

## CURRICULUM VITAE

**Name:** Guy Dagan  
**Date of Birth:** Feb. 3, 1986  
**Place of Birth:** Jerusalem, Israel  
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**Updated:** 05/05/2026

### Education

2014-2018 PhD, Weizmann Institute of Science, Department of Earth and Planetary Sciences. Supervisor: Prof. Ilan Koren.  
Field of study: Aerosol-cloud interactions in warm convective clouds.  
2012-2014 MSc, Weizmann Institute of Science, Department of Earth and Planetary Sciences. Supervisor: Prof. Ilan Koren  
Field of study: Aerosol-cloud interactions in warm convective clouds.  
2009-2012 BSc, Hebrew University of Jerusalem  
Atmospheric sciences  
Graduated with honors (Magna cum-laude)

### Professional Experience

2025-present Associate Professor (Tenured), Faculty of Sciences, Institute of Earth Sciences, The Hebrew University of Jerusalem, Israel  
2021-2025 Senior lecturer (equivalent to tenure-track assistant professor), Faculty of Sciences, Institute of Earth Sciences, The Hebrew University of Jerusalem, Israel. Golda Meir fellow.  
2018-2021 Postdoctoral research assistant, Department of Physics, University of Oxford. Host: Philip Stier

### Teaching Experience

Fall 2023-present Organizer, The Hebrew University of Jerusalem.  
Seminar for graduate students  
Spring 2023-present Teaching, The Hebrew University of Jerusalem.  
Cloud physics  
Fall 2021-present Teaching, The Hebrew University of Jerusalem.  
Thermodynamics of the Atmosphere and Oceans  
2017-2018 Teaching assistant, Weizmann Institute of Science.  
Global Warming Debates  
2015-2018 Teaching high-school students at Davidson Institute of Science.

## **Funded Grants**

2026-2028	Ministry of Science and Technology: Advanced spatio-temporal characterization of the Land-Sea Breeze, and of its effects on air pollution. 250,000NIS. Co-PI (Lead PI: Aviv Solodoch (HUJI))
2025-2029	VATAT: Mediterranean climate impact across scales and disciplines. 11,800,000NIS. Co-PI (Lead PI: Ori Adam (HUJI), part of a large consortium).
2024-2027	UAEREP: Identification of clouds microphysical seedability in an actionable manner. Co-I. 1,500,000\$ (550,000\$ to HUJI).
2023-2026	DFG: Quantifying the Multiscale Effects of Subtropical Marine Cloud Brightening on the Tropical Cloud Continuum. PI (together with Fabian Hoffmann, LMU/FUB, Germany). 440,000 Euro (180,000 Euro to HUJI).
2023	BatSheva de Rothschild Fund: "BatSheva de Rothschild seminar on cloud-climate interactions across scales" international conference, Eilat, Israel. 40,000\$
2023	Israel Ministry of Science: "BatSheva de Rothschild seminar on cloud-climate interactions across scales" international conference, Eilat, Israel. 20,000NIS
2021-2025	Israeli Science Foundation: Adopting an atmospheric water and energy budgets perspective to narrow-down uncertainties in the clouds' role in climate change. PI. 990,000NIS
2021	Israeli Science Foundation - equipment for new faculty members. PI. 835,000NIS

## **Honors and Awards**

2022	Golda Meir Fellowship, Hebrew University of Jerusalem
2019-2022	Junior Research Fellowship, Kellogg College, University of Oxford
2018	CIRES postdoctoral Fellowship (declined)
2018	Professor Shimon Reich Memorial Prize for outstanding students, WIS
2017-2018	Rieger Foundation-Jewish National Fund Fellow in Environmental Studies
2016-2017	Rieger Foundation-Jewish National Fund Fellow in Environmental Studies
2016	IMS Travel Grant for Young Scientists
2015	Rachel and Salim Benin fellowships
2011	Dean's List, Hebrew University of Jerusalem
2010	Dean's List, Hebrew University of Jerusalem

**Publications** (\*advisee at HUJI; \*\*co-advisee at Oxford)

- 59) Namrah Habib\*, **Guy Dagan**, and Nathan Steiger: Episodic Convection and Storms in Low Mean Molecular Weight Atmospheres. *The Astrophysical Journal*. Submitted.
- 58) Denis Shum\*, **Guy Dagan**, and Roni Shpitzer\*: Convective invigoration is a transient phenomenon. *Nature Geoscience*. In revision.
- 57) **Guy Dagan**: Opposing transient and equilibrium effective radiative forcing from aerosol-cloud interactions. *Nature Communications*. In press.
- 56) Graham L. O'Donnell, Allison A. Wing, Levi G. Silvers, Kevin A. Reed, Peter A. Bogenschutz, Jean-Pierre Chaboureau, **Guy Dagan**, Romain Fi'evet, Blaz Gasparini, Walter M. Hannah, Keiichi Hashimoto, Peter G. Hill, Gabrielle "Bee" R. Leung, Shuhei Matsugishi, Sebastian Ortega, Romain Roehrig, David M. Romps, Jacob Shpund\*, Adam B. Sokol, Lorenzo Tomassini, Susan C. van den Heever, Chien-Ming Wu: Characteristics of a Multi-model Ensemble of Mock-Walker Simulations. *Journal of Advances in Modeling Earth Systems*. In revision.
- 55) Netta Yehekel\*, Matthew Christensen, Fabian Hoffmann, Graham Feingold, and **Guy Dagan**: A Robust Aerosol Impact On Clouds Along The Subtropical To Tropical Transition. *Atmospheric Chemistry and Physics*. In revision.
- 54) Heng Quan, Yi Zhang, **Guy Dagan** and Stephan Fueglistaler: Periodic Extreme Rainfall In A Warmer Climate Due To Stronger Convectively-Coupled Waves. *Science Advances*. In revision.
- 53) Sreelekshmi T.\*, Jacob Shpund\*, Namrah Habib\* and **Guy Dagan**: A Hierarchical Modeling Study of Absorbing Aerosol Impacts on Precipitation Characteristics and Extremes. *Journal of Advances in Modeling Earth Systems*. In revision.
- 52) **Guy Dagan** and Sreelekshmi T\*: Baseline Cloud Regime Distribution Determines The Effective Radiative Forcing From Absorbing Aerosols. *Journal of Advances in Modeling Earth Systems*. Submitted.
- 51) Namrah Habib\*, **Guy Dagan**, and Nathan Steiger: Diurnal Variability Modulates Episodic Convection in Hothouse Climates over Ocean and Swamp-like Surface Conditions. *Journal of Advances in Modeling Earth Systems*, 2026 [[Link](#)].

- 50) **Guy Dagan**, Susan C. van den Heever, Philip Stier, Tristan H. Abbott, Christian Barthlott, Jean-Pierre Chaboureau, Jiwen Fan, Stephan de Roode, Blaž Gasparini, Corinna Hoose, Fredrik Jansson, Gayatri Kulkarni, Gabrielle R. Leung, Suf Lorian\*, Thara Prabhakaran, David M. Romps, Denis Shum\*, Mirjam Tjihuis, Chiel C. van Heerwaarden, Allison A. Wing and Shan Yunpeng: RCEMIP-ACI: Aerosol-Cloud Interactions in a Multimodel Ensemble of Radiative-Convective Equilibrium Simulations. *Journal of Advances in Modeling Earth Systems*, 2025 [[Link](#)].
- 49) Johannes Quaas, Timothy Andrews, Nicolas Bellouin, Karoline Block, Olivier Boucher, Paulo Ceppi, **Guy Dagan**, Sabine Doktorowski, Marie Eichholz Hannah, Piers Forster, Tom Goren, Edward Gryspeerdt, Øivind Hodnebrog, Hailing Jia, Ryan Kramer, Charlotte Lange, Amanda Maycock, Johannes Mulmenstadt, Gunnar Myhre, Fiona O'Connor, Robert Pincus, Bjørn Hallvard Samset, Fabian Senf, Keith Shine, Chris Smith, Camilla Weum Stjern, Toshihiko Takemura, Velle Toll, and Casey Wall: Adjustments To Climate Perturbations - Mechanisms, Implications, Observational Constraints, *AGU Advances*, 2024 [[Link](#)].
- 48) Suf Lorian\* and **Guy Dagan**: On The Sensitivity Of Aerosol-Cloud Interactions To Changes In Sea Surface Temperature In Radiative-Convective Equilibrium, *Atmospheric Chemistry and Physics*, 2024 [[Link](#)].
- 47) Philip Stier, Susan van den Heever, Matthew Christensen, Edward Gryspeerdt, **Guy Dagan**, Massimo Bollasina, Leo Donner, Kerry Emanuel, Annica Ekman, Graham Feingold, Paul Field, Piers Forster, Jim Haywood, Ralph Kahn, Ilan Koren, Christian Kummerow, Tristan L'Ecuyer, Ulrike Lohmann, Yi Ming, Gunnar Myhre, Johannes Quaas, Daniel Rosenfeld, Bjørn Samset, Axel Seifert, Graeme Stephens and Wei-Kuo Tao: Multifaceted Aerosol Effects on Precipitation, *Nature Geoscience*, 2024 [[Link](#)].
- 46) **Guy Dagan**, Eshkol Eytan: The potential of absorbing aerosols to enhance extreme precipitation, *Geophysical Research Letters*, 2024 [[Link](#)].
- 45) **Guy Dagan**: Large-Scale Tropical Circulation Intensification by Aerosol Effect on Clouds, *Geophysical Research Letters*, 2024 [[Link](#)].

- 44) **Guy Dagan**, Netta Yehekel\*, and Andrew Williams: Radiative forcing from aerosol–cloud interactions enhanced by large-scale circulation adjustments, *Nature Geoscience*, 2023 [[Link](#)].
- 43) **Guy Dagan**, Jacob Thomas Seeley and Nathan Steiger: Convection and convective-organization in hothouse climates, *Journal of Advances in Modeling Earth Systems*, 2023 [[Link](#)].
- 42) Andrew Williams\*\*, Duncan Watson-Parris, **Guy Dagan**, and Philip Stier: Dependence of fast changes in global and local precipitation on the geographical location of aerosol absorption, *Journal of Climate*, 2023 [[Link](#)].
- 41) Shipeng Zhang\*\*, Philip Stier, **Guy Dagan**, Chen Zhou, and Minghui Wang: Sea surface warming patterns drive hydrological sensitivity uncertainties, *Nature Climate Change*, 2023 [[Link](#)].
- 40) Beth Dingley\*\*, **Guy Dagan**, Philip Stier, and Ross Herbert: The impact of a land-sea contrast on convective aggregation in radiative-convective equilibrium, *Journal of Advances in Modeling Earth Systems*, 2023 [[Link](#)].
- 39) **Guy Dagan**: Equilibrium climate sensitivity increases with aerosol concentration due to changes in precipitation efficiency, *Atmospheric Chemistry and Physics*, 2022 [[Link](#)].
- 38) **Guy Dagan**: Sub-tropical aerosols enhance tropical cloudiness – a remote aerosol-cloud lifetime effect, *Journal of Advances in Modeling Earth Systems*, 2022 [[Link](#)]. Selected for Editor’s Highlight: [[Link](#)].
- 37) Andrew Williams\*\*, Philip Stier, **Guy Dagan** and Duncan Watson-Parris: Strong control of effective radiative forcing by the spatial pattern of absorbing aerosol, *Nature Climate Change*, 2022 [[Link](#)].
- 36) **Guy Dagan**, Philip Stier, Beth Dingley\*\* and Andrew Williams\*\*: Examining the regional co-variability of the atmospheric water and energy imbalances in different model configurations - linking clouds and circulation, *Journal of Advances in Modeling Earth Systems*, 2022 [[Link](#)].
- 35) **Guy Dagan**, Philip Stier, George Spill\*\*, Ross Herbert, Max Heikenfeld, Susan C. van den Heever and Peter J. Marinescu: Boundary conditions representation can determine simulated

aerosol effects on convective cloud fields, *Communications Earth & Environment*, 2022 [[Link](#)].

- 34) Matthew Christensen, Andrew Gettelman, Jan Cermak, **Guy Dagan**, Michael Diamond, Alyson Douglas, Graham Feingold, Franziska Glassmeier, Tom Goren, Daniel P. Grosvenor, Edward Gryspeerd, Ralph Kahn, Zhanqing Li, Po-Lun Ma, Florent Malavelle, Isabel McCoy, Daniel McCoy, Greg McFarquhar, Johannes Mülmenstädt, Sandip Pal, Anna Possner, Adam Povey, Johannes Quaas, Daniel Rosenfeld, Anja Schmidt, Roland Schrödner, Armin Sorooshian, Philip Stier, Velle Toll, Duncan Watson-Parris, Robert Wood, Mingxi Yang and Tianle Yuan: Opportunistic experiments to constrain aerosol effective radiative forcing, *Atmospheric Chemistry and Physics*, 2022 [[Link](#)].
- 33) Shipeng Zhang\*\*, Philip Stier, **Guy Dagan** and Minghuai Wang: Anthropogenic aerosols modulated twentieth-century Sahel rainfall variability, *Geophysical Research Letters*, 2021 [[Link](#)].
- 32) Beth Dingley\*\*, **Guy Dagan** and Philip Stier: Forcing convection to aggregate using diabatic heating perturbations, *Journal of Advances in Modeling Earth Systems*, 2021 [[Link](#)].
- 31) Michel Flores, Guillaume Bourdin, Alex Kostinski, Orit Altaratz, **Guy Dagan**, Fabien Lombard, Nils Haentjens, Emmanuel Boss, Matthew B. Sullivan, Gabriel Gorsky, Naama Lang-Yona, Miri Trainic, Sarah Romac, Christian R. Voolstra, Yinon Rudich, Assaf Vardi, and Ilan Koren: Diurnal cycle of large sea spray aerosols over the tropical Pacific Ocean and Caribbean Sea, *Nature Communications*, 2021 [[Link](#)].
- 30) George Spill\*\*, Philip Stier, Paul Field and **Guy Dagan**: Contrasting responses of idealised and realistic simulations of shallow cumuli to aerosol perturbations, *Geophysical Research Letters*, 2021 [[Link](#)].
- 29) Ross Herbert, Philip Stier and **Guy Dagan**: Isolating large-scale smoke impacts on cloud and precipitation processes over the Amazon with convection permitting resolution, *Journal of Geophysical Research: Atmosphere*, 2021 [[Link](#)].
- 28) **Guy Dagan**, Philip Stier and Duncan Watson-Parris: An energetic view on the geographical dependence of the fast aerosol radiative effects on precipitation, *Journal of Geophysical Research: Atmosphere*, 2021 [[Link](#)].

- 27) **Guy Dagan**, Philip Stier and Duncan Watson-Parris: Aerosol forcing masks and delays the formation of the North-Atlantic warming hole by three decades, *Geophysical Research Letters*, 2020 [[Link](#)].
- 26) Tom Dror, Michel Flores, Orit Altaratz, **Guy Dagan**, Zev Levin, Assaf Vardi and Ilan Koren: Sensitivity of warm clouds to large particles in marine aerosol size distributions, *Atmospheric Chemistry and Physics*, 2020 [[Link](#)].
- 25) **Guy Dagan** and Philip Stier: Constraint on precipitation response to climate change by combination of atmospheric energy and water budgets, *npj Climate and Atmospheric Science*, 2020 [[Link](#)].
- 24) **Guy Dagan** and Philip Stier: Ensemble daily simulations for elucidating cloud-aerosol interactions under a large spread of realistic environmental conditions, *Atmospheric Chemistry and Physics*, 2020 [[Link](#)].
- 23) **Guy Dagan**, Philip Stier, Matthew Christensen, Guido Cioni, Daniel Klock and Axel Seifert: Atmospheric energy budget response to idealized aerosol perturbation in tropical cloud systems, *Atmospheric Chemistry and Physics*, 2020 [[Link](#)].
- 22) George Spill\*\*, Philip Stier, Paul Field and **Guy Dagan**: Effects of aerosol on shallow cumulus cloud fields, *Atmospheric Chemistry and Physics*, 2019 [[Link](#)].
- 21) **Guy Dagan**, Philip Stier and Duncan Watson-Parris: Analysis of the atmospheric water budget for elucidating the spatial scale of precipitation changes under climate change, *Geophysical Research Letters*, 2019 [[Link](#)]. Highlight - [Commentary](#).
- 20) Reuven Heiblum, Lital Pinto, Orit Altaratz, **Guy Dagan**, and Ilan Koren: Core and margin in warm convective clouds. Part I: core types and evolution during a cloud's lifetime, *Atmospheric Chemistry and Physics*, 2019 [[Link](#)].
- 19) Reuven Heiblum, Lital Pinto, Orit Altaratz, **Guy Dagan**, and Ilan Koren: Core and margin in warm convective clouds. Part II: aerosol effects on core properties, *Atmospheric Chemistry and Physics*, 2019 [[Link](#)].
- 18) **Guy Dagan**, Philip Stier and Duncan Watson-Parris: Contrasting response of precipitation to aerosol perturbation in the tropics and extra-tropics explained by energy budget considerations, *Geophysical Research Letters*, 2019 [[Link](#)].

- 17) Huan Liu, Ilan Koren, Jianping Guo, Orit Altaratz, **Guy Dagan**, Yuan Wang, Jonathan Jiang, Panmao Zhai and Yuk Yung: Non-monotonic aerosol effect on precipitation of deep convective clouds over tropical oceans, *Scientific Report*, 2019 [[Link](#)].
- 16) Pavel Khain, Reuven Heiblum, Ulrich Blahak, Yoav Levi, H. B. Muskatell, Elyakom Vadislavsky, Orit Altaratz, Ilan Koren, **Guy Dagan**, Jacob Shpund and Alexander Khain: Governing microphysical parameters of shallow cumulus cloud ensembles and their parameterization using LES with bin microphysics, *Journal of the Atmospheric Sciences*, 2019 [[Link](#)].
- 15) **Guy Dagan**, Ilan Koren, Orit Altaratz and Yoav Lehahn: Shallow convective cloud field lifetime as a key factor for evaluating aerosol effects, *iScience*, 2018 [[Link](#)].
- 14) **Guy Dagan**, Ilan Koren, Alex Kostinski and Orit Altaratz: Organization and oscillations in simulated shallow convective clouds, *Journal of Advances in Modeling Earth Systems*, 2018 [[Link](#)].
- 13) Rei Chemke and **Guy Dagan**: The effects of the spatial distribution of anthropogenic aerosols radiative forcing on atmospheric circulation, *Journal of climate*, 2018 [[Link](#)].
- 12) **Guy Dagan**, Ilan Koren, Orit Altaratz: Quantifying the effect of aerosol on vertical velocity and effective terminal velocity in warm convective clouds, *Atmospheric Chemistry and Physics*, 2018 [[Link](#)].
- 11) **Guy Dagan**, Ilan Koren, Orit Altaratz and Graham Feingold: Feedbacks of warm convective clouds in a warmer climate as demonstrated by changes in buoyancy, *Environmental Research Letters*, 2018 [[Link](#)].
- 10) Qian Chen, Ilan Koren, Orit Altaratz, Reuven H. Heiblum, **Guy Dagan** and Lital Pinto: How do changes in warm phase microphysics affect deep convective clouds? *Atmospheric Chemistry and Physics*, 2017 [[Link](#)].
- 9) **Guy Dagan**, Ilan Koren, Orit Altaratz and Reuven H. Heiblum: Time dependent, non-monotonic response of warm convective cloud fields to changes in aerosol loading, *Atmospheric Chemistry and Physics*, 2017 [[Link](#)].
- 8) **Guy Dagan**, Ilan Koren, Orit Altaratz and Reuven H. Heiblum: Aerosol effect on the evolution of the thermodynamic properties of warm convective cloud fields, *Scientific Report*, 2016 [[Link](#)].
- 7) **Guy Dagan**, and Rei Chemke: The effect of subtropical aerosol loading on equatorial precipitation, *Geophysical Research Letters*, 2016 [[Link](#)].
- 6) Reuven Heiblum, Orit Altaratz, Ilan Koren, Graham Feingold, Alex Kostinski, Alexander Khain, Mikhail Ovchinnikov, Eric Fredj, **Guy Dagan**, Lital Pinto, Ricki Yaish, Qian Chen: Characterization of cumulus cloud fields using trajectories in the center-of-gravity vs. water

mass phase space. Part I: Cloud tracking and phase space description. *Journal of Geophysical Research: Atmosphere*, 2016 [[Link](#)].

- 5) Reuven Heiblum, Orit Altaratz, Ilan Koren, Graham Feingold, Alex Kostinski, Alexander Khain, Mikhail Ovchinnikov, Eric Fredj, **Guy Dagan**, Lital Pinto, Ricki Yaish, Qian Chen: Characterization of cumulus cloud fields using trajectories in the center-of-gravity vs. water mass phase space. Part II: Aerosol effects on warm convective clouds. *Journal of Geophysical Research: Atmosphere*, 2016 [[Link](#)].
- 4) **Guy Dagan**, Ilan Koren, Orit Altaratz: Aerosol effects on the timing of warm rain processes. *Geophysical Research Letters*, 2015 [[Link](#)].
- 3) Ilan Koren, Orit Altaratz, **Guy Dagan**: Aerosol Effect on the Mobility of Cloud Droplets. *Environmental Research Letters*, 2015 [[Link](#)].
- 2) **Guy Dagan**, Ilan Koren, Orit Altaratz: Competition between core and periphery-based processes in warm convective clouds – from invigoration to suppression. *Atmospheric Chemistry and Physics*, 2015 [[Link](#)].
- 1) Ilan Koren, **Guy Dagan**, Orit Altaratz: From aerosol-limited to invigoration of warm convective clouds. *Science*, 2014 [[Link](#)].

### **Professional and Institutional Activities**

- Scientific Planning Committee for the workshop: "*Directions for Future Research and Applications on Clouds, Precipitation, and Extreme Weather in Africa*", University of Nairobi, Kenya (July 2026) [[Link](#)].
- Member of the working group on "Clouds and Radiation" as part of the International Radiation Commission (IRC) of the International Association of Meteorology and Atmospheric Sciences (IAMAS) (August 2025 – present) [[Link](#)].
- Member of The Earth Science Institute Award Committee (August 2025 – present).
- Associate Editor at "*Journal of Advances in Modeling Earth Systems*" (October 2024 – present).
- Convener of a session at the ACPC annual meeting, Imperial College, London (May, 2024).
- Member of the International Commission on Tropical Meteorology (ICTM) under the International Association of Meteorology and Atmospheric Physics (IAMAS) (March 2024 – present) [[Link](#)].
- Editor at "*Atmospheric Chemistry and Physics*" (September, 2023 – present).
- Organizer of the Climate, Atmosphere, and Ocean (CAO) seminar, The Earth Science Institute, HUJI (Autumn 2023 – present).
- Climate specialists committee, The Israeli Meteorology Service (May, 2023 – present).
- Lead organizer of "BatSheva de Rothschild seminar on cloud-climate interactions across scales" international conference, Eilat, Israel (funded by BatSheva de Rothschild Fund, Israel Ministry of Science, HUJI and WIS, February, 2023).

- Member of the GEWEX Aerosol Precipitation (GAP) initiative scientific steering committee and lead organizer of RCEMIP-ACI model intercomparison project (January, 2023 – present) [[Link](#)]
- Member of the PhD admissions committee, The Earth Science Institute, HUJI (January, 2023 – present).
- Member of the ACPC scientific steering committee (May, 2022 – present) [[Link](#)]
- Co-convener of a session at the ACPC annual meeting (May, 2022).
- Organizer of the department seminar, AOPP, University of Oxford (2019 – 2021).
- Organizer of the ICON-HAM developers' workshop, University of Oxford (July, 2019).
- College advisor of nine graduate students, Kellogg College, University of Oxford (2019 – 2021).
- Organizer of the Cloud tracking workshop, University of Oxford (September 2018).
- Undergrad student advisor (n=9; of which 6 paid students, 2 Amirim students and 1 summer intern (6 weeks) student from Cornell University, USA).
- **Peer Review Activities**
  - **Grant agencies:** Israel Science Foundation (ISF), German Research Foundation (DFG), Austrian Science Fund (FWF), Swiss National Supercomputing Centre (CSCS).
  - **Journals:** *Nature Geoscience, Nature Climate Change, Nature Communications, Science Advances, PNAS, npj Climate and Atmospheric Science, Geophysical Research Letters (GRL), Atmospheric Chemistry and Physics (ACP), Journal of Geophysical Research – Atmospheres (JGR-A), Journal of Advances in Modeling Earth Systems (JAMES), Journal of Climate, Journal of the Atmospheric Sciences (JAS), Quarterly Journal of the Royal Meteorological Society (QJRMS), Remote Sensing, Journal of Applied Remote Sensing, Atmosphere, International Journal of Remote Sensing, Annals of the New York Academy of Sciences, Hydrology and Earth System Sciences.*
  - **External Referee for Ph.D. progress lectures and Thesis Committee/Reviewer for graduate students:** x7 at HUJI and x1 at TAU.

### **Supervision of graduate students and postdocs**

- **Current:**

2026-present	Bivas Bhaumi (Postdoc; jointly supervised with Aviv Solodoch).
2025-present	Devang Falor (Postdoc; jointly supervised with Aviv Solodoch and Hezi Gildor).
2025-present	Elyakom Vadislavsky (Ph.D.; jointly supervised with Alexander Khain).
2025-present	Omer Cohen (MSc).
2025 present	Suf Lorian (MSc).
2024-present	Sreelekshmi Thulaseedharan (Ph.D.).
2024-present	Denis Shum (MSc).
2024-present	Gedaliya Kitrossky (MSc; jointly supervised with Daniel Rosenfeld).

- **Graduated and past group members:**

2024-2026	Namrah Habib (Postdoc; jointly supervised with Nathan Steiger). Next position: Postdoc at University of Oxford, UK.
2024-2025	Koby Shpund (Postdoc; jointly supervised with Alexander Khain). Next position: Researcher at the Israeli Meteorological Service.
2023-2026	Yuval Levin (MSc; jointly supervised with Assaf Hochman). Work title: Anthropogenic Land-Cover Change and Regional Hydroclimate Responses in the Middle East
2023-2025	Netta Yeheskel (MSc). Work title: A Robust Aerosol Impact On Clouds Along The Subtropical To Tropical Transition.
2018-2021	Co-supervising of 4 Ph.D. students (George Spill, Elisabeth Dingley, Shipeng Zhang and Andrew Williams), University of Oxford

### Conference Proceedings and Presentations

- AMS annual meeting, Houston, Texas, USA (January 2026). *Aerosol Effects on Convective Intensity and Large-Scale Circulation in a Multi-Model Radiative–Convective Equilibrium Ensemble*, Invited talk.
- AGU annual meeting, New Orleans, USA (December 2025). *Absorbing Aerosols Can Enhance Both Extreme Precipitation and Dry Spells*, Invited talk.
- UAEREP project meeting, Abu Dhabi (September, 2025). *Simulating clouds and precipitation over the UAE*, Oral.
- Radiation and climate Gordon Research Conference (GRC), Bates College, Maine, USA (July, 2025). *Large-Scale Circulation Adjustments to Aerosol-Cloud Interactions*, Invited talk.
- ACPC annual meeting, University of Tokyo and online (May 2025). *RCEMIP-ACI: Aerosol-Cloud Interactions in a Multimodel Ensemble of Radiative-Convective Equilibrium Simulations*, Oral.
- EGU General Assembly, Vienna (April 2025). *RCEMIP-ACI: Aerosol-Cloud Interactions in a Multimodel Ensemble of Radiative-Convective Equilibrium Simulations*, Oral.
- AMS annual meeting, New Orleans, USA and virtual (January 2025). *Non-Local Aerosol-Cloud Effective Radiative Forcing: An Important but Overlooked Process*, Oral.
- The 52<sup>nd</sup> Annual Conference for Science and Environment; The Israeli Society of Ecology and Environmental Science, Be'er-Sheva, Israel (September, 2024). *On the role of clouds in climate change*, Oral.
- ACPC annual meeting, Imperial College, London (May 2024). *The effective radiative forcing from aerosol-cloud interaction is enhanced by remote clouds modifications*, Oral.
- EGU General Assembly, Vienna (April 2024). *Absorbing aerosols can strongly enhance extreme precipitation*, Oral.
- UAEREP project meeting, Abu Dhabi (March, 2024). *Understanding the clouds' role in climate change*, Oral.

- ECS & cloud feedbacks virtual symposium (October, 2023). *Aerosol-cloud interactions in the climate feedback-forcing framework*, Invited talk.
- Radiation and climate Gordon Research Conference (GRC), Bates College, Maine, USA (July, 2023). *Enhanced radiative forcing from aerosol-cloud interactions due to large-scale circulation adjustments*.
- CFMIP/GASS conference, Paris, France (July, 2023). *Enhanced radiative forcing from aerosol-cloud interactions due to large-scale circulation adjustments*.
- BatSheva de Rothschild seminar on cloud-climate interactions across scales international conference, Eilat, Israel (February 2023). *Enhanced radiative forcing from aerosol-cloud interactions due to large-scale circulation adjustments*, Oral.
- AGU annual meeting, virtual conference (December 2022). *Sub-Tropical Aerosols Enhance Tropical Cloudiness – A Remote Aerosol-Cloud Lifetime Effect*, Oral.
- COSTRAIN meeting, Leipzig, Germany (November 2022). *Sub-tropical aerosols enhance tropical cloudiness – a remote aerosol-cloud lifetime effect in CRM simulations*, Invited talk.
- Basha'ar climate change outreach event (July 2022). *On the role of clouds in climate change*, Oral.
- ACPC annual meeting, virtual meeting (May 2022). *Strong coupling between aerosol effect on sub-tropical and tropical clouds*, Oral.
- AMS annual meeting, virtual conference (January 2022). *The representation of the boundary conditions can determine the simulated aerosol effects on convective cloud fields*, Oral.
- AGU annual meeting, virtual conference (December 2021). *Idealized cloud resolving simulations tend to overestimate the effect of aerosol on the thermodynamic environment and convective clouds*, Oral.
- International Conference on Clouds & Precipitations (ICCP), virtual meeting (August, 2021). *Combined constraint of the atmospheric energy and water budgets on the spatial scale of precipitation changes under climate change*, Oral.
- ACPC annual meeting, virtual meeting (May 2021). *Idealized cloud resolving simulations overestimate the effect of aerosol on the environment*, Oral.
- AMS annual meeting, virtual conference (January 2021). *Energy budget considerations explain contrasting response of precipitation to aerosol perturbation in the tropics and extratropics in idealised and realistic simulations*, Oral.
- AOPP annual meeting, University of Oxford, Oxford, UK (October 2020). *What sets the amount of precipitation in our current and future warming climate?* Oral.
- ICON-HAM workshop, virtual meeting (April, 2020). *Examining precipitation changes due to aerosol forcing using an atmospheric energy budget perspective*, Oral.
- 36th International Geological Congress, New Delhi, India (March, 2020). *Constraining the spatial scale of precipitation changes due to anthropogenic forcing using an atmospheric water and energy budget perspective*. Invited talk (postponed due to COVID-19).

- Radiation and climate Gordon Research Seminar (GRS), Bates College, Maine, USA (July, 2019). *Identifying the spatial scales in aerosol-precipitation interactions from a water and energy budget perspective*, Oral.
- Radiation and climate Gordon Research Conference (GRC), Bates College, Maine, USA (July, 2019). *Identifying the spatial scales in aerosol-precipitation interactions from a water and energy budget perspective*, Poster.
- Cloud modeling workshop, Kraków, Poland (April, 2019). *Atmospheric energy budget perspective on clouds-aerosol interactions*, Oral.
- Cloud tracking workshop, University of Oxford, Oxford, UK (September, 2018). *Tracking of convection in models*, Oral.
- AOPP annual meeting, University of Oxford, Oxford, UK (September 2018). *Cloud field lifetime as a key factor for evaluating aerosol effects on climate*, Oral.
- The 46<sup>th</sup> Annual Conference for Science and Environment; The Israeli Society of Ecology and Environmental Science, Rehovot, Israel (June, 2018). *Cloud field lifetime as a key factor for evaluating aerosol effects on climate*, Oral.
- Keynote lecture in the Riger Foundation-Jewish National Fund Fellow in Environmental Studies ceremony, Tel-Aviv, Israel (September, 2017), Oral.
- Fourth International Conference on Earth System Modelling, Hamburg, Germany (August, 2017). *Non-monotonic, time dependent aerosol effect on warm convective clouds and its dependency on the environmental thermodynamic conditions*, Poster.
- The Israeli aerosol conference, Israel Institute of Technology, Haifa, Israel (February, 2017). *Time dependent, non-monotonic response of warm convective cloud fields to changes in aerosol loading*, Oral.
- Model Hierarchies Workshop, Princeton University, USA (November, 2016).
- International Conference on Clouds & Precipitations (ICCP), Manchester, UK (July, 2016). *From invigoration to suppression – the aerosol effect on warm convective clouds*, Poster.
- International Cloud modeling workshop, Met office, Exeter, UK (July, 2016), Oral.
- The Israeli Metrology Society conference, The Open University, Tel Aviv, Israel (February, 2016). *Warm convective clouds response to changes in aerosol loading*, Oral.

### **Invited seminars**

- CleanCloud Monthly Seminar Series (March, 2016). *Strong Transient but Weak Equilibrium Aerosol Effects on Convection and Radiation*.
- Department of Meteorology (MISU), Stockholm University, Sweden (October, 2025). *Large-Scale Circulation Adjustments to Aerosol-Cloud Interactions*.
- Geoscience department seminar, Tel-Aviv University, Tel-Aviv, Israel (November, 2024). *Large scale circulation adjustments to aerosol-cloud interactions and its radiative effect*.

- The Earth science institute department seminar, The Hebrew University, Jerusalem, Israel (November, 2024). *Large scale circulation adjustments to aerosol-cloud interactions and its radiative effect.*
- Earth and planetary science, Weizmann Institute of Science, Israel, (March, 2024). *Large scale circulation adjustments to aerosol-cloud interactions and its radiative effect.*
- Earth science, Ben-Gurion University, Israel, (January, 2024). *Understanding the clouds' role in climate change.*
- Climate, Atmosphere, and Ocean (CAO) seminar, The Hebrew University, Jerusalem, Israel (January, 2022). *Understanding the clouds' role in climate change – main issues and possible solutions.*
- Earth and planetary science, Weizmann Institute of Science, Israel, (February, 2020). *What sets the amount of precipitation in our current and future warming climate?*
- The Earth science institute department seminar, The Hebrew University, Jerusalem, Israel (January, 2020). *What sets the amount of precipitation in our current and future warming climate?*
- The Earth science institute department seminar, The Hebrew University, Jerusalem, Israel (December, 2019). *Examining precipitation changes due to anthropogenic forcing using an atmospheric water and energy budget perspective.*
- Geoscience department seminar, Tel-Aviv University, Tel-Aviv, Israel (December, 2019). *What sets the amount of precipitation in our current and future warming climate?*
- Department of Meteorology, Reading University, UK (November, 2019). *Constraining the spatial scale of precipitation changes due to anthropogenic forcing using an atmospheric water and energy budget perspective.*
- Atmospheric, ocean and planetary physics department seminar, University of Oxford, UK (July, 2019). *Water and energy budget constrain on precipitation changes due to anthropogenic forcing.*
- The German weather service, Germany (June, 2019). *Water and energy budget constrain on precipitation changes due to anthropogenic forcing.*
- Earth and planetary science, Weizmann Institute of Science, Israel, (June, 2018). *Exploring the interplay between key processes in warm convective clouds.*
- The Israeli Meteorological Service seminar, Bet Dagan, Israel (May, 2018). *Cloud field lifetime as a key factor for evaluating aerosol effects on climate.*
- Geoscience department seminar, Tel-Aviv University, Tel-Aviv, Israel (May, 2018). *Cloud field lifetime as a key factor for evaluating aerosol effects on climate.*

- The Earth science institute department seminar, The Hebrew University, Jerusalem, Israel (January, 2018). *Time dependent aerosol effect on warm convective clouds.*
- School of marine sciences department seminar, Haifa University, Haifa, Israel (January, 2018). *Non-monotonic aerosol effect on warm convective clouds.*
- The Porter School of Environmental Studies department seminar, Tel Aviv University, Israel (November, 2017). *Time dependent, non-monotonic aerosol effect on warm convective clouds and its dependency on the environmental thermodynamic conditions.*
- The Earth science institute department seminar, The Hebrew University, Jerusalem, Israel (March, 2017). *Aerosol effect on warm convective cloud fields and its dependency on the environmental thermodynamic conditions.*
- GFDL department seminar, Princeton University, USA (November, 2016). *Non-monotonic response of warm convective clouds to changes in aerosol loading.*
- Earth and planetary science, Weizmann Institute of Science, Israel, (December, 2014). *Aerosol effect on warm convective clouds under different environmental conditions.*