Claudia Timmreck

List of Publications by Year
in descending order

53 papers	3,982 citations	172386 29 h-index	168321 53 g-index
104 all docs	104 docs citations	104 times ranked	5052 citing authors

#	Article	IF	Citations
1	Effects of forcing differences and initial conditions on inter-model agreement in the VolMIP volc-pinatubo-full experiment. Geoscientific Model Development, 2022, 15, 2265-2292.	1.3	22
2	Sensitivity of regional monsoons to idealised equatorial volcanic eruption of different sulfur emission strengths. Environmental Research Letters, 2022, 17, 054001.	2.2	5
3	Volcanic effects on climate: recent advances and future avenues. Bulletin of Volcanology, 2022, 84, .	1.1	32
4	Was there a volcanic-induced long-lasting cooling over the Northern Hemisphere in the mid-6thâ€“7th century?. Climate of the Past, 2022, 18, 1601-1623.	1.3	10
5	Decadal Disruption of the QBO by Tropical Volcanic Supereruptions. Geophysical Research Letters, 2021, 48, e2020GL089687.	1.5	13
6	Simulation of ash clouds after a Laacher See-type eruption. Climate of the Past, 2021, 17, 633-652.	1.3	11
7	Model physics and chemistry causing intermodel disagreement within the VolMIP-Tambora Interactive Stratospheric Aerosol ensemble. Atmospheric Chemistry and Physics, 2021, 21, 3317-3343.	1.9	33
8	The Climate Response to Emissions Reductions Due to COVIDâ€19: Initial Results From CovidMIP. Geophysical Research Letters, 2021, 48, e2020GL091883.	1.5	43
9	The impact of volcanic eruptions of different magnitude on stratospheric water vapor in the tropics. Atmospheric Chemistry and Physics, 2021, 21, 6565-6591.	1.9	9
10	The Arctic Polar Vortex Response to Volcanic Forcing of Different Strengths. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2020JD034450.	1.2	12
11	The unidentified eruption of 1809: a climatic cold case. Climate of the Past, 2021, 17, 1455-1482.	1.3	19
12	Changes in stratospheric aerosol extinction coefficient after the 2018ÂAmbae eruption as seen by OMPS-LP and MAECHAM5-HAM. Atmospheric Chemistry and Physics, 2021, 21, 14871-14891.	1.9	7
13	Disentangling Internal and External Contributions to Atlantic Multidecadal Variability Over the Past Millennium. Geophysical Research Letters, 2021, 48, e2021GL095990.	1.5	17
14	Robust Multiyear Climate Impacts of Volcanic Eruptions in Decadal Prediction Systems. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031739.	1.2	15
15	The Research Unit VolImpact: Revisiting the volcanic impact on atmosphere and climateÂâ€“ preparations for the next big volcanic eruption. Meteorologische Zeitschrift, 2020, 29, 3-18.	0.5	20
16	Simulated Tropical Precipitation Assessed across Three Major Phases of the Coupled Model Intercomparison Project (CMIP). Monthly Weather Review, 2020, 148, 3653-3680.	0.5	92
17	Disentangling the causes of the 1816 European year without a summer. Environmental Research Letters, 2019, 14, 094019.	2.2	13
18	Revisiting the Agung 1963 volcanic forcing â€“ impact of one or two eruptions. Atmospheric Chemistry and Physics, 2019, 19, 10379-10390.	1.9	6

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19	Disproportionately strong climate forcing from extratropical explosive volcanic eruptions. Nature Geoscience, 2019, 12, 100-107.	5.4	79
20	Clarifying the Relative Role of Forcing Uncertainties and Initialâ€Condition Unknowns in Spreading the Climate Response to Volcanic Eruptions. Geophysical Research Letters, 2019, 46, 1602-1611.	1.5	32
21	Multi-model comparison of the volcanic sulfate deposition from the 1815 eruption of Mt.ÂTambora. Atmospheric Chemistry and Physics, 2018, 18, 2307-2328.	1.9	41
22	Assessing the impact of aÂfuture volcanic eruption on decadal predictions. Earth System Dynamics, 2018, 9, 701-715.	2.7	9
23	The Interactive Stratospheric Aerosol Model Intercomparison ProjectÂ(ISA-MIP): motivation and experimental design. Geoscientific Model Development, 2018, 11, 2581-2608.	1.3	57
24	The PMIP4 contribution to CMIP6 â€“ Part 3: The last millennium, scientific objective, and experimental design for the PMIP4 <i>past1000</i> simulations. Geoscientific Model Development, 2017, 10, 4005-4033.	1.3	155
25	Toward predicting volcanically-forced decadal climate variability. Past Global Change Magazine, 2017, 25, 25-31.	0.4	1
26	Easy Volcanic Aerosol (EVA v1.0): an idealized forcing generator for climate simulations. Geoscientific Model Development, 2016, 9, 4049-4070.	1.3	63
27	The Model Intercomparison Project on the climatic response to Volcanic forcing (VolMIP): experimental design and forcing input data for CMIP6. Geoscientific Model Development, 2016, 9, 2701-2719.	1.3	138
28	Stratospheric aerosol-Observations, processes, and impact on climate. Reviews of Geophysics, 2016, 54, 278-335.	9.0	265
29	Tambora 1815 as a test case for high impact volcanic eruptions: Earth system effects. Wiley Interdisciplinary Reviews: Climate Change, 2016, 7, 569-589.	3.6	105
30	MiKlip: A National Research Project on Decadal Climate Prediction. Bulletin of the American Meteorological Society, 2016, 97, 2379-2394.	1.7	78
31	Using a large ensemble of simulations to assess the Northern Hemisphere stratospheric dynamical response to tropical volcanic eruptions and its uncertainty. Geophysical Research Letters, 2016, 43, 9324-9332.	1.5	75
32	The impact of stratospheric volcanic aerosol on decadalâ€scale climate predictions. Geophysical Research Letters, 2016, 43, 834-842.	1.5	39
33	Radiative and climate impacts of a large volcanic eruption during stratospheric sulfur geoengineering. Atmospheric Chemistry and Physics, 2016, 16, 305-323.	1.9	40
34	The impact of waveâ€mean flow interaction on the Northern Hemisphere polar vortex after tropical volcanic eruptions. Journal of Geophysical Research D: Atmospheres, 2016, 121, 5281-5297.	1.2	26
35	Quasi-biennial oscillation of the tropical stratospheric aerosol layer. Atmospheric Chemistry and Physics, 2015, 15, 5557-5584.	1.9	24
36	What is the limit of climate engineering by stratospheric injection of SO₂?. Atmospheric Chemistry and Physics, 2015, 15, 9129-9141.	1.9	111

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37	Modelling of mineral dust for interglacial and glacial climate conditions with a focus on Antarctica. Climate of the Past, 2015, 11, 765-779.	1.3	20
38	Inter-hemispheric asymmetry in the sea-ice response to volcanic forcing simulated by MPI-ESM (COSMOS-Mill). Earth System Dynamics, 2014, 5, 223-242.	2.7	27
39	Observational constraints on the tropospheric and near-surface winter signature of the Northern Hemisphere stratospheric polar vortex. Climate Dynamics, 2014, 43, 3245-3266.	1.7	30
40	The impact of volcanic aerosol on the Northern Hemisphere stratospheric polar vortex: mechanisms and sensitivity to forcing structure. Atmospheric Chemistry and Physics, 2014, 14, 13063-13079.	1.9	53
41	Background conditions influence the decadal climate response to strong volcanic eruptions. Journal of Geophysical Research D: Atmospheres, 2013, 118, 4090-4106.	1.2	86
42	Delayed winter warming: A robust decadal response to strong tropical volcanic eruptions?. Geophysical Research Letters, 2013, 40, 204-209.	1.5	48
43	Climate and carbon cycle changes from 1850 to 2100 in MPIâ€ESM simulations for the Coupled Model Intercomparison Project phase 5. Journal of Advances in Modeling Earth Systems, 2013, 5, 572-597.	1.3	1,280
44	Volcanic sulfate deposition to Greenland and Antarctica: A modeling sensitivity study. Journal of Geophysical Research D: Atmospheres, 2013, 118, 4788-4800.	1.2	33
45	Impact of an extremely large magnitude volcanic eruption on the global climate and carbon cycle estimated from ensemble Earth System Model simulations. Biogeosciences, 2013, 10, 669-687.	1.3	22
46	Climate response to the Toba super-eruption: Regional changes. Quaternary International, 2012, 258, 30-44.	0.7	68
47	Tree rings and volcanic cooling. Nature Geoscience, 2012, 5, 836-837.	5.4	137
48	Sensitivity of a coupled climate-carbon cycle model to large volcanic eruptions during the last millennium. Tellus, Series B: Chemical and Physical Meteorology, 2010, 62, 674-681.	0.8	50
49	Aerosol size confines climate response to volcanic superâ€eruptions. Geophysical Research Letters, 2010, 37, .	1.5	124
50	Limited temperature response to the very large AD 1258 volcanic eruption. Geophysical Research Letters, 2009, 36, .	1.5	143
51	Aerosol chemistry interactions after the Mt. Pinatubo eruption. Geophysical Monograph Series, 2003, , 213-225.	0.1	17
52	Three-dimensional simulation of stratospheric background aerosol: First results of a multiannual general circulation model simulation. Journal of Geophysical Research, 2001, 106, 28313-28332.	3.3	33
53	A one and half year interactive MA/ECHAM4 simulation of Mount Pinatubo Aerosol. Journal of Geophysical Research, 1999, 104, 9337-9359.	3.3	47