

# Pierre Gauthier

## List of Publications by Year in descending order

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27  
papers

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citations

759233

12  
h-index

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28  
times ranked

552  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Optimal Configuration of a Farâ€infrared Radiometer to Study the Arctic Winter Atmosphere. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD031773.                    | 3.3 | 3         |
| 2  | Coupled Stratospheric Chemistryâ€Meteorology Data Assimilation. Part II: Weak and Strong Coupling. Atmosphere, 2019, 10, 798.   | 2.3 | 9         |
| 3  | Convergence Issues in the Estimation of Interchannel Correlated Observation Errors in Infrared Radiance Data. Monthly Weather Review, 2018, 146, 3227-3239.                             | 1.4 | 8         |
| 4  | Near-Surface Wind Observation Impact on Forecasts: Temporal Propagation of the Analysis Increment. Monthly Weather Review, 2017, 145, 1549-1564.  | 1.4 | 3         |
| 5  | Impact of Lateral Boundary Conditions on Regional Analyses. Monthly Weather Review, 2017, 145, 1361-1379.   | 1.4 | 8         |
| 6  | A geoâ€statistical observation operator for the assimilation of nearâ€surface wind data. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 2857-2868.                   | 2.7 | 13        |
| 7  | On the effect of boundary conditions on the Canadian Regional Climate Model: use of process tendencies. Climate Dynamics, 2015, 45, 2515-2526.  | 3.8 | 3         |
| 8  | Assessment of the Impact of Observations on Analyses Derived from Observing System Experiments. Monthly Weather Review, 2012, 140, 245-257.   | 1.4 | 11        |
| 9  | TICFIRE: a far infrared payload to monitor the evolution of thin ice clouds. Proceedings of SPIE, 2011, , .   | 0.8 | 7         |
| 10 | Evaluation of the Impact of Observations on Analyses in 3D- and 4D-Var Based on Information Content. Monthly Weather Review, 2011, 139, 726-737.  | 1.4 | 17        |
| 11 | Observability of Flow-Dependent Structure Functions for Use in Data Assimilation. Monthly Weather Review, 2011, 139, 713-725.   | 1.4 | 2         |
| 12 | Convergence properties of the primal and dual forms of variational data assimilation. Quarterly Journal of the Royal Meteorological Society, 2010, 136, 107-115.                        | 2.7 | 15        |
| 13 | Intercomparison of the primal and dual formulations of variational data assimilation. Quarterly Journal of the Royal Meteorological Society, 2008, 134, 1015-1025.                      | 2.7 | 23        |
| 14 | Extension of 3DVAR to 4DVAR: Implementation of 4DVAR at the Meteorological Service of Canada. Monthly Weather Review, 2007, 135, 2339-2354.   | 1.4 | 162       |
| 15 | Impact of the Different Components of 4DVAR on the Global Forecast System of the Meteorological Service of Canada. Monthly Weather Review, 2007, 135, 2355-2364.                        | 1.4 | 36        |
| 16 | Evaluation of new estimates of background- and observation-error covariances for variational assimilation. Quarterly Journal of the Royal Meteorological Society, 2005, 131, 3373-3383. | 2.7 | 23        |
| 17 | Operational Implementation of Variational Data Assimilation. , 2003, , 167-176.   |     | 3         |
| 18 | Quality Control: Methodology and Applications. , 2003, , 177-187.   |     | 7         |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | 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       |
| 20 | 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        |
| 21 | 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         |
| 22 | 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        |
| 23 | Temporal Accumulation of First-Order Linearization Error for Semi-Lagrangian Passive Advection. <i>Monthly Weather Review</i> , 1997, 125, 1296-1311.  | 1.4 | 8         |
| 24 | 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        |
| 25 | 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        |
| 26 | Assimilation of Simulated Wind Lidar Data with a Kalman Filter. <i>Monthly Weather Review</i> , 1993, 121, 1803-1820.  | 1.4 | 74        |
| 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         |