, Israel
Citizenship: Israeli
Military service: January 1999 – January 2001
Address: Department of Earth and Planetary Sciences
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B. EDUCATION

2012- Post-doctoral fellow, Institute for Atmospheric and Climate Science, ETH Zurich,
2017 Switzerland. Host: Prof. Heini Wernli

2007- PhD, Department of Environmental Sciences and Energy Research, Weizmann Institute of
2012 Science, Israel
Thesis title: *Anomalous, non-conservative chemical transport in saturated porous media*.
Advisor: Prof. Brian Berkowitz

2004- M.Sc. in Atmospheric Sciences, the Hebrew University of Jerusalem, Israel, *cum laude*
2006 Thesis title: *Characterizing Tropical Plumes over eastern North Africa that transport moisture to the eastern Mediterranean and Israel*.
Advisors: Prof. Nathan Paldor and Dr. Baruch Ziv

2001- B.Sc. in Atmospheric Sciences (major) and Physics (minor), the Hebrew University of
2004 Jerusalem, Israel, *cum laude*

C. EMPLOYMENT HISTORY

2024- Associate professor, Department of Earth and Planetary Sciences, Weizmann Institute of
present Science

2025 Visiting professor, Institute for Atmospheric and Climate Science, ETH Zurich (6 months)

2024- Visiting professor, Institute of Geography, University of Bern (6 months)
2025

2017- Senior scientist, Department of Earth and Planetary Sciences, Weizmann Institute of
2024 Science

2004 Research assistant of Dr. Baruch Ziv, Department of Natural Sciences, the Open
University of Israel

2002- Research assistant of Prof. Nathan Paldor, Department of Atmospheric Sciences, the

2004 Hebrew University of Jerusalem

D. ACADEMIC ADMINISTRATION

2022-present Member of the Hiring Committee, Department of Earth and Planetary Sciences, Weizmann Institute of Science

2022-present Member of the Green Campus presidential committee, Weizmann Institute of Science

2021-present Member of the Board of Studies, Faculty of Chemistry, Weizmann Institute of Science

E. OTHER APPOINTMENTS

2023-present Member, International Commission on Dynamic Meteorology (ICDM) of the International Association of Meteorology and Atmospheric Sciences (IAMAS)

2023-present Management committee member, COST Action CA22162: FutureMed: A transdisciplinary network to bridge climate science and impacts on society

2020-present Member and working group leader of the Gender Equality Together forum, Weizmann Institute of Science

2019-present Co-editor of the journal Weather and Climate Dynamics (WCD), Copernicus Publishing, European Geosciences Union (EGU)

2018-present Examination committee member for M.Sc. and PhD theses submitted to Technische Universität Bergakademie Freiberg, Weizmann Institute of Science, Tel-Aviv University, Hebrew University of Jerusalem

2020-2025 Member of AcademiaNet

2020-2024 Working group leader, management committee member and short-term scientific missions evaluation committee member, COST Action CA19109: European network for Mediterranean cyclones in weather and climate

2018-2022 Task team member of the High-Impact Weather Project of the World Weather Research Programme (WWRP), World Meteorological Organization (WMO)

2013-2020 HyMeX (HYdrological cycle in the Mediterranean EXperiment), member of the science teams: Sources and Transport of Water Vapour, Heavy Precipitation, Mediterranean Cyclones

Teaching experience

2022-present Lecturer, Weizmann Institute of Science
Graduate course: Dynamical meteorology

2025 Guest lecturer, ETH Zurich
Graduate course: Mesoscale atmospheric systems

2016 Guest lecturer, ETH Zurich
Graduate course: Dynamics of large-scale atmospheric flow

2004-2006	Teaching assistant, department of atmospheric sciences, the Hebrew University of Jerusalem Undergraduate courses: Introduction to climatology, Physical oceanography, Climate changes, Earth as a planet
2017-present	Outreach lectures in schools and for the open public: Israel Academy of Sciences and Humanities, the Israel Young Academy, Academic community for Israeli Society (“BaShaar”), De-Shalit Rehovot, Bechor Levi Rehovot, Hashita highschool Rehovot, JFS London, American School in London, Alpha, Ofakim, Madan Bareshet programmes, Davidson Institute, 1.5°C Climate Initiative (Hebrew University), Big Little Science (“Mada Gadol, Baktana”), Haaretz newspaper, Kan radio

F. INTERNATIONAL RECOGNITION

Awards and Prizes

2023	Scientific Council Prize, Weizmann Institute of Science
2012	Otto Schwarz Memorial Graduate Scholarship, Weizmann Institute of Science
2010-2011	Ministry of Science and Technology excellence fellowship for the advancement of women in science
2008, 2011	Rieger-JNF Fellowship for Environmental Studies
2005	Schindel Prize for excellence in M.Sc. research from the Atmospheric Sciences department, the Hebrew University of Jerusalem
2001	Excellence award for new students, Earth Sciences Institute, the Hebrew University of Jerusalem

International organizing committees, Membership in juries, Review boards

2014-present	Reviewer of manuscripts for scientific journals: <i>Annales Geophysicae</i> , <i>Atmosphere</i> , <i>Atmospheric Research</i> , <i>Atmospheric Science Letters</i> , <i>Climate Dynamics</i> , <i>Communications Earth & Environment</i> , <i>Earth System Dynamics</i> , <i>Earth System Science Data</i> , <i>Geophysical Research Letters</i> , <i>Hydrology and Earth System Sciences</i> , <i>International Journal of Climatology</i> , <i>Journal of Climate</i> , <i>Journal of Geophysical Research – Atmospheres</i> , <i>Meteorology and Atmospheric Physics</i> , <i>Natural Hazards and Earth System Sciences</i> , <i>npj Climate and Atmospheric Science</i> , <i>Quarterly Journal of the Royal Meteorological Society</i> , <i>Quaternary Science Reviews</i> , <i>Weather and Climate Dynamics</i>
2021-present	Reviewer and panel member for the evaluation of research proposals to the Israel Science Foundation (ISF), German Research Foundation (DFG), Swiss National Science Foundation (SNSF), US National Science Foundation (NSF), Pazy Research Foundation, Azrieli Foundation, Israel Ministry of Innovation, Science and Technology (MOST)
2025	Convener and chair of the session “UP1.1: Atmospheric dynamics, predictability and extremes”, European Meteorological Society Annual Meeting, 7-12 September 2025, Ljubljana, Slovenia

- 2025 Co-convener of the symposium "M05 Advances in Dynamic Meteorology", International Association of Meteorology and Atmospheric Sciences (IAMAS) Joint Assembly, (BACO25), 20-25 July 2025, Busan, South Korea
- 2025 Scientific organizing committee and session chair of the Stormtracks 2025 Workshop, 15-20 June 2025, Rosendal, Norway
- 2024 Session chair, 20th Cyclone Workshop, 24 October 2024, St. Sauveur, Quebec, Canada
- 2024 Convener of the session "UP1.1: Atmospheric dynamics, predictability and extremes", European Meteorological Society Annual Meeting, 2-6 September 2024, Barcelona, Spain
- 2024 Co-organizer and tutor of the 3rd MedCyclones Workshop and Training School, 15-19 July 2024, Frascati, Italy
- 2023 Convener and chair of the session "UP1.1: Atmospheric dynamics, predictability and extremes", European Meteorological Society Annual Meeting, 4 September 2023, Bratislava, Slovakia
- 2023 Session chair of "M28d - Advances in Dynamic Meteorology", IUGG23: The 28th general assembly of the international union of geodesy and geophysics, 15 July 2023, Berlin, Germany
- 2023 Co-organizer and tutor of the 2nd MedCyclones Workshop and Training School, 26-30 June 2023, Toulouse, France
- 2022 Co-organizer and tutor of the 1st MedCyclones Workshop and Training School, 27 June - 2 July 2022, Athens, Greece
- 2022 Lead organizer of the conference "Mediterranean Cyclones: Dynamics, Impact and Prediction at Weather and Climate Scales" (virtual), 3 January 2022
- 2017-2021 Co-organizer of the weekly seminar series of the Department of Earth and Planetary Sciences, Weizmann Institute of Science
- 2020 Co-organizer of the first North Atlantic Waveguide, Dry Intrusion, and Downstream Impact Campaign (NAWDIC) workshop (virtual), 23-24 November 2020
- 2019 Co-organizer of the Israel-Italy Scientific Workshop "Mediterranean Climate: Changes and Challenges", Tel Aviv, Israel, 5 November 2019
- 2019 Co-organizer of an international workshop "Climate and Wave Dynamics", Eilat, Israel, 22-26 September 2019
- 2019 Organizer of a symposium on "The atmospheric water cycle: underlying processes and future projections", Department of Earth and Planetary Sciences, Weizmann Institute of Science, 5 May 2019
- 2018 Convener and chair of the session "Understanding weather extremes", ISEES Annual Conference for Science and the Environment, Weizmann Institute of Science, 20-21 June 2018
- 2018 Session chair in the 11th HyMeX Workshop, Lecce, Italy, 30 May 2018
- 2007 Co-organizer and session chair, the 6th Conference on Active Research by Environmental Science Students (CARESS), Weizmann Institute of Science, 29 May 2007

Talks at international meetings

Invited talks

Community efforts for understanding and predicting hazards across the Atlantic-Euro-Mediterranean regions (**keynote**, *HIWeather Final Conference, Munich, Germany, 10 September 2024*).

Improving prediction of extreme weather in a changing climate (*Fragile Society - Crisis Throughout History, Climate, Environment, and Food Security, The Israel Academy of Sciences and Humanities, Jerusalem, Israel, 24 October 2023, postponed*)

Dynamics of dry intrusion air streams and their relevance for extreme weather (*IUGG23: The 28th general assembly of the international union of geodesy and geophysics, Berlin, Germany, 16 July 2023*)

Process-based classification of Mediterranean cyclones (**keynote**, *MetMed: 9th International Conference on Meteorology and Climatology of the Mediterranean, Genoa, Italy, 23 May 2023*)

Process understanding of extreme weather events: the local and non-local role of extratropical cyclones (*"Rare events in Physics and Climate" international conference, Sde Boker, Israel, 12 December 2022*)

Dynamics of dry intrusion air streams and their relevance for extreme weather (**keynote**, *European Meteorological Society Annual Meeting, Bonn, Germany, 8 September 2022*)

The importance of cyclones for heavy precipitation in the Mediterranean (*Israel-Italy Scientific Workshop "Mediterranean Climate: Changes and Challenges", Tel Aviv, Israel, 5 November 2019*)

Climatology and dynamics of the link between dry intrusions and cold fronts (*European Geosciences Union General Assembly, Vienna, Austria, 9 April 2019*)

Wind: the journey of air on Earth (*The Israel Academy of Sciences and Humanities annual meeting, Jerusalem, Israel, 4 February 2019*)

Current challenges in understanding and predicting storms (*Fluid flows, from Graphene to planet atmospheres, International workshop, Weizmann Institute of Science, 19 December 2018*)

Understanding the weather (*5th How To Change the World Conference, London, UK, 6 December 2018*)

The relevance of dry-air intrusions for high-impact weather (*High-Impact Weather Workshop, WMO, Beijing, China, 21 November 2018*)

The dynamical and thermodynamical links between North Atlantic cyclones and Mediterranean cyclones (*Stormtracks 2018 workshop, Utö, Stockholm, Sweden, 29 August 2018*)

Climatology of dry air intrusions and their relation to strong surface winds in extratropical cyclones (**keynote**, *5th European storms workshop STORMEx, Bern, Switzerland, 31 August 2015*)

Anomalous, non-conservative chemical transport in saturated porous media. (*Research conference of the Israeli Water Authority, Maale Hahamisha, Israel, 21 June 2011*)

Contributed talks

Introduction to dry intrusions – state of the art and open questions for NAWDIC (*3rd International NAWDIC Workshop, Karlsruhe, Germany, 15 September 2025*)

The climatological contribution of Mediterranean cyclones to precipitation and ocean evaporation (*European Meteorological Society Annual Meeting, Ljubljana, Slovenia, 11 September 2025*)

The North Atlantic Waveguide, Dry Intrusion, and Downstream Impact Campaign (NAWDIC) (*10th European Windstorm Workshop, Bern, Switzerland, 7 February 2025*)

Process-based classification of Mediterranean cyclones (*20th Cyclone Workshop, St. Sauveur, Quebec, Canada, 24 October 2024*)

Dynamics of dry intrusion air streams and their relevance for extreme weather (*JSPS-ISF symposium, University of Tokyo, Japan, 27 September 2023*)

The dry intrusion as a link between the tropopause and low-level high impact weather (*NAWDIC-HALO Workshop, Karlsruhe Institute of Technology, Germany, virtual, 12 May 2023*)

The role of cyclones for persistent warm and dry extremes in the Eastern Mediterranean (*JSPS - ISF (Japan - Israel) Symposium in Atmospheric Dynamics and Climate, Weizmann Institute of Science, Rehovot, Israel, 27 November 2022*)

Understanding weather extremes for improving impact prediction – an international effort (*combined oral/poster presentation, MaltaX conference: Frontiers of Science, Malta, 7 November 2022*)

North Atlantic Waveguide, Dry Intrusion, and Downstream Impact Campaign: updates and state of the art (*Atmospheric River Reconnaissance Workshop 2022, Scripps Seaside Forum, La Jolla, CA, USA, virtual, 26 October 2022*)

The role of Mediterranean cyclones for persistent warm and dry extremes over the Eastern Mediterranean during winter (*1st MedCyclones Workshop, Athens, Greece, 29 June 2022*)

The link between Rossby-wave breaking, cyclones, severe winds and air-sea interaction: the case of the Mistral wind (*Stormtracks2022: Midlatitude storm-tracks workshop, Saint-Pierre-d'Oleron, France, 31 May 2022*)

Persistent warm and dry extremes over the Eastern Mediterranean during winter: the role of upstream Rossby wave pattern (*European Geosciences Union General Assembly, Vienna, Austria, virtual, 27 May 2022*)

Dry air intrusions link Rossby wave breaking to large-scale dust storms in North Africa (*European Geosciences Union General Assembly, Vienna, Austria, virtual, 23 May 2022*)

Persistent dry and warm winter events over Israel and their relation to Atlantic and Mediterranean cyclones (*Mediterranean Cyclones: Dynamics, Impact and Prediction at Weather and Climate Scales conference, virtual, 3 January 2022*)

The importance of a series of Rossby wave breaking for dust transport near Mediterranean cyclones (*1st Meeting on Mediterranean Cyclones and Aerosol, Lecce, Italy, virtual, 20 September 2021*)

Dry intrusions: State of the art and open questions for NAWDIC (*NAWDIC Workshop, virtual, 23 November 2020*)

The influence of dry intrusions on the lower troposphere, boundary layer and ocean surface (*First virtual conference on atmospheric dynamics ViCoDyn1, virtual, 16 June 2020*)

Climatology and dynamics of the link between dry intrusions and cold fronts (*19th Cyclone Workshop, Kloster Seeon, Germany, 30 September 2019*)

The influence of dry intrusions on the PBL: Insights from a global Lagrangian climatology and relevance for ACE-ENA (*ACE-ENA Workshop, Brookhaven National Lab, NY, USA, 30 January 2019*)

The dynamical link between North Atlantic cyclones and intense Mediterranean cyclones (*GFDdays workshop, Sde Boker, Israel, 23 January 2019*)

The importance of Atlantic cyclones for intense Mediterranean cyclones (*11th HyMeX Workshop, Lecce, Italy, 31 May 2018*)

Climatology and dynamics of the link between dry intrusions and cold fronts (*Israel Meteorological Society annual meeting, Hebrew University in Jerusalem, 13 March 2018*)

Dry intrusions and their role for intense ocean evaporation and for triggering severe surface weather (*Bilateral meeting on Warm Conveyor Belts, ECMWF, Reading, UK, 23 May 2017*)

Dry intrusions: Lagrangian climatology and impact on the boundary layer (*European Geosciences Union General Assembly, Vienna, Austria, 26 April 2017*)

Initiative: Frontal heavy precipitation events – dynamical mechanism and moisture pathways (*HyMeX Mediterranean Cyclones science-team meeting, Paris, France, 10 March 2017*)

Dry air intrusions: climatology and their relevance for strong surface winds (*15th Plinius Conference on Mediterranean Risks, Giardini Naxos, Italy, 9 June 2016*)

The role of Mediterranean cyclones for producing large-scale precipitation extremes (*15th Plinius Conference on Mediterranean Risks, Giardini Naxos, Italy, 8 June 2016*)

Climatology of dry air intrusions and their relation to strong surface winds in extratropical cyclones (*17th Cyclone Workshop, Pacific Grove, CA, USA, 29 October 2015*)

Large-scale surface wind extremes in the Mediterranean (*4th European storms workshop STORMEx, Lisbon, Portugal, 8 September 2014*)

Large-scale surface wind extremes in the Mediterranean (*WWRP Open Science Conference, Montreal, Canada, 20 August 2014*)

Governing mechanisms of large-scale precipitation extremes – COSMO sensitivity experiments (*Swiss COSMO user workshop, MeteoSwiss, Zurich, Switzerland, 27 November 2013*)

The role of Mediterranean cyclones for producing large-scale precipitation extremes (*7th HyMeX Workshop, Cassis, France, 10 October 2013*)

The role of Mediterranean cyclones for producing large-scale precipitation extremes (*16th Cyclone Workshop, Sainte-Adele, Canada, 24 September 2013*)

Invited seminars

The importance of dry intrusions for air-sea interaction and downstream weather extremes (*Department of Atmospheric and Oceanic Sciences (ATOC), University of Colorado Boulder, USA, 2 May 2025*)

The importance of dry intrusions for air-sea interaction and downstream weather extremes (*Physical Sciences Lab seminar, National Oceanic and Atmospheric Administration (NOAA) Boulder CO, USA, 29 April 2025*)

The importance of dry intrusions for air-sea interaction and downstream weather extremes (*Atmosphere, Climate and Earth Observation Colloquium, University of Bern, Switzerland, 18 December 2024*)

The importance of dry intrusions for air-sea interaction and downstream weather extremes (*Atmosphere and Climate Colloquium, ETH Zurich, Switzerland, 16 December 2024*)

The relevance of dry intrusions for surface winds near (and away from) extratropical cyclones (*Climate seminar series, MeteoSwiss Zurich, Switzerland, 10 December 2024*)

The importance of dry intrusions for air-sea interaction and downstream weather extremes (*Expertise Center for Climate Extremes Seminar, University of Lausanne, Switzerland, 28 November 2024*)

The importance of dry intrusions for air-sea interaction and downstream weather extremes (*Max Planck Institute for Meteorology, Hamburg, Germany, 13 November 2024*)

Dynamics of dry intrusions and their relevance for high-impact weather (*University of Bern, Switzerland, 12 March 2024*)

Dynamics of dry intrusions and their relevance for high-impact weather (*Israel Meteorological Service, Bet-Dagan, Israel, 31 January 2024*)

Dynamics of dry intrusions and their relevance for high-impact weather (*Kyoto University, Japan, 5 October 2023*)

Process-based classification of Mediterranean cyclones (*Kyoto University, Japan, 5 October 2023*)

Dynamics of dry intrusions and their relevance for high-impact weather (*Topics in Atmospheric and Oceanic Sciences seminar, Stony Brook University, US, virtual, 20 September 2023*)

Dynamics of dry intrusions and their relevance for high-impact weather (*Free University of Berlin, Germany, 17 July 2023*)

Dynamics of dry intrusions and their relevance for high-impact weather (*LEGOS seminar, CNRS Toulouse, France, 26 June 2023*)

The links between winter weather systems and local boundary-layer structure in Israel: the case of persistent warm and dry extremes (*Israel Meteorological Service, Bet Dagan, Israel, 1 February 2023*)

Dynamics of dry intrusions and their relevance for extreme weather (*Climate, Atmosphere, and Ocean Seminar, Hebrew University of Jerusalem, Israel, 26 January 2023*)

The role of dry intrusions in large-scale Saharan dust transports and air-sea interaction (*Department of Meteorology MISU seminar, Stockholm University, 19 May 2022*)

Large-scale Saharan dust transport or hot winter days: new insight from a Lagrangian perspective (*Geological Survey of Israel seminar, Jerusalem, Israel, virtual, 6 March 2022*)

The link between planetary boundary layer characteristics and extratropical weather systems (*Environmental Engineering Departmental Seminar, Technion, Israel, 23 November 2021*)

The link between planetary boundary layer characteristics and extratropical weather systems (*Climate, Atmosphere, and Ocean Seminar, Hebrew University of Jerusalem, Israel, virtual, 13 May 2021*)

The link between planetary boundary layer characteristics and extratropical weather systems during winter (*Institute of Soil, Water and Environmental Science seminar, Volcani Center, Israel, virtual, 17 February 2021*)

How does synoptic-scale descent influence the planetary boundary layer? (*LMD Seminar, École Polytechnique, Paris, France, 28 November 2019*)

The link between dry air intrusions and frontal precipitation and winds (*Ludwig Maximilian University of Munich, Waves to Weather seminar, Munich, Germany, 16 May 2019*)

The link between dry air intrusions and frontal precipitation and winds (*Karlsruhe Institute of Technology, IMK-TRO, Waves to Weather seminar, Karlsruhe, Germany, 14 May 2019*)

The link between dry air intrusions and frontal precipitation and winds (*Institute for Atmospheric Physics, University of Mainz, Mainz, Germany, 13 May 2019*)

The role of dry air intrusions in frontal precipitation and winds (*The Interuniversity Institute for Marine Sciences in Eilat, Israel, 17 January 2019*)

The role of dry air intrusions in frontal precipitation and winds (*Department of Solar Energy and Environmental Physics, Institute for Desert Research, Ben-Gurion University, Israel, 11 December 2018*)

The importance of warm conveyor belts for Mediterranean cyclones (*Department of Geosciences, Tel Aviv University, Israel, 19 March 2018*)

Dry air intrusions: climatology and their relevance for extreme weather (*Institute of Geography, University of Bern, Bern, Switzerland, 13 December 2017*)

Dry air intrusions: climatology and their relevance for strong surface winds in the Euro-Mediterranean region (*Israel Meteorological Service, Bet Dagan, Israel, 22 November 2017*)

Dry intrusions and warm conveyor belts: feature-based climatologies for understanding extratropical weather dynamics (*Department of Earth and Planetary Sciences, Weizmann Institute of Science, Israel, 4 January 2017*)

Dry air intrusions: climatology and their relevance for strong surface winds in the Euro-Mediterranean region (*Institute of Earth Sciences, Hebrew University of Jerusalem, Israel, 9 November 2016*)

Dry air intrusions: climatology and their relevance for strong surface winds in the Euro-Mediterranean region (*Department of Geosciences, Tel Aviv University, Israel, 7 November 2016*)

Dry air intrusions: climatology and their relevance for strong surface winds in the Euro-Mediterranean region (*Faculty of Civil and Environmental Engineering, Technion, Israel, 28 June 2016*)

Dry air intrusions: climatology and their relevance for strong surface winds in the Euro-Mediterranean region (*Department of Earth and Planetary Sciences, Weizmann Institute of Science, Israel, 27 December 2015*)

Anomalous, non-conservative chemical transport in saturated porous media. (*Environmental Health Sciences seminar, Hadassah College, Jerusalem, Israel, December 2010*)

G. SCIENTIFIC PRODUCTIVITY

Research grants

2025-2029	Climate research centre, VATAT, "Tuning for deserts" (Co-I)
2025-2029	Climate research centre, VATAT, "Med World Consortium: Mediterranean climate-impact across scales and disciplines" (Co-I)
2024-2025	Swiss National Science Foundation Scientific Exchanges with the University of Bern (27,600 US\$)
2024-2025	Hans Sigrist Foundation support for a research visit to the University of Bern (7000 US\$)
2024-2026	MBZUAI-WIS joint program for artificial intelligence research flagship project: "AI approaches for forecasting of regional extreme weather events: Implementations to the EMME" (450,000 US\$)
2023-2027	Israel Science Foundation, Individual Research Grant 1242/23: "Classification of Eastern Mediterranean cyclones: lifecycle, impact and predictability" (237,600 US\$)
2022-2027	European Research Council starting grant: "Extratropical-Tropical interaction (ExTrA): A unified view on the extratropical impact on the subtropics and tropics at weather timescales" (1,687,500 US\$)
2022-2024	Weizmann-ETH Zurich Bridge Program: "The role of jet dynamics in shaping midlatitude storm tracks, regional climate change and weather extremes" (75,000 US\$)
2022-2024	Data Science Research Center, VATAT (59,270 US\$)
2022-2023	Swiss National Science Foundation: "Compound weather events associated with Mediterranean Cyclones - climatology and large-scale climate drivers (COMPOUND-MED)", project partner
2020-2021	Data Science Research Center, VATAT (12,330 US\$)
2020-2022	Weizmann-UK Joint Programme: "Life cycle of atmospheric fronts, associated circulation and impact" (50,000 US\$)
2020-2021	German-Israeli Foundation Young Scientists' Program Grant I-1087-307.6-2018: "Dry intrusions role in the Earth's water cycle" (28,649 US\$)
2019-2022	Weizmann-CNRS Collaboration Program: "The Mistral wind: large-scale controlling mechanisms and impact on air-sea interaction" (88,400 US\$)
2018-2022	Israel Science Foundation, Individual Research Grant 1347/18: "Multi-scale dynamical interactions of dry intrusions" (218,500 US\$)
2018	Israel Science Foundation, New-Faculty Equipment Grant 2179/18 (259,700 US\$)

2015-2017	Marie Heim-Vögtlin grant, Swiss National Science Foundation: “Dry intrusions: climatology, dynamics and link to extreme weather” (255,000 US\$)
2012-2014	ETH Zurich Postdoctoral Fellowship (Co-funded by Marie Curie actions): “Governing mechanisms of large-scale strong winds and heavy precipitation in the Mediterranean region” (200,000 US\$)
2009-2011	Israel Water Authority research grant: “Anomalous transport of sorbing solutes in saturated porous media” (28,000 US\$)

Supervision of students

Ongoing

Post-doctoral fellows

PhD students

- Tsruya Sadeh Yaari, 2023-present (doctoral fellow of The Institute for Environmental Sustainability (IES), Weizmann Institute of Science)
- Noy Klaider, 2023-present (fellow of the KKL-JNF Climate Fellowship Program for Doctoral Students on Combating the Climate Crisis)
- Tali Gens, 2025-present

MSc students

- Lidiya Shendrik, 2024-present
- Yarden Cristal, 2024-present
- Yotam Menachem (co-supervisor with Dan Yakir), 2024-present

Visiting students (rotation or short-term stays)

Completed

Post-doctoral fellows

- Pinelopi Loizou, 2025, WIS (currently postdoctoral fellow, The Cyprus Institute)
- Eyal Ilotoviz, 2021, WIS (receiver of the postdoctoral Dean Fellowship for excellence, currently senior climatologist at Israel Meteorological Service)
- Vered Silverman, 2021, WIS
- Leehi Magaritz-Ronen, 2021, WIS (currently assistant staff scientist in Raveh-Rubin group)
- Deepika Rai, 2022, WIS (currently project scientist, Indian institute of Science, Bangalore, India)

PhD theses

- Yonatan Givon, 2024, WIS: “Dynamic classification of Mediterranean cyclones: surface impact and Mistral air-sea interactions” (Fellow of Sustainability and Energy Research Initiative, WIS)

MSc theses

- Tali Gens, 2024, WIS: “A new climatological perspective on cyclone impacts in the Eastern Mediterranean using potential vorticity-based classification”
- Tsruya Yaari, 2023, WIS: “Midlatitude weather-system impact on the tropical hydrological cycle”
- Noy Klaider, 2023, WIS: “Cold extremes: global climatology and driving mechanisms”
- Stav Nahum, 2021, WIS: “Dry Intrusions Initiation: Large scale governing features and forcing mechanisms”. Currently software engineer at Breezometer, Google
- Matthias Jeker, 2014, ETH Zurich. “Governing mechanisms of a selected large-scale heavy precipitation event in the Mediterranean”; co-supervisor with Heini Wernli

BSc theses

- Katharina Hartmuth, 2017, ETH Zurich. “The initiation of dry air intrusions”
- Lea Beusch, 2015, ETH Zurich. “Puelche Foehn - A Case Study”; co-supervisor with Lukas Papritz and Michael Sprenger
- Yasmin Roskopf, 2014, ETH Zurich. “A case study of a heavy precipitation event in southwestern Mediterranean, September / October 1986”

Consultants

- Dr. Elody Fluck (currently research fellow, European Space Agency)
- Dr. Reuven Heiblum (currently R&D Project Manager at Mobile Physics)

Visiting students (rotation)

- Sagi Maor, 2023, WIS. “Characterizing extratropical intrusions into the tropics”
- Yarden Cristal, 2024, WIS. “The role of stratospheric dry intrusions for Californian wildfires”
- Lidiya Shendrik, 2024, WIS. “Implementation of Lagranto-ICON for a dry intrusion case study in the Azores”
- Yotam Menachem, 2024, WIS. “Fate of CO emitted during the 2023 Canadian fires”
- Alina Karlinsky, 2023, WIS. “Sources of CO in the New York pollution event of June 2023”
- Amir Sheffer, 2023, WIS. “Drivers of dust storms in East Asia”
- Tali Gens, 2022, WIS. “Understanding Eastern Mediterranean precipitation by classifying Mediterranean cyclones”
- Or Hess, 2022, WIS. “Classification of Mediterranean cyclones by potential vorticity”
- Erez Aviv, 2021, WIS. “Linking inter-hemispheric flows to active and break monsoon spells in India”
- Elizabeth Ruth Shehter, 2021, WIS. “Predictability of heavy precipitation under active Red Sea Trough in Israel”
- Oz Mendelsohn, 2020, WIS. “Machine-learning based classification of radiosonde profiles and their regional signature”
- Eli Windwer, 2019, WIS. “The dynamical links between cyclone Dagmar and its clustered cyclones”
- Shahar Hegyi, 2018, WIS. “The global relationship between dry intrusions and boundary layer height anomalies”

- Tsuf Lichtman, 2018, WIS. “The contribution of dry intrusions to ocean evaporation hot spots”

Visiting scientists

- Dr. Sigalit Berkovic (Israel Institute for Biological Research), 2020, mini-sabbatical at WIS
- Vlad Amihaesei (University of Iasi, Romania), 2022, Short-term scientific mission to WIS

National and international collaborators

- Heini Wernli, ETH Zurich, Switzerland
- Emmanouil Flaounas, Hellenic Centre for Marine Research, Athens, Greece
- Jennifer Catto, University of Exeter, UK
- Virendra Ghate, Argonne National Lab, US
- Philippe Drobinski, École Polytechnique, CNRS, Paris, France
- Christian Grams, Karlsruhe Institute of Technology, Germany
- Olivia Romppainen-Martius, University of Bern, Switzerland
- Baruch Ziv, Open University of Israel
- Hadas Saaroni, Tel Aviv University
- Nathan Paldor, the Hebrew University of Jerusalem
- Assaf Hochman, the Hebrew University of Jerusalem
- Andreas Schäfler, Deutsches Zentrum für Luft und Raumfahrt (DLR), Germany
- Julian Quinting, Karlsruhe Institute of Technology, Germany

H. PATENTS

Not applicable

I. LANGUAGES

Hebrew: Reading 3, Writing 3, Speaking 3

English: Reading 3, Writing 3, Speaking 3