Chantal Claud

List of Publications by Year
in descending order

95 papers	2,466 citations	218677 26 h-index	243625 44 g-index
96 all docs	96 docs citations	96 times ranked	2501 citing authors

#	Article	IF	Citations
1	An update of observed stratospheric temperature trends. Journal of Geophysical Research, 2009, 114, .	3.3	260
2	Evaluation of current and projected Antarctic precipitation in CMIP5 models. Climate Dynamics, 2017, 48, 225-239.	3.8	125
3	How much snow falls on the Antarctic ice sheet?. Cryosphere, 2014, 8, 1577-1587.	3.9	124
4	Absorbing and reflecting sudden stratospheric warming events and their relationship with tropospheric circulation. Journal of Geophysical Research D: Atmospheres, 2016, 121, 80-94.	3.3	88
5	Characteristics of the TOVS Pathfinder Path-B Dataset. Bulletin of the American Meteorological Society, 1999, 80, 2679-2701.	3.3	86
6	Comparison of coâ€located independent groundâ€based middle atmospheric wind and temperature measurements with numerical weather prediction models. Journal of Geophysical Research D: Atmospheres, 2015, 120, 8318-8331.	3.3	85
7	The 11-year solar-cycle effects on the temperature in the upper-stratosphere and mesosphere: Part Iâ€"Assessment of observations. Journal of Atmospheric and Solar-Terrestrial Physics, 2005, 67, 940-947.	1.6	72
8	Tropical transition of a Mediterranean storm by jet crossing. Quarterly Journal of the Royal Meteorological Society, 2012, 138, 596-611.	2.7	68
9	Observed Temperature Changes in the Troposphere and Stratosphere from 1979 to 2018. Journal of Climate, 2020, 33, 8165-8194.	3.2	66
10	Mediterranean hurricanes: large-scale environment and convective and precipitating areas from satellite microwave observations. Natural Hazards and Earth System Sciences, 2010, 10, 2199-2213.	3.6	49
11	Comparison between the Large-Scale Environments of Moderate and Intense Precipitating Systems in the Mediterranean Region. Monthly Weather Review, 2009, 137, 3933-3959.	1.4	47
12	Polar low <I>le Cygne</I>: Satellite observations and numerical simulations. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 1075-1102.	2.7	46
13	Report of a Workshop on Theoretical and Observational Studies of Polar Lowsâ€•of the European Geophysical Society Polar Lows Working Group. Bulletin of the American Meteorological Society, 1997, 78, 2643-2658.	3.3	46
14	Evaluation of a cloud system life-cycle simulated by the Meso-NH model during FASTEX using METEOSAT radiances and TOVS-3i cloud retrievals. Quarterly Journal of the Royal Meteorological Society, 2000, 126, 1735-1750.	2.7	46
15	Evaluation of Antarctic snowfall in global meteorological reanalyses. Atmospheric Research, 2017, 190, 104-112.	4.1	42
16	Polar Lows over the Nordic Seas: Improved Representation in ERA-Interim Compared to ERA-40 and the Impact on Downscaled Simulations. Monthly Weather Review, 2014, 142, 2271-2289.	1.4	40
17	Polar low tracks over the Nordic Seas: a 14-winter climatic analysis. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 67, 24660.	1.7	38
18	Potential of Advanced Microwave Sounding Unit to identify precipitating systems and associated upperâ€level features in the Mediterranean region: Case studies. Journal of Geophysical Research, 2007, 112, .	3.3	37

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19	Polar lows over the Nordic and Labrador Seas: Synoptic circulation patterns and associations with North Atlanticâ€Europe wintertime weather regimes. Journal of Geophysical Research D: Atmospheres, 2013, 118, 2455-2472.	3.3	37
20	Satellite observations of a polar low over the Norwegian Sea by special sensor microwave imager, Geosat, and TIROSâ€N operational vertical sounder. Journal of Geophysical Research, 1993, 98, 14487-14506.	3.3	35
21	Revisiting the Possible Links between the Quasi-Biennial Oscillation and the Indian Summer Monsoon Using NCEP R-2 and CMAP Fields. Journal of Climate, 2007, 20, 773-787.	3.2	35
22	Associations between large-scale atmospheric circulation and polar low developments over the North Atlantic during winter. Journal of Geophysical Research, 2007, 112, .	3.3	35
23	An evaluation of uncertainties in monitoring middle atmosphere temperatures with the ground-based lidar network in support of space observations. Journal of Atmospheric and Solar-Terrestrial Physics, 2011, 73, 627-642.	1.6	34
24	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.	2.7	33
25	Evolution and mesoscale structure of a polar low outbreak. Quarterly Journal of the Royal Meteorological Society, 2000, 126, 1031-1063.	2.7	31
26	How Does Ground Clutter Affect CloudSat Snowfall Retrievals Over Ice Sheets?. IEEE Geoscience and Remote Sensing Letters, 2019, 16, 342-346.	3.1	30
27	Satellite-based climatology of Mediterranean cloud systems and their association with large-scale circulation. Journal of Geophysical Research, 2006, 111, .	3.3	29
28	Coupled chemistry climate model simulations of stratospheric temperatures and their trends for the recent past. Geophysical Research Letters, 2009, 36, .	4.0	29
29	Convective activity in Mato Grosso state (Brazil) from microwave satellite observations: Comparisons between AMSU and TRMM data sets. Journal of Geophysical Research, 2012, 117, .	3.3	28
30	Contribution of stratospheric warmings to temperature trends in the middle atmosphere from the lidar series obtained at Hauteâ€Provence Observatory (44Â°N). Journal of Geophysical Research, 2012, 117, .	3.3	28
31	Heavy rainfall in Mediterranean cyclones. Part I: contribution of deep convection and warm conveyor belt. Climate Dynamics, 2018, 50, 2935-2949.	3.8	27
32	Remote sensing of deep convection within a tropicalâ€like cyclone over the Mediterranean Sea. Atmospheric Science Letters, 2018, 19, e823.	1.9	26
33	A high resolution climatology of precipitation and deep convection over the Mediterranean region from operational satellite microwave data: development and application to the evaluation of model uncertainties. Natural Hazards and Earth System Sciences, 2012, 12, 785-798.	3.6	25
34	Characteristics of stratospheric warming events during Northern winter. Journal of Geophysical Research D: Atmospheres, 2016, 121, 5368-5380.	3.3	25
35	Satellite-derived atmospheric characteristics of spiral and comma-shaped southern hemisphere mesocyclones. Journal of Geophysical Research, 1997, 102, 13889-13905.	3.3	24
36	Retrieving Surface Snowfall With the GPM Microwave Imager: A New Module for the SLALOM Algorithm. Geophysical Research Letters, 2019, 46, 13593-13601.	4.0	24

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37	A cold air outbreak over the Norwegian Sea observed with the TIROS-N Operational Vertical Sounder (TOVS) and the Special Sensor Microwave/Imager (SSM/I). Tellus, Series A: Dynamic Meteorology and Oceanography, 1992, 44, 100-118.	1.7	23
38	Dynamical amplification of the stratospheric solar response simulated with the Chemistry-Climate Model LMDz-Reprobus. Journal of Atmospheric and Solar-Terrestrial Physics, 2012, 75-76, 147-160.	1.6	22
39	Insights into the convective evolution of Mediterranean tropicalâ€like cyclones. Quarterly Journal of the Royal Meteorological Society, 2020, 146, 4147-4169.	2.7	22
40	Postmillennium changes in stratospheric temperature consistently resolved by GPS radio occultation and AMSU observations. Geophysical Research Letters, 2017, 44, 7510-7518.	4.0	21
41	A 6â€year AMSUâ€based climatology of upperâ€level troughs and associated precipitation distribution in the Mediterranean region. Journal of Geophysical Research, 2008, 113, .	3.3	20
42	Severe convection in the Mediterranean from microwave observations and a convectionâ€permitting model. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 43-55.	2.7	19
43	Evaluation of CloudSat snowfall rate profiles by a comparison with in situ micro-rain radar observations in East Antarctica. Cryosphere, 2019, 13, 943-954.	3.9	19
44	The role of convective overshooting clouds in tropical stratosphereâ€"troposphere dynamical coupling. Atmospheric Chemistry and Physics, 2015, 15, 6767-6774.	4.9	18
45	Regional and seasonal stratospheric temperature trends in the last decade (2002â€"2014) from AMSU observations. Journal of Geophysical Research D: Atmospheres, 2016, 121, 8172-8185.	3.3	17
46	In Situ Measurements of Surface Winds, Waves, and Sea State in Polar Lows Over the North Atlantic. Journal of Geophysical Research D: Atmospheres, 2019, 124, 700-718.	3.3	17
47	Crossâ€validation of Advanced Microwave Sounding Unit and lidar for longâ€term upperâ€stratospheric temperature monitoring. Journal of Geophysical Research, 2008, 113, .	3.3	16
48	Assessing precipitation extremes (1981â€"2018) and deep convective activity (2002â€"2018) in the Amazon region with CHIRPS and AMSU data. Climate Dynamics, 2021, 57, 827-849.	3.8	15
49	Assessment of the accuracy of atmospheric temperature profiles retrieved from TOVS observations by the 3I method in the European Arctic; Application for mesoscale weather analysis. Journal of Geophysical Research, 1991, 96, 2875-2887.	3.3	14
50	Patterns of Precipitation and Convection Occurrence over the Mediterranean Basin Derived from a Decade of Microwave Satellite Observations. Atmosphere, 2014, 5, 370-398.	2.3	14
51	Deep convective clouds distribution over the Mediterranean region from AMSU-B/MHS observations. Atmospheric Research, 2018, 207, 122-135.	4.1	14
52	Aspects of stratospheric long-term changes induced by ozone depletion. Climate Dynamics, 2006, 27, 101-111.	3.8	13
53	Southern hemisphere winter cold-air mesocyclones: climatic environments and associations with teleconnections. Climate Dynamics, 2009, 33, 383-408.	3.8	13
54	Tidal effects on stratospheric temperature series derived from successive advanced microwave sounding units. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 477-483.	2.7	13

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55	Arctic Snowfall from CloudSat Observations and Reanalyses. Journal of Climate, 2020, 33, 2093-2109.	3.2	13
56	Use of TOVS observations for the study of polar and arctic lows. International Journal of Remote Sensing, 1992, 13, 129-139.	2.9	12
57	Verification of ensemble forecasts of Mediterranean high-impact weather events against satellite observations. Natural Hazards and Earth System Sciences, 2012, 12, 2449-2462.	3.6	12
58	Sensitivity studies of TOVS retrievals with 3I and ITPP retrieval algorithms: Application to the resolution of meso-scale phenomena in the Antarctic. Meteorology and Atmospheric Physics, 1995, 55, 87-100.	2.0	11
59	Monitoring Deep Convection and Convective Overshooting From 60Â° S to 60Â° N Using MHS: A Cloudsat/CALIPSO-Based Assessment. IEEE Geoscience and Remote Sensing Letters, 2017, 14, 159-163.	3.1	10
60	Implication of tropical lower stratospheric cooling in recent trends in tropical circulation and deep convective activity. Atmospheric Chemistry and Physics, 2019, 19, 2655-2669.	4.9	10
61	CloudSatâ€Inferred Vertical Structure of Snowfall Over the Antarctic Continent. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031399.	3.3	10
62	A cold air outbreak over the Norwegian Sea observed with the TIROS-N Operational Vertical Sounder (TOVS) and the Special Sensor Microwave/Imager (SSM/I). Tellus, Series A: Dynamic Meteorology and Oceanography, 1992, 44, 100-118.	1.7	9
63	Global scale observation of the earth for climate studies. Advances in Space Research, 1994, 14, 155-159.	2.6	9
64	The effect of the 11-year solar cycle on the temperature in the lower stratosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 2008, 70, 2031-2040.	1.6	9
65	On associations between the 11â€year solar cycle and the Indian Summer Monsoon system. Journal of Geophysical Research, 2008, 113, .	3.3	9
66	Observation of polar lows by the Advanced Microwave Sounding Unit: potential and limitations. Tellus, Series A: Dynamic Meteorology and Oceanography, 2022, 61, 264.	1.7	9
67	Investigations of stratospheric temperature regional variability with lidar and Advanced Microwave Sounding Unit. Journal of Geophysical Research, 2011, 116, .	3.3	9
68	North Atlantic polar lows and weather regimes: do current links persist in a warmer climate?. Atmospheric Science Letters, 2017, 18, 349-355.	1.9	9
69	Global monitoring of deep convection using passive microwave observations. Atmospheric Research, 2021, 247, 105244.	4.1	9
70	Assessment of the quality of TOVS retrievals obtained with the 3I algorithm for Antarctic conditions. Journal of Geophysical Research, 1995, 100, 5143.	3.3	8
71	The use of tovs observations for the identification of tropopauseâ€level thermal anomalies. Quarterly Journal of the Royal Meteorological Society, 2000, 126, 1473-1494.	2.7	8
72	Stratospheric Final Warmings fall into two categories with different evolution over the course of the year. Communications Earth & Environment, 2022, 3, .	6.8	8

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73	Depiction of Upper-Level Precursors of the December 1999 Storms from TOVS Observations. Weather and Forecasting, 2003, 18, 417-430.	1.4	7
74	Associations between tropical cyclone activity in the Southwest Indian Ocean and El NiÃ±o Southern Oscillation. Atmospheric Science Letters, 2015, 16, 506-511.	1.9	7
75	Potential of microwave observations for the evaluation of rainfall and convection in a regional climate model in the frame of HyMeX and MED-CORDEX. Climate Dynamics, 2018, 51, 837-855.	3.8	7
76	New Insights Into the Vertical Structure of Clouds in Polar Lows, Using Radarâ€Lidar Satellite Observations. Geophysical Research Letters, 2020, 47, e2020GL088785.	4.0	7
77	TOVS observations of a stratospheric cooling during the CHEOPS 3 campaign: February 4â€"6, 1990, over Scandinavia. Journal of Geophysical Research, 1993, 98, 7229-7243.	3.3	6
78	A new MesosphEO data set of temperature profiles from 35 to 85â€‰km using Rayleigh scattering at limb from GOMOS/ENVISAT daytime observations. Atmospheric Measurement Techniques, 2019, 12, 749-761.	3.1	6
79	Seasonal, Interannual, and Zonal Temperature Variability of the Tropical Stratosphere Based on TOVS Satellite Data: 1987â€"91. Journal of Climate, 1999, 12, 540-550.	3.2	5
80	Observed variability of North Atlantic oceanic precipitating systems during winter. Journal of Geophysical Research, 2003, 108, .	3.3	4
81	Assessment of ERA-5 Temperature Variability in the Middle Atmosphere Using Rayleigh LiDAR Measurements between 2005 and 2020. Atmosphere, 2022, 13, 242.	2.3	4
82	Assessment of TOVS-derived stratospheric temperatures up to 10 hPa for episodes of the European Arctic Stratospheric Ozone Experiment campaign. Journal of Geophysical Research, 1996, 101, 3941-3956.	3.3	3
83	Large-scale cloud, precipitation, and upper level features during Fronts and Atlantic Storm Track Experiment as inferred from TIROS-N Operational Vertical Sounder observations. Journal of Geophysical Research, 2001, 106, 17293-17302.	3.3	3
84	Atmospheric and upper ocean environments of Southern Ocean polar mesocyclones in the transition season months and associations with teleconnections. Journal of Geophysical Research, 2009, 114, .	3.3	3
85	Temperature Trends Observed in the Middle Atmosphere and Future Directions. , 2019, , 805-823.		3
86	Two case studies of severe storms in the Mediterranean using AMSU. Advances in Geosciences, 0, 12, 19-26.	12.0	3
87	Exploring the signature of polar lows in infrasound: the 19â€"20 November 2008 cases. Tellus, Series A: Dynamic Meteorology and Oceanography, 2017, 69, 1338885.	1.7	2
88	Evaluation of coastal Antarctic precipitation in LMDz6 global atmospheric model using ground-based radar observations. Arctic and Antarctic Research, 2021, 67, 147-164.	0.6	2
89	Evolution and mesoscale structure of a polar low outbreak. Quarterly Journal of the Royal Meteorological Society, 2000, 126, 1031-1064.	2.7	2
90	Evaluation of TOVS-derived stratospheric temperatures up to 10 hPa for a case of vortex displacement over western Europe. Journal of Geophysical Research, 1998, 103, 13743-13761.	3.3	1

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91	The dynamical influence of the Pinatubo eruption in the subtropical stratosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 2006, 68, 1600-1608.	1.6	1
92	Observation of the thermal structure and dynamics of the stratosphere and the mesosphere from space. Comptes Rendus - Geoscience, 2010, 342, 323-330.	1.2	1
93	Recent Dynamic Studies on the Middle Atmosphere at Mid- and Low-Latitudes Using Rayleigh Lidar and Other Technologies. , 2019, , 757-776.		1
94	Use of satellite observations for the study of mesoscale systems in polar regions. Advances in Space Research, 1992, 12, 299-302.	2.6	0
95	Temperature Climatology with Rayleigh Lidar Above Observatory of Haute-Provence: Dynamical Feedback. EPJ Web of Conferences, 2016, 119, 13009.	0.3	0