Martin Weissmann

List of Publications by Year in Descending Order

43 papers	1,321 citations	21 h-index	36 g-index
55 ext. papers	1,547 ext. citations	3.8 avg, IF	4.47 L-index

#	Paper	IF	Citations
43	Validation of Aeolus winds using radiosonde observations and numerical weather prediction model equivalents. *Atmospheric Measurement Techniques*, **2021**, 14, 2167-2183	4	19
42	Understanding the model representation of clouds based on visible and infrared satellite observations. *Atmospheric Chemistry and Physics*, **2021**, 21, 12273-12290	6.8	1
41	Assimilating visible satellite images for convective-scale numerical weather prediction: A case-study. *Quarterly Journal of the Royal Meteorological Society*, **2020**, 146, 3165-3186	6.4	7
40	A convective-scale 1,000-member ensemble simulation and potential applications. *Quarterly Journal of the Royal Meteorological Society*, **2020**, 146, 1423-1442	6.4	12
39	Assimilation of SEVIRI Water Vapor Channels With an Ensemble Kalman Filter on the Convective Scale. *Frontiers in Earth Science*, **2020**, 8,	3.5	1
38	Assimilating Visible and Infrared Radiances in Idealized Simulations of Deep Convection. *Monthly Weather Review*, **2020**, 148, 4357-4375	2.4	3
37	The Impact of Dropsonde and Extra Radiosonde Observations during NAWDEX in Autumn 2016. *Monthly Weather Review*, **2020**, 148, 809-824	2.4	7
36	First Results from the German Cal/Val Activities for Aeolus. *EPJ Web of Conferences*, **2020**, 237, 01008	0.3	6
35	Predictability of Deep Convection in Idealized and Operational Forecasts: Effects of Radar Data Assimilation, Orography, and Synoptic Weather Regime. *Monthly Weather Review*, **2020**, 148, 63-81	2.4	15
34	Site-specific assessment of mechanical loads on photovoltaic modules from meteorological reanalysis data. *Solar Energy*, **2019**, 188, 1134-1145	6.8	4
33	Sampling Error Correction Evaluated Using a Convective-Scale 1000-Member Ensemble. *Monthly Weather Review*, **2019**, 148, 1229-1249	2.4	6
32	Impact of radar data assimilation and orography on predictability of deep convection. *Quarterly Journal of the Royal Meteorological Society*, **2019**, 145, 117-130	6.4	19
31	Survey of data assimilation methods for convective-scale numerical weather prediction at operational centres. *Quarterly Journal of the Royal Meteorological Society*, **2018**, 144, 1218-1256	6.4	125
30	The importance of appropriate verification metrics for the assessment of observation impact in a convection-permitting modelling system. *Quarterly Journal of the Royal Meteorological Society*, **2018**, 144, 1667-1680	6.4	15
29	Efficient Methods to Account for Cloud-Top Inclination and Cloud Overlap in Synthetic Visible Satellite Images. *Journal of Atmospheric and Oceanic Technology*, **2018**, 35, 665-685	2	11
28	Ensemble-based approximation of observation impact using an observation-based verification metric. *Tellus, Series A: Dynamic Meteorology and Oceanography*, **2016**, 68, 27885	2	12
27	HErZ: The German Hans-Ertel Centre for Weather Research. *Bulletin of the American Meteorological Society*, **2016**, 97, 1057-1068	6.1	48

26	Error model for the assimilation of cloud-affected infrared satellite observations in an ensemble data assimilation system. *Quarterly Journal of the Royal Meteorological Society*, **2016**, 142, 1797-1808	6.4	29
25	Lidar-Based Height Correction for the Assimilation of Atmospheric Motion Vectors. *Journal of Applied Meteorology and Climatology*, **2016**, 55, 2211-2227	2.7	3
24	Observation impact in a convective-scale localized ensemble transform Kalman filter. *Quarterly Journal of the Royal Meteorological Society*, **2014**, 140, 2672-2679	6.4	17
23	Initial phase of the Hans-Ertel Centre for Weather Research□A virtual centre at the interface of basic and applied weather and climate research. *Meteorologische Zeitschrift*, **2014**, 23, 193-208	3.1	34
22	Lidar-Measured Wind Profiles: The Missing Link in the Global Observing System. *Bulletin of the American Meteorological Society*, **2014**, 95, 543-564	6.1	87
21	Height Correction of Atmospheric Motion Vectors Using Satellite Lidar Observations from CALIPSO. *Journal of Applied Meteorology and Climatology*, **2014**, 53, 1809-1819	2.7	12
20	Observation Operator for Visible and Near-Infrared Satellite Reflectances. *Journal of Atmospheric and Oceanic Technology*, **2014**, 31, 1216-1233	2	29
19	The impact of Typhoon Jangmi (2008) on the midlatitude flow. Part I: Upper-level ridgebuilding and modification of the jet. *Quarterly Journal of the Royal Meteorological Society*, **2013**, 139, 2148-2164	6.4	50
18	High-Resolution Doppler Lidar Observations of Transient Downslope Flows and Rotors. *Monthly Weather Review*, **2013**, 141, 3257-3272	2.4	15
17	Height Correction of Atmospheric Motion Vectors Using Airborne Lidar Observations. *Journal of Applied Meteorology and Climatology*, **2013**, 52, 1868-1877	2.7	11
16	Influence of airborne Doppler wind lidar profiles near Typhoon Sinlaku on ECMWF and NOGAPS forecasts. *Quarterly Journal of the Royal Meteorological Society*, **2012**, 138, 118-130	6.4	25
15	Experimental assimilation of DIAL water vapour observations in the ECMWF global model. *Quarterly Journal of the Royal Meteorological Society*, **2011**, 137, 1532-1546	6.4	21
14	The Influence of Assimilating Dropsonde Data on Typhoon Track and Midlatitude Forecasts. *Monthly Weather Review*, **2011**, 139, 908-920	2.4	72
13	The Impact of Dropwindsonde Observations on Typhoon Track Forecasts in DOTSTAR and T-PARC. *Monthly Weather Review*, **2011**, 139, 1728-1743	2.4	60
12	Sensitivity of Typhoon Forecasts to Different Subsets of Targeted Dropsonde Observations. *Monthly Weather Review*, **2010**, 138, 2664-2680	2.4	38
11	Coplanar Doppler Lidar Retrieval of Rotors from T-REX. *Journals of the Atmospheric Sciences*, **2010**, 67, 713-729	2.1	41
10	Vorticity from Line-of-Sight Lidar Velocity Scans. *Journal of Atmospheric and Oceanic Technology*, **2009**, 26, 2683-2690	2	6
9	Observations and Numerical Simulations of Subrotor Vortices during T-REX. *Journals of the Atmospheric Sciences*, **2009**, 66, 1229-1249	2.1	42

8	Three-Dimensional Wind Retrieval: Application of MUSCAT to Dual-Doppler Lidar. *Journal of Atmospheric and Oceanic Technology*, **2009**, 26, 635-646	2	22
7	THE TERRAIN-INDUCED ROTOR EXPERIMENT. *Bulletin of the American Meteorological Society*, **2008**, 89, 1513-1534	6.1	157
6	Impact of airborne Doppler lidar observations on ECMWF forecasts. *Quarterly Journal of the Royal Meteorological Society*, **2007**, 133, 107-116	6.4	36
5	Gap flows: Results from the Mesoscale Alpine Programme. *Quarterly Journal of the Royal Meteorological Society*, **2007**, 133, 881-896	6.4	68
4	Key analysis errors and airborne wind lidar observations. *Meteorologische Zeitschrift*, **2007**, 16, 709-721	3.1	1
3	The Alpine Mountain–Plain Circulation: Airborne Doppler Lidar Measurements and Numerical Simulations. *Monthly Weather Review*, **2005**, 133, 3095-3109	2.4	55
2	Targeted Observations with an Airborne Wind Lidar. *Journal of Atmospheric and Oceanic Technology* , **2005**, 22, 1706-1719	2	57
1	Observations of the Temporal Evolution and Spatial Structure of the Gap Flow in the Wipp Valley on 2 and 3 October 1999. *Monthly Weather Review*, **2004**, 132, 2684-2697	2.4	21