Rachel Pinker

List of Publications by Year
in descending order

147 papers	11,513 citations	53794 45 h-index	30087 103 g-index
153 all docs	153 docs citations	153 times ranked	9742 citing authors

#	Article	IF	Citations
1	An emerging ground-based aerosol climatology: Aerosol optical depth from AERONET. Journal of Geophysical Research, 2001, 106, 12067-12097.	3.3	1,737
2	The multi-institution North American Land Data Assimilation System (NLDAS): Utilizing multiple GCIP products and partners in a continental distributed hydrological modeling system. Journal of Geophysical Research, 2004, 109, .	3.3	985
3	Baseline Surface Radiation Network (BSRN/WCRP): New Precision Radiometry for Climate Research. Bulletin of the American Meteorological Society, 1998, 79, 2115-2136.	3.3	778
4	Use of NDVI and Land Surface Temperature for Drought Assessment: Merits and Limitations. Journal of Climate, 2010, 23, 618-633.	3.2	628
5	Modeling Surface Solar Irradiance for Satellite Applications on a Global Scale. Journal of Applied Meteorology and Climatology, 1992, 31, 194-211.	1.7	517
6	Do Satellites Detect Trends in Surface Solar Radiation?. Science, 2005, 308, 850-854.	12.6	412
7	Realâ€time and retrospective forcing in the North American Land Data Assimilation System (NLDAS) project. Journal of Geophysical Research, 2003, 108, .	3.3	357
8	Climatological aspects of the optical properties of fine/coarse mode aerosol mixtures. Journal of Geophysical Research, 2010, 115, .	3.3	325
9	Aerosol radiative forcing during dust events over New Delhi, India. Journal of Geophysical Research, 2008, 113, .	3.3	238
10	A review of satellite methods to derive surface shortwave irradiance. Remote Sensing of Environment, 1995, 51, 108-124.	11.0	228
11	Estimating Photosynthetically Active Radiation (PAR) at the earth's surface from satellite observations. Remote Sensing of Environment, 1995, 51, 98-107.	11.0	221
12	Surface radiation budgets in support of the GEWEX Continentalâ€Scale International Project (GCIP) and the GEWEX Americas Prediction Project (GAPP), including the North American Land Data Assimilation System (NLDAS) project. Journal of Geophysical Research, 2003, 108, .	3.3	196
13	Diurnal variability of aerosol optical depth observed at AERONET (Aerosol Robotic Network) sites. Geophysical Research Letters, 2002, 29, 30-1-30-4.	4.0	190
14	Estimation of land surface temperature from a Geostationary Operational Environmental Satellite (GOES-8). Journal of Geophysical Research, 2003, 108, .	3.3	176
15	Full-coverage mapping and spatiotemporal variations of ground-level ozone (O3) pollution from 2013 to 2020 across China. Remote Sensing of Environment, 2022, 270, 112775.	11.0	174
16	Evaluation of the North American Land Data Assimilation System over the southern Great Plains during the warm season. Journal of Geophysical Research, 2003, 108, .	3.3	157
17	Snow process modeling in the North American Land Data Assimilation System (NLDAS): 2. Evaluation of model simulated snow water equivalent. Journal of Geophysical Research, 2003, 108, .	3.3	150
18	First Global WCRP Shortwave Surface Radiation Budget Dataset. Bulletin of the American Meteorological Society, 1995, 76, 905-922.	3.3	142

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19	Streamflow and water balance intercomparisons of four land surface models in the North American Land Data Assimilation System project. Journal of Geophysical Research, 2004, 109, .	3.3	141
20	High-Latitude Ocean and Sea Ice Surface Fluxes: Challenges for Climate Research. Bulletin of the American Meteorological Society, 2013, 94, 403-423.	3.3	137
21	Validation of the North American Land Data Assimilation System (NLDAS) retrospective forcing over the southern Great Plains. Journal of Geophysical Research, 2003, 108, .	3.3	136
22	Modeling Surface Solar Radiation: Model Formulation and Validation. Journal of Climate and Applied Meteorology, 1985, 24, 389-401.	1.0	122
23	Global Distribution of Photosynthetically Active Radiation as Observed from Satellites. Journal of Climate, 1992, 5, 56-65.	3.2	120
24	Air-Sea Fluxes With a Focus on Heat and Momentum. Frontiers in Marine Science, 2019, 6, .	2.5	111
25	Evaluation of AERONET precipitable water vapor versus microwave radiometry, GPS, and radiosondes at ARM sites. Journal of Geophysical Research D: Atmospheres, 2014, 119, 9596-9613.	3.3	100
26	Land surface model spinâ€up behavior in the North American Land Data Assimilation System (NLDAS). Journal of Geophysical Research, 2003, 108, .	3.3	96
27	Snow process modeling in the North American Land Data Assimilation System (NLDAS): 1. Evaluation of modelâ€simulated snow cover extent. Journal of Geophysical Research, 2003, 108, .	3.3	95
28	Intercomparison of shortwave radiative transfer schemes in global aerosol modeling: results from the AeroCom Radiative Transfer Experiment. Atmospheric Chemistry and Physics, 2013, 13, 2347-2379.	4.9	94
29	An Interdisciplinary Field Study of the Energy and Water Fluxes in the Atmospheric-Biosphere System over Semiarid Rangelands: Description and Some Preliminary Results. Bulletin of the American Meteorological Society, 1991, 72, 1683-1705.	3.3	93
30	A Climate Data Record (CDR) for the global terrestrial water budget: 1984â€“2010. Hydrology and Earth System Sciences, 2018, 22, 241-263.	4.9	91
31	Himawari-8-derived diurnal variations in ground-level PM_{2.5} pollution across China using the fast space-time Light Gradient Boosting Machine (LightGBM). Atmospheric Chemistry and Physics, 2021, 21, 7863-7880.	4.9	86
32	The albedo of a tropical evergreen forest. Quarterly Journal of the Royal Meteorological Society, 1980, 106, 551-558.	2.7	85
33	Shortwave radiative fluxes from MODIS: Model development and implementation. Journal of Geophysical Research, 2009, 114, .	3.3	84
34	Review and assessment of latent and sensible heat flux accuracy over the global oceans. Remote Sensing of Environment, 2017, 201, 196-218.	11.0	75
35	Diurnal temperature range over the United States: A satellite view. Geophysical Research Letters, 2006, 33, .	4.0	74
36	Aerosol radiative forcing over a tropical urban site in India. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	72

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37	Evaluation of satellite estimates of downward shortwave radiation over the Tibetan Plateau. Journal of Geophysical Research, 2008, 113, .	3.3	70
38	Modeling shortwave radiative fluxes from satellites. Journal of Geophysical Research, 2012, 117, .	3.3	62
39	Evaluation and Comparison of MODIS and IMS Snow-Cover Estimates for the Continental United States Using Station Data. Journal of Hydrometeorology, 2005, 6, 1002-1017.	1.9	57
40	Preface paper to the Semi-Arid Land-Surface-Atmosphere (SALSA) Program special issue. Agricultural and Forest Meteorology, 2000, 105, 3-20.	4.8	55
41	A dust outbreak episode in sub-Sahel West Africa. Journal of Geophysical Research, 2001, 106, 22923-22930.	3.3	53
42	Case Study of Soil Moisture Effect on Land Surface Temperature Retrieval. IEEE Geoscience and Remote Sensing Letters, 2004, 1, 127-130.	3.1	49
43	Surface Radiation Budget from Satellites. Monthly Weather Review, 1984, 112, 209-215.	1.4	48
44	Land Surface Temperature Estimation from the Next Generation of Geostationary Operational Environmental Satellites: GOES Mâ€“Q. Journal of Applied Meteorology and Climatology, 2004, 43, 363-372.	1.7	48
45	Retrieval of surface temperature from the MSGâ€SEVIRI observations: Part I. Methodology. International Journal of Remote Sensing, 2007, 28, 5255-5272.	2.9	48
46	Evaluation of Satellite Estimates of Land Surface Temperature from GOES over the United States. Journal of Applied Meteorology and Climatology, 2009, 48, 167-180.	1.5	48
47	Intraseasonal Latent Heat Flux Based on Satellite Observations. Journal of Climate, 2009, 22, 4539-4556.	3.2	46
48	A global view of aerosols from merged transport models, satellite, and ground observations. Journal of Geophysical Research, 2005, 110, .	3.3	43
49	Determination of surface albedo from satellites. Advances in Space Research, 1985, 5, 333-343.	2.6	41
50	Seasonal asymmetry in diurnal variation of aerosol optical characteristics over Pune, western India. Journal of Geophysical Research, 2007, 112, .	3.3	40
51	The Energy Balance of a Tropical Evergreen Forest. Journal of Applied Meteorology, 1980, 19, 1341-1350.	1.1	37
52	Implementation of GOESâ€based land surface temperature diurnal cycle to AVHRR. International Journal of Remote Sensing, 2005, 26, 3975-3984.	2.9	36
53	Characteristic spectral reflectance of a semi-arid environment. International Journal of Remote Sensing, 1995, 16, 1341-1363.	2.9	35
54	How good are ocean buoy observations of radiative fluxes?. Geophysical Research Letters, 2009, 36, .	4.0	35

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55	Solar radiation and evapotranspiration in northern Mexico estimated from remotely sensed measurements of cloudiness. Hydrological Sciences Journal, 2001, 46, 465-478.	2.6	34
56	The microclimate of a dry tropical forest. Agricultural Meteorology, 1980, 22, 249-265.	0.6	33
57	Cloud Variability over the Indian Monsoon Region as Observed from Satellites. Journal of Applied Meteorology and Climatology, 2009, 48, 1803-1821.	1.5	33
58	Investigation of the "elevated heat pump" hypothesis of the Asian monsoon using satellite observations. Atmospheric Chemistry and Physics, 2014, 14, 8749-8761.	4.9	30
59	Seasonal Variations in Diurnal Temperature Range From Satellites and Surface Observations. IEEE Transactions on Geoscience and Remote Sensing, 2006, 44, 2779-2785.	6.3	29
60	Shortwave cloudâ€radiative forcing at the top of the atmosphere at the surface and of the atmospheric column as determined from ISCCP C1 data. Journal of Geophysical Research, 1993, 98, 2703-2713.	3.3	28
61	Characteristic aerosol optical depths during the Harmattan Season on sub-Sahara Africa. Geophysical Research Letters, 1994, 21, 685-688.	4.0	28
62	Geostationary satellite parameters for surface energy balance. Advances in Space Research, 2002, 30, 2427-2432.	2.6	28
63	Estimates of net heat fluxes over the Atlantic Ocean. Journal of Geophysical Research: Oceans, 2014, 119, 410-427.	2.6	28
64	Basin-scale solar irradiance estimates in semiarid regions using GOES 7. Water Resources Research, 1994, 30, 1375-1386.	4.2	27
65	Radiative effects of aerosols in subâ€Sahel Africa: Dust and biomass burning. Journal of Geophysical Research, 2010, 115, .	3.3	27
66	The Relationship between the Planetary and Surface Net Radiation. Journal of Climate and Applied Meteorology, 1985, 24, 1262-1268.	1.0	23
67	Daytime net radiation estimated for a semiarid rangeland basin from remotely sensed data. Agricultural and Forest Meteorology, 1994, 71, 337-357.	4.8	23
68	Radiative flux opens new window on climate research. Eos, 1995, 76, 145-145.	0.1	23
69	Toward improved satellite estimates of short-wave radiative fluxesâ€”Focus on cloud detection over snow: 2. Results. Journal of Geophysical Research, 2007, 112, .	3.3	23
70	Remote sensing of aerosol optical characteristics in sub-Sahel, West Africa. Journal of Geophysical Research, 2001, 106, 28347-28356.	3.3	22
71	Estimating surface longwave radiative fluxes from satellites utilizing artificial neural networks. Journal of Geophysical Research, 2012, 117, .	3.3	22
72	Observed Variability of Cloud Frequency and Cloud-Base Height within 3600 m above the Surface over the Contiguous United States. Journal of Climate, 2017, 30, 3725-3742.	3.2	22

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73	Wind and temperature profile characteristics in a tropical evergreen forest in Thailand. Tellus, 2022, 27, 562.	0.8	21
74	Effect of surface properties on the narrow to broadband spectral relationship in clear sky satellite observations. Remote Sensing of Environment, 1986, 20, 267-282.	11.0	21
75	An intensified seasonal transition in the Central U.S. that enhances summer drought. Journal of Geophysical Research D: Atmospheres, 2015, 120, 8804-8816.	3.3	21
76	ENSO impact on surface radiative fluxes as observed from space. Journal of Geophysical Research: Oceans, 2017, 122, 7880-7896.	2.6	21
77	SHORTWAVE RADIATIVE CLOUD FORCING IN THE TROPICAL PACIFIC INCLUDING THE 1982-1983 AND 1987 EL NIÃ'Os. International Journal of Climatology, 1996, 16, 1-13.	3.5	20
78	Radiative fluxes at high latitudes. Geophysical Research Letters, 2010, 37, .	4.0	20
79	Impact of Ingesting Satellite-Derived Cloud Cover into the Regional Atmospheric Modeling System. Monthly Weather Review, 2002, 130, 610-628.	1.4	19
80	Turbulence structure of a tropical forest. Boundary-Layer Meteorology, 1988, 43, 43-63.	2.3	18
81	Diurnal and seasonal variability of rainfall in the sub-Sahel as seen from observations, satellites and a numerical model. Geophysical Research Letters, 2006, 33, .	4.0	18
82	Detection of a gas flaring signature in the AERONET optical properties of aerosols at a tropical station in West Africa. Journal of Geophysical Research D: Atmospheres, 2016, 121, 14,513.	3.3	18
83	Wind and temperature profile characteristics in a tropical evergreen forest in Thailand. Tellus, 1975, 27, 562-573.	0.8	17
84	Satellite estimates of surface radiative fluxes for the extended San Pedro Basin: sensitivity to aerosols. Agricultural and Forest Meteorology, 2000, 105, 43-54.	4.8	17
85	Towards a Unified and Coherent Land Surface Temperature Earth System Data Record from Geostationary Satellites. Remote Sensing, 2019, 11, 1399.	4.0	17
86	Aerosol optical depths in a semiarid region. Journal of Geophysical Research, 1997, 102, 11123-11137.	3.3	16
87	Impact of satellite based PAR on estimates of terrestrial net primary productivity. International Journal of Remote Sensing, 2010, 31, 5221-5237.	2.9	16
88	Improved prospects for estimating insolation for calculating regional evapotranspiration from remotely sensed data. Agricultural and Forest Meteorology, 1990, 52, 227-251.	4.8	15
89	Surface Radiative Fluxes in Sub-Sahel Africa. Journal of Applied Meteorology and Climatology, 1997, 36, 521-530.	1.7	15
90	Spatial and Temporal Scaling Behavior of Surface Shortwave Downward Radiation Based on MODIS and In Situ Measurements. IEEE Geoscience and Remote Sensing Letters, 2008, 5, 542-546.	3.1	15

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91	The Role of Daily Surface Forcing in the Upper Ocean over the Tropical Pacific: A Numerical Study. Journal of Climate, 2003, 16, 756-766.	3.2	15
92	Evaluating Surface Radiation Fluxes Observed From Satellites in the Southeastern Pacific Ocean. Geophysical Research Letters, 2018, 45, 2404-2412.	4.0	14
93	Synthesis of information on aerosol optical properties. Journal of Geophysical Research, 2008, 113, .	3.3	13
94	Aerosol effects in the UVâ€B spectral region over Pune, an urban site in India. Geophysical Research Letters, 2009, 36, .	4.0	13
95	Differences between two estimates of air-sea turbulent heat fluxes over the Atlantic Ocean. Journal of Geophysical Research, 2011, 116, .	3.3	13
96	Seasonal characteristics of spectral aerosol optical properties at a sub-Saharan site. Atmospheric Research, 2007, 85, 38-51.	4.1	12
97	Diurnal cycle of land surface temperature in a desert encroachment zone as observed from satellites. Geophysical Research Letters, 2007, 34, .	4.0	12
98	The role of shortwave radiation in the 2007 Arctic sea ice anomaly. Geophysical Research Letters, 2012, 39, .	4.0	12
99	Estimating surface longâ€wave radiative fluxes at global scale. Quarterly Journal of the Royal Meteorological Society, 2012, 138, 1083-1093.	2.7	12
100	Evaluation of cloud base height in the North American Regional Reanalysis using ceilometer observations. International Journal of Climatology, 2020, 40, 3161-3178.	3.5	12
101	Season, not lockdown, improved air quality during COVID-19 State of Emergency in Nigeria. Science of the Total Environment, 2021, 768, 145187.	8.0	12
102	Modelling planetary bidirectional reflectance over land. International Journal of Remote Sensing, 1990, 11, 113-123.	2.9	11
103	Interannual Variability of Solar Irradiance over the Amazon Basin Including the 19827ndash;83 El Ni7ntilde;o Year. Journal of Climate, 1992, 5, 1305-1315.	3.2	11
104	A satellite approach for estimating regional land surface energy budget for GCIP/GAPP. Journal of Geophysical Research, 2003, 108, .	3.3	11
105	Radiative fluxes from satellites: Focus on aerosols. Journal of Geophysical Research, 2008, 113, .	3.3	11
106	Estimates of surface ultraviolet radiation over north America using Geostationary Operational Environmental Satellites observations. Journal of Geophysical Research, 2008, 113, .	3.3	11
107	On the canopy flow index of a tropical forest. Boundary-Layer Meteorology, 1982, 22, 313-324.	2.3	10
108	Remote Sensing of Spectral Aerosol Properties: A Classroom Experience. Bulletin of the American Meteorological Society, 2007, 88, 25-30.	3.3	10

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109	Revisiting satellite radiative flux computations at the top of the atmosphere. International Journal of Remote Sensing, 2012, 33, 1383-1399.	2.9	10
110	Evaluation of radiative fluxes over the north Indian Ocean. Theoretical and Applied Climatology, 2018, 132, 983-988.	2.8	10
111	Precipitable water vapor over oceans from the Maritime Aerosol Network: Evaluation of global models and satellite products under clear sky conditions. Atmospheric Research, 2019, 215, 294-304.	4.1	10
112	Estimating Monthly Mean Water and Energy Budgets over the Central U.S. Great Plains. Part I: Evapoclimatonomy Model Formulation. Monthly Weather Review, 1987, 115, 1140-1152.	1.4	9
113	Simulations of the GOES visible sensor to changing surface and atmospheric conditions. Journal of Geophysical Research, 1987, 92, 4001-4009.	3.3	9
114	An Empirical Orthogonal Function Iteration Approach for Obtaining Homogeneous Radiative Fluxes from Satellite Observations. Journal of Applied Meteorology and Climatology, 2007, 46, 435-444.	1.5	9
115	Toward improved satellite estimates of short-wave radiative fluxesâ€"Focus on cloud detection over snow: 1. Methodology. Journal of Geophysical Research, 2007, 112, .	3.3	9
116	The radiative environment of the Tibetan Plateau. International Journal of Climatology, 2014, 34, 2153-2162.	3.5	9
117	Solar heating of the <scp>A</scp>rctic <scp>O</scp>cean in the context of iceâ€albedo feedback. Journal of Geophysical Research: Oceans, 2014, 119, 8395-8409.	2.6	9
118	An improved methodology for deriving highâ€resolution surface shortwave radiative fluxes from MODIS in the Arctic region. Journal of Geophysical Research D: Atmospheres, 2015, 120, 2382-2393.	3.3	9
119	Observations of positive sea surface temperature trends in the steadily shrinking Dead Sea. Natural Hazards and Earth System Sciences, 2018, 18, 3007-3018.	3.6	9
120	High-Resolution Daytime Cloud Observations for Northwestern Mexico fromGOES-7Satellite Observations. Journal of Atmospheric and Oceanic Technology, 2001, 18, 39-55.	1.3	8
121	Radiative Fluxes at Barrow, Alaska: A Satellite View. Journal of Climate, 2011, 24, 5494-5505.	3.2	8
122	Factors Contributing to the Spatial Variability of Satellite Estimates of Diurnal Temperature Range in the United States. IEEE Geoscience and Remote Sensing Letters, 2014, 11, 1524-1528.	3.1	7
123	The net energy budget at the oceanâ€atmosphere interface of the â€œCold Tongueâ€•region. Journal of Geophysical Research: Oceans, 2017, 122, 5502-5521.	2.6	7
124	Relationship between downwelling surface shortwave radiative fluxes and sea surface temperature over the tropical Pacific: AMIP II models versus satellite estimates. Annales Geophysicae, 2008, 26, 785-794.	1.6	6
125	Shortwave Radiative Fluxes on Slopes. Journal of Applied Meteorology and Climatology, 2016, 55, 1513-1532.	1.5	6
126	Analysis of Radiative Properties and Direct Radiative Forcing Estimates of Dominant Aerosol Clusters over an Urban-Desert Region in West Africa. Aerosol and Air Quality Research, 2019, 19, 38-48.	2.1	6

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127	Estimating Monthly Mean Water and Energy Budgets over the Central U.S. Great Plains. Part II: Evapoclimatonomy Experiments. Monthly Weather Review, 1987, 115, 1153-1160.	1.4	5
128	Sensitivity of Surface Solar Fluxes to Cloud Parameterization. Journals of the Atmospheric Sciences, 1988, 45, 881-884.	1.7	5
129	Evaluation of Surface Shortwave Flux Estimates from GOES: Sensitivity to Sensor Calibration. Journal of Atmospheric and Oceanic Technology, 2006, 23, 927-935.	1.3	5
130	The canopy coupling index of a tropical forest. Boundary-Layer Meteorology, 1983, 26, 305-311.	2.3	4
131	Diurnal variation of planetary radiation budget parameters from geostationary satellites. Journal of Climatology, 1986, 6, 389-403.	0.7	4
132	Satellites and our understanding of the surface energy balance. Global and Planetary Change, 1990, 2, 321-342.	3.5	4
133	Shortwave Radiation from ABI on the GOES-R Series. , 2020, , 179-191.		4
134	The albedo of a tropical evergreen forest. Quarterly Journal of the Royal Meteorological Society, 1980, 106, 551-558.	2.7	4
135	Estimating the solar zenith dependence of the clearâ€sky planetary albedo for land surfaces from the GOES satellite. Journal of Geophysical Research, 1983, 88, 6007-6011.	3.3	3
136	Correction to â€œCharacteristic aerosol optical depths during the Harmattan season in sub-Sahara Africaâ€• Geophysical Research Letters, 1994, 21, 1099-1099.	4.0	3
137	Solar warming of the south-central Pacific. International Journal of Remote Sensing, 2014, 35, 5411-5419.	2.9	3
138	Fine-Mode Aerosol Loading Over a Sub-Sahel Location and Its Relation with the West African Monsoon. Aerosol Science and Engineering, 2018, 2, 74-91.	1.9	3
139	Spatial Non-Uniformity of Surface Temperature of the Dead Sea and Adjacent Land Areas. Remote Sensing, 2020, 12, 107.	4.0	3
140	Photosynthetic climate in selected regions during the northern hemisphere growing season. Global Biogeochemical Cycles, 1994, 8, 117-125.	4.9	2
141	Experiments with Cloud Properties: Impact on Surface Radiative Fluxes. Journal of Atmospheric and Oceanic Technology, 2008, 25, 1034-1040.	1.3	2
142	Multi-technique analysis of precipitable water vapor estimates in the sub-Sahel West Africa. Heliyon, 2018, 4, e00765.	3.2	2
143	Surface Radiative Fluxes. Encyclopedia of Earth Sciences Series, 2014, , 806-815.	0.1	1
144	Surface Radiation Budget from Satellites. , 1987, , 172-180.		1

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145	Estimation of land surface temperature diurnal cycle from Geostationary Operational Environmental Satellite (GOES-8) and application to the polar orbiting imager NOAA/AVHRR. , 2003, 4895, 137.		0
146	Annual and seasonal variability of net heat flux in the Northern Indian Ocean. International Journal of Remote Sensing, 2020, 41, 6461-6483.	2.9	0
147	Diurnal Variability of Surface Temperature over Lakes: Case Study for Lake Huron. Atmosphere, 2021, 12, 252.	2.3	0