Chun-Chieh Wu

List of Publications by Citations

108 papers	4,556 citations	36 h-index	65 g-index
115 ext. papers	5,149 ext. citations	2.7 avg, IF	5.63 L-index

#	Paper	IF	Citations
108	New evidence for enhanced ocean primary production triggered by tropical cyclone. *Geophysical Research Letters*, **2003**, 30,	4.9	295
107	Current understanding of tropical cyclone structure and intensity changes a review. *Meteorology and Atmospheric Physics*, **2004**, 87, 257-278	2	243
106	The Interaction of Supertyphoon Maemi (2003) with a Warm Ocean Eddy. *Monthly Weather Review*, **2005**, 133, 2635-2649	2.4	222
105	Upper-Ocean Thermal Structure and the Western North Pacific Category 5 Typhoons. Part I: Ocean Features and the Category 5 Typhoons Intensification. *Monthly Weather Review*, **2008**, 136, 3288-3306	2.4	204
104	Typhoons Affecting Taiwan: Current Understanding and Future Challenges. *Bulletin of the American Meteorological Society*, **1999**, 80, 67-80	6.1	204
103	Warm ocean anomaly, air sea fluxes, and the rapid intensification of tropical cyclone Nargis (2008). *Geophysical Research Letters*, **2009**, 36, n/a-n/a	4.9	139
102	An ocean coupling potential intensity index for tropical cyclones. *Geophysical Research Letters*, **2013**, 40, 1878-1882	4.9	126
101	The Effect of the Ocean Eddy on Tropical Cyclone Intensity. *Journals of the Atmospheric Sciences*, **2007**, 64, 3562-3578	2.1	125
100	Upper-Ocean Thermal Structure and the Western North Pacific Category 5 Typhoons. Part II: Dependence on Translation Speed. *Monthly Weather Review*, **2009**, 137, 3744-3757	2.4	124
99	Rainfall Simulation Associated with Typhoon Herb (1996) near Taiwan. Part I: The Topographic Effect. *Weather and Forecasting*, **2002**, 17, 1001-1015	2.1	110
98	Concentric Eyewall Formation in Typhoon Sinlaku (2008). Part II: Axisymmetric Dynamical Processes. *Journals of the Atmospheric Sciences*, **2012**, 69, 662-674	2.1	104
97	Targeted Observations of Tropical Cyclone Movement Based on the Adjoint-Derived Sensitivity Steering Vector. *Journals of the Atmospheric Sciences*, **2007**, 64, 2611-2626	2.1	101
96	Interaction of a Baroclinic Vortex with Background Shear: Application to Hurricane Movement. *Journals of the Atmospheric Sciences*, **1993**, 50, 62-76	2.1	98
95	Environmental Dynamical Control of Tropical Cyclone Intensity An Observational Study. *Monthly Weather Review*, **2007**, 135, 38-59	2.4	96
94	Impact of Typhoons on the Ocean in the Pacific. *Bulletin of the American Meteorological Society*, **2014**, 95, 1405-1418	6.1	94
93	Satellite observations of modulation of surface winds by typhoon-induced upper ocean cooling. *Geophysical Research Letters*, **2003**, 30,	4.9	94
92	The Impact of Dropwindsonde Data on Typhoon Track Forecasts in DOTSTAR. *Weather and Forecasting*, **2007**, 22, 1157-1176	2.1	87

91	IN BOX. *Bulletin of the American Meteorological Society*, **2005**, 86, 787-794	6.1	73
90	The Influence of Assimilating Dropsonde Data on Typhoon Track and Midlatitude Forecasts. *Monthly Weather Review*, **2011**, 139, 908-920	2.4	72
89	Numerical Simulation of Typhoon Gladys (1994) and Its Interaction with Taiwan Terrain Using the GFDL Hurricane Model. *Monthly Weather Review*, **2001**, 129, 1533-1549	2.4	68
88	Change of tropical cyclone activity by Pacific-Japan teleconnection pattern in the western North Pacific. *Journal of Geophysical Research*, **2010**, 115,		65
87	Potential vorticity Diagnostics of Hurricane Movement. Part 1: A Case Study of Hurricane Bob (1991). *Monthly Weather Review*, **1995**, 123, 69-92	2.4	65
86	Intercomparison of Targeted Observation Guidance for Tropical Cyclones in the Northwestern Pacific. *Monthly Weather Review*, **2009**, 137, 2471-2492	2.4	64
85	Monsoonal Influence on Typhoon Morakot (2009). Part I: Observational Analysis. *Journals of the Atmospheric Sciences*, **2011**, 68, 2208-2221	2.1	63
84	Influence of Tropical Cyclones on the Estimation of Climate Variability in the Tropical Western North Pacific. *Journal of Climate*, **2008**, 21, 2960-2975	4.4	63
83	Impact of SSTA in the East Indian Ocean on the Frequency of Northwest Pacific Tropical Cyclones: A Regional Atmospheric Model Study. *Journal of Climate*, **2011**, 24, 6227-6242	4.4	62
82	A Numerical Study of the Track Deflection of Supertyphoon Haitang (2005) Prior to Its Landfall in Taiwan. *Monthly Weather Review*, **2008**, 136, 598-615	2.4	62
81	The Impact of Dropwindsonde Observations on Typhoon Track Forecasts in DOTSTAR and T-PARC. *Monthly Weather Review*, **2011**, 139, 1728-1743	2.4	60
80	Concentric Eyewall Formation in Typhoon Sinlaku (2008). Part I: Assimilation of T-PARC Data Based on the Ensemble Kalman Filter (EnKF). *Monthly Weather Review*, **2012**, 140, 506-527	2.4	57
79	A New Look at the Binary Interaction: Potential Vorticity Diagnosis of the Unusual Southward Movement of Tropical Storm Bopha (2000) and Its Interaction with Supertyphoon Saomai (2000). *Monthly Weather Review*, **2003**, 131, 1289-1300	2.4	53
78	Assimilation of Tropical Cyclone Track and Structure Based on the Ensemble Kalman Filter (EnKF). *Journals of the Atmospheric Sciences*, **2010**, 67, 3806-3822	2.1	52
77	The Influence of Island Topography on Typhoon Track Deflection. *Monthly Weather Review*, **2011**, 139, 1708-1727	2.4	49
76	Potential Vorticity Diagnostics of Hurricane Movement. Part II: Tropical Storm Ana (1991) and Hurricane Andrew (1992). *Monthly Weather Review*, **1995**, 123, 93-109	2.4	49
75	A Numerical Study of the Feedback Mechanisms of Hurricane–Environment Interaction on Hurricane Movement from the Potential Vorticity Perspective. *Journals of the Atmospheric Sciences*, **1996**, 53, 2264-2282	2.1	48
74	Monsoonal Influence on Typhoon Morakot (2009). Part II: Numerical Study. *Journals of the Atmospheric Sciences*, **2011**, 68, 2222-2235	2.1	44

73	Typhoon Initialization in a Mesoscale Model: Combination of the Bogused Vortex and the Dropwindsonde Data in DOTSTAR. *Monthly Weather Review*, **2008**, 136, 865-879	2.4	38
72	Tropical cyclone-ocean interaction in Typhoon Megi (2010): A synergy study based on ITOP observations and atmosphere-ocean coupled model simulations. *Journal of Geophysical Research D: Atmospheres*, **2016**, 121, 153-167	4.4	36
71	A Numerical Investigation of the Eyewall Evolution in a Landfalling Typhoon. *Monthly Weather Review*, **2009**, 137, 21-40	2.4	36
70	Tropical Cyclone Initialization and Prediction Based on Four-Dimensional Variational Data Assimilation. *Journals of the Atmospheric Sciences*, **2006**, 63, 2383-2395	2.1	36
69	Typhoon Morakot: Key Findings from the Journal TAO for Improving Prediction of Extreme Rains at Landfall. *Bulletin of the American Meteorological Society*, **2013**, 94, 155-160	6.1	35
68	Numerical Study of the Rainfall Event due to the Interaction of Typhoon Babs (1998) and the Northeasterly Monsoon. *Monthly Weather Review*, **2009**, 137, 2049-2064	2.4	35
67	An Observing System Experiment for Typhoon Conson (2004) Using a Singular Vector Method and DOTSTAR Data. *Monthly Weather Review*, **2009**, 137, 2801-2816	2.4	33
66	Influence of Mesoscale Topography on Tropical Cyclone Tracks: Further Examination of the Channeling Effect. *Journals of the Atmospheric Sciences*, **2015**, 72, 3032-3050	2.1	31
65	Possible connection between summer tropical cyclone frequency and spring Arctic Oscillation over East Asia. *Climate Dynamics*, **2012**, 38, 2613-2629	4.2	29
64	Interaction of Typhoon Shanshan (2006) with the Midlatitude Trough from both Adjoint-Derived Sensitivity Steering Vector and Potential Vorticity Perspectives. *Monthly Weather Review*, **2009**, 137, 852-862	2.4	29
63	Secondary Eyewall Formation in an Idealized Tropical Cyclone Simulation: Balanced and Unbalanced Dynamics. *Journals of the Atmospheric Sciences*, **2016**, 73, 3911-3930	2.1	28
62	Interpretation of Tropical Cyclone Forecast Sensitivity from the Singular Vector Perspective. *Journals of the Atmospheric Sciences*, **2009**, 66, 3383-3400	2.1	27
61	Impacts of typhoon megi (2010) on the South China Sea. *Journal of Geophysical Research: Oceans*, **2014**, 119, 4474-4489	3.3	25
60	The Impact of a Warm Ocean Eddy on Typhoon Morakot (2009): A Preliminary Study from Satellite Observations and Numerical Modelling. *Terrestrial, Atmospheric and Oceanic Sciences*, **2011**, 22, 661	1.8	24
59	Binary Interaction between Typhoons Fengshen (2002) and Fungwong (2002) Based on the Potential Vorticity Diagnosis. *Monthly Weather Review*, **2008**, 136, 4593-4611	2.4	24
58	Eyewall Contraction, Breakdown and Reformation in a Landfalling Typhoon. *Geophysical Research Letters*, **2003**, 30, n/a-n/a	4.9	24
57	On the Processes Leading to the Rapid Intensification of Typhoon Megi (2010). *Journals of the Atmospheric Sciences*, **2017**, 74, 1169-1200	2.1	23
56	Assessment of the ASCAT wind error characteristics by global dropwindsonde observations. *Journal of Geophysical Research D: Atmospheres*, **2013**, 118, 9011-9021	4.4	23

55	Advances in understanding the Perfect Monsoon-influenced Typhoon Summary from International Conference on Typhoon Morakot (2009). *Asia-Pacific Journal of Atmospheric Sciences*, **2011**, 47, 213-222	2.1	21
54	Rainfall Simulations of Typhoon Morakot with Controlled Translation Speed Based on EnKF Data Assimilation. *Terrestrial, Atmospheric and Oceanic Sciences*, **2011**, 22, 647	1.8	21
53	Potential Vorticity Diagnosis of the Factors Affecting the Track of Typhoon Sinlaku (2008) and the Impact from Dropwindsonde Data during T-PARC. *Monthly Weather Review*, **2012**, 140, 2670-2688	2.4	21
52	Potential Vorticity Diagnosis of the Key Factors Affecting the Motion of Typhoon Sinlaku (2002). *Monthly Weather Review*, **2004**, 132, 2084-2093	2.4	20
51	Effect of targeted dropsonde observations and best track data on the track forecasts of Typhoon Sinlaku (2008) using an ensemble Kalman filter. *Tellus, Series A: Dynamic Meteorology and Oceanography*, **2012**, 64, 14984	2	18
50	The Role of Convective Heating in Tropical Cyclone Eyewall Ring Evolution. *Journals of the Atmospheric Sciences*, **2016**, 73, 319-330	2.1	17
49	Driftsondes: Providing In Situ Long-Duration Dropsonde Observations over Remote Regions. *Bulletin of the American Meteorological Society*, **2013**, 94, 1661-1674	6.1	17
48	An Observational Study of Environmental Influences on the Intensity Changes of Typhoons Flo (1990) and Gene (1990). *Monthly Weather Review*, **1999**, 127, 3003-3031	2.4	17
47	Influence of the Size of Supertyphoon Megi (2010) on SST Cooling. *Monthly Weather Review*, **2018**, 146, 661-677	2.4	16
46	Internal Variability of the Dynamically Downscaled Tropical Cyclone Activity over the Western North Pacific by the IPRC Regional Atmospheric Model. *Journal of Climate*, **2012**, 25, 2104-2122	4.4	16
45	Comments on How Does the Boundary Layer Contribute to Eyewall Replacement Cycles in Axisymmetric Tropical Cyclones? *Journals of the Atmospheric Sciences*, **2014**, 71, 4682-4691	2.1	15
44	Optical and radio signatures of negative gigantic jets: Cases from Typhoon Lionrock (2010). *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		14
43	Validation of QuikSCAT wind vectors by dropwindsonde data from Dropwindsonde Observations for Typhoon Surveillance Near the Taiwan Region (DOTSTAR). *Journal of Geophysical Research*, **2010**, 115,		14
42	Characteristics of Ensemble Transform Kalman Filter adaptive sampling guidance for tropical cyclones. *Quarterly Journal of the Royal Meteorological Society*, **2011**, 137, 503-520	6.4	13
41	Typhoon-Position-Oriented Sensitivity Analysis. Part I: Theory and Verification. *Journals of the Atmospheric Sciences*, **2013**, 70, 2525-2546	2.1	12
40	Controlling synoptic-scale factors for the distribution of transient luminous events. *Journal of Geophysical Research*, **2010**, 115, n/a-n/a		12
39	Statistical Characteristic of Heavy Rainfall Associated with Typhoons near Taiwan Based on High-Density Automatic Rain Gauge Data. *Bulletin of the American Meteorological Society*, **2016**, 97, 1363-1375	6.1	12
38	The Role of Near-Core Convective and Stratiform Heating/Cooling in Tropical Cyclone Structure and Intensity. *Journals of the Atmospheric Sciences*, **2018**, 75, 297-326	2.1	12

37	The degree of prevalence of similarity between outer tropical cyclone rainbands and squall lines. *Scientific Reports*, **2018**, 8, 8247	4.9	11
36	Eyewall Evolution of Typhoons Crossing the Philippines and Taiwan: An Observational Study. *Terrestrial, Atmospheric and Oceanic Sciences*, **2011**, 22, 535	1.8	10
35	Typhoon Forecast with the GFDL Hurricane Model. *Journal of the Meteorological Society of Japan*, **2000**, 78, 777-788	2.8	10
34	Uncertainty and Predictability of Tropical Cyclone Rainfall Based on Ensemble Simulations of Typhoon Sinlaku (2008). *Monthly Weather Review*, **2013**, 141, 3517-3538	2.4	9
33	Preface to the Special Issue on "Typhoon Morakot (2009): Observation, Modeling, and Forecasting". *Terrestrial, Atmospheric and Oceanic Sciences*, **2011**, 22, 000	1.8	9
32	Concentric Eyewall Formation in Typhoon Sinlaku (2008). Part III: Horizontal Momentum Budget Analyses. *Journals of the Atmospheric Sciences*, **2018**, 75, 3541-3563	2.1	9
31	The Impact of Idealized Terrain on Upstream Tropical Cyclone Track. *Journals of the Atmospheric Sciences*, **2018**, 75, 3887-3910	2.1	9
30	The Impact of Tropical Storm Paul (1999) on the Motion and Rainfall Associated with Tropical Storm Rachel (1999) near Taiwan. *Monthly Weather Review*, **2010**, 138, 1635-1650	2.4	8
29	Validation and Interpretation of Adjoint-Derived Sensitivity Steering Vector as Targeted Observation Guidance. *Monthly Weather Review*, **2011**, 139, 1608-1625	2.4	8
28	The Remote Effect of Typhoon Megi (2010) on the Heavy Rainfall over Northeastern Taiwan. *Monthly Weather Review*, **2016**, 144, 3109-3131	2.4	8
27	Synoptic Analysis of Extreme Hourly Precipitation in Taiwan during 2003–12. *Monthly Weather Review*, **2017**, 145, 5123-5140	2.4	7
26	Numerical Simulations of Typhoon Morakot (2009) Using a Multiply Nested Tropical Cyclone Prediction Model. *Weather and Forecasting*, **2016**, 31, 627-645	2.1	7
25	The Role of WISHE in Secondary Eyewall Formation. *Journals of the Atmospheric Sciences*, **2018**, 75, 3823-3841	2.1	7
24	TROPICAL CYCLONE CHARACTERISTICS AND MONSOON CIRCULATIONS. *World Scientific Series on Asia-Pacific Weather and Climate*, **2011**, 357-372		7
23	Effect of ENSO on landfalling tropical cyclones over the Korean peninsula. *Asia-Pacific Journal of Atmospheric Sciences*, **2011**, 47, 391-397	2.1	7
22	Reanalysis of western Pacific typhoons in 2004 with multi-satellite observations. *Meteorology and Atmospheric Physics*, **2007**, 97, 3-18	2	7
21	Tropical Cyclone Contribution to Interdecadal Change in Summer Rainfall over South China in the Early 1990s. *Terrestrial, Atmospheric and Oceanic Sciences*, **2012**, 23, 49	1.8	6
20	Impacts of Tides and Typhoon Fanapi (2010) on Seas Around Taiwan. *Terrestrial, Atmospheric and Oceanic Sciences*, **2016**, 27, 261-280	1.8	6

19	The Role of Polygonal Eyewalls in Rapid Intensification of Typhoon Megi (2010). *Journals of the Atmospheric Sciences*, **2018**, 75, 4175-4199	2.1	6
18	Seasonal prediction for tropical cyclone frequency around Taiwan using teleconnection patterns. *Theoretical and Applied Climatology*, **2014**, 116, 501-514	3	5
17	Diurnal Variation of the Convective Area and Eye Size Associated with the Rapid Intensification of Tropical Cyclones. *Monthly Weather Review*, **2020**, 148, 4061-4082	2.4	5
16	Exploratory Analysis of Upper-Ocean Heat Content and Sea Surface Temperature Underlying Tropical Cyclone Rapid Intensification in the Western North Pacific. *Journal of Climate*, **2020**, 33, 1031-1050	4.4	5
15	Recent Progress in the Fundamental Understanding of Tropical Cyclone Motion. *Journal of the Meteorological Society of Japan*, **2020**, 98, 5-17	2.8	4
14	Typhoon Fanapi (2010) and its Interaction with Taiwan Terrain Evaluation of the Uncertainty in Track, Intensity and Rainfall Simulations. *Journal of the Meteorological Society of Japan*, **2020**, 98, 93-113	2.8	3
13	Secondary eyewall formation in tropical cyclones168-175		3
12	Diagnosis of Large Prediction Errors on Recurvature of Typhoon Fengshen (2008) in the NCEP-GFS Model. *Journal of the Meteorological Society of Japan*, **2018**, 96, 85-96	2.8	2
11	Ensemble Sensitivity Analysis of Tropical Cyclone Intensification Rate during the Development Stage. *Journals of the Atmospheric Sciences*, **2020**, 77, 3387-3405	2.1	2
10	The Role of WISHE in the Rapid Intensification of Tropical Cyclones. *Journals of the Atmospheric Sciences*, **2020**, 77, 3139-3160	2.1	2
9	Weather and Climate Research in Taiwan: Potential Application of GPS/MET Data. *Terrestrial, Atmospheric and Oceanic Sciences*, **2000**, 11, 211	1.8	2
8	The Role of Surface Heat Fluxes on the Size of Typhoon Megi (2016). *Journals of the Atmospheric Sciences*, **2021**, 78, 1075-1093	2.1	2
7	Aircraft Observations of Tropical Cyclones. *World Scientific Series on Asia-Pacific Weather and Climate*, **2010**, 227-240		1
6	The Impact of Outer-Core Surface Heat Fluxes on the Convective Activities and Rapid Intensification of Tropical Cyclones. *Journals of the Atmospheric Sciences*, **2020**, 77, 3907-3927	2.1	1
5	Outer Tropical Cyclone Rainbands Associated with Typhoon Matmo (2014). *Monthly Weather Review*, **2020**, 148, 2935-2952	2.4	1
4	Understanding the Impacts of Upper-Tropospheric Cold Low on Typhoon Jongdari (2018) Using Piecewise Potential Vorticity Inversion. *Monthly Weather Review*, **2021**, 149, 1499-1515	2.4	1
3	Deep Eye Clouds in Tropical Cyclone Trami (2018) during T-PARCII Dropsonde Observations. *Journals of the Atmospheric Sciences*, **2022**, 79, 683-703	2.1	1
2	Remote Rainfall of Typhoon Khanun (2017): Monsoon Mode and Topographic Mode. *Monthly Weather Review*, **2021**, 149, 733-752	2.4	0

1 Effects of the Assimilation of Relative Humidity Reproduced From T-PARCII and Himawari-8 Satellite Imagery Using Dynamical Initialization and Ocean-Coupled Model: A Case Study of Typhoon Lan (2017). *Journal of Geophysical Research D: Atmospheres*, **2021**, 126, e2020JD034516 4.4