



Monthly Weather Review

Contents

Vol. 139, No. 4, April 2011

ANNUAL SUMMARY

- Atlantic Hurricane Season of 2009 ROBERT J. BERG AND LIXION A. AVILA 1049–1069

ARTICLES

- Statistical-Dynamical Predictions of Seasonal North Atlantic Hurricane Activity GABRIEL A. VECCHI, MING ZHAO, HUI WANG, GABRIELE VILLARINI, ANTHONY ROSATI, ARUN KUMAR, ISAAC M. HELD, AND RICHARD GUDGEL 1070–1082
- Environment and Early Evolution of the 8 May 2009 Derecho-Producing Convective System MICHAEL C. CONIGLIO, STEPHEN F. CORFIDI, AND JOHN S. KAIN 1083–1102
- Comparison of Two-Moment Bulk Microphysics Schemes in Idealized Supercell Thunderstorm Simulations HUGH MORRISON AND JASON MILBRANDT 1103–1130
- The Impact of Size Distribution Assumptions in a Bulk One-Moment Microphysics Scheme on Simulated Surface Precipitation and Storm Dynamics during a Low-Topped Supercell Case in Belgium KWINTEN VAN WEVERBERG, NICOLE P. M. VAN LIPZIG, AND LAURENT DELOBBE 1131–1147
- 3D-Var Assimilation of Insect-Derived Doppler Radar Radial Winds in Convective Cases Using a High-Resolution Model S. J. RENNIE, S. L. DANCE, A. J. ILLINGWORTH, S. P. BALLARD, AND D. SIMONIN 1148–1163
- The Golden Radius in Balanced Atmospheric Flows H. E. WILLOUGHBY 1164–1168
- A Multiscale Observational Case Study of a Pacific Atmospheric River Exhibiting Tropical-Extratropical Connections and a Mesoscale Frontal Wave F. MARTIN RALPH, PAUL J. NEIMAN, GEORGE N. KILADIS, KLAUS WEICKMANN, AND DAVID W. REYNOLDS 1169–1189
- Using a Stochastic Kinetic Energy Backscatter Scheme to Improve MOGREPS Probabilistic Forecast Skill WARREN J. TENNANT, GLENN J. SHUTTS, ALBERTO ARIBAS, AND SIMON A. THOMPSON 1190–1206
- Assessing the Performance of an Ensemble Forecast System in Predicting the Magnitude and the Spectrum of Analysis and Forecast Uncertainties ELIZABETH SATTERFIELD AND ISTVAN SZUNYOGH 1207–1223
- A Space-Time Multiscale Analysis System: A Sequential Variational Analysis Approach Y. XIE, S. KOCH, J. McGINLEY, S. ALBERS, P. E. BIERINGER, M. WOLFSON, AND M. CHAN 1224–1240
- Adaptive Ensemble Covariance Localization in Ensemble 4D-VAR State Estimation CRAIG H. BISHOP AND DANIEL HODYSS 1241–1255
- High-Order Spectral Filter for the Spherical-Surface Limited Area JA-RIN PARK, HYEONG-BIN CHEONG, AND HYUN-GYU KANG 1256–1278
- WRF Model Experiments on the Antarctic Atmosphere in Winter ESA-MATTI TASTULA AND TIMO VIHMA 1279–1291
- Improving the Temporal Resolution Problem by Localized Gridpoint Nudging in Regional Weather and Climate Models PIET TERMONIA, DAAN DEGRAUWE, AND RAFIQ HAMDI 1292–1304
- Special Collection: *The Third International THORPEX Science Symposium*
- Special Collection: *Intercomparisons of 4D-Variational Assimilation and the Ensemble Kalman Filter*