

## Other reference papers on conjugate studies

1. DeWitt, R. N., The occurrence of aurora in geomagnetically conjugate areas, JGR, <https://doi.org/10.1029/JZ067i004p01347>, 1962.
2. Wescott, E. M., Magnetoconjugate phenomena, Space Science Reviews volume 5, pages507–561, <https://link.springer.com/article/10.1007/BF00240576>, 1966.
3. Belon, A. E., J. E. Maggs, T. N. Davis, K. B. Mather, N. W. Glass, G. F. Hughes, Conjugacy of visual auroras during magnetically quiet periods, JGR, 74, 1, 1-28, <https://agupubs.onlinelibrary.wiley.com/doi/abs/10.1029/JA074i001p00001>, 1969.
4. Davis, T. N., T. J. Hallinan, and H. C. Stenbaek-Nielsen, Auroral conjugacy and time-dependent geometry of auroras, The Radiating Atmosphere, Edited by B. M. McCormac, Reidel Publishing Company, 160-169, 1971.
5. Stenbaek-Nielsen, H. C., T. N. Davis, N. W. Glass, Relative motion of auroral conjugate points during substorms, JGR, Volume 77, Issue 10, p.1844-1858, <https://doi.org/10.1029/JA077i010p01844>, 1972.
6. Stenbaek-Nielsen, H. C., E. M. Wescott, T. N. Davis, R. W. Peterson, Differences in auroral intensity at conjugate points, JGR, Volume78, Issue4, 659-671, <https://doi.org/10.1029/JA078i004p00659>, 1973.
7. Cowley, S.W.H., Magnetospheric asymmetries associated with the y-component of the IMF, Planetary and Space Science, Volume 29, Issue 1, Pages 79-96, [https://doi.org/10.1016/0032-0633\(81\)90141-0](https://doi.org/10.1016/0032-0633(81)90141-0), 1981.
8. Holzworth, R.H., C.-I. Meng, Auroral boundary variations and the interplanetary magnetic field, Planetary and Space Science, Volume 32, Issue 1, Pages 25-29, [https://doi.org/10.1016/0032-0633\(84\)90038-2](https://doi.org/10.1016/0032-0633(84)90038-2), 1984.
9. Dickinson, Dale F., Stephen B. Mende, David S. Evans, Dayside variation in auroral conjugacy, Geophysical Research Letters, Volume13, Issue1, 68-71, <https://doi.org/10.1029/GL013i001p00068>, 1986.
10. Kaufmann, R. L., Douglas J. Larson, Chen Lu, Mapping and distortions of auroral structures in the quiet magnetosphere, JGR, Volume95, IssueA6, 7973-7994, <https://doi.org/10.1029/JA095iA06p07973>, 1990.
11. Craven, J. D., J. S. Murphree, L. A. Frank, and L. L. Cogger, Simultaneous optical observations of transpolar arcs in the two polar caps, GRL, 18, 12, 2297-2300, <https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/91GL02308>, 1991.
12. Stenbaek-Nielsen, H. C., and A. Otto, Conjugate auroras and the interplanetary magnetic field, JGR, Volume102, IssueA2, 2223-2232, <https://doi.org/10.1029/96JA03563>, 1997.
13. Partamies, N., M. P. Freeman, K. Kauristie, On the winding of auroral spirals: Interhemispheric observations and Hallinan's theory revisited, JGR, Volume106, IssueA12, 28913-28924, <https://doi.org/10.1029/2001JA900093>, 2001.
14. Vorobjev, V. G., O. I. Yagodkina, D. Sibeck, K. Liou, C.-I. Meng, Aurora conjugacy during substorms: Coordinated Antarctic ground and Polar Ultraviolet observations, Volume106, Issue A11, Pages 24579-24591, <https://doi.org/10.1029/2001JA900025>, 2011.
15. Shue, J.-H., P. T. Newell, K. Liou, C.-I Meng, Influence of interplanetary magnetic field on global auroral patterns, JGR, Volume106, IssueA4, 5913-5926, <https://doi.org/10.1029/2000JA003010>, 2001.
16. Shue, J.-H., P. T. Newell, K. Liou, C.-I. Meng, S. W. H. Cowley, Interplanetary magnetic field Bx asymmetry effect on auroral brightness, Volume107, IssueA8, Pages SIA 16-1-SIA 16-10, <https://doi.org/10.1029/2001JA000229>, 2002.
17. Frank, L. A., and J. B. Sigwarth, Simultaneous images of the northern and southern auroras from the Polar spacecraft: An auroral substorm, JGR, VOL. 108, NO. A4, 8015, doi:10.1029/2002JA009356, 2003.
18. Østgaard, N., S. B. Mende, H. U. Frey, L. A. Frank, J. B. Sigwarth, Observations of non-conjugate theta aurora, Volume30, Issue21, <https://doi.org/10.1029/2003GL017914>, 2003.
19. Østgaard, N., S. B. Mende, H. U. Frey, and T. J. Immel, Interplanetary magnetic field control of the location of substorm onset and auroral features in the conjugate hemispheres, VOL. 109, A07204, <https://doi.org/10.1029/2003JA010370>, 2004
20. Østgaard, N., N. A. Tsyganenko, S. B. Mende, H. U. Frey, T. J. Immel, M. Fillingim, L. A. Frank, J. B. Sigwarth, Observations and model predictions of substorm auroral asymmetries in the conjugate hemispheres, GRL, VOL. 32, L05111, <https://doi.org/10.1029/2004GL022166>, 2005.
21. Fillingim, M. O., G. K. Parks, H. U. Frey, T. J. Immel, and S. B. Mende, Hemispheric asymmetry of the afternoon electron aurora, GRL, VOL. 32, L03113, <https://doi.org/10.1029/2004GL021635>, 2005.
22. Stubbs, T. J., R. R. Vondrak, N. Østgaard, J. B. Sigwarth, and L. A. Frank, Simultaneous observations of the auroral ovals in both hemispheres under varying conditions, GRL, VOL. 32, L03103, <https://doi.org/10.1029/2004GL021199>, 2005.
23. Østgaard, N., S. B. Mende, H. U. Frey, and J. B. Sigwarth, Simultaneous imaging of the reconnection spot in the opposite hemispheres during northward IMF, GRL, VOL. 32, L21104, <https://doi.org/10.1029/2005GL024491>, 2005.
24. Østgaard, N., S.B. Mende, H.U. Frey, J.B. Sigwarth, A. A. Åsnes, J.M. Weygand, Auroral conjugacy studies based on global imaging, Journal of Atmospheric and Solar-Terrestrial Physics 69, 249–255, <https://doi.org/10.1016/j.jastp.2006.05.026>, 2007.
25. Wang, H., H. Lühr, S. Y. Ma, and H. U. Frey, Interhemispheric comparison of average substorm onset locations: evidence for deviation from conjugacy, Ann. Geophys., 25, 4, 989–999, <https://doi.org/10.5194/angeo-25-989-2007>, 2007.

26. Weygand, J. M., and Eftihia Zesta, Comparison of auroral electrojet indices in the Northern and Southern Hemispheres, JGR, VOL. 113, A08202, <https://doi.org/10.1029/2008JA013055>, 2008.
27. Weygand, J. M., and Eftihia Zesta, Correction to “Comparison of auroral electrojet indices in the Northern and Southern Hemispheres”, JGR, VOL. 113, A09299, <https://doi.org/10.1029/2008JA013671>, 2008.
28. Laundal, K. M., and N. Østgaard, Asymmetric auroral intensities in the Earth’s Northern and Southern hemispheres, Nature Letters, Vol 460, 23, <https://doi.org/10.1038/nature08154>, July 2009.
29. Østgaard, N., B. K. Humerås, and K. M. Laundal, Evolution of auroral asymmetries in the conjugate hemispheres during two substorms, GRL, VOL. 38, L03101, <https://doi.org/10.1029/2010GL046057>, 2011.
30. Østgaard, N., K. M. Laundal, L. Juusola, A. Åsnes, S. E. Håland, and J. M. Weygand, Interhemispherical asymmetry of substorm onset locations and the interplanetary magnetic field, GRL, VOL. 38, L08104, <https://doi.org/10.1029/2011GL046767>, 2011.
31. Østgaard, N., K. M. Laundal, L. Juusola, A. Åsnes, S. E. Håland, and J. M. Weygand, Correction to “Interhemispherical asymmetry of substorm onset locations and the interplanetary magnetic field”, GRL, VOL. 39, L10104, <https://doi.org/10.1029/2012GL052319>, 2012.
32. Østgaard, N., and K. M. Laundal, Auroral Asymmetries in the Conjugate Hemispheres and Interhemispheric Currents, Auroral Phenomenology and Magnetospheric Processes: Earth And Other Planets, Volume 197, <https://doi.org/10.1029/2011GM001190>, 2012.
33. Ganushkina, N. Yu., M. V. Kubyshkina, N. Partamies, and E. Tanskanen, Interhemispheric magnetic conjugacy, JGR, VOL. 118, 1049–1061, <https://doi.org/10.1002/jgra.50137>, 2013.
34. Hu, Ze-Jun, Hui-Gen Yang, Hong-Qiao Hu, Bei-Chen Zhang, De-Hong Huang, Zhuo-Tian Chen, and Q. Wang, The hemispheric conjugate observation of postnoon “bright spots”/auroral spirals, JGR, VOL. 118, 1428–1434, <https://doi.org/10.1002/jgra.50243>, 2013.
35. Kim, H., X. Cai, C. R. Clauer, B. S. R. Kunduri, J. Matzka, C. Stolle, and D. R. Weimer, Geomagnetic response to solar wind dynamic pressure impulse events at high-latitude conjugate points, JGR, VOL. 118, 6055–6071, <https://doi.org/10.1002/jgra.50555>, 2013.
36. Reistad, J. P., N. Østgaard, K. M. Laundal, and K. Oksavik, On the non-conjugacy of nightside aurora and their generator mechanisms, JGR, VOL. 118, 3394–3406, <https://doi.org/10.1002/jgra.50300>, 2013.
37. Reistad, J. P., N. Østgaard, K.M. Laundal, S. Haaland, P. Tenfjord, K. Snekvik, K. Oksavik, and S. E. Milan, Intensity asymmetries in the dusk sector of the poleward auroral oval due to IMF B<sub>x</sub>, J. Geophys. Res. Space Physics, 119, 9497–9507, <https://doi.org/10.1002/2014JA020216>, 2014.
38. Luan, X., W. Wang, A. Burns, and X. Dou, Universal time variations of the auroral hemispheric power and their interhemispheric asymmetry from TIMED/GUVI observations, J. Geophys. Res. Space Physics, 121, 10,258–10,268, <https://doi.org/10.1002/2016JA022730>, 2016.
39. Reistad, J. P., N. Østgaard, P. Tenfjord, K. M. Laundal, K. Snekvik, S. Haaland, S. E. Milan, K. Oksavik, H. U. Frey, and A. Grocott, Dynamic effects of restoring footpoint symmetry on closed magnetic field lines, J. Geophys. Res. Space Physics, 121, 3963–3977, <https://doi.org/10.1002/2015JA022058>, 2016.
40. Samara, M., R. G. Michell, and G. V. Khazanov, First optical observations of interhemispheric electron reflections within pulsating aurora, Geophys. Res. Lett., 44, 2618–2623, <https://doi.org/10.1002/2017GL072794>, 2017.
41. Martinis, C., J. Baumgardner, J. Wroten, M. Mendillo, All-sky-imaging capabilities for ionospheric space weather research using geomagnetic conjugate point observing sites, Advances in Space Research 61, 1636–1651, <http://dx.doi.org/10.1016/j.asr.2017.07.021>, 2018.
42. Ohma, A., Østgaard, N., Reistad, J. P., Tenfjord, P., Laundal, K. M., Snekvik, K., et al., Evolution of asymmetrically displaced footpoints during substorms. Journal of Geophysical Research: Space Physics, 123, 10,030–10,063. <https://doi.org/10.1029/2018JA025869>, 2018.
43. Reidy, J., Fear, R. C., Whiter, D., Lanchester, B. S., Kavanagh, A. J., Milan, S. E., et al., Interhemispheric survey of polar cap aurora, Journal of Geophysical Research: Space Physics, 123, 7283–7306. <https://doi.org/10.1029/2017JA025153>, 2018.
44. Ranasinghe, M., Akiko Fujimoto, Akimasa Yoshikawa and Chandana Jayaratne, Seasonal variation of inter-hemispheric field-aligned currents deduced from time-series analysis of the equatorial geomagnetic field data during solar cycle 23–24, Earth, Planets and Space, 73:146, <https://doi.org/10.1186/s40623-021-01481-6>, 2021.
45. Kullen, A., Thor, S., & Cai, L., The question of transpolar arc conjugacy: New results from comparing solar wind data and dipole tilt distribution of five different datasets. Journal of Geophysical Research: Space Physics, 128, e2022JA030987. <https://doi.org/10.1029/2022JA030987>, 2023.