Heini Wernli

List of Publications by Year in Descending Order

238 papers	12,256 citations	60 h-index	102 g-index
326 ext. papers	13,884 ext. citations	4.9 avg, IF	6.68 L-index

#	Paper	IF	Citations
238	Lagrangian formation pathways of moist anomalies in the trade-wind region during the dry season: two case studies from EUREC⁴A. *Weather and Climate Dynamics*, **2022**, 3, 59-88	3.3	0
237	Identification, characteristics and dynamics of Arctic extreme seasons. *Weather and Climate Dynamics*, **2022**, 3, 89-111	3.3	
236	Characterization of transport from the Asian summer monsoon anticyclone into the UTLS via shedding of low potential vorticity cutoffs. *Atmospheric Chemistry and Physics*, **2022**, 22, 3841-3860	6.8	1
235	How intense daily precipitation depends on temperature and the occurrence of specific weather systems – an investigation with ERA5 reanalyses in the extratropical Northern Hemisphere. *Weather and Climate Dynamics*, **2022**, 3, 391-411	3.3	1
234	Disentangling different moisture transport pathways over the eastern subtropical North Atlantic using multi-platform isotope observations and high-resolution numerical modelling. *Atmospheric Chemistry and Physics*, **2021**, 21, 16319-16347	6.8	1
233	Systematic assessment of the diabatic processes that modify low-level potential vorticity in extratropical cyclones. *Weather and Climate Dynamics*, **2021**, 2, 1073-1091	3.3	0
232	How Rossby wave breaking modulates the water cycle in the North Atlantic trade wind region. *Weather and Climate Dynamics*, **2021**, 2, 281-309	3.3	8
231	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. *Weather and Climate Dynamics*, **2021**, 2, 331-357	3.3	3
230	Lagrangian matches between observations from aircraft, lidar and radar in a warm conveyor belt crossing orography. *Atmospheric Chemistry and Physics*, **2021**, 21, 5477-5498	6.8	2
229	The three-dimensional life cycles of potential vorticity cutoffs: a global and selected regional climatologies in ERA-Interim (1979–2018). *Weather and Climate Dynamics*, **2021**, 2, 507-534	3.3	12
228	A potential vorticity perspective on cyclogenesis over centre-eastern South America. *International Journal of Climatology*, **2021**, 41, 663-678	3.5	9
227	The storm-track suppression over the western North Pacific from a cyclone life-cycle perspective. *Weather and Climate Dynamics*, **2021**, 2, 55-69	3.3	5
226	Observations and simulation of intense convection embedded in a warm conveyor belt – how ambient vertical wind shear determines the dynamical impact. *Weather and Climate Dynamics*, **2021**, 2, 89-110	3.3	5
225	Extreme wet seasons – their definition and relationship with synoptic-scale weather systems. *Weather and Climate Dynamics*, **2021**, 2, 71-88	3.3	1
224	Widening the common space to reduce the gap between climate science and decision-making in industry. *Climate Services*, **2021**, 23, 100237	3.8	2
223	Sources and transport pathways of precipitating waters in cold-season deep North Atlantic cyclones. *Journals of the Atmospheric Sciences*, **2021**,	2.1	3
222	A Lagrangian Perspective on Stable Water Isotopes During the West African Monsoon. *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2021JD034895	4.4	3

221	A New Framework for Identifying and Investigating Seasonal Climate Extremes. *Journal of Climate*, **2021**, 34, 7761-7782	4.4	1
220	Meridional and vertical variations of the water vapour isotopic composition in the marine boundary layer over the Atlantic and Southern Ocean. *Atmospheric Chemistry and Physics*, **2020**, 20, 5811-5835	6.8	11
219	Kilometer-Scale Climate Models: Prospects and Challenges. *Bulletin of the American Meteorological Society*, **2020**, 101, E567-E587	6.1	40
218	Potential vorticity structure of embedded convection in a warm conveyor belt and its relevance for large-scale dynamics. *Weather and Climate Dynamics*, **2020**, 1, 127-153	3.3	17
217	A Lagrangian analysis of upper-tropospheric anticyclones associated with heat waves in Europe. *Weather and Climate Dynamics*, **2020**, 1, 191-206	3.3	9
216	The substructure of extremely hot summers in the Northern Hemisphere. *Weather and Climate Dynamics*, **2020**, 1, 45-62	3.3	3
215	A Lagrangian analysis of the dynamical and thermodynamic drivers of large-scale Greenland melt events during 1979 2017. *Weather and Climate Dynamics*, **2020**, 1, 497-518	3.3	7
214	Vertical cloud structure of warm conveyor belts a comparison and evaluation of ERA5 reanalysis, CloudSat and CALIPSO data. *Weather and Climate Dynamics*, **2020**, 1, 577-595	3.3	3
213	How an uncertain short-wave perturbation on the North Atlantic wave guide affects the forecast of an intense Mediterranean cyclone (Medicane Zorbas). *Weather and Climate Dynamics*, **2020**, 1, 597-615	3.3	12
212	Attribution of precipitation to cyclones and fronts over Europe in a kilometer-scale regional climate simulation. *Weather and Climate Dynamics*, **2020**, 1, 675-699	3.3	6
211	Structure, Process, and Mechanism **2020**, 15-43		4
210	Global and Regional Perspectives **2020**, 89-140		2
209	Stratospheric influence on ECMWF sub-seasonal forecast skill for energy-industry-relevant surface weather in European countries. *Quarterly Journal of the Royal Meteorological Society*, **2020**, 146, 3675-3694	6.4	10
208	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	2.1	5
207	Marine versus Continental Sources of Iodine and Selenium in Rainfall at Two European High-Altitude Locations. *Environmental Science & Technology*, **2019**, 53, 1905-1917	10.3	13
206	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	4.4	7
205	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	6.8	4
204	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	6.4	10

203	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	6.4	26
202	Modification of Potential Vorticity near the Tropopause by Nonconservative Processes in the ECMWF Model. *Journals of the Atmospheric Sciences*, **2019**, 76, 1709-1726	2.1	14
201	A new interpretative framework for below-cloud effects on stable water isotopes in vapour and rain. *Atmospheric Chemistry and Physics*, **2019**, 19, 747-765	6.8	27
200	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	6.1	35
199	Processes determining heat waves across different European climates. *Quarterly Journal of the Royal Meteorological Society*, **2019**, 145, 2973-2989	6.4	31
198	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	4.4	11
197	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	6.8	10
196	Role of polar anticyclones and mid-latitude cyclones for Arctic summertime sea-ice melting. *Nature Geoscience*, **2018**, 11, 108-113	18.3	58
195	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	4.2	23
194	Northern Hemisphere Rossby Wave Initiation Events on the Extratropical Jet—A Climatological Analysis. *Journal of Climate*, **2018**, 31, 743-760	4.4	25
193	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	6.4	6
192	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	6.4	25
191	The North Atlantic Waveguide and Downstream Impact Experiment. *Bulletin of the American Meteorological Society*, **2018**, 99, 1607-1637	6.1	77
190	Investigations of Mesoscopic Complexity of Small Ice Crystals in Midlatitude Cirrus. *Geophysical Research Letters*, **2018**, 45, 11,465	4.9	4
189	When during Their Life Cycle Are Extratropical Cyclones Attended by Fronts?. *Bulletin of the American Meteorological Society*, **2018**, 99, 149-165	6.1	24
188	Flow-Dependent Reliability: A Path to More Skillful Ensemble Forecasts. *Bulletin of the American Meteorological Society*, **2018**, 99, 1015-1026	6.1	21
187	ML-CIRRUS: The Airborne Experiment on Natural Cirrus and Contrail Cirrus with the High-Altitude Long-Range Research Aircraft HALO. *Bulletin of the American Meteorological Society*, **2017**, 98, 271-288	6.1	77
186	THORPEX Research and the Science of Prediction. *Bulletin of the American Meteorological Society*, **2017**, 98, 807-830	6.1	15

185	The Microphysical Building Blocks of Low-Level Potential Vorticity Anomalies in an Idealized Extratropical Cyclone. *Journals of the Atmospheric Sciences*, **2017**, 74, 1403-1416	2.1	15
184	Global Climatologies of Eulerian and Lagrangian Flow Features based on ERA-Interim. *Bulletin of the American Meteorological Society*, **2017**, 98, 1739-1748	6.1	73
183	Objective classification of extratropical cyclogenesis. *Quarterly Journal of the Royal Meteorological Society*, **2017**, 143, 1047-1061	6.4	21
182	Increase in the number of extremely strong fronts over Europe? A study based on ERA-Interim reanalysis (1979–2014). *Geophysical Research Letters*, **2017**, 44, 553-561	4.9	21
181	Marine Primary Productivity as a Potential Indirect Source of Selenium and Other Trace Elements in Atmospheric Deposition. *Environmental Science & Technology*, **2017**, 51, 108-118	10.3	20
180	Atmospheric Rivers Emerge as a Global Science and Applications Focus. *Bulletin of the American Meteorological Society*, **2017**, 98, 1969-1973	6.1	78
179	Does the lower stratosphere provide predictability for month-ahead wind electricity generation in Europe?. *Quarterly Journal of the Royal Meteorological Society*, **2017**, 143, 3025-3036	6.4	20
178	Balancing Europe's wind power output through spatial deployment informed by weather regimes. *Nature Climate Change*, **2017**, 7, 557-562	21.4	145
177	Exceptional Air Mass Transport and Dynamical Drivers of an Extreme Wintertime Arctic Warm Event. *Geophysical Research Letters*, **2017**, 44, 12,028-12,036	4.9	37
176	The stable isotopic composition of water vapour above Corsica during the HyMeX SOP1 campaign: insight into vertical mixing processes from lower-tropospheric survey flights. *Atmospheric Chemistry and Physics*, **2017**, 17, 6125-6151	6.8	35
175	Effect of anthropogenic aerosol emissions on precipitation in warm conveyor belts in the western North Pacific in winter a model study with ECHAM6-HAM. *Atmospheric Chemistry and Physics*, **2017**, 17, 6243-6255	6.8	8
174	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	4.9	30
173	Effect of anthropogenic aerosol emissions on precipitation in warm conveyor belts in the western North Pacific in winter a model study with ECHAM6-HAM **2016**,		1
172	Processes leading to heavy precipitation associated with two Mediterranean cyclones observed during the HyMeX SOP1. *Quarterly Journal of the Royal Meteorological Society*, **2016**, 142, 275-286	6.4	32
171	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	6.4	14
170	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	6.4	25
169	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	2.1	56
168	Drivers of H variations in an idealized extratropical cyclone. *Geophysical Research Letters*, **2016**, 43, 5401-5408	4.9	10

167	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	4.4	56
166	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	6.4	64
165	The Lagrangian analysis tool LAGRANTO – version 2.0 **2015**,		12
164	Importance of latent heat release in ascending air streams for atmospheric blocking. *Nature Geoscience*, **2015**, 8, 610-614	18.3	123
163	Tropopause folds in ERA-Interim: Global climatology and relation to extreme weather events. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 4860-4877	4.4	61
162	IWAL – An Interactive Weather Analysis Laboratory. *Bulletin of the American Meteorological Society*, **2015**, 96, 903-909	6.1	1
161	The dynamical structure of intense Mediterranean cyclones. *Climate Dynamics*, **2015**, 44, 2411-2427	4.2	54
160	Isotope meteorology of cold front passages: A case study combining observations and modeling. *Geophysical Research Letters*, **2015**, 42, 5652-5660	4.9	44
159	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	6.4	13
158	The transatlantic dust transport from North Africa to the Americas – Its characteristics and source regions. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 11,231-11,252	4.4	25
157	Stratosphere–troposphere exchange (STE) in the vicinity of North Atlantic cyclones. *Atmospheric Chemistry and Physics*, **2015**, 15, 10939-10953	6.8	15
156	Verification of North Atlantic warm conveyor belt outflows in ECMWF forecasts. *Quarterly Journal of the Royal Meteorological Society*, **2015**, 141, 1333-1344	6.4	12
155	A Lagrangian investigation of hot and cold temperature extremes in Europe. *Quarterly Journal of the Royal Meteorological Society*, **2015**, 141, 98-108	6.4	62
154	Diabatic Rossby waves in the Southern Hemisphere. *Quarterly Journal of the Royal Meteorological Society*, **2015**, 141, 3106-3117	6.4	3
153	Climatology of potential vorticity streamers and associated isentropic transport pathways across PV gradient barriers. *Journal of Geophysical Research D: Atmospheres*, **2015**, 120, 3802-3821	4.4	25
152	The LAGRANTO Lagrangian analysis tool – version 2.0. *Geoscientific Model Development*, **2015**, 8, 2569-2586	6.3	189
151	DYNAMICAL METEOROLOGY | Quasigeostrophic Theory **2015**, 393-403		3
150	Mechanisms underlying temperature extremes in Iberia: a Lagrangian perspective. *Tellus, Series A: Dynamic Meteorology and Oceanography*, **2015**, 67, 26032	2	11

149	Pollution patterns in the upper troposphere over Europe and Asia observed by CARIBIC. *Atmospheric Environment*, **2014**, 96, 245-256	5.3	3
148	Estimates of background surface ozone concentrations in the United States based on model-derived source apportionment. *Atmospheric Environment*, **2014**, 84, 275-288	5.3	55
147	How important is intensified evaporation for Mediterranean precipitation extremes?. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 5240-5256	4.4	47
146	On the linkage between the Asian summer monsoon and tropopause fold activity over the eastern Mediterranean and the Middle East. *Journal of Geophysical Research D: Atmospheres*, **2014**, 119, 3202-3221	4.4	44
145	On the Co-Occurrence of Warm Conveyor Belt Outflows and PV Streamers*. *Journals of the Atmospheric Sciences*, **2014**, 71, 3668-3673	2.1	16
144	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. *Atmospheric Chemistry and Physics*, **2014**, 14, 10803-10822	6.8	19
143	Comparison of Eulerian and Lagrangian moisture source diagnostics the flood event in eastern Europe in May 2010. *Atmospheric Chemistry and Physics*, **2014**, 14, 6605-6619	6.8	42
142	A global climatology of stratosphere troposphere exchange using the ERA-Interim data set from 1979 to 2011. *Atmospheric Chemistry and Physics*, **2014**, 14, 913-937	6.8	166
141	Deuterium excess as a proxy for continental moisture recycling and plant transpiration. *Atmospheric Chemistry and Physics*, **2014**, 14, 4029-4054	6.8	112
140	3-D model simulations of dynamical and microphysical interactions in pyroconvective clouds under idealized conditions. *Atmospheric Chemistry and Physics*, **2014**, 14, 7573-7583	6.8	17
139	A new circulation type classification based upon Lagrangian air trajectories. *Frontiers in Earth Science*, **2014**, 2,	3.5	5
138	Atmospheric processes triggering the central European floods in June 2013. *Natural Hazards and Earth System Sciences*, **2014**, 14, 1691-1702	3.9	88
137	The Role of Extratropical Cyclones and Fronts for Southern Ocean Freshwater Fluxes. *Journal of Climate*, **2014**, 27, 6205-6224	4.4	51
136	HyMeX: A 10-Year Multidisciplinary Program on the Mediterranean Water Cycle. *Bulletin of the American Meteorological Society*, **2014**, 95, 1063-1082	6.1	254
135	The Linkage between the Warm and the Cold Conveyor Belts in an Idealized Extratropical Cyclone*. *Journals of the Atmospheric Sciences*, **2014**, 71, 1443-1459	2.1	31
134	Warm Conveyor Belts in the ERA-Interim Dataset (1979 2010). Part I: Climatology and Potential Vorticity Evolution. *Journal of Climate*, **2014**, 27, 3-26	4.4	170
133	The dichotomous structure of the warm conveyor belt. *Quarterly Journal of the Royal Meteorological Society*, **2014**, 140, 1809-1824	6.4	36
132	Planning aircraft measurements within a warm conveyor belt. *Weather*, **2014**, 69, 161-166	0.9	18

131	Warm Conveyor Belts in the ERA-Interim Dataset (1979–2010). Part II: Moisture Origin and Relevance for Precipitation. *Journal of Climate*, **2014**, 27, 27-40	4.4	125
130	Warm Conveyor Belts in Idealized Moist Baroclinic Wave Simulations*. *Journals of the Atmospheric Sciences*, **2013**, 70, 627-652	2.1	62
129	IMILAST: A Community Effort to Intercompare Extratropical Cyclone Detection and Tracking Algorithms. *Bulletin of the American Meteorological Society*, **2013**, 94, 529-547	6.1	308
128	A 10-yr Climatology of Diabatic Rossby Waves in the Northern Hemisphere. *Monthly Weather Review*, **2013**, 141, 1139-1154	2.4	27
127	A Global Climatology of Tropical Moisture Exports. *Journal of Climate*, **2013**, 26, 3031-3045	4.4	69
126	A bulk parametrization of melting snowflakes with explicit liquid water fraction for the COSMO model. *Geoscientific Model Development*, **2013**, 6, 1925-1939	6.3	18
125	An online trajectory module (version 1.0) for the nonhydrostatic numerical weather prediction model COSMO. *Geoscientific Model Development*, **2013**, 6, 1989-2004	6.3	35
124	The role of upper-level dynamics and surface processes for the Pakistan flood of July 2010. *Quarterly Journal of the Royal Meteorological Society*, **2013**, 139, 1780-1797	6.4	93
123	Are Greenhouse Gas Signals of Northern Hemisphere winter extra-tropical cyclone activity dependent on the identification and tracking algorithm?. *Meteorologische Zeitschrift*, **2013**, 22, 61-68	3.1	67
122	Microphysical and radiative changes in cirrus clouds by geoengineering the stratosphere. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 4533-4548	4.4	23
121	Tropopause level Rossby wave breaking in the Northern Hemisphere: a feature-based validation of the ECHAM5-HAM climate model. *International Journal of Climatology*, **2013**, 33, 3073-3082	3.5	10
120	Identification of glacial meltwater runoff in a karstic environment and its implication for present and future water availability. *Hydrology and Earth System Sciences*, **2013**, 17, 3261-3277	5.5	33
119	Meteorological influences on the incidence of aneurysmal subarachnoid hemorrhage - a single center study of 511 patients. *PLoS ONE*, **2013**, 8, e81621	3.7	8
118	Spatial coherency of extreme weather events in Germany and Switzerland. *International Journal of Climatology*, **2012**, 32, 1863-1874	3.5	14
117	A Case Study of High-Impact Wet Snowfall in Northwest Germany (25–27 November 2005): Observations, Dynamics, and Forecast Performance. *Weather and Forecasting*, **2012**, 27, 1217-1234	2.1	16
116	Quantifying the relevance of atmospheric blocking for co-located temperature extremes in the Northern Hemisphere on (sub-)daily time scales. *Geophysical Research Letters*, **2012**, 39, n/a-n/a	4.9	168
115	Quantifying the importance of stratospheric-tropospheric transport on surface ozone concentrations at high- and low-elevation monitoring sites in the United States. *Atmospheric Environment*, **2012**, 62, 646-656	5.3	46
114	Quantifying the Relevance of Cyclones for Precipitation Extremes. *Journal of Climate*, **2012**, 25, 6770-6780	4.4	197

113	Influence of microphysical processes on the potential vorticity development in a warm conveyor belt: a case-study with the limited-area model COSMO. *Quarterly Journal of the Royal Meteorological Society*, **2012**, 138, 407-418	6.4	98
112	Impact of North Atlantic evaporation hot spots on southern Alpine heavy precipitation events. *Quarterly Journal of the Royal Meteorological Society*, **2012**, 138, 1245-1258	6.4	55
111	A PV Perspective on the Vertical Structure of Mature Midlatitude Cyclones in the Northern Hemisphere. *Journals of the Atmospheric Sciences*, **2012**, 69, 725-740	2.1	72
110	A Trajectory-Based Investigation of Physical and Dynamical Processes That Govern the Temporal Evolution of the Subtropical Jet Streams over Africa. *Journals of the Atmospheric Sciences*, **2012**, 69, 1602-1616	2.1	8
109	Measuring variations of ¹⁸O and ²H in atmospheric water vapour using two commercial laser-based spectrometers: an instrument characterisation study. *Atmospheric Measurement Techniques*, **2012**, 5, 1491-1511	4	91
108	Measuring variations of ¹⁸O and ²H in atmospheric water vapour using laser spectroscopy: an instrument characterisation study **2012**,		3
107	The 1-way on-line coupled atmospheric chemistry model system MECO(n) – Part 3: Meteorological evaluation of the on-line coupled system. *Geoscientific Model Development*, **2012**, 5, 129-147	6.3	11
106	Detection, tracking and event localization of jet stream features in 4-D atmospheric data. *Geoscientific Model Development*, **2012**, 5, 457-470	6.3	20
105	The Mineral Dust Cycle in EMAC 2.40: sensitivity to the spectral resolution and the dust emission scheme. *Atmospheric Chemistry and Physics*, **2012**, 12, 1611-1627	6.8	25
104	The isotopic composition of precipitation from a winter storm – a case study with the limited-area model COSMO_{iso}. *Atmospheric Chemistry and Physics*, **2012**, 12, 1629-1648	6.8	58
103	Classification of precipitation events with a convective response timescale and their forecasting characteristics. *Geophysical Research Letters*, **2011**, 38, n/a-n/a	4.9	36
102	Life Cycle Study of a Diabatic Rossby Wave as a Precursor to Rapid Cyclogenesis in the North Atlantic – Dynamics and Forecast Performance. *Monthly Weather Review*, **2011**, 139, 1861-1878	2.4	29
101	Verification of quantitative precipitation forecasts on short time-scales: A fuzzy approach to handle timing errors with SAL. *Meteorologische Zeitschrift*, **2011**, 20, 95-105	3.1	11
100	The importance of stratospheric–tropospheric transport in affecting surface ozone concentrations in the western and northern tier of the United States. *Atmospheric Environment*, **2011**, 45, 4845-4857	5.3	67
99	The Convective and Orographically-induced Precipitation Study (COPS): the scientific strategy, the field phase, and research highlights. *Quarterly Journal of the Royal Meteorological Society*, **2011**, 137, 3-30	6.4	149
98	Airborne lidar observations in the inflow region of a warm conveyor belt. *Quarterly Journal of the Royal Meteorological Society*, **2011**, 137, 1257-1272	6.4	20
97	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	6.4	153
96	The 1-way on-line coupled atmospheric chemistry model system MECO(n) – Part 3: Meteorological evaluation of the on-line coupled system **2011**,		1

95	A Lagrangian Climatology of Tropical Moisture Exports to the Northern Hemispheric Extratropics. *Journal of Climate*, **2010**, 23, 987-1003	4.4	164
94	How representative were the meteorological conditions during the COPS field experiment in summer 2007?. *Meteorologische Zeitschrift*, **2010**, 19, 619-630	3.1	6
93	Transport timescales and tracer properties in the extratropical UTLS. *Atmospheric Chemistry and Physics*, **2010**, 10, 7929-7944	6.8	32
92	Forecasted deep stratospheric intrusions over Central Europe: case studies and climatologies. *Atmospheric Chemistry and Physics*, **2010**, 10, 499-524	6.8	55
91	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	5.3	42
90	Spatial Forecast Verification Methods Intercomparison Project: Application of the SAL Technique. *Weather and Forecasting*, **2009**, 24, 1472-1484	2.1	45
89	Multi-model simulations of a convective situation in low-mountain terrain in central Europe. *Meteorology and Atmospheric Physics*, **2009**, 103, 95-103	2	23
88	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	6.4	61
87	Lagrangian simulations of stable isotopes in water vapor: An evaluation of nonequilibrium fractionation in the Craig-Gordon model. *Journal of Geophysical Research*, **2009**, 114,		34
86	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,		15
85	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	6.8	241
84	Interannual variability of Greenland winter precipitation sources: Lagrangian moisture diagnostic and North Atlantic Oscillation influence. *Journal of Geophysical Research*, **2008**, 113,		202
83	Comparison of ERA40 cloud top phase with POLDER-1 observations. *Journal of Geophysical Research*, **2008**, 113, n/a-n/a		10
82	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,		99
81	Air parcel trajectory analysis of stable isotopes in water vapor in the eastern Mediterranean. *Journal of Geophysical Research*, **2008**, 113,		104
80	Northern Hemisphere Extratropical Cyclones: A Comparison of Detection and Tracking Methods and Different Reanalyses. *Monthly Weather Review*, **2008**, 136, 880-897	2.4	163
79	SAL—A Novel Quality Measure for the Verification of Quantitative Precipitation Forecasts. *Monthly Weather Review*, **2008**, 136, 4470-4487	2.4	233
78	The general observation period 2007 within the priority program on quantitative precipitation forecasting: Concept and first results. *Meteorologische Zeitschrift*, **2008**, 17, 849-866	3.1	23

77	A gridded dataset of hourly precipitation in Germany: Its construction, climatology and application. *Meteorologische Zeitschrift*, **2008**, 17, 719-732	3.1	39
76	Airborne in-situ measurements of vertical, seasonal and latitudinal distributions of carbon dioxide over Europe. *Atmospheric Chemistry and Physics*, **2008**, 8, 6395-6403	6.8	29
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