

# Pierre Gauthier

## List of Publications by Year in descending order

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Version: 2024-02-01

27  
papers

691  
citations

759233

12  
h-index

552781

26  
g-index

28  
all docs

28  
docs citations

28  
times ranked

552  
citing authors

#	ARTICLE	IF	CITATIONS
1	Extension of 3DVAR to 4DVAR: Implementation of 4DVAR at the Meteorological Service of Canada. <i>Monthly Weather Review</i> , 2007, 135, 2339-2354.	1.4	162
2	Impact of the Digital Filter as a Weak Constraint in the Preoperational 4DVAR Assimilation System of Météo-France. <i>Monthly Weather Review</i> , 2001, 129, 2089-2102.	1.4	126
3	Assimilation of Simulated Wind Lidar Data with a Kalman Filter. <i>Monthly Weather Review</i> , 1993, 121, 1803-1820.	1.4	74
4	Four-dimensional data assimilation with a wide range of scales. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 1995, 47, 974-997.	1.7	39
5	Impact of the Different Components of 4DVAR on the Global Forecast System of the Meteorological Service of Canada. <i>Monthly Weather Review</i> , 2007, 135, 2355-2364.	1.4	36
6	Implementation of a 3D variational data assimilation system at the Canadian meteorological centre. Part II: The regional analysis. <i>Atmosphere - Ocean</i> , 1999, 37, 281-307.	1.6	34
7	Four-dimensional data assimilation with a wide range of scales. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 1995, 47, 974-997.	1.7	26
8	Evaluation of new estimates of background- and observation-error covariances for variational assimilation. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2005, 131, 3373-3383.	2.7	23
9	Intercomparison of the primal and dual formulations of variational data assimilation. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2008, 134, 1015-1025.	2.7	23
10	A validation of the incremental formulation of 4D variational data assimilation in a nonlinear barotropic flow. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 1998, 50, 557-572.	1.7	21
11	Evaluation of the Impact of Observations on Analyses in 3D- and 4D-Var Based on Information Content. <i>Monthly Weather Review</i> , 2011, 139, 726-737.	1.4	17
12	Convergence properties of the primal and dual forms of variational data assimilation. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2010, 136, 107-115.	2.7	15
13	A geostatistical observation operator for the assimilation of near-surface wind data. <i>Quarterly Journal of the Royal Meteorological Society</i> , 2015, 141, 2857-2868.	2.7	13
14	Assessment of the Impact of Observations on Analyses Derived from Observing System Experiments. <i>Monthly Weather Review</i> , 2012, 140, 245-257.	1.4	11
15	Coupled Stratospheric Chemistry-Meteorology Data Assimilation. Part II: Weak and Strong Coupling. <i>Atmosphere</i> , 2019, 10, 798.	2.3	9
16	Temporal Accumulation of First-Order Linearization Error for Semi-Lagrangian Passive Advection. <i>Monthly Weather Review</i> , 1997, 125, 1296-1311.	1.4	8
17	A validation of the incremental formulation of 4D variational data assimilation in a nonlinear barotropic flow. <i>Tellus, Series A: Dynamic Meteorology and Oceanography</i> , 1998, 50, 557-572.	1.7	8
18	Impact of Lateral Boundary Conditions on Regional Analyses. <i>Monthly Weather Review</i> , 2017, 145, 1361-1379.	1.4	8

#	ARTICLE	IF	CITATIONS
19	Convergence Issues in the Estimation of Interchannel Correlated Observation Errors in Infrared Radiance Data. <i>Monthly Weather Review</i> , 2018, 146, 3227-3239.	1.4	8
20	TICFIRE: a far infrared payload to monitor the evolution of thin ice clouds. <i>Proceedings of SPIE</i> , 2011, , .	0.8	7
21	Quality Control: Methodology and Applications. , 2003, , 177-187.		7
22	On the effect of boundary conditions on the Canadian Regional Climate Model: use of process tendencies. <i>Climate Dynamics</i> , 2015, 45, 2515-2526.	3.8	3
23	Near-Surface Wind Observation Impact on Forecasts: Temporal Propagation of the Analysis Increment. <i>Monthly Weather Review</i> , 2017, 145, 1549-1564.	1.4	3
24	Optimal Configuration of a Farâ€Infrared Radiometer to Study the Arctic Winter Atmosphere. <i>Journal of Geophysical Research D: Atmospheres</i> , 2020, 125, e2019JD031773.	3.3	3
25	Operational Implementation of Variational Data Assimilation. , 2003, , 167-176.		3
26	Observability of Flow-Dependent Structure Functions for Use in Data Assimilation. <i>Monthly Weather Review</i> , 2011, 139, 713-725.	1.4	2
27	Effect of Detuning on the Development of Marginally Unstable Baroclinic Vortices. <i>Journals of the Atmospheric Sciences</i> , 1990, 47, 999-1011.	1.7	1