

Curriculum Vitae

Dr. Michael Sprenger

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Affiliation:

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Scientific Education

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| 1982-1990 | Liechtensteinisches Gymnasium, Vaduz Matura Type B (including Latin) |
| 1990-1996 | Physics study dipl. Phys. ETHZ |
| 1996-1999 | PhD Institute Atmospheric and Climate Science Dr. Sc. Nat. |
| 1997-1999 | Postgraduate course in Applied Statistics Dipl. NDK ETHZ in Applied Statistics |
| 2000-2002 | Postgraduate course in Medical Physics Dipl. NDS ETHZ in Medical Physics |
| 2003-2006 | Postgraduate course in Applied Computer Science, Dipl. NDS FFHS in Applied Computer Science |

Activities in Panels and Boards

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| 2012-2019 | Member of Executive Board and President of Swiss Meteorological Society |
| 2014-2024 | Member of the ICAM (International Conference on Alpine Meteorology) Steering Committee |
| 2016- | Member of editorial board of Promet (educational journal of German Weather Service) |

Professional Experience

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| 2000-2002 | Postdoc at ETH Zürich Institute for Atmospheric and Climate Science |
| 2002-2003 | Physics and Math Teacher Kantonsschule am Burggraben, St. Gallen |
| 2003-2010 | Senior Scientist ETH Zürich, Institute for Atmospheric and Climate Science researcher and lecturer in dynamic meteorology group of Prof. H. C. Davies |
| 2010- | Permanent position ETH Zürich Institute for Atmospheric and Climate Science senior scientist and scientific programmer in dynamic meteorology group of Prof. H. Wernli |

Project Acquisition (PI)

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| 2019-2022 | Foehn Dynamics – Lagrangian perspective and LES simulations; joint project together with Goethe-Universität Frankfurt (GUF; Prof. J. Schmidli); 2 PhD positions for 3 years (SNF) |
| 2020-2021 | Gust predictions along wind-exposed section of the Appenzeller Bahnen; joint project together with MeteoSwiss and Appenzeller Bahnen AG; 1 Postdoc position for 1 year (Innosuisse) |
| 2023 | Observed-based Typology, Impact and Predictability of Clear Air Turbulence; 1PhD position for 3 years (ETH Grants) |

Co-Supervision of PhD Theses

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| Kew, S., 2007: Structure and Dynamics of Distinctive Flow Anomalies in the Lowermost Stratosphere. Diss ETH No. 17231 , 137 pp. [H.C. Davies, C. A. Davis, M. A. Sprenger] |
| Cui, J., 2008: Lagrangian Analysis of Ozone Trends at Selected Receptor Sites in the Northern Hemisphere. Diss ETH No. 18052 , 107 pp. [J. Staehelin, A. Stohl, M. Sprenger, T. Peter] |
| Skerlak, B., 2014: Climatology and process studies of tropopause folds, cross-tropopause exchange, and transport into the boundary layer. Diss ETH No. 22036 , 178 pp. [H. Wernli, M. Sprenger, P. Hoor] |
| Graf, M., 2014: Objektive Klassifikation von Zyklogenese in den Aussertropen. Diss ETH No. 21759 , 145 pp. [H. Wernli, M. Sprenger, C. Raible] |
| Rüdisühli, S., 2018: Attribution of rain to cyclones and fronts over Europe in a kilometer-scale regional climate simulation. Diss ETH No. 25536 , 221 pp. [H. Wernli, M. Sprenger, O. Martius] |
| Oertel, A., 2019: Embedded convection in warm conveyor belts. Diss ETH No. 26554 , 224 pp. [H. Wernli, H. Joos, M. Sprenger, B. Harvey] |
| Portmann, R., 2020: The life cycle of potential vorticity cutoffs - climatology, predictability, and high impact weather. Diss ETH No. 27081 , 214 pp. [H. Wernli, M. Sprenger, A. Fink] |
| Enz, B., 2022: The Dynamical Tropopause Location as a Predictor for North Atlantic Tropical Cyclone Activity. Diss ETH No. XXXX , 110 pp. [U. Lohmann, M. Sprenger, S.Jones] |
| Jansing, J., 2023: Lagrangian Analysis of Foehn flows in the Alps. Diss ETH [M. Sprenger, H. Wernli] |
| Heitmann, K., 2023: Warm conveyor belts in a warming climate. Diss ETH [H. Joos, M. Sprenger, H. Wernli] |

Teaching Supervision Activities

(Co-) Supervision of >100 Master/Bachelor theses