

Danijel Belušić – List of Publications

Book chapters:

1. Ulbrich, U., Lionello, P., Belušić, D., Jacobeit, J., Knippertz, P., Kuglitsch, F. G., Leckebusch, G. C., Luterbacher, J., Maugeri, M., Maheras, P., Nissen, K. M., Pavan, V., Pinto, J. G., Saaroni, H., Seubert, S., Toreti, A., Xoplaki, E., Ziv, B., 2012: Climate of the Mediterranean: synoptic patterns, temperature, precipitation, winds, and their extremes. In: *The Climate of the Mediterranean Region - From the Past to the Future*, ed. Piero Lionello, Elsevier, Amsterdam, pp. 301-346.

Journal publications:

1. Taylor, C. M., Belušić, D., Guichard, F., Parker, D. J., Vischel, T., Bock, O., Harris, P. P., Janicot, S., Klein, C., Panthou, G., 2017: Frequency of extreme Sahelian storms tripled since 1982 in satellite observations. *Nature*, **544**, 475–478.
2. Wang, Z., Belušić, D., Huang, Y., Siems, S. T., Manton, M. J., 2016: Understanding orographic effects on surface observations at Macquarie Island. *J. Appl. Meteorol. Climatol.*, **55**, 2377–2395.
3. Sun, J., Nappo, C. J., Mahrt, L., Belušić, D., Grisogono, B., Stauffer, D. R., Pulido, M., Staquet, C., Jiang, Q., Pouquet, A., Yague, C., Galperin, B., Smith, R. B., Finnigan, J. J., Mayor, S. D., Svensson, G., Grachev, A. A., Neff, W. D., 2015: Review of wave-turbulence interactions in the stable atmospheric boundary layer. *Rev. Geophys.*, **53**, doi:10.1002/2015RG000487.
4. Kang, Y., Belušić, D., Smith-Miles, K., 2015: Classes of structures in the stable atmospheric boundary layer. *Q. J. R. Meteorol. Soc.*, **141**, 2057–2069.
5. Belušić, D., Večenaj, Ž., LeMone, M. A., 2015: Possible observation of horizontal roll vortices over the Adriatic Sea during bora. *Front. Earth Sci.* **3**, 23, doi:10.3389/feart.2015.00023.
6. Wang, Z., Siems, S. T., Belušić, D., Manton, M. J., Huang, Y., 2015: A climatology of the precipitation over the Southern Ocean as observed at Macquarie Island. *J. Appl. Meteorol. Climatol.*, **54**, 2321–2337.
7. Kang, Y., Belušić, D., Smith-Miles, K., 2014: A note on the relationship between turbulent coherent structures and phase correlation. *Chaos*, **24**, 023114, doi:10.1063/1.4875260.
8. Belušić, D., Lenschow, D. H., Tapper, N. J., 2014: Performance of a mobile car platform for mean wind and turbulence measurements. *Atmos. Meas. Tech.*, **7**, 1825–1837, doi:10.5194/amt-7-1825-2014.
9. Kang, Y., Belušić, D., Smith-Miles, K., 2014: Detecting and classifying events in noisy time series. *J. Atmos. Sci.*, **71**, 1090–1104.
10. Nappo, C., Sun, J., Mahrt, L., Belušić, D., 2014: Determining wave-turbulence interactions in the stable boundary layer. *B. Amer. Meteorol. Soc.*, **95**, ES11–ES13.
11. Belušić, D., Hrastinski, M., Večenaj, Ž., Grisogono, B., 2013: Wind regimes associated with a mountain gap at the northeastern Adriatic coast. *J. Appl. Meteorol. Climatol.*, **52**, 2089–2105.
12. Kang, Y., Smith-Miles, K., Belušić, D., 2013: How to extract meaningful shapes from noisy time-series subsequences? *2013 IEEE Symposium on Computational Intelligence and Data Mining*, Singapore, 65–72, doi:10.1109/CIDM.2013.6597219.

13. Hande, L. B., Siems, S. T., Manton, M. J., Belušić, D., 2012: Observations of wind shear over the Southern Ocean. *J. Geophys. Res.*, **117**, D12206, doi:10.1029/2012JD017488.
14. Belušić, D., Mahrt, L., 2012: Is geometry more universal than physics in atmospheric boundary layer flow? *J. Geophys. Res.*, **117**, D09115, doi:10.1029/2011JD016987.
15. Güttler, I., Belušić, D., 2012: The nature of small-scale non-turbulent variability in a mesoscale model. *Atmos. Sci. Lett.*, **13**, 169–173.
16. Večenaj, Ž., Belušić, D., Grubišić, V., Grisogono, B., 2012: Along-coast features of bora-related turbulence. *Boundary-Layer Meteorol.*, **143**, 527–545.
17. Belušić, D., Güttler, I., 2010: Can mesoscale models reproduce meandering motions? *Q. J. R. Meteorol. Soc.*, **136**, 553–565.
18. Orlić, M., Belušić, D., Janeković, I., Pasarić, M., 2010: Fresh evidence relating the great Adriatic surge of 21 June 1978 to mesoscale atmospheric forcing. *J. Geophys. Res.*, **115**, C06011, doi:10.1029/2009JC005777.
19. Večenaj, Ž., Belušić, D., Grisogono, B., 2010: Characteristics of the near-surface turbulence during a bora event. *Ann. Geophys.*, **28**, 155–163.
20. Davidović, D., Skala, K., Belušić, D., Telišman Prtenjak, M., 2010: Grid implementation of the Weather Research and Forecasting model. *Earth Sci. Inform.*, **3**, 199–208, doi:10.1007/s12145-010-0060-5.
21. Belušić, D., Strelec Mahović, N., 2009: Detecting and following atmospheric disturbances with a potential to generate meteotsunamis in the Adriatic. *Phys. Chem. Earth*, **34**, 918 – 927.
22. Pasarić, Z., Belušić, D., Chiggiato, J., 2009: Orographic effects on meteorological fields over the Adriatic from different models. *J. Marine Sys.*, **78**, S90–S100.
23. Šepić, J., Vilibić, I., Belušić, D., 2009: Source of the 2007 Ist meteotsunami (Adriatic Sea). *J. Geophys. Res.*, **114**, C03016, doi:10.1029/2008JC005092.
24. Grisogono, B., Belušić, D., 2009: A review of recent advances in understanding the meso- and microscale properties of the severe Bora wind. *Tellus*, **61A**, 1–16.
25. Prtenjak, M. T., Belušić, D., 2009: Formation of reversed lee flow over the north-eastern Adriatic during bora. *Geofizika*, **26**, 145–155.
26. Bencetić Klaić, Z., Prodanov A. D., Belušić, D., 2009: Wind measurements in Senj - underestimation of true bora flows. *Geofizika*, **26**, 245–252.
27. Grisogono, B., Belušić, D., 2008: Improving mixing length-scale for stable boundary layers. *Q. J. R. Meteorol. Soc.*, **134**, 2185 – 2192.
28. Belušić, D., Mahrt, L., 2008: Estimation of length scales from mesoscale networks. *Tellus*, **60A**, 706–715.
29. Vickers, D., Mahrt, L., Belušić, D., 2008: Particle simulations of dispersion using observed meandering and turbulence. *Acta Geophys.*, **56**, 234–256.
30. Belušić, D., Grisogono, B., Klaić, Z. B., 2007: Atmospheric origin of the devastating coupled air-sea event in the east Adriatic. *J. Geophys. Res. – Atmos.*, **112**, D17111, doi:10.1029/2006JD008204.
31. Belušić, D., Žagar, M., Grisogono, B., 2007: Numerical simulation of pulsations in the bora wind. *Q. J. R. Meteorol. Soc.*, **133**, 1371–1388.
32. Pasarić, Z., Belušić, D., Klaić, Z. B., 2007: Orographic influences on the Adriatic sirocco wind. *Ann. Geophys.*, **25**, 1263–1267.

33. Belušić, D., Pasarić, M., Pasarić, Z., Orlić, M., Grisogono, B., 2006: A note on local and non-local properties of turbulence in the bora flow. *Meteorol. Z.*, **15**, 301–306.
34. Belušić, D., Klaić, Z. B., 2006: Mesoscale dynamics, structure and predictability of a severe Adriatic bora case. *Meteorol. Z.*, **15**, 157–168.
35. Belušić, D., Pasarić, M., Orlić, M., 2004: Quasi-periodic bora gusts related to the structure of the troposphere. *Q. J. R. Meteorol. Soc.*, **130**, 1103–1121.
36. Belušić, D., Klaić, Z. B., 2004: Estimation of bora wind gusts using a limited area model. *Tellus*, **56A**, 296–307.
37. Kos, I., Belušić, D., Jeričević, A., Horvath, K., Koračin, D., Telišman Prtenjak, M., 2004: Education and research: Initial development of the Atmospheric Lagrangian Particle Stochastic (ALPS) Dispersion Model. *Geofizika*, **21**, 37–52.
38. Klaić, Z. B., Belušić, D., Herceg Bulić, I., Hrust, L., 2003: Mesoscale modelling of meteorological conditions in the lower troposphere during a winter stratospheric ozone intrusion over Zagreb, Croatia. *J. Geophys. Res. – Atmos.*, **108**, 4720, doi:10.1029/2003JD003878.
39. Klaić, Z. B., Belušić, D., Grubišić, V., Gabela, L., Čoso, L., 2003: Mesoscale airflow structure over the northern Croatian coast during MAP IOP 15 – a major Bora event. *Geofizika*, **20**, 23–61.

Over 60 presentations at international conferences and meetings.