

Volume 139, Issue 5 (May 2011)
[View Abstracts](#) [Add to Favorites](#) [Email](#) [Download to Citation Manager](#) [Track Citations](#)
 Select All


 Denotes Open Access Content
ARTICLES

- 1305   **The North American Lightning Detection Network (NALDN)—Analysis of Flash Data: 2001–09** 1305–
Richard E. Orville, Gary R. Huffines, William R. Burrows, Kenneth L. Cummins 1322
[Abstract](#) . [Full Text](#) . [PDF \(21634 KB\)](#)
- 1323   **The Daily Cloud-to-Ground Lightning Flash Density in the Contiguous United States and Finland** 1323–
Antti Mäkelä, Pekka Rossi, David M. Schultz 1337
[Abstract](#) . [Full Text](#) . [PDF \(9416 KB\)](#)
- 1338   **Observations of Seven Atmospheric Density Current Fronts in Dixon, California** 1338–
Shane D. Mayor 1351
[Abstract](#) . [Full Text](#) . [PDF \(4278 KB\)](#) . [Supplemental Material](#)
- 1352   **The Sensitivity of Momentum Transport and Severe Surface Winds to Environmental Moisture in Idealized Simulations of a Mesoscale Convective System** 1352–
Kelly M. Mahoney, Gary M. Lackmann 1369
[Abstract](#) . [Full Text](#) . [PDF \(4663 KB\)](#)
- 1370   **Life Cycle of a Mesoscale Circular Gust Front Observed by a C-Band Doppler Radar in West Africa** 1370–
Marie Lothon, Bernard Campistron, Michel Chong, Fleur Couvreux, Françoise Guichard, Catherine Rio, Earle Williams 1388
[Abstract](#) . [Full Text](#) . [PDF \(5780 KB\)](#)
- 1389    **Intercomparison of Mesoscale Model Simulations of the Daytime Valley Wind System** 1389–
Juerg Schmidli, Brian Billings, Fotini K. Chow, Stephan F. J. de Wekker, James Doyle, Vanda Grubišić, Teddy Holt, Qiangfang Jiang, Katherine A. Lundquist, Peter Sheridan, Simon Vosper, C. David Whiteman, Andrzej A. Wyszogrodzki, Günther Zängl 1409
[Abstract](#) . [Full Text](#) . [PDF \(2480 KB\)](#)
- 1410   **Probabilistic Precipitation Forecast Skill as a Function of Ensemble Size and Spatial Scale in a Convection-Allowing Ensemble** 1410–
Adam J. Clark, John S. Kain, David J. Stensrud, Ming Xue, Fanyou Kong, Michael C. Coniglio, Kevin W. Thomas, Yunheng Wang, Keith Brewster, Jidong Gao, Xuguang Wang, Steven J. Weiss, Jun Du 1418
[Abstract](#) . [Full Text](#) . [PDF \(1893 KB\)](#)
- 1419   **Composite Analysis of North Atlantic Extratropical Cyclones in NCEP–NCAR Reanalysis Data** 1419–
Irina Rudeva, Sergey K. Gulev 1446
[Abstract](#) . [Full Text](#) . [PDF \(9715 KB\)](#)
- 1447   **An Estimation of Turbulent Characteristics in the Low-Level Region of Intense Hurricanes Allen (1980) and Hugo (1989)** 1447–
Jun A. Zhang, Frank D. Marks, Michael T. Montgomery, Sylvie Lorsolo 1462
[Abstract](#) . [Full Text](#) . [PDF \(3217 KB\)](#)
- 1463   **High-Resolution Initialization and Simulations of Typhoon Morakot (2009)** 1463–
Hiep Van Nguyen, Yi-Leng Chen 1491
[Abstract](#) . [Full Text](#) . [PDF \(11991 KB\)](#)
- 1492   **Evolution of Eyewall Convective Events as Indicated by Intracloud and Cloud-to-Ground Lightning Activity during the Rapid Intensification of Hurricanes Rita and Katrina** 1492–
Alexandre O. Fierro, Xuan-Min Shao, Timothy Hamlin, Jon M. Reisner, Jeremiah Harlin 1504
[Abstract](#) . [Full Text](#) . [PDF \(2409 KB\)](#)

1505	<input type="checkbox"/>  Growth of Forecast Errors from Covariances Modeled by 4DVAR and ETKF Methods <i>Chiara Piccolo</i> Abstract . Full Text . PDF (1235 KB)	1505– 1518
1519	<input type="checkbox"/>  The Gaussian Approach to Adaptive Covariance Inflation and Its Implementation with the Local Ensemble Transform Kalman Filter <i>Takemasa Miyoshi</i> Abstract . Full Text . PDF (3428 KB)	1519– 1535
1536	<input type="checkbox"/>  Global Transport on a Spherical Multiple-Cell Grid <i>Jian-Guo Li</i> Abstract . Full Text . PDF (17021 KB)	1536– 1555
1556	<input type="checkbox"/>  A Class of Conservative Fourth-Order Advection Schemes and Impact of Enhanced Formal Accuracy on Extended-Range Forecasts <i>Zavisa Janjic, Tijana Janjic, Ratko Vasic</i> Abstract . Full Text . PDF (2022 KB)	1556– 1568
1569	<input type="checkbox"/>  Patterns of Land Surface Errors and Biases in the Global Forecast System <i>David Werth, Alfred Garrett</i> Abstract . Full Text . PDF (7527 KB)	1569– 1582
1583	<input type="checkbox"/>  A Multiconserving Discretization with Enthalpy as a Thermodynamic Prognostic Variable in Generalized Hybrid Vertical Coordinates for the NCEP Global Forecast System <i>Hann-Ming Henry Juang</i> Abstract . Full Text . PDF (4011 KB)	1583– 1607
1608	<input type="checkbox"/>   Validation and Interpretation of Adjoint-Derived Sensitivity Steering Vector as Targeted Observation Guidance <i>Shin-Gan Chen, Chun-Chieh Wu, Jan-Huey Chen, Kun-Hsuan Chou</i> Abstract . Full Text . PDF (3590 KB)	1608– 1625
1626	<input type="checkbox"/>  Probabilistic Visibility Forecasting Using Bayesian Model Averaging <i>Richard M. Chmielecki, Adrian E. Raftery</i> Abstract . Full Text . PDF (809 KB)	1626– 1636
1637	<input type="checkbox"/>  A General Filter for Stretched-Grid Models: Application in Cartesian Geometry <i>Dorina Surcel, René Laprise</i> Abstract . Full Text . PDF (3809 KB)	1637– 1653