

# Heini Wernli

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2238505/publications.pdf>

Version: 2024-02-01

227  
papers

15,826  
citations

13087

68  
h-index

22808

112  
g-index

326  
all docs

326  
docs citations

326  
times ranked

9610  
citing authors

#	ARTICLE	IF	CITATIONS
1	Upstream development in idealized baroclinic wave experiments. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 2022, 51, 574.	0.8	12
2	Mechanisms underlying temperature extremes in Iberia: a Lagrangian perspective. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 2022, 67, 26032.	0.8	18
3	Lagrangian formation pathways of moist anomalies in the trade-wind region during the dry season: two case studies from EUREC4A. <i>Weather and Climate Dynamics</i> , 2022, 3, 59-88.	1.2	7
4	Identification, characteristics and dynamics of Arctic extreme seasons. <i>Weather and Climate Dynamics</i> , 2022, 3, 89-111.	1.2	1
5	Characterization of transport from the Asian summer monsoon anticyclone into the UTLS via shedding of low potential vorticity cutoffs. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 3841-3860.	1.9	3
6	Highly Active Ice-Nucleating Particles at the Summer North Pole. <i>Journal of Geophysical Research D: Atmospheres</i> , 2022, 127, .	1.2	22
7	How intense daily precipitation depends on temperature and the occurrence of specific weather systems – an investigation with ERA5 reanalyses in the extratropical Northern Hemisphere. <i>Weather and Climate Dynamics</i> , 2022, 3, 391-411.	1.2	4
8	Physical and Chemical Properties of Cloud Droplet Residuals and Aerosol Particles During the Arctic Ocean 2018 Expedition. <i>Journal of Geophysical Research D: Atmospheres</i> , 2022, 127, .	1.2	12
9	Stable water isotope signals in tropical ice clouds in the West African monsoon simulated with a regional convection-permitting model. <i>Atmospheric Chemistry and Physics</i> , 2022, 22, 8863-8895.	1.9	7
10	A potential vorticity perspective on cyclogenesis over <sc>centre-eastern</sc> South America. <i>International Journal of Climatology</i> , 2021, 41, 663-678.	1.5	18
11	The storm-track suppression over the western North Pacific from a cyclone life-cycle perspective. <i>Weather and Climate Dynamics</i> , 2021, 2, 55-69.	1.2	9
12	Observations and simulation of intense convection embedded in a warm conveyor belt – how ambient vertical wind shear determines the dynamical impact. <i>Weather and Climate Dynamics</i> , 2021, 2, 89-110.	1.2	10
13	Extreme wet seasons – their definition and relationship with synoptic-scale weather systems. <i>Weather and Climate Dynamics</i> , 2021, 2, 71-88.	1.2	6
14	How Rossby wave breaking modulates the water cycle in the North Atlantic trade wind region. <i>Weather and Climate Dynamics</i> , 2021, 2, 281-309.	1.2	17
15	The role of air-sea fluxes for the water vapour isotope signals in the cold and warm sectors of extratropical cyclones over the Southern Ocean. <i>Weather and Climate Dynamics</i> , 2021, 2, 331-357.	1.2	17
16	Lagrangian matches between observations from aircraft, lidar and radar in a warm conveyor belt crossing orography. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 5477-5498.	1.9	3
17	Seamless multi-model postprocessing for air temperature forecasts in complex topography. <i>Weather and Forecasting</i> , 2021, , .	0.5	0
18	The three-dimensional life cycles of potential vorticity cutoffs: a global and selected regional climatologies in ERA-Interim (1979–2018). <i>Weather and Climate Dynamics</i> , 2021, 2, 507-534.	1.2	23

#	ARTICLE	IF	CITATIONS
19	Widening the common space to reduce the gap between climate science and decision-making in industry. <i>Climate Services</i> , 2021, 23, 100237.	1.0	9
20	Sources and Transport Pathways of Precipitating Waters in Cold-Season Deep North Atlantic Cyclones. <i>Journals of the Atmospheric Sciences</i> , 2021, 78, 3349-3368.	0.6	15
21	A Lagrangian Perspective on Stable Water Isotopes During the West African Monsoon. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2021JD034895.	1.2	10
22	A New Framework for Identifying and Investigating Seasonal Climate Extremes. <i>Journal of Climate</i> , 2021, 34, 7761-7782.	1.2	4
23	Disentangling different moisture transport pathways over the eastern subtropical North Atlantic using multi-platform isotope observations and high-resolution numerical modelling. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 16319-16347.	1.9	12
24	Systematic assessment of the diabatic processes that modify low-level potential vorticity in extratropical cyclones. <i>Weather and Climate Dynamics</i> , 2021, 2, 1073-1091.	1.2	8
25	Stratospheric influence on ECMWF sub-seasonal forecast skill for energy-relevant surface weather in European countries. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2020, 146, 3675-3694.	1.0	19
26	Meridional and vertical variations of the water vapour isotopic composition in the marine boundary layer over the Atlantic and Southern Ocean. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 5811-5835.	1.9	28
27	Structure, Process, and Mechanism. , 2020, , 15-43.		8
28	Global and Regional Perspectives. , 2020, , 89-140.		3
29	Kilometer-Scale Climate Models: Prospects and Challenges. <i>Bulletin of the American Meteorological Society</i> , 2020, 101, E567-E587.	1.7	96
30	Potential vorticity structure of embedded convection in a warm conveyor belt and its relevance for large-scale dynamics. <i>Weather and Climate Dynamics</i> , 2020, 1, 127-153.	1.2	30
31	A Lagrangian analysis of upper-tropospheric anticyclones associated with heat waves in Europe. <i>Weather and Climate Dynamics</i> , 2020, 1, 191-206.	1.2	22
32	The substructure of extremely hot summers in the Northern Hemisphere. <i>Weather and Climate Dynamics</i> , 2020, 1, 45-62.	1.2	9
33	A Lagrangian analysis of the dynamical and thermodynamic drivers of large-scale Greenland melt events during 1979–2017. <i>Weather and Climate Dynamics</i> , 2020, 1, 497-518.	1.2	18
34	Vertical cloud structure of warm conveyor belts – a comparison and evaluation of ERA5 reanalysis, CloudSat and CALIPSO data. <i>Weather and Climate Dynamics</i> , 2020, 1, 577-595.	1.2	13
35	How an uncertain short-wave perturbation on the North Atlantic wave guide affects the forecast of an intense Mediterranean cyclone (Medicane Zorbas). <i>Weather and Climate Dynamics</i> , 2020, 1, 597-615.	1.2	22
36	Attribution of precipitation to cyclones and fronts over Europe in a kilometer-scale regional climate simulation. <i>Weather and Climate Dynamics</i> , 2020, 1, 675-699.	1.2	15

#	ARTICLE	IF	CITATIONS
37	Observations of Arctic Sea Ice Leads and Open Water During the Microbiological-Ocean-Cloud Coupling in the High Arctic Campaign. , 2020, , .		0
38	Overview of the Antarctic Circumnavigation Expedition: Study of Preindustrial-like Aerosols and Their Climate Effects (ACE-SPACE). Bulletin of the American Meteorological Society, 2019, 100, 2260-2283.	1.7	71
39	Processes determining heat waves across different European climates. Quarterly Journal of the Royal Meteorological Society, 2019, 145, 2973-2989.	1.0	84
40	On the Time Evolution of Limited-Area Ensemble Variance: Case Studies with the Convection-Permitting Ensemble COSMO-E. Journals of the Atmospheric Sciences, 2019, 76, 11-26.	0.6	9
41	Marine versus Continental Sources of Iodine and Selenium in Rainfall at Two European High-Altitude Locations. Environmental Science & Technology, 2019, 53, 1905-1917.	4.6	20
42	Water Vapor in the Asian Summer Monsoon Anticyclone: Comparison of Balloon-Borne Measurements and ECMWF Data. Journal of Geophysical Research D: Atmospheres, 2019, 124, 7053-7068.	1.2	18
43	A numerical process study on the rapid transport of stratospheric air down to the surface over western North America and the Tibetan Plateau. Atmospheric Chemistry and Physics, 2019, 19, 6535-6549.	1.9	9
44	Quantifying the role of individual diabatic processes for the formation of PV anomalies in a North Pacific cyclone. Quarterly Journal of the Royal Meteorological Society, 2019, 145, 2454-2476.	1.0	17
45	Convective activity in an extratropical cyclone and its warm conveyor belt – a case study combining observations and a convection-permitting model simulation. Quarterly Journal of the Royal Meteorological Society, 2019, 145, 1406-1426.	1.0	41
46	Modification of Potential Vorticity near the Tropopause by Nonconservative Processes in the ECMWF Model. Journals of the Atmospheric Sciences, 2019, 76, 1709-1726.	0.6	25
47	A new interpretative framework for below-cloud effects on stable water isotopes in vapour and rain. Atmospheric Chemistry and Physics, 2019, 19, 747-765.	1.9	66
48	On the Thermodynamic Preconditioning of Arctic Air Masses and the Role of Tropopause Polar Vortices for Cold Air Outbreaks From Fram Strait. Journal of Geophysical Research D: Atmospheres, 2019, 124, 11033-11050.	1.2	15
49	Lagrangian process attribution of isotopic variations in near-surface water vapour in a 30-year regional climate simulation over Europe. Atmospheric Chemistry and Physics, 2018, 18, 1653-1669.	1.9	19
50	Role of polar anticyclones and mid-latitude cyclones for Arctic summertime sea-ice melting. Nature Geoscience, 2018, 11, 108-113.	5.4	84
51	Assessment of an ensemble of ocean-atmosphere coupled and uncoupled regional climate models to reproduce the climatology of Mediterranean cyclones. Climate Dynamics, 2018, 51, 1023-1040.	1.7	35
52	Northern Hemisphere Rossby Wave Initiation Events on the Extratropical Jet – A Climatological Analysis. Journal of Climate, 2018, 31, 743-760.	1.2	34
53	The complex life cycles of two long-lived potential vorticity cut-offs over Europe. Quarterly Journal of the Royal Meteorological Society, 2018, 144, 701-719.	1.0	12
54	An evaluation of the convection-permitting ensemble COSMO-E for three contrasting precipitation events in Switzerland. Quarterly Journal of the Royal Meteorological Society, 2018, 144, 744-764.	1.0	45

#	ARTICLE	IF	CITATIONS
55	The North Atlantic Waveguide and Downstream Impact Experiment. <i>Bulletin of the American Meteorological Society</i> , 2018, 99, 1607-1637.	1.7	105
56	Investigations of Mesoscopic Complexity of Small Ice Crystals in Midlatitude Cirrus. <i>Geophysical Research Letters</i> , 2018, 45, 11,465.	1.5	6
57	When during Their Life Cycle Are Extratropical Cyclones Attended by Fronts?. <i>Bulletin of the American Meteorological Society</i> , 2018, 99, 149-165.	1.7	34
58	Flow-Dependent Reliability: A Path to More Skillful Ensemble Forecasts. <i>Bulletin of the American Meteorological Society</i> , 2018, 99, 1015-1026.	1.7	27
59	ML-CIRRUS: The Airborne Experiment on Natural Cirrus and Contrail Cirrus with the High-Altitude Long-Range Research Aircraft HALO. <i>Bulletin of the American Meteorological Society</i> , 2017, 98, 271-288.	1.7	107
60	THORPEX Research and the Science of Prediction. <i>Bulletin of the American Meteorological Society</i> , 2017, 98, 807-830.	1.7	23
61	The Microphysical Building Blocks of Low-Level Potential Vorticity Anomalies in an Idealized Extratropical Cyclone. <i>Journals of the Atmospheric Sciences</i> , 2017, 74, 1403-1416.	0.6	24
62	Global Climatologies of Eulerian and Lagrangian Flow Features based on ERA-Interim. <i>Bulletin of the American Meteorological Society</i> , 2017, 98, 1739-1748.	1.7	108
63	Objective classification of extratropical cyclogenesis. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2017, 143, 1047-1061.	1.0	26
64	Increase in the number of extremely strong fronts over Europe? A study based on ERA-Interim reanalysis (1979-2014). <i>Geophysical Research Letters</i> , 2017, 44, 553-561.	1.5	26
65	Marine Primary Productivity as a Potential Indirect Source of Selenium and Other Trace Elements in Atmospheric Deposition. <i>Environmental Science &amp; Technology</i> , 2017, 51, 108-118.	4.6	31
66	Atmospheric Rivers Emerge as a Global Science and Applications Focus. <i>Bulletin of the American Meteorological Society</i> , 2017, 98, 1969-1973.	1.7	106
67	Does the lower stratosphere provide predictability for month-ahead wind electricity generation in Europe?. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2017, 143, 3025-3036.	1.0	25
68	Balancing Europe's wind-power output through spatial deployment informed by weather regimes. <i>Nature Climate Change</i> , 2017, 7, 557-562.	8.1	236
69	Exceptional Air Mass Transport and Dynamical Drivers of an Extreme Wintertime Arctic Warm Event. <i>Geophysical Research Letters</i> , 2017, 44, 12,028.	1.5	48
70	The stable isotopic composition of water vapour above Corsica during the HyMeX SOP1 campaign: insight into vertical mixing processes from lower-tropospheric survey flights. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 6125-6151.	1.9	52
71	Effect of anthropogenic aerosol emissions on precipitation in warm conveyor belts in the western North Pacific in winter - a model study with ECHAM6-HAM. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 6243-6255.	1.9	12
72	Processes leading to heavy precipitation associated with two Mediterranean cyclones observed during the HyMeX SOP1. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2016, 142, 275-286.	1.0	33

#	ARTICLE	IF	CITATIONS
73	An algorithm for identifying the initiation of synoptic-scale Rossby waves on potential vorticity waveguides. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 889-900.	1.0	17
74	Large-scale wind and precipitation extremes in the Mediterranean: dynamical aspects of five selected cyclone events. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 3097-3114.	1.0	39
75	The Role of Warm Conveyor Belts for the Intensification of Extratropical Cyclones in Northern Hemisphere Winter. Journals of the Atmospheric Sciences, 2016, 73, 3997-4020.	0.6	89
76	Introduction to the <sc>HyMeX S</sc>pecial Issue on "Advances in understanding and forecasting of heavy precipitation in the Mediterranean through the <sc>HyMeX SOP1</sc> field campaign". Quarterly Journal of the Royal Meteorological Society, 2016, 142, 1-6.	1.0	18
77	Drivers of $\langle \hat{v} \rangle^2$ variations in an idealized extratropical cyclone. Geophysical Research Letters, 2016, 43, 5401-5408.	1.5	16
78	A trajectory-based classification of ERA-Interim ice clouds in the region of the North Atlantic storm track. Geophysical Research Letters, 2016, 43, 6657-6664.	1.5	47
79	Isotope meteorology of cold front passages: A case study combining observations and modeling. Geophysical Research Letters, 2015, 42, 5652-5660.	1.5	70
80	A scaling relation for warm-phase orographic precipitation: a Lagrangian analysis for 2D mountains. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 2185-2198.	1.0	15
81	The transatlantic dust transport from North Africa to the Americas—its characteristics and source regions. Journal of Geophysical Research D: Atmospheres, 2015, 120, 11,231.	1.2	33
82	Stratosphere-troposphere exchange (STE) in the vicinity of North Atlantic cyclones. Atmospheric Chemistry and Physics, 2015, 15, 10939-10953.	1.9	22
83	Verification of North Atlantic warm conveyor belt outflows in ECMWF forecasts. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 1333-1344.	1.0	15
84	A Lagrangian investigation of hot and cold temperature extremes in Europe. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 98-108.	1.0	92
85	Diabatic Rossby waves in the Southern Hemisphere. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 3106-3117.	1.0	3
86	Climatology of potential vorticity streamers and associated isentropic transport pathways across PV gradient barriers. Journal of Geophysical Research D: Atmospheres, 2015, 120, 3802-3821.	1.2	29
87	The LAGRANTO Lagrangian analysis tool "version 2.0. Geoscientific Model Development, 2015, 8, 2569-2586.	1.3	298
88	DYNAMICAL METEOROLOGY   Quasigeostrophic Theory., 2015, , 393-403.		4
89	A Climatology of Cold Air Outbreaks and Their Impact on Air-Sea Heat Fluxes in the High-Latitude South Pacific. Journal of Climate, 2015, 28, 342-364.	1.2	81
90	Large-scale wind and precipitation extremes in the Mediterranean: a climatological analysis for 1979-2012. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 2404-2417.	1.0	92

#	ARTICLE	IF	CITATIONS
91	Importance of latent heat release in ascending air streams for atmospheric blocking. <i>Nature Geoscience</i> , 2015, 8, 610-614.	5.4	183
92	Tropopause folds in ERA-Interim: Global climatology and relation to extreme weather events. <i>Journal of Geophysical Research D: Atmospheres</i> , 2015, 120, 4860-4877.	1.2	89
93	IWAL—An Interactive Weather Analysis Laboratory. <i>Bulletin of the American Meteorological Society</i> , 2015, 96, 903-909.	1.7	1
94	The dynamical structure of intense Mediterranean cyclones. <i>Climate Dynamics</i> , 2015, 44, 2411-2427.	1.7	69
95	A new circulation type classification based upon Lagrangian air trajectories. <i>Frontiers in Earth Science</i> , 2014, 2, .	0.8	5
96	Atmospheric processes triggering the central European floods in June 2013. <i>Natural Hazards and Earth System Sciences</i> , 2014, 14, 1691-1702.	1.5	111
97	The Role of Extratropical Cyclones and Fronts for Southern Ocean Freshwater Fluxes. <i>Journal of Climate</i> , 2014, 27, 6205-6224.	1.2	69
98	HyMeX: A 10-Year Multidisciplinary Program on the Mediterranean Water Cycle. <i>Bulletin of the American Meteorological Society</i> , 2014, 95, 1063-1082.	1.7	288
99	The Linkage between the Warm and the Cold Conveyor Belts in an Idealized Extratropical Cyclone*. <i>Journals of the Atmospheric Sciences</i> , 2014, 71, 1443-1459.	0.6	44
100	Warm Conveyor Belts in the ERA-Interim Dataset (1979–2010). Part I: Climatology and Potential Vorticity Evolution. <i>Journal of Climate</i> , 2014, 27, 3-26.	1.2	226
101	The dichotomous structure of the warm conveyor belt. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2014, 140, 1809-1824.	1.0	45
102	Planning aircraft measurements within a warm conveyor belt. <i>Weather</i> , 2014, 69, 161-166.	0.6	22
103	Warm Conveyor Belts in the ERA-Interim Dataset (1979–2010). Part II: Moisture Origin and Relevance for Precipitation. <i>Journal of Climate</i> , 2014, 27, 27-40.	1.2	150
104	Pollution patterns in the upper troposphere over Europe and Asia observed by CARIBIC. <i>Atmospheric Environment</i> , 2014, 96, 245-256.	1.9	4
105	Estimates of background surface ozone concentrations in the United States based on model-derived source apportionment. <i>Atmospheric Environment</i> , 2014, 84, 275-288.	1.9	73
106	How important is intensified evaporation for Mediterranean precipitation extremes?. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 5240-5256.	1.2	55
107	On the linkage between the Asian summer monsoon and tropopause fold activity over the eastern Mediterranean and the Middle East. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 3202-3221.	1.2	59
108	On the Co-Occurrence of Warm Conveyor Belt Outflows and PV Streamers*. <i>Journals of the Atmospheric Sciences</i> , 2014, 71, 3668-3673.	0.6	19

#	ARTICLE	IF	CITATIONS
109	Comparison of Fast In situ Stratospheric Hygrometer (FISH) measurements of water vapor in the upper troposphere and lower stratosphere (UTLS) with ECMWF (re)analysis data. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 10803-10822.	1.9	27
110	Comparison of Eulerian and Lagrangian moisture source diagnostics – the flood event in eastern Europe in May 2010. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 6605-6619.	1.9	55
111	A global climatology of stratosphere–troposphere exchange using the ERA-Interim data set from 1979 to 2011. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 913-937.	1.9	222
112	Deuterium excess as a proxy for continental moisture recycling and plant transpiration. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 4029-4054.	1.9	138
113	3-D model simulations of dynamical and microphysical interactions in pyroconvective clouds under idealized conditions. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 7573-7583.	1.9	20
114	Warm Conveyor Belts in Idealized Moist Baroclinic Wave Simulations. <i>Journals of the Atmospheric Sciences</i> , 2013, 70, 627-652.	0.6	75
115	IMILAST: A Community Effort to Intercompare Extratropical Cyclone Detection and Tracking Algorithms. <i>Bulletin of the American Meteorological Society</i> , 2013, 94, 529-547.	1.7	391
116	A 10-yr Climatology of Diabatic Rossby Waves in the Northern Hemisphere. <i>Monthly Weather Review</i> , 2013, 141, 1139-1154.	0.5	31
117	A Global Climatology of Tropical Moisture Exports. <i>Journal of Climate</i> , 2013, 26, 3031-3045.	1.2	78
118	A bulk parametrization of melting snowflakes with explicit liquid water fraction for the COSMO model. <i>Geoscientific Model Development</i> , 2013, 6, 1925-1939.	1.3	21
119	An online trajectory module (version 1.0) for the nonhydrostatic numerical weather prediction model COSMO. <i>Geoscientific Model Development</i> , 2013, 6, 1989-2004.	1.3	48
120	The role of upper-level dynamics and surface processes for the Pakistan flood of July 2010. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2013, 139, 1780-1797.	1.0	118
121	Are Greenhouse Gas Signals of Northern Hemisphere winter extra-tropical cyclone activity dependent on the identification and tracking algorithm?. <i>Meteorologische Zeitschrift</i> , 2013, 22, 61-68.	0.5	77
122	Microphysical and radiative changes in cirrus clouds by geoengineering the stratosphere. <i>Journal of Geophysical Research D: Atmospheres</i> , 2013, 118, 4533-4548.	1.2	24
123	Tropopause level Rossby wave breaking in the Northern Hemisphere: a feature-based validation of the <sc>ECHAM5</sc> climate model. <i>International Journal of Climatology</i> , 2013, 33, 3073-3082.	1.5	10
124	Identification of glacial meltwater runoff in a karstic environment and its implication for present and future water availability. <i>Hydrology and Earth System Sciences</i> , 2013, 17, 3261-3277.	1.9	37
125	Meteorological Influences on the Incidence of Aneurysmal Subarachnoid Hemorrhage – A Single Center Study of 511 Patients. <i>PLoS ONE</i> , 2013, 8, e81621.	1.1	9
126	A PV Perspective on the Vertical Structure of Mature Midlatitude Cyclones in the Northern Hemisphere. <i>Journals of the Atmospheric Sciences</i> , 2012, 69, 725-740.	0.6	87



#	ARTICLE	IF	CITATIONS
127	A Trajectory-Based Investigation of Physical and Dynamical Processes That Govern the Temporal Evolution of the Subtropical Jet Streams over Africa. <i>Journals of the Atmospheric Sciences</i> , 2012, 69, 1602-1616.	0.6	9
128	Measuring variations of $\delta^{18}\text{O}$ and $\delta^2\text{H}$ in atmospheric water vapour using two commercial laser-based spectrometers: an instrument characterisation study. <i>Atmospheric Measurement Techniques</i> , 2012, 5, 1491-1511.	1.2	116
129	The 1-way on-line coupled atmospheric chemistry model system MECO(n) – Part 3: Meteorological evaluation of the on-line coupled system. <i>Geoscientific Model Development</i> , 2012, 5, 129-147.	1.3	16
130	Detection, tracking and event localization of jet stream features in 4-D atmospheric data. <i>Geoscientific Model Development</i> , 2012, 5, 457-470.	1.3	27
131	The Mineral Dust Cycle in EMAC 2.40: sensitivity to the spectral resolution and the dust emission scheme. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 1611-1627.	1.9	31
132	The isotopic composition of precipitation from a winter storm – a case study with the limited-area model COSMO-iso. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 1629-1648.	1.9	83
133	A Case Study of High-Impact Wet Snowfall in Northwest Germany (25–27 November 2005): Observations, Dynamics, and Forecast Performance. <i>Weather and Forecasting</i> , 2012, 27, 1217-1234.	0.5	18
134	Quantifying the relevance of atmospheric blocking for co-located temperature extremes in the Northern Hemisphere on (sub-)daily time scales. <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	224
135	Quantifying the importance of stratospheric-tropospheric transport on surface ozone concentrations at high- and low-elevation monitoring sites in the United States. <i>Atmospheric Environment</i> , 2012, 62, 646-656.	1.9	59
136	Quantifying the Relevance of Cyclones for Precipitation Extremes. <i>Journal of Climate</i> , 2012, 25, 6770-6780.	1.2	249
137	Influence of microphysical processes on the potential vorticity development in a warm conveyor belt: a case study with the limited-area model COSMO. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2012, 138, 407-418.	1.0	121
138	Impact of North Atlantic evaporation hot spots on southern Alpine heavy precipitation events. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2012, 138, 1245-1258.	1.0	59
139	Spatial coherency of extreme weather events in Germany and Switzerland. <i>International Journal of Climatology</i> , 2012, 32, 1863-1874.	1.5	14
140	Classification of precipitation events with a convective response timescale and their forecasting characteristics. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	44
141	Life Cycle Study of a Diabatic Rossby Wave as a Precursor to Rapid Cyclogenesis in the North Atlantic – Dynamics and Forecast Performance. <i>Monthly Weather Review</i> , 2011, 139, 1861-1878.	0.5	31
142	Verification of quantitative precipitation forecasts on short time-scales: A fuzzy approach to handle timing errors with SAL. <i>Meteorologische Zeitschrift</i> , 2011, 20, 95-105.	0.5	12
143	The importance of stratospheric-tropospheric transport in affecting surface ozone concentrations in the western and northern tier of the United States. <i>Atmospheric Environment</i> , 2011, 45, 4845-4857.	1.9	83
144	The Convective and Orographically-induced Precipitation Study (COPS): the scientific strategy, the field phase, and research highlights. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2011, 137, 3-30.	1.0	181

#	ARTICLE	IF	CITATIONS
145	Airborne lidar observations in the inflow region of a warm conveyor belt. Quarterly Journal of the Royal Meteorological Society, 2011, 137, 1257-1272.	1.0	23
146	The key role of diabatic processes in modifying the upper-tropospheric wave guide: a North Atlantic case-study. Quarterly Journal of the Royal Meteorological Society, 2011, 137, 2174-2193.	1.0	177
147	Transport timescales and tracer properties in the extratropical UTLS. Atmospheric Chemistry and Physics, 2010, 10, 7929-7944.	1.9	44
148	Forecasted deep stratospheric intrusions over Central Europe: case studies and climatologies. Atmospheric Chemistry and Physics, 2010, 10, 499-524.	1.9	85
149	Enhanced ozone over western North America from biomass burning in Eurasia during April 2008 as seen in surface and profile observations. Atmospheric Environment, 2010, 44, 4497-4509.	1.9	55
150	A Lagrangian Climatology of Tropical Moisture Exports to the Northern Hemispheric Extratropics. Journal of Climate, 2010, 23, 987-1003.	1.2	186
151	How representative were the meteorological conditions during the COPS field experiment in summer 2007?. Meteorologische Zeitschrift, 2010, 19, 619-630.	0.5	7
152	Spatial Forecast Verification Methods Intercomparison Project: Application of the SAL Technique. Weather and Forecasting, 2009, 24, 1472-1484.	0.5	57
153	Multi-model simulations of a convective situation in low-mountain terrain in central Europe. Meteorology and Atmospheric Physics, 2009, 103, 95-103.	0.9	31
154	Sources of water vapour contributing to the Elbe flood in August 2002—A tagging study in a mesoscale model. Quarterly Journal of the Royal Meteorological Society, 2009, 135, 205-223.	1.0	76
155	Lagrangian simulations of stable isotopes in water vapor: An evaluation of nonequilibrium fractionation in the Craig-Gordon model. Journal of Geophysical Research, 2009, 114, .	3.3	47
156	A new windstorm proxy from lake sediments: A comparison of geological and meteorological data from western Germany for the period 1965–2001. Journal of Geophysical Research, 2009, 114, .	3.3	19
157	Aerosol- and updraft-limited regimes of cloud droplet formation: influence of particle number, size and hygroscopicity on the activation of cloud condensation nuclei (CCN). Atmospheric Chemistry and Physics, 2009, 9, 7067-7080.	1.9	305
158	Identification and Climatology of Cut-off Lows near the Tropopause. Annals of the New York Academy of Sciences, 2008, 1146, 256-290.	1.8	63
159	Interannual variability of Greenland winter precipitation sources: Lagrangian moisture diagnostic and North Atlantic Oscillation influence. Journal of Geophysical Research, 2008, 113, .	3.3	289
160	Comparison of ERA40 cloud top phase with POLDER observations. Journal of Geophysical Research, 2008, 113, .	3.3	11
161	Interannual variability of Greenland winter precipitation sources: 2. Effects of North Atlantic Oscillation variability on stable isotopes in precipitation. Journal of Geophysical Research, 2008, 113, .	3.3	113
162	Air parcel trajectory analysis of stable isotopes in water vapor in the eastern Mediterranean. Journal of Geophysical Research, 2008, 113, .	3.3	133

#	ARTICLE	IF	CITATIONS
163	Northern Hemisphere Extratropical Cyclones: A Comparison of Detection and Tracking Methods and Different Reanalyses. <i>Monthly Weather Review</i> , 2008, 136, 880-897.	0.5	186
164	SALâ€”A Novel Quality Measure for the Verification of Quantitative Precipitation Forecasts. <i>Monthly Weather Review</i> , 2008, 136, 4470-4487.	0.5	289
165	The general observation period 2007 within the priority program on quantitative precipitation forecasting: Concept and first results. <i>Meteorologische Zeitschrift</i> , 2008, 17, 849-866.	0.5	29
166	A gridded dataset of hourly precipitation in Germany: Its construction, climatology and application. <i>Meteorologische Zeitschrift</i> , 2008, 17, 719-732.	0.5	43
167	Airborne in-situ measurements of vertical, seasonal and latitudinal distributions of carbon dioxide over Europe. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 6395-6403.	1.9	32
168	Identification and ERA-15 Climatology of Potential Vorticity Streamers and Cutoffs near the Extratropical Tropopause. <i>Journals of the Atmospheric Sciences</i> , 2007, 64, 1569-1586.	0.6	179
169	Stratosphereâ€”Troposphere Exchange and Its Relation to Potential Vorticity Streamers and Cutoffs near the Extratropical Tropopause. <i>Journals of the Atmospheric Sciences</i> , 2007, 64, 1587-1602.	0.6	83
170	Verification of precipitation from regional climate simulations and remote-sensing observations with respect to ground-based observations in the upper Danube catchment. <i>Meteorologische Zeitschrift</i> , 2007, 16, 275-293.	0.5	31
171	Strong influence of lowermost stratospheric ozone on lower tropospheric background ozone changes over Europe. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	128
172	Seasonal cycles and variability of O&lt;sub&gt;3&lt;/sub& and H&lt;sub&gt;2&lt;/sub&O in the UT/LMS during SPURT. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 109-125.	1.9	48
173	Highly resolved observations of trace gases in the lowermost stratosphere and upper troposphere from the Spurt project: an overview. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 283-301.	1.9	86
174	The transport history of two Saharan dust events archived in an Alpine ice core. <i>Atmospheric Chemistry and Physics</i> , 2006, 6, 667-688.	1.9	72
175	Surface Cyclones in the ERA-40 Dataset (1958â€”2001). Part I: Novel Identification Method and Global Climatology. <i>Journals of the Atmospheric Sciences</i> , 2006, 63, 2486-2507.	0.6	359
176	A complex case study of down to the surface intrusions of persistent stratospheric air over the Eastern Mediterranean. <i>Atmospheric Environment</i> , 2006, 40, 4113-4125.	1.9	48
177	An event-based jet-stream climatology and typology. <i>International Journal of Climatology</i> , 2006, 26, 283-301.	1.5	143
178	Observations of meteoric material and implications for aerosol nucleation in the winter Arctic lower stratosphere derived from in situ particle measurements. <i>Atmospheric Chemistry and Physics</i> , 2005, 5, 3053-3069.	1.9	113
179	A case study on the formation and evolution of ice supersaturation in the vicinity of a warm conveyor belt's outflow region. <i>Atmospheric Chemistry and Physics</i> , 2005, 5, 973-987.	1.9	62
180	Sampling of an STT event over the Eastern Mediterranean region by lidar and electrochemical sonde. <i>Annales Geophysicae</i> , 2005, 23, 2039-2050.	0.6	16

#	ARTICLE	IF	CITATIONS
181	A composite study on the structure and formation of ozone miniholes and minihighs over central Europe. <i>Geophysical Research Letters</i> , 2005, 32, n/a-n/a.	1.5	44
182	Tropical troposphere-to-stratosphere transport inferred from trajectory calculations. <i>Journal of Geophysical Research</i> , 2004, 109, n/a-n/a.	3.3	188
183	Analysis of a jet stream induced gravity wave associated with an observed ice cloud over Greenland. <i>Atmospheric Chemistry and Physics</i> , 2004, 4, 1183-1200.	1.9	18
184	Seasonality and extent of extratropical TST derived from in-situ CO measurements during SPURT. <i>Atmospheric Chemistry and Physics</i> , 2004, 4, 1427-1442.	1.9	152
185	Tracing troposphere-to-stratosphere transport above a mid-latitude deep convective system. <i>Atmospheric Chemistry and Physics</i> , 2004, 4, 741-756.	1.9	68
186	A 15-Year Climatology of Warm Conveyor Belts. <i>Journal of Climate</i> , 2004, 17, 218-237.	1.2	267
187	Isotope composition of air moisture over the Mediterranean Sea: an index of the air-sea interaction pattern. <i>Tellus, Series B: Chemical and Physical Meteorology</i> , 2003, 55, 953-965.	0.8	193
188	Dehydration potential of ultrathin clouds at the tropical tropopause. <i>Geophysical Research Letters</i> , 2003, 30, .	1.5	54
189	Clouds at the tropical tropopause: A case study during the APE-THESEO campaign over the western Indian Ocean. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	15
190	Stratosphere-troposphere exchange: A model and method intercomparison. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	55
191	Stratosphere-troposphere exchange: A review, and what we have learned from STACCATO. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	413
192	Tropopause folds and cross-tropopause exchange: A global investigation based upon ECMWF analyses for the time period March 2000 to February 2001. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	161
193	Observations of stratosphere-to-troposphere transport events over the eastern Mediterranean using a ground-based lidar system. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	46
194	A northern hemispheric climatology of cross-tropopause exchange for the ERA15 time period (1979-1993). <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	219
195	Reply to comment by H. Teitelbaum et al. on "A Lagrangian analysis of stratospheric ozone variability and long-term trends above Payerne (Switzerland) during 1970-2001". <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	8
196	A New Perspective of Stratosphere-Troposphere Exchange. <i>Bulletin of the American Meteorological Society</i> , 2003, 84, 1565-1574.	1.7	132
197	Ultrathin Tropical Tropopause Clouds (LUTCs): II. Stabilization mechanisms. <i>Atmospheric Chemistry and Physics</i> , 2003, 3, 1093-1100.	1.9	34
198	Detailed modeling of mountain wave PSCs. <i>Atmospheric Chemistry and Physics</i> , 2003, 3, 697-712.	1.9	54

#	ARTICLE	IF	CITATIONS
199	Forecast, observation and modelling of a deep stratospheric intrusion event over Europe. <i>Atmospheric Chemistry and Physics</i> , 2003, 3, 763-777.	1.9	56
200	A novel model to predict the physical state of atmospheric H <sub>2</sub> O, SO <sub>2</sub> , NH <sub>3</sub> and aerosol particles. <i>Atmospheric Chemistry and Physics</i> , 2003, 3, 909-924.	3.3	143
201	A Lagrangian 1-year climatology of (deep) cross-tropopause exchange in the extratropical Northern Hemisphere. <i>Journal of Geophysical Research</i> , 2002, 107, ACL 13-1.	3.3	33
202	A Lagrangian analysis of stratospheric ozone variability and long-term trends above Payerne (Switzerland) during 1970-2001. <i>Journal of Geophysical Research</i> , 2002, 107, ACL 2-1.	3.3	20
203	Synoptic tracer gradients in the upper troposphere over central Canada during the Stratosphere-Troposphere Experiments by Aircraft Measurements 1998 summer campaign. <i>Journal of Geophysical Research</i> , 2002, 107, ACH 5-1.	1.5	38
204	Large NAT particle formation by mother clouds: Analysis of SOLVE/THESEO-2000 observations. <i>Geophysical Research Letters</i> , 2002, 29, 52-1.	1.0	206
205	Dynamical aspects of the life cycle of the winter storm 'Lothar' (24-26 December 1999). <i>Quarterly Journal of the Royal Meteorological Society</i> , 2002, 128, 405-429.	3.3	58
206	Nitrogen oxides and ozone in the tropopause region of the northern hemisphere: Measurements from commercial aircraft in 1995/1996 and 1997. <i>Journal of Geophysical Research</i> , 2001, 106, 27673-27699.	3.3	72
207	Climate impacts of European-scale anthropogenic vegetation changes: A sensitivity study using a regional climate model. <i>Journal of Geophysical Research</i> , 2001, 106, 7817-7835.	3.3	31
208	Midstratospheric ozone variability over Bern related to planetary wave activity during the winters 1994-1995 to 1998-1999. <i>Journal of Geophysical Research</i> , 2001, 106, 7903-7916.	0.5	80
209	Influence of Upstream Diabatic Heating upon an Alpine Event of Heavy Precipitation. <i>Monthly Weather Review</i> , 2001, 129, 2822-2828.	0.9	121
210	An intercomparison of results from three trajectory models. <i>Meteorological Applications</i> , 2001, 8, 127-135.	1.0	35
211	The influence of the 1997-99 El Niño Southern Oscillation on extratropical baroclinic life cycles over the eastern North Pacific. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2001, 127, 331-342.	0.5	30
212	On the origin of 129I in rain water near Zürich. <i>Radiochimica Acta</i> , 2001, 89, 815-822.	1.0	24
213	The influence of the 1997-99 El Nino Southern Oscillation on extratropical baroclinic life cycles over the eastern North Pacific. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2001, 127, 331-342.	0.9	69
214	Growth and Decay of an Extra-Tropical Cyclone's PV-Tower. <i>Meteorology and Atmospheric Physics</i> , 2000, 73, 139-156.	3.3	37
215	Measurements of nitrogen oxides at the tropopause: Attribution to convection and correlation with lightning. <i>Journal of Geophysical Research</i> , 2000, 105, 3679-3700.	0.8	11
216	Upstream development in idealized baroclinic wave experiments. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 1999, 51, 574-587.		

#	ARTICLE	IF	CITATIONS
217	Mesoscale modelling of vertical atmospheric transport in the Alps associated with the advection of a tropopause fold – a winter ozone episode. <i>Atmospheric Environment</i> , 1999, 33, 3613-3626.	1.9	17
218	A Planetary-Scale to Mesoscale Perspective of the Life Cycles of Extratropical Cyclones: The Bridge between Theory and Observations. , 1999, , 139-185.		52
219	Heavy precipitation on the alpine southside: An upper-level precursor. <i>Geophysical Research Letters</i> , 1998, 25, 1435-1438.	1.5	191
220	The Effect of Barotropic Shear on Upper-Level Induced Cyclogenesis: Semigeostrophic and Primitive Equation Numerical Simulations. <i>Journals of the Atmospheric Sciences</i> , 1998, 55, 2080-2094.	0.6	42
221	The Milan photooxidant plume. <i>Journal of Geophysical Research</i> , 1997, 102, 23375-23388.	3.3	69
222	A Lagrangian-based analysis of extratropical cyclones. I: The method and some applications. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1997, 123, 467-489.	1.0	564
223	A Lagrangian-based analysis of extratropical cyclones. II: A detailed case-study. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1997, 123, 1677-1706.	1.0	195
224	On studying the structure of synoptic systems. <i>Meteorological Applications</i> , 1997, 4, 365-374.	0.9	6
225	A Lagrangian-based analysis of extratropical cyclones. I: The method and some applications. , 1997, 123, 467.		19
226	Structure and evolution of an isolated semi-geostrophic cyclone. <i>Quarterly Journal of the Royal Meteorological Society</i> , 1993, 119, 57-90.	1.0	55
227	The Palette of Fronts and Cyclones within a Baroclinic Wave Development. <i>Journals of the Atmospheric Sciences</i> , 1991, 48, 1666-1689.	0.6	124