

Publications related to the National Air Quality Forecast Capability (NAQFC) are separated into sections by the component of the capability that they are most closely associated with: ozone, smoke, dust or fine particulate matter (PM_{2.5}) predictions, and system overview.

NAQFC system overview:

1. Davidson, P., K. Schere, R. Draxler, S. Kondrangunta, R. A. Wayland, J. F. Meagher, R. Mathur (2008), Toward a US National Air Quality Forecast Capability: Current and Planned Capabilities, *Air Pollution Modeling and Its Application XIX*, C. Borrego and A.I. Miranda (Eds.), 226-234, ISBN 978-1-4020-8452-2, Springer, The Netherlands.
(http://link.springer.com/chapter/10.1007%2F978-1-4020-8453-9_25)
2. Stajner, I., P. Davidson, D. Byun, J. McQueen, R. Draxler, P. Dickerson, J. Meagher (2012), US National Air Quality Forecast Capability: Expanding Coverage to Include Particulate Matter, *NATO/ITM Air Pollution Modeling and Its Application XXI*, Douw G. Steyn & Silvia Trini Castelli (ed.), Springer, Netherlands, pp 379-384, DOI: 10.1007/978-94-007-1359-8_64.
(http://link.springer.com/chapter/10.1007%2F978-94-007-1359-8_64)

Ozone prediction:

3. Chai, T., H. Kim, P. Lee, D. Tong, L. Pan, Y. Tang, J. Huang, J. McQueen, M. Tsidulko, and I. Stajner, (2013), Evaluation of the United States National Air Quality Forecast Capability experimental real-time predictions in 2010 using Air Quality System ozone and NO₂ measurements, *Geosci. Model Dev.* 6, 1831-1850 doi:10.5194/gmd-6-1831-2013.
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5. Delle Monache, Luca, James Wilczak, Stuart Mckeen, Georg Grell, Mariusz Pagowski, Steven Peckham, Roland Stull, John Mchenry, Jeffrey Mcqueen (2008), A Kalman-filter bias correction method applied to deterministic, ensemble averaged and probabilistic forecasts of surface ozone, *Tellus Ser B*, 60(2), 238. (<http://www.tellusb.net/index.php/tellusb/article/view/16918>)
6. Eder, B., Kang, D., Mathur, R., Pleim, J., Yu, S., Otte, T., and Pouliot, G. (2009), A performance evaluation of the National Air Quality Forecast Capability for the summer of 2007, *Atmos. Environ.*, 43, 2312–2320.
(<http://www.sciencedirect.com/science/article/pii/S1352231009000624>)
7. Garner, G., A. Thompson, P. Lee, and D. Matins, 2013: Valuation of NAQFC Model Performance in Forecasting Surface Ozone during the 2011 DISCOVER-AQ Campaign, J.

Atmospheric Chemistry. 10.1007/s10874-013-9251-z.

(<http://link.springer.com/article/10.1007%2Fs10874-013-9251-z>)

8. Kang, D., R. Mathur, S. T. Rao, and S. Yu (2008), Bias adjustment techniques for improving ozone air quality forecasts, *J. Geophys. Res.*, 113, D23308, doi:10.1029/2008JD010151. (<http://onlinelibrary.wiley.com/doi/10.1029/2008JD010151/pdf>)
9. Kang, Daiwen, Rohit Mathur, and S. Trivikrama Rao (2010), Real-time bias-adjusted O₃ and PM_{2.5} air quality index forecasts and their performance evaluations over the continental United States, *Atmosphere Environment*, 44(18), 2203. (<http://www.sciencedirect.com/science/article/pii/S1352231010002128>)
10. Lee, P., D. Kang, J. McQueen, M. Tsidulko, M. Hart, G. DiMego, N. Seaman, and P. Davidson (2008), Impact of Domain Size on Modeled Ozone Forecast for the Northeastern United States. *J. Meteor. and Climate.*, 47, 443–461. (<http://journals.ametsoc.org/doi/abs/10.1175/2007JAMC1408.1>)
11. Lee, P., Y.-H. Tang, D. Kang, J. McQueen, M. Tsidulko, H.-C. Huang, S. Lu, M. Hart, H.-M. Lin, S. Yu, G. DiMego, I. Stajner and P. Davidson (2009), Impact of Consistent Boundary Layer Mixing Approaches Between NAM and CMAQ, *Environmental Fluid Mechanics*, 9:23-42. doi:10.1007/s10652-008-9089-0. (<http://link.springer.com/article/10.1007%2Fs10652-008-9089-0>)
12. Lee, Pius, Fantine Ngan, Hyuncheol Kim, Daniel Tong, Youhua Tang, Tianfeng Chai, Rick Saylor, Ariel Stein, Daewon Byun and Marina Tsidulko, Jeff McQueen, Ivanka Stajner (2012), Incremental Development of Air Quality Forecasting System with Off-Line/On-Line Capability: Coupling CMAQ to NCEP National Mesoscale Model, *NATO/ITM Air Pollution Modeling and Its Application XXI*, Douw G. Steyn & Silvia Trini Castelli (ed.), Springer, Netherlands, pp 187-192, DOI: 10.1007/978-94-007-1359-8_32. (http://link.springer.com/chapter/10.1007%2F978-94-007-1359-8_32)
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15. Otte, T. L., G. Pouliot, J. E. Pleim, J. O. Young, K. L. Schere, D. C. Wong, P.C. Lee, M. Tsidulko, J.T. McQueen, P. Davidson, R. Mathur, H. Y. Chuang, G. DiMego and N. Seaman (2005), Linking the Eta Model with the Community Multiscale Air Quality (CMAQ) modeling system to build a national air quality forecasting system. *Wea. Forecasting*, 20, 367-384. (<http://journals.ametsoc.org/doi/pdf/10.1175/WAF855.1>)
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17. Pan, L., D.Q. Tong, P. Lee, H. Kim and T. Chai,(2014), Assessment of NO_x and O₃ forecasting performances in the U.S. National Air Quality Forecasting Capability before and after the 2012 major emissions updates, *Atmospheric Environment*, 95(2014), Pages 610-619.
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Prediction of smoke from wildfires:

27. Christopher, S., P. Gupta, U. Nair, T. A. Jones, S. Kondragunta, Y-L Wu, J. Hand, and X. Zhang (2009), Satellite Remote Sensing and Mesoscale Modeling of the 2007 Georgia/Florida Fires, *IEEE J. of Selected Topics in Applied Earth Sciences and Remote Sensing*, 2 (3), 163-175, doi:10.1109/JSTARS.2009.2026626. (<http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=5208307&url=http%3A%2F%2Fieeexplore.ieee.org%2Fiel5%2F4609443%2F4609444%2F05208307.pdf%3Farnumber%3D5208307>)
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(<http://www.bom.gov.au/amm/docs/1998/draxler.pdf>)
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Prediction of fine particulate matter (PM_{2.5}):

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NAQFC Applications:

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