

List of Refereed Publications
Wind Spacecraft: 2022

References

- [1] Abe, S., S. Asami, A. Gando, Y. Gando, T. Gima, A. Goto, T. Hachiya, K. Hata, K. Hosokawa, K. Ichimura, S. Ieki, H. Ikeda, K. Inoue, K. Ishidoshiro, Y. Kamei, N. Kawada, Y. Kishimoto, T. Kinoshita, M. Koga, N. Maemura, T. Mitsui, H. Miyake, K. Nakamura, K. Nakamura, R. Nakamura, H. Ozaki, T. Sakai, H. Sambonsugi, I. Shimizu, J. Shirai, K. Shiraishi, A. Suzuki, Y. Suzuki, A. Takeuchi, K. Tamae, M. Eizuka, M. Kurasawa, T. Nakahata, S. Futagi, H. Watanabe, Y. Yoshida, S. Obara, A. K. Ichikawa, S. Yoshida, S. Umehara, K. Fushimi, B. E. Berger, B. K. Fujikawa, J. G. Learned, J. Maricic, S. N. Axani, J. Smolsky, C. Laber-Smith, L. A. Winslow, Z. Fu, J. Ouellet, Y. Efremenko, H. J. Karwowski, D. M. Markoff, W. Tornow, A. Li, J. A. Detwiler, S. Enomoto, M. P. Decowski, C. Grant, H. Song, T. O'Donnell, and S. Dell'Oro (2022), A Search for Correlated Low-energy Electron Antineutrinos in KamLAND with Gamma-Ray Bursts, *Astrophys. J.*, **927**(1), 69, [10.3847/1538-4357/ac4e7e](https://doi.org/10.3847/1538-4357/ac4e7e).
- [2] Adriani, O., Y. Akaike, K. Asano, Y. Asaoka, E. Berti, G. Bigongiari, W. R. Binns, M. Bongi, P. Brogi, A. Bruno, J. H. Buckley, N. Cannady, G. Castellini, C. Checchia, M. L. Cherry, G. Collazuol, K. Ebisawa, A. W. Ficklin, H. Fuke, S. Gonzi, T. G. Guzik, T. Hams, K. Hibino, M. Ichimura, K. Ioka, W. Ishizaki, M. H. Israel, K. Kasahara, J. Kataoka, R. Kataoka, Y. Katayose, C. Kato, N. Kawanaka, Y. Kawakubo, K. Kobayashi, K. Kohri, H. S. Krawczynski, J. F. Krizmanic, P. Maestro, P. S. Marrocchesi, A. M. Messineo, J. W. Mitchell, S. Miyake, A. A. Moiseev, M. Mori, N. Mori, H. M. Motz, K. Munakata, S. Nakahira, J. Nishimura, G. A. de Nolfo, S. Okuno, J. F. Ormes, N. Ospina, S. Ozawa, L. Pacini, P. Papini, B. F. Rauch, S. B. Ricciarini, K. Sakai, T. Sakamoto, M. Sasaki, Y. Shimizu, A. Shiomi, P. Spillantini, F. Stolzi, S. Sugita, A. Sulaj, M. Takita, T. Tamura, T. Terasawa, S. Torii, Y. Tsunesada, Y. Uchihori, E. Vannuccini, J. P. Wefel, K. Yamaoka, S. Yanagita, A. Yoshida, K. Yoshida, and W. V. Zober (2022), CALET Search for Electromagnetic Counterparts of Gravitational Waves during the LIGO/Virgo O3 Run, *Astrophys. J.*, **933**(1), 85, [10.3847/1538-4357/ac6f53](https://doi.org/10.3847/1538-4357/ac6f53).
- [3] Aksim, D., and D. Pavlov (2022), Improving the solar wind density model used in processing of spacecraft ranging observations, *Mon. Not. Roy. Astron. Soc.*, **514**(3), 3191–3201, [10.1093/mnras/stac1229](https://doi.org/10.1093/mnras/stac1229).
- [4] Al Shidi, Q., T. Pulkkinen, G. Toth, A. Brenner, S. Zou, and J. Gjerloev (2022), A Large Simulation Set of Geomagnetic Storms—Can Simulations Predict Ground Magnetometer Station Observations of Magnetic Field Perturbations?, *Space Weather*, **20**(11), e2022SW003049, [10.1029/2022SW003049](https://doi.org/10.1029/2022SW003049).
- [5] Albert, A., R. Alfaro, C. Alvarez, J. C. Arteaga-Velázquez, K. P. Arunbabu, D. A. Rojas, H. A. A. Solares, R. Babu, E. Belmont-Moreno, C. Brisbois, K. S. Caballero-Mora, T. Capistrán, A. Carramiñana, S. Casanova, O. Chaparro-Amaro, U. Cotti, J. Cotzomi, S. C. de León, C. de León, E. De la Fuente, R. Diaz Hernandez, S. Dichiara, B. L. Dingus, M. A. DuVernois, M. Durocher, J. C. Díaz-Vélez, K. Engel, C. Espinoza, K. L. Fan, N. Fraija, A. Galván-Gámez, J. A. García-González, F. Garfias, M. M. González, J. A. Goodman, J. P. Harding, S. Hernandez, B. Hona, D. Huang, F. Hueyotl-Zahuantitla, T. B. Humensky, P. Hüntemeyer, A. Iriarte, V. Joshi, S. Kaufmann, A. Lara, W. H. Lee, H. L.

List of Refereed Publications
Wind Spacecraft: 2022

- Vargas, J. T. Linnemann, A. L. Longinotti, G. Luis-Raya, K. Malone, S. S. Marinelli, O. Martinez, J. Martínez-Castro, J. A. Matthews, P. Miranda-Romagnoli, J. A. Morales-Soto, E. Moreno, M. Mostafá, A. Nayerhoda, L. Nellen, M. Newbold, R. Noriega-Papaqui, A. Peisker, Y. P. Araujo, E. G. Pérez-Pérez, Z. Ren, C. D. Rho, D. Rosa-González, M. Rosenberg, J. R. Sacahui, H. Salazar, F. S. Greus, A. Sandoval, J. Serna-Franco, A. J. Smith, R. W. Springer, P. Surajbali, O. Tibolla, K. Tollefson, I. Torres, R. Torres-Escobedo, R. Turner, L. Villaseñor, X. Wang, E. Willox, A. Zepeda, H. Zhou, and HAWC Collaboration (2022), Constraints on the Very High Energy Gamma-Ray Emission from Short GRBs with HAWC, *Astrophys. J.*, **936**(2), 126, [10.3847/1538-4357/ac880e](https://doi.org/10.3847/1538-4357/ac880e).
- [6] Alfonsi, L., N. Bergeot, P. J. Cilliers, G. De Franceschi, L. Baddeley, E. Correia, D. Di Mauro, C.-F. Enell, M. Engebretson, R. Ghoddousi-Fard, I. Häggström, Y.-b. Ham, G. Heygster, G. Gee, A. Kero, M. Kosch, H.-J. Kwon, C. Lee, S. Lotz, L. Macotela, M. F. Marcucci, W. J. Miloch, Y. J. Morton, T. Naoi, M. Negusini, N. Partamies, B. H. Petkov, E. Pottiaux, P. Prikryl, P. R. Shreedevi, R. Slapak, L. Spogli, J. Stephenson, A. M. Triana-Gómez, O. A. Troshichev, R. Van Malderen, J. M. Weygand, and S. Zou (2022), Review of Environmental Monitoring by Means of Radio Waves in the Polar Regions: From Atmosphere to Geospace, *Surveys in Geophys.*, **43**(6), 1609–1698, [10.1007/s10712-022-09734-z](https://doi.org/10.1007/s10712-022-09734-z).
- [7] Alerman, B. L. (2022), Plasma Data Sources in the OMNI Database, *Res. Notes Amer. Astron. Soc.*, **6**(6), 135, [10.3847/2515-5172/ac7a2f](https://doi.org/10.3847/2515-5172/ac7a2f).
- [8] Armatas, S., C. Bouratzis, A. Hillaris, C. E. Alissandrakis, P. Preka-Papadema, A. Kontogeorgos, P. Tsitsipis, and X. Moussas (2022), High-resolution observations with ARTEMIS/JLS and the NRH. IV. Imaging spectroscopy of spike-like structures near the front of type-II bursts, *Astron. & Astrophys.*, **659**, A198, [10.1051/0004-6361/202142406](https://doi.org/10.1051/0004-6361/202142406).
- [9] Arrazola, D., J. J. Blanco, and M. A. Hidalgo (2022), Analysis of the heliospheric current sheet's local structure based on a magnetic model, *Astron. & Astrophys.*, **660**, A12, [10.1051/0004-6361/202142474](https://doi.org/10.1051/0004-6361/202142474).
- [10] Aschwanden, M. J. (2022), The Fractality and Size Distributions of Astrophysical Self-Organized Criticality Systems, *Astrophys. J.*, **934**(1), 33, [10.3847/1538-4357/ac6bf2](https://doi.org/10.3847/1538-4357/ac6bf2).
- [11] Badman, S. T., D. H. Brooks, N. Poirier, H. P. Warren, G. Petrie, A. P. Rouillard, C. Nick Arge, S. D. Bale, D. de Pablos Agüero, L. Harra, S. I. Jones, A. Kouloumvakos, P. Riley, O. Panasenco, M. Velli, and S. Wallace (2022), Constraining Global Coronal Models with Multiple Independent Observables, *Astrophys. J.*, **932**(2), 135, [10.3847/1538-4357/ac6610](https://doi.org/10.3847/1538-4357/ac6610).
- [12] Badman, S. T., E. Carley, L. A. Cañizares, N. Dresing, L. K. Jian, D. Lario, P. T. Gallagher, J. C. Martínez Oliveros, M. Pulupa, and S. D. Bale (2022), Tracking a Beam of Electrons from the Low Solar Corona into Interplanetary Space with the Low Frequency Array, Parker Solar Probe, and 1 au Spacecraft, *Astrophys. J.*, **938**(2), 95, [10.3847/1538-4357/ac90c2](https://doi.org/10.3847/1538-4357/ac90c2).

List of Refereed Publications
Wind Spacecraft: 2022

- [13] Badruddin, B., O. P. M. Aslam, and M. Derouich (2022), Study of the development of geomagnetic storms in the magnetosphere using solar wind data of three different time resolutions, *Astrophys. Space Sci.*, **367**(1), 10, [10.1007/s10509-021-04030-5](https://doi.org/10.1007/s10509-021-04030-5).
- [14] Bailey, R. L., R. Leonhardt, C. Möstl, C. Beggan, M. A. Reiss, A. Bhaskar, and A. J. Weiss (2022), Forecasting GICs and Geoelectric Fields From Solar Wind Data Using LSTMs: Application in Austria, *Space Weather*, **20**(3), e2021SW002907, [10.1029/2021SW002907](https://doi.org/10.1029/2021SW002907).
- [15] Baliukin, I., J.-L. Bertaux, M. Bzowski, V. Izmodenov, R. Lallement, E. Provornikova, and E. Quémérais (2022), Backscattered Solar Lyman- α Emission as a Tool for the Heliospheric Boundary Exploration, *Space Sci. Rev.*, **218**(5), 45, [10.1007/s11214-022-00913-3](https://doi.org/10.1007/s11214-022-00913-3).
- [16] Bandyopadhyay, R., R. A. Qudsi, S. P. Gary, W. H. Matthaeus, T. N. Parashar, B. A. Maruca, V. Roytershteyn, A. Chasapis, B. L. Giles, D. J. Gershman, C. J. Pollock, C. T. Russell, R. J. Strangeway, R. B. Torbert, T. E. Moore, and J. L. Burch (2022), Interplay of turbulence and proton-microinstability growth in space plasmas, *Phys. Plasmas*, **29**(10), 102107, [10.1063/5.0098625](https://doi.org/10.1063/5.0098625).
- [17] Barani, M., W. Tu, M. K. Hudson, and T. Sarris (2022), High-Fidelity Analysis of ULF Wave Mode Structure Following Interplanetary Shock Compression of the Dayside Magnetopause Using MMS Multi-Point Observations, *J. Geophys. Res.*, **127**(4), e30116, [10.1029/2021JA030116](https://doi.org/10.1029/2021JA030116).
- [18] Barnard, L., and M. Owens (2022), HUXt—An open source, computationally efficient reduced-physics solar wind model, written in Python, *Front. Phys.*, **10**, 1005621, [10.3389/fphy.2022.1005621](https://doi.org/10.3389/fphy.2022.1005621).
- [19] Baumjohann, W., and R. A. Treumann (2022), Auroral kilometric radiation—The electron cyclotron maser paradigm, *Front. Astron. Space Sci.*, **9**, 389, [10.3389/fspas.2022.1053303](https://doi.org/10.3389/fspas.2022.1053303).
- [20] Besliu-Ionescu, D., G. Maris Muntean, and V. Dobrica (2022), Complex Catalogue of High Speed Streams Associated with Geomagnetic Storms During Solar Cycle 24, *Solar Phys.*, **297**(5), 65, [10.1007/s11207-022-01998-3](https://doi.org/10.1007/s11207-022-01998-3).
- [21] Beyene, F., V. Angelopoulos, A. Runov, and A. Artemyev (2022), Properties of Storm-Time Magnetic Flux Transport, *J. Geophys. Res.*, **127**(6), e30357, [10.1029/2022JA030357](https://doi.org/10.1029/2022JA030357).
- [22] Bhattacharjee, D., P. Subramanian, V. Bothmer, T. Nieves-Chinchilla, and A. Vourlidas (2022), On Modeling ICME Cross-Sections as Static MHD Columns, *Solar Phys.*, **297**(4), 45, [10.1007/s11207-022-01982-x](https://doi.org/10.1007/s11207-022-01982-x).
- [23] Biji, M. S., and P. R. Prince (2022), A study of the characteristic properties of SEP events observed by SOHO ERNE during solar cycle 24, *Adv. Space Res.*, **69**(7), 2902–2920, [10.1016/j.asr.2022.01.024](https://doi.org/10.1016/j.asr.2022.01.024).

List of Refereed Publications
Wind Spacecraft: 2022

- [24] Bilenko, I. A. (2022), Solar Photospheric Magnetic Fields, Coronal Mass Ejections, and Type II Radio Bursts in Cycles 23 and 24, *Astron. Rep.*, **66**(7), 579–594, [10.1134/S1063772922080017](https://doi.org/10.1134/S1063772922080017).
- [25] Bilitza, D., M. Pezzopane, V. Truhlik, D. Altadill, B. W. Reinisch, and A. Pignalberi (2022), The International Reference Ionosphere Model: A Review and Description of an Ionospheric Benchmark, *Rev. Geophys.*, **60**(4), e2022RG000792, [10.1029/2022RG000792](https://doi.org/10.1029/2022RG000792).
- [26] Billett, D. D., K. A. McWilliams, G. W. Perry, L. B. N. Clausen, and B. J. Anderson (2022), Ionospheric Energy Input in Response to Changes in Solar Wind Driving: Statistics From the SuperDARN and AMPERE Campaigns, *J. Geophys. Res.*, **127**(3), e30102, [10.1029/2021JA030102](https://doi.org/10.1029/2021JA030102).
- [27] Blagoveshchensky, D. V., M. A. Sergeeva, and T. Raita (2022), Riometer absorption during four similar storms, *Adv. Space Res.*, **69**(1), 176–186, [10.1016/j.asr.2021.10.001](https://doi.org/10.1016/j.asr.2021.10.001).
- [28] Blandin, M., H. K. Connor, D. S. Öztürk, A. M. Keesee, V. Pinto, M. S. Mahmud, C. Ngwira, and S. Priyadarshi (2022), Multi-Variate LSTM Prediction of Alaska Magnetometer Chain Utilizing a Coupled Model Approach, *Front. Astron. Space Sci.*, **9**, 846291, [10.3389/fspas.2022.846291](https://doi.org/10.3389/fspas.2022.846291).
- [29] Blasl, K. A., T. K. M. Nakamura, F. Plaschke, R. Nakamura, H. Hasegawa, J. E. Stawarz, Y.-H. Liu, S. Peery, J. C. Holmes, M. Hosner, D. Schmid, O. W. Roberts, and M. Volwerk (2022), Multi-scale observations of the magnetopause Kelvin-Helmholtz waves during southward IMF, *Phys. Plasmas*, **29**(1), 012105, [10.1063/5.0067370](https://doi.org/10.1063/5.0067370).
- [30] Boschini, M. J., S. Della Torre, M. Gervasi, G. La Vacca, and P. G. Rancoita (2022), Forecasting of cosmic rays intensities with HELMOD Model, *Adv. Space Res.*, **70**(9), 2649–2657, [10.1016/j.asr.2022.01.031](https://doi.org/10.1016/j.asr.2022.01.031).
- [31] Bourouaine, S., J. C. Perez, N. E. Raouafi, B. D. G. Chandran, S. D. Bale, and M. Velli (2022), Features of Magnetic Field Switchbacks in Relation to the Local-field Geometry of Large-amplitude Alfvénic Oscillations: Wind and PSP Observations, *Astrophys. J. Lett.*, **932**(2), L13, [10.3847/2041-8213/ac67d9](https://doi.org/10.3847/2041-8213/ac67d9).
- [32] Bower, G. E., S. E. Milan, L. J. Paxton, and S. M. Imber (2022), Transpolar Arcs: Seasonal Dependence Identified by an Automated Detection Algorithm, *J. Geophys. Res.*, **127**(1), e29743, [10.1029/2021JA029743](https://doi.org/10.1029/2021JA029743).
- [33] Bower, G. E., S. E. Milan, L. J. Paxton, and B. J. Anderson (2022), Occurrence Statistics of Horse Collar Aurora, *J. Geophys. Res.*, **127**(5), e30385, [10.1029/2022JA030385](https://doi.org/10.1029/2022JA030385).
- [34] Bowler, S., and A. Gunn (2022), News in Astronomy & Geophysics - December 2022, *Astron. Geophys.*, **63**(6), 6.4–6.10, [10.1093/astrogeo/atac073](https://doi.org/10.1093/astrogeo/atac073).
- [35] Bristow, W. A., C. A. Topliff, and M. B. Cohen (2022), Development of a High-Latitude Convection Model by Application of Machine Learning to SuperDARN Observations, *Space Weather*, **20**(1), e2021SW002920, [10.1029/2021SW002920](https://doi.org/10.1029/2021SW002920).

List of Refereed Publications
Wind Spacecraft: 2022

- [36] Bristow, W. A., L. R. Lyons, Y. Nishimura, S. G. Shepherd, and E. F. Donovan (2022), High-Latitude Plasma Convection Based on SuperDARN Observations and the Locally Divergence Free Criterion, *J. Geophys. Res.*, **127**(12), e2022JA030883, [10.1029/2022JA030883](https://doi.org/10.1029/2022JA030883).
- [37] Buatthaisong, N., D. Ruffolo, A. Sáiz, C. Banglieng, W. Mitthumsiri, T. Nutaro, and W. Nuntiyakul (2022), Extended Cosmic Ray Decreases with Strong Anisotropy after Passage of Interplanetary Shocks, *Astrophys. J.*, **939**(2), 99, [10.3847/1538-4357/ac96ea](https://doi.org/10.3847/1538-4357/ac96ea).
- [38] Bukhari, S. A. M., S. Sajjad, and U. Murtaza (2022), The spectral analysis and study of GRB 120709A, a burst with three distinct emission episodes, *Adv. Space Res.*, **70**(5), 1512–1528, [10.1016/j.asr.2022.05.073](https://doi.org/10.1016/j.asr.2022.05.073).
- [39] Bunting, K. A., and H. Morgan (2022), An inner boundary condition for solar wind models based on coronal density, *J. Space Weather Space Clim.*, **12**, 30, [10.1051/swsc/2022026](https://doi.org/10.1051/swsc/2022026).
- [40] Burch, J. L., M. Hesse, J. M. Webster, K. J. Genestreti, R. B. Torbert, R. E. Denton, R. E. Ergun, B. L. Giles, D. J. Gershman, C. T. Russell, S. Wang, L. J. Chen, K. Dokgo, K. J. Hwang, and C. J. Pollock (2022), The EDR inflow region of a reconnecting current sheet in the geomagnetic tail, *Phys. Plasmas*, **29**(5), 052903, [10.1063/5.0083169](https://doi.org/10.1063/5.0083169).
- [41] Burger, R. A., A. E. Nel, and N. E. Engelbrecht (2022), Spectral Properties of the N Component of the Heliospheric Magnetic Field from IMP and ACE Observations for 1973-2020, *Astrophys. J.*, **926**(2), 128, [10.3847/1538-4357/ac4741](https://doi.org/10.3847/1538-4357/ac4741).
- [42] Burkholder, B. L., L.-J. Chen, S. Fuselier, D. Gershman, C. Schiff, J. Shuster, Y. Zou, B. M. Walsh, P. Reiff, S. Petrinec, and A. Sciola (2022), MMS Observations of Storm-Time Magnetopause Boundary Layers in the Vicinity of the Southern Cusp, *Geophys. Res. Lett.*, **49**(24), e2022GL101231, [10.1029/2022GL101231](https://doi.org/10.1029/2022GL101231).
- [43] Cai, L., A. Aikio, A. Kullen, Y. Deng, Y. Zhang, S.-R. Zhang, I. Virtanen, and H. Vanhamäki (2022), GeospaceLAB: Python package for managing and visualizing data in space physics, *Front. Astron. Space Sci.*, **9**, 387, [10.3389/fspas.2022.1023163](https://doi.org/10.3389/fspas.2022.1023163).
- [44] Camporeale, E., G. J. Wilkie, A. Y. Drozdov, and J. Bortnik (2022), Data-Driven Discovery of Fokker-Planck Equation for the Earth's Radiation Belts Electrons Using Physics-Informed Neural Networks, *J. Geophys. Res.*, **127**(7), e30377, [10.1029/2022JA030377](https://doi.org/10.1029/2022JA030377).
- [45] Carbone, F., D. Telloni, E. Yordanova, and L. Sorriso-Valvo (2022), Modulation of Solar Wind Impact on the Earth's Magnetosphere during the Solar Cycle, *Universe*, **8**(6), 330, [10.3390/universe8060330](https://doi.org/10.3390/universe8060330).
- [46] Carson, G., J. E. Kooi, J. F. Helmboldt, B. B. Markowski, D. J. Bonanno, and B. C. Hicks (2022), DLITE—An inexpensive, deployable interferometer for solar radio burst observations, *Front. Astron. Space Sci.*, **9**, 1026455, [10.3389/fspas.2022.1026455](https://doi.org/10.3389/fspas.2022.1026455).
- [47] Cesarini, A., C. Grimani, S. Benella, M. Fabi, F. Sabbatini, M. Villani, and D. Telloni (2022), Interplanetary medium monitoring with LISA: Lessons from LISA Pathfinder, *J. Space Weather Space Clim.*, **12**, 36, [10.1051/swsc/2022031](https://doi.org/10.1051/swsc/2022031).

List of Refereed Publications
Wind Spacecraft: 2022

- [48] Chandra, H., and B. Bhatt (2022), A comparison of Solar Cycle 23rd and 24th for Solar type II radio bursts associated with coronal mass ejection in relation to interplanetary features, *Astrophys. Space Sci.*, **367**(12), 128, [10.1007/s10509-022-04156-0](https://doi.org/10.1007/s10509-022-04156-0).
- [49] Chang, H., H. Kil, A. K. Sun, S.-R. Zhang, and J. Lee (2022), Ionospheric Disturbances in Low- and Midlatitudes During the Geomagnetic Storm on 26 August 2018, *J. Geophys. Res.*, **127**(2), e2021JA029879, [10.1029/2021JA029879](https://doi.org/10.1029/2021JA029879).
- [50] Chang, H.-K., C.-H. Lin, C.-C. Tsao, C.-Y. Chu, S.-C. Yang, C.-Y. Huang, C.-H. Wang, T.-H. Su, Y.-H. Chung, Y.-W. Chang, Z.-J. Gong, J. Hsiang-Yue, K.-L. Lai, T.-H. Lin, C.-Y. Lu, and C.-Y. Yang (2022), The Gamma-ray Transients Monitor (GTM) on board Formosat-8B and its GRB detection efficiency, *Adv. Space Res.*, **69**(2), 1249–1255, [10.1016/j.asr.2021.10.044](https://doi.org/10.1016/j.asr.2021.10.044).
- [51] Chang, Q., X. Xu, X. Wang, Y. Ye, Q. Xu, J. Wang, M. Wang, Z. Zhou, L. Luo, S. Cheng, and P. He (2022), The Solar Wind Parker Spiral Angle Distributions and Variations at 1 au, *Astrophys. J.*, **931**(2), 105, [10.3847/1538-4357/ac6bf3](https://doi.org/10.3847/1538-4357/ac6bf3).
- [52] Charikov, Y. E., V. I. Shuvalova, E. M. Sklyarova, and A. N. Shabalin (2022), Generation of X-Ray Spikes in Solar Flare Plasma, *Geomag. and Aeron.*, **62**(8), 1085–1095, [10.1134/S0016793222080072](https://doi.org/10.1134/S0016793222080072).
- [53] Chattopadhyay, T., S. Gupta, S. Iyyani, D. Saraogi, V. Sharma, A. Tsvetkova, A. Ratheesh, R. Gupta, N. P. S. Mithun, C. S. Vaishnava, V. Prasad, E. Aarthi, A. Kumar, A. R. Rao, S. Vadawale, V. Bhalerao, D. Bhattacharya, A. Vibhute, and D. Frederiks (2022), Hard X-Ray Polarization Catalog for a Five-year Sample of Gamma-Ray Bursts Using AstroSat CZT Imager, *Astrophys. J.*, **936**(1), 12, [10.3847/1538-4357/ac82ef](https://doi.org/10.3847/1538-4357/ac82ef).
- [54] Chen, J., H. Deng, S. Li, W. Li, H. Chen, Y. Chen, and B. Luo (2022), RU-net: A Residual U-net for Automatic Interplanetary Coronal Mass Ejection Detection, *Astrophys. J. Suppl.*, **259**(1), 8, [10.3847/1538-4365/ac4587](https://doi.org/10.3847/1538-4365/ac4587).
- [55] Chi, Y., C. Shen, C. Scott, M. Xu, M. Owens, Y. Wang, and M. Lockwood (2022), Predictive Capabilities of Corotating Interaction Regions Using STEREO and Wind In-Situ Observations, *Space Weather*, **20**(7), e2022SW003112, [10.1029/2022SW003112](https://doi.org/10.1029/2022SW003112).
- [56] Choi, K.-E., D.-Y. Lee, K. Marubashi, and S. Lee (2022), Near-orthogonal Orientation of Small-scale Magnetic Flux Ropes Relative to the Background Interplanetary Magnetic Field, *Astrophys. J.*, **931**(2), 98, [10.3847/1538-4357/ac69d3](https://doi.org/10.3847/1538-4357/ac69d3).
- [57] Cid, C., and E. Saiz (2022), Comment on “Properties of the Recovery Phase of Extreme Storms” by Choraghe et al. (2021), *J. Geophys. Res.*, **127**(1), e29999, [10.1029/2021JA029999](https://doi.org/10.1029/2021JA029999).
- [58] Coburn, J. T., C. H. K. Chen, and J. Squire (2022), A measurement of the effective mean free path of solar wind protons, *J. Plasma Phys.*, **88**(5), 175880502, [10.1017/S0022377822000836](https://doi.org/10.1017/S0022377822000836).

List of Refereed Publications
Wind Spacecraft: 2022

- [59] Cooper, A. J., A. Rowlinson, R. A. M. J. Wijers, C. Bassa, K. Gourdji, J. Hessels, A. J. van der Horst, V. Kondratiev, D. Michilli, Z. Pleunis, T. Shimwell, and S. ter Veen (2022), Testing afterglow models of FRB 200428 with early post-burst observations of SGR 1935 + 2154, *Mon. Not. Roy. Astron. Soc.*, **517**(4), 5483–5495, [10.1093/mnras/stac2951](https://doi.org/10.1093/mnras/stac2951).
- [60] Corbin, A., and J. Kusche (2022), Improving the estimation of thermospheric neutral density via two-step assimilation of in situ neutral density into a numerical model, *Earth, Planets and Space*, **74**(1), 183, [10.1186/s40623-022-01733-z](https://doi.org/10.1186/s40623-022-01733-z).
- [61] Corona-Romero, P., J. J. González-Avilés, and P. Riley (2022), A Semi-empirical Approach to the Dynamic Coupling of CMEs and Solar Wind, *Astrophys. J.*, **937**(1), 24, [10.3847/1538-4357/ac8b03](https://doi.org/10.3847/1538-4357/ac8b03).
- [62] Coxon, J. C., A. Aruliah, S. Bentley, and R. M. Shore (2022), RAS Specialist Discussion Meeting report, *Astron. Geophys.*, **63**(1), 1.30–1.34, [10.1093/astrogeo/atac011](https://doi.org/10.1093/astrogeo/atac011).
- [63] Cristoforetti, M., R. Battiston, A. Gobbi, R. Iuppa, and M. Piersanti (2022), Prominence of the training data preparation in geomagnetic storm prediction using deep neural networks, *Sci. Rep.*, **12**, 7631, [10.1038/s41598-022-11721-8](https://doi.org/10.1038/s41598-022-11721-8).
- [64] Şentürk, E., M. Saqib, and M. A. Adil (2022), A Multi-Network based Hybrid LSTM model for ionospheric anomaly detection: A case study of the M_w 7.8 Nepal earthquake, *Adv. Space Res.*, **70**(2), 440–455, [10.1016/j.asr.2022.04.057](https://doi.org/10.1016/j.asr.2022.04.057).
- [65] Cuesta, M. E., R. Chhiber, S. Roy, J. Goodwill, F. Pecora, J. Jarosik, W. H. Matthaeus, T. N. Parashar, and R. Bandyopadhyay (2022), Isotropization and Evolution of Energy-containing Eddies in Solar Wind Turbulence: Parker Solar Probe, Helios 1, ACE, WIND, and Voyager 1, *Astrophys. J. Lett.*, **932**(1), L11, [10.3847/2041-8213/ac73fd](https://doi.org/10.3847/2041-8213/ac73fd).
- [66] da Silva, D., L. J. Chen, S. Fuselier, S. Wang, S. Elkington, J. Dorelli, B. Burkholder, and D. Sibeck (2022), Automatic Identification and New Observations of Ion Energy Dispersion Events in the Cusp Ionosphere, *J. Geophys. Res.*, **127**(4), e29637, [10.1029/2021JA029637](https://doi.org/10.1029/2021JA029637).
- [67] Dado, S., and A. Dar (2022), The Maximum Isotropic Equivalent Energy of Gamma-Ray Bursts, *Astrophys. J. Lett.*, **940**(1), L4, [10.3847/2041-8213/ac98e8](https://doi.org/10.3847/2041-8213/ac98e8).
- [68] Dado, S., A. Dar, and A. D. De Rújula (2022), Critical Tests of Leading Gamma Ray Burst Theories, *Universe*, **8**(7), 350, [10.3390/universe8070350](https://doi.org/10.3390/universe8070350).
- [69] Dahal, S., B. Adhikari, A. K. Khadka, A. Silwal, S. K. Gupta, and N. P. Chapagain (2022), Ionospheric Signatures During G2, G3 and G4 Storms in Mid-Latitude, *Radio Science*, **57**(5), e2022RS007430, [10.1029/2022RS007430](https://doi.org/10.1029/2022RS007430).
- [70] Dahani, S., R. Kieokaew, V. Génot, B. Lavraud, Y. Chen, B. Michotte de Welle, N. Aunai, G. Tóth, P. A. Cassak, N. Fargette, R. C. Fear, A. Marchaudon, D. Gershman, B. Giles, R. Torbert, and J. Burch (2022), The Helicity Sign of Flux Transfer Event Flux Ropes and Its Relationship to the Guide Field and Hall Physics in Magnetic Reconnection at the Magnetopause, *J. Geophys. Res.*, **127**(11), e2022JA030686, [10.1029/2022JA030686](https://doi.org/10.1029/2022JA030686).

List of Refereed Publications
Wind Spacecraft: 2022

- [71] Dainotti, M. G., V. Nielson, G. Sarracino, E. Rinaldi, S. Nagataki, S. Capozziello, O. Y. Gnedin, and G. Bargiacchi (2022), Optical and X-ray GRB Fundamental Planes as cosmological distance indicators, *Mon. Not. Roy. Astron. Soc.*, **514**(2), 1828–1856, [10.1093/mnras/stac1141](https://doi.org/10.1093/mnras/stac1141).
- [72] D'Amicis, R., D. Perrone, M. Velli, L. Sorriso-Valvo, D. Telloni, R. Bruno, and R. De Marco (2022), Investigating Alfvénic Turbulence in Fast and Slow Solar Wind Streams, *Universe*, **8**(7), 352, [10.3390/universe8070352](https://doi.org/10.3390/universe8070352).
- [73] Dang, T., X. Li, B. Luo, R. Li, B. Zhang, K. Pham, D. Ren, X. Chen, J. Lei, and Y. Wang (2022), Unveiling the Space Weather During the Starlink Satellites Destruction Event on 4 February 2022, *Space Weather*, **20**(8), e2022SW003152, [10.1029/2022SW003152](https://doi.org/10.1029/2022SW003152).
- [74] David, L., F. Fraschetti, J. Giacalone, R. Wimmer-Schweingruber, L. Berger, and D. Lario (2022), Energy Balance at Interplanetary Shocks: In-situ Measurement of the Fraction in Supra-thermal and Energetic Ions with ACE and Wind, in *37th International Cosmic Ray Conference*, p. 1311, [10.22323/1.395.1311](https://doi.org/10.22323/1.395.1311).
- [75] David, L., F. Fraschetti, J. Giacalone, R. F. Wimmer-Schweingruber, L. Berger, and D. Lario (2022), In Situ Measurement of the Energy Fraction in Suprathermal and Energetic Particles at ACE, Wind, and PSP Interplanetary Shocks, *Astrophys. J.*, **928**(1), 66, [10.3847/1538-4357/ac54af](https://doi.org/10.3847/1538-4357/ac54af).
- [76] Davies, E. E., R. M. Winslow, C. Scolini, R. J. Forsyth, C. Möstl, N. Lugaz, and A. B. Galvin (2022), Multi-spacecraft Observations of the Evolution of Interplanetary Coronal Mass Ejections between 0.3 and 2.2 au: Conjunctions with the Juno Spacecraft, *Astrophys. J.*, **933**(2), 127, [10.3847/1538-4357/ac731a](https://doi.org/10.3847/1538-4357/ac731a).
- [77] Dayeh, M. A., and G. Livadiotis (2022), Polytropic Behavior in the Structures of Interplanetary Coronal Mass Ejections, *Astrophys. J. Lett.*, **941**(2), L26, [10.3847/2041-8213/aca673](https://doi.org/10.3847/2041-8213/aca673).
- [78] DeLaunay, J., and A. Tohuuvavohu (2022), Harvesting BAT-GUANO with NITRATES (Non-Imaging Transient Reconstruction and Temporal Search): Detecting and Localizing the Faintest Gamma-Ray Bursts with a Likelihood Framework, *Astrophys. J.*, **941**(2), 169, [10.3847/1538-4357/ac9d38](https://doi.org/10.3847/1538-4357/ac9d38).
- [79] Deng, L.-T., D.-B. Lin, L. Zhou, K. Wang, X. Yang, S.-J. Hou, J. Li, X.-G. Wang, R.-J. Lu, and E.-W. Liang (2022), Spectral Analysis of GRB 220426A: Another Case of a Thermally Dominated Burst, *Astrophys. J. Lett.*, **934**(2), L22, [10.3847/2041-8213/ac8169](https://doi.org/10.3847/2041-8213/ac8169).
- [80] Dereli-Bégué, H., A. Pe'er, F. Ryde, S. R. Oates, B. Zhang, and M. G. Dainotti (2022), A wind environment and Lorentz factors of tens explain gamma-ray bursts X-ray plateau, *Nature Comm.*, **13**, 5611, [10.1038/s41467-022-32881-1](https://doi.org/10.1038/s41467-022-32881-1).
- [81] Despirak, I. V., N. G. Kleimenova, A. A. Lyubchich, P. V. Setsko, L. I. Gromova, and R. Werner (2022), Global Development of the Supersubstorm of May 28, 2011, *Geomag. and Aeron.*, **62**(3), 199–208, [10.1134/S0016793222030069](https://doi.org/10.1134/S0016793222030069).

List of Refereed Publications
Wind Spacecraft: 2022

- [82] Di Matteo, S., U. Villante, N. Viall, L. Kepko, and S. Wallace (2022), On Differentiating Multiple Types of ULF Magnetospheric Waves in Response to Solar Wind Periodic Density Structures, *J. Geophys. Res.*, **127**(3), e30144, [10.1029/2021JA030144](https://doi.org/10.1029/2021JA030144).
- [83] Dimitrakoudis, S., I. R. Mann, G. Balasis, C. Papadimitriou, A. Anastasiadis, and I. A. Daglis (2022), On the Interplay Between Solar Wind Parameters and ULF Wave Power as a Function of Geomagnetic Activity at High- and Mid-latitudes, *J. Geophys. Res.*, **127**(1), e29693, [10.1029/2021JA029693](https://doi.org/10.1029/2021JA029693).
- [84] Dimmock, A. P., E. Yordanova, D. B. Graham, Y. V. Khotyaintsev, X. Blanco-Cano, P. Kajdič, T. Karlsson, A. Fedorov, C. J. Owen, E. A. L. E. Werner, and A. Johlander (2022), Mirror Mode Storms Observed by Solar Orbiter, *J. Geophys. Res.*, **127**(11), e2022JA030754, [10.1029/2022JA030754](https://doi.org/10.1029/2022JA030754).
- [85] Ding, Z., G. Li, R. W. Ebert, M. A. Dayeh, A. S. Fe-Dueñas, M. Desai, H. Xie, N. Gopalswamy, and A. Bruno (2022), Modeling the East-West Asymmetry of Energetic Particle Fluence in Large Solar Energetic Particle Events Using the iPATH Model, *J. Geophys. Res.*, **127**(6), e30343, [10.1029/2022JA030343](https://doi.org/10.1029/2022JA030343).
- [86] Dong, X. F., X. J. Li, Z. B. Zhang, and X. L. Zhang (2022), A comparative study of luminosity functions and event rate densities of long GRBs with non-parametric method, *Mon. Not. Roy. Astron. Soc.*, **513**(1), 1078–1087, [10.1093/mnras/stac949](https://doi.org/10.1093/mnras/stac949).
- [87] Duan, Y., Y. Shen, X. Zhou, Z. Tang, C. Zhou, and S. Tan (2022), Homologous Accelerated Electron Beams, a Quasiperiodic Fast-propagating Wave, and a Coronal Mass Ejection Observed in One Fan-spine Jet, *Astrophys. J. Lett.*, **926**(2), L39, [10.3847/2041-8213/ac4df2](https://doi.org/10.3847/2041-8213/ac4df2).
- [88] Dumbović, M., B. Vršnak, M. Temmer, B. Heber, and P. Kühl (2022), Generic profile of a long-lived corotating interaction region and associated recurrent Forbush decrease, *Astron. & Astrophys.*, **658**, A187, [10.1051/0004-6361/202140861](https://doi.org/10.1051/0004-6361/202140861).
- [89] Efimov, A. I., V. M. Smirnov, I. V. Chashei, and A. S. Nabatov (2022), Co-rotating Solar Wind Disturbances in Radio Sounding Data and Local Measurements, *Geomag. and Aeron.*, **62**, S54–S58, [10.1134/S0016793222600679](https://doi.org/10.1134/S0016793222600679).
- [90] Elhawary, R., K. M. Laundal, J. P. Reistad, and S. M. Hatch (2022), Possible Ionospheric Influence on Substorm Onset Location, *Geophys. Res. Lett.*, **49**(4), e96691, [10.1029/2021GL096691](https://doi.org/10.1029/2021GL096691).
- [91] Elliott, H. A., C. N. Arge, C. J. Henney, M. A. Dayeh, G. Livadiotis, J. M. Jahn, and C. E. DeForest (2022), Improving Multiday Solar Wind Speed Forecasts, *Space Weather*, **20**(9), e2021SW002868, [10.1029/2021SW002868](https://doi.org/10.1029/2021SW002868).
- [92] Elsden, T., M. K. James, J. K. Sandhu, and C. Watt (2022), RAS Specialist Discussion Meeting Report, *Astron. Geophys.*, **63**(5), 5.26–5.30, [10.1093/astrogeo/atac066](https://doi.org/10.1093/astrogeo/atac066).

List of Refereed Publications
Wind Spacecraft: 2022

- [93] Engebretson, M. J., L. E. Simms, V. A. Pilipenko, L. Bouayed, M. B. Moldwin, J. M. Weygand, M. D. Hartinger, Z. Xu, C. R. Clauer, S. Coyle, A. N. Willer, M. P. Freeman, and A. J. Gerrard (2022), Geomagnetic Disturbances That Cause GICs: Investigating Their Interhemispheric Conjugacy and Control by IMF Orientation, *J. Geophys. Res.*, **127**(10), e2022JA030580, [10.1029/2022JA030580](https://doi.org/10.1029/2022JA030580).
- [94] Eriksson, S., M. Swisdak, J. M. Weygand, A. Mallet, D. L. Newman, G. Lapenta, L. B. Wilson III, D. L. Turner, and B. Larsen (2022), Characteristics of Multi-scale Current Sheets in the Solar Wind at 1 au Associated with Magnetic Reconnection and the Case for a Heliospheric Current Sheet Avalanche, *Astrophys. J.*, **933**(2), 181, [10.3847/1538-4357/ac73f6](https://doi.org/10.3847/1538-4357/ac73f6).
- [95] Fainberg, J., and V. Osherovich (2022), Spectroscopy of Electric-Field Oscillations in the Solar Wind During the Passage of a Type III Radio Burst Using Observations Compared with Self-Similar Theory, *Solar Phys.*, **297**(5), 50, [10.1007/s11207-022-01972-z](https://doi.org/10.1007/s11207-022-01972-z).
- [96] Farrugia, C. J., N. Lugaz, S. Wing, L. B. Wilson III, D. J. Sibeck, S. W. H. Cowley, R. B. Torbert, B. J. Vasquez, and J. Berchem (2022), Effects from dayside magnetosphere to distant tail unleashed by a bifurcated, non-reconnecting interplanetary current sheet, *Front. Phys.*, **10**, 942486, [10.3389/fphy.2022.942486](https://doi.org/10.3389/fphy.2022.942486).
- [97] Fatmasiefa, F., and S. Lejosne (2022), Is K_p the Best Single Magnetic Activity Parameterization for Electromagnetic Radial Diffusion in the Outer Radiation Belt?, *J. Geophys. Res.*, **127**(10), e2022JA030521, [10.1029/2022JA030521](https://doi.org/10.1029/2022JA030521).
- [98] Feng, H.-T., D.-S. Han, S.-C. Teng, R. Shi, Su-Zhou, H.-G. Yang, H.-X. Qiu, and Y. L. Zhang (2022), An Auroral Signature of the Duskside Boundary of the Cusp, *J. Geophys. Res.*, **127**(8), e30634, [10.1029/2022JA030634](https://doi.org/10.1029/2022JA030634).
- [99] Feng, J., Y. Zhu, T. Zhang, and Y. Zhang (2022), Solar activity influence on the temporal and spatial variations of the Arctic and Antarctic ionosphere, *Adv. Space Res.*, **70**(1), 188–202, [10.1016/j.asr.2022.04.028](https://doi.org/10.1016/j.asr.2022.04.028).
- [100] Firoz, K. A., W. Q. Gan, Y. P. Li, J. Rodríguez-Pacheco, and L. I. Dorman (2022), Duration and Fluence of Major Solar Energetic Particle (SEP) Events, *Solar Phys.*, **297**(6), 71, [10.1007/s11207-022-01994-7](https://doi.org/10.1007/s11207-022-01994-7).
- [101] Fogg, A. R., C. M. Jackman, J. E. Waters, X. Bonnin, L. Lamy, B. Cecconi, K. Issautier, and C. K. Louis (2022), Wind/WAVES Observations of Auroral Kilometric Radiation: Automated Burst Detection and Terrestrial Solar Wind - Magnetosphere Coupling Effects, *J. Geophys. Res.*, **127**(5), e30209, [10.1029/2021JA030209](https://doi.org/10.1029/2021JA030209).
- [102] Fraija, N., B. B. Kamenetskaia, A. Galvan-Gamez, M. G. Dainotti, R. L. Becerra, S. Dichiara, P. Veres, and A. C. C. do E. S. Pedreira (2022), GRB Afterglow of the Sub-relativistic Materials with Energy Injection, *Astrophys. J.*, **933**(2), 243, [10.3847/1538-4357/ac714d](https://doi.org/10.3847/1538-4357/ac714d).

List of Refereed Publications
Wind Spacecraft: 2022

- [103] Fraschetti, F., J. D. Alvarado-Gómez, J. J. Drake, O. Cohen, and C. Garraffo (2022), Stellar Energetic Particle Transport in the Turbulent and CME-disrupted Stellar Wind of AU Microscopii, *Astrophys. J.*, **937**(2), 126, [10.3847/1538-4357/ac86d7](https://doi.org/10.3847/1538-4357/ac86d7).
- [104] Frassati, F., M. Laurenza, A. Bemporad, M. J. West, S. Mancuso, R. Susino, T. Alberti, and P. Romano (2022), Acceleration of Solar Energetic Particles through CME-driven Shock and Streamer Interaction, *Astrophys. J.*, **926**(2), 227, [10.3847/1538-4357/ac460e](https://doi.org/10.3847/1538-4357/ac460e).
- [105] Fraternale, F., L. Zhao, N. V. Pogorelov, L. Sorriso-Valvo, S. Redfield, M. Zhang, K. Ghanbari, V. Florinski, and T. Y. Chen (2022), Exploring Turbulence from the Sun to the Local Interstellar Medium: Current Challenges and Perspectives for Future Space Missions, *Front. Astron. Space Sci.*, **9**, 353, [10.3389/fspas.2022.1064098](https://doi.org/10.3389/fspas.2022.1064098).
- [106] Frost, A. M., M. Owens, A. Macneil, and M. Lockwood (2022), Estimating the Open Solar Flux from In-Situ Measurements, *Solar Phys.*, **297**(7), 82, [10.1007/s11207-022-02004-6](https://doi.org/10.1007/s11207-022-02004-6).
- [107] Fu, S., Z. Ding, Y. Zhang, X. Zhang, C. Li, G. Li, S. Tang, H. Zhang, Y. Xu, Y. Wang, J. Guo, L. Zhao, Y. Wang, X. Hu, P. Luo, Z. Sun, Y. Yu, and L. Xie (2022), First Report of a Solar Energetic Particle Event Observed by China's Tianwen-1 Mission in Transit to Mars, *Astrophys. J. Lett.*, **934**(1), L15, [10.3847/2041-8213/ac80f5](https://doi.org/10.3847/2041-8213/ac80f5).
- [108] Galli, A., P. Wurz, N. A. Schwadron, K. Fairchild, D. Heirtzler, E. Möbius, H. Kucharek, R. Winslow, M. Bzowski, M. A. Kubiak, I. Kowalska-Leszczynska, S. A. Fuselier, J. M. Sokół, P. Swaczyna, and D. J. McComas (2022), One Solar Cycle of Heliosphere Observations with the Interstellar Boundary Explorer: Energetic Neutral Hydrogen Atoms Observed with IBEX-Lo from 10 eV to 2 keV, *Astrophys. J. Suppl.*, **261**(2), 18, [10.3847/1538-4365/ac69c9](https://doi.org/10.3847/1538-4365/ac69c9).
- [109] Gamayunov, K. V., and M. J. Engebretson (2022), Low Frequency ULF Waves in the Earth's Inner Magnetosphere: Power Spectra During High Speed Streams and Quiet Solar Wind and Seeding of EMIC Waves, *J. Geophys. Res.*, **127**(11), e2022JA030647, [10.1029/2022JA030647](https://doi.org/10.1029/2022JA030647).
- [110] Gao, H.-X., J.-J. Geng, L. Hu, M.-K. Hu, G.-X. Lan, C.-M. Chang, S.-B. Zhang, X.-L. Zhang, Y.-F. Huang, and X.-F. Wu (2022), Gravitationally lensed orphan afterglows of gamma-ray bursts, *Mon. Not. Roy. Astron. Soc.*, **516**(1), 453–464, [10.1093/mnras/stac2215](https://doi.org/10.1093/mnras/stac2215).
- [111] Gendre, B., N. B. Orange, E. Moore, A. Klotz, D. M. Coward, T. Giblin, P. Gokuldass, and D. Morris (2022), Modeling the GRB 170202A Fireball from Continuous Observations with the Zadko and the Virgin Island Robotic Telescopes, *Astrophys. J.*, **929**(1), 16, [10.3847/1538-4357/ac561e](https://doi.org/10.3847/1538-4357/ac561e).
- [112] George, H., G. Reeves, G. Cunningham, M. M. H. Kalliokoski, E. Kilpua, A. Osmane, M. G. Henderson, S. K. Morley, S. Hoilijoki, and M. Palmroth (2022), Contributions to Loss Across the Magnetopause During an Electron Dropout Event, *J. Geophys. Res.*, **127**(10), e2022JA030751, [10.1029/2022JA030751](https://doi.org/10.1029/2022JA030751).

List of Refereed Publications
Wind Spacecraft: 2022

- [113] Gill, R., and J. Granot (2022), Gamma-Ray Bursts at TeV Energies: Theoretical Considerations, *Galaxies*, **10**(3), 74, [10.3390/galaxies10030074](https://doi.org/10.3390/galaxies10030074).
- [114] Goetz, C., E. Behar, A. Beth, D. Bodewits, S. Bromley, J. Burch, J. Deca, A. Divin, A. I. Eriksson, P. D. Feldman, M. Galand, H. Gunell, P. Henri, K. Heritier, G. H. Jones, K. E. Mandt, H. Nilsson, J. W. Noonan, E. Odelstad, J. W. Parker, M. Rubin, C. Simon Wedlund, P. Stephenson, M. G. G. T. Taylor, E. Vigren, S. K. Vines, and M. Volwerk (2022), The Plasma Environment of Comet 67P/Churyumov-Gerasimenko, *Space Sci. Rev.*, **218**(8), 65, [10.1007/s11214-022-00931-1](https://doi.org/10.1007/s11214-022-00931-1).
- [115] Goldstein, J., P. W. Valek, D. J. McComas, and J. Redfern (2022), Average Ring Current Response to Solar Wind Drivers: Statistical Analysis of 61 Days of ENA Images, *J. Geophys. Res.*, **127**(1), e29938, [10.1029/2021JA029938](https://doi.org/10.1029/2021JA029938).
- [116] Gonzalez, W. D. (2022), Magnetospheric Reconnection and Geomagnetic Storms: A Personal Perspective, *J. Geophys. Res.*, **127**(10), e2022JA030770, [10.1029/2022JA030770](https://doi.org/10.1029/2022JA030770).
- [117] Good, S. W., L. M. Hatakka, M. Ala-Lahti, J. E. Soljento, A. Osmane, and E. K. J. Kilpuu (2022), Cross helicity of interplanetary coronal mass ejections at 1 au, *Mon. Not. Roy. Astron. Soc.*, **514**(2), 2425–2433, [10.1093/mnras/stac1388](https://doi.org/10.1093/mnras/stac1388).
- [118] Goodwin, L. V., and G. W. Perry (2022), Resolving the High-Latitude Ionospheric Irregularity Spectra Using Multi-Point Incoherent Scatter Radar Measurements, *Radio Science*, **57**(9), e2022RS007475, [10.1029/2022RS007475](https://doi.org/10.1029/2022RS007475).
- [119] Gopalswamy, N. (2022), The Sun and Space Weather, *Atmosphere*, **13**(11), 1781, [10.3390/atmos13111781](https://doi.org/10.3390/atmos13111781).
- [120] Gopalswamy, N., P. Mäkelä, S. Yashiro, S. Akiyama, and H. Xie (2022), Solar activity and space weather, in *J. Phys. Conf. Ser., Journal of Physics Conference Series*, vol. 2214, p. 012021, [10.1088/1742-6596/2214/1/012021](https://doi.org/10.1088/1742-6596/2214/1/012021).
- [121] Gopalswamy, N., S. Yashiro, S. Akiyama, H. Xie, P. Mäkelä, M. C. Fok, and C. P. Ferradas (2022), What Is Unusual About the Third Largest Geomagnetic Storm of Solar Cycle 24?, *J. Geophys. Res.*, **127**(8), e30404, [10.1029/2022JA030404](https://doi.org/10.1029/2022JA030404).
- [122] Greiner, J., U. Hugentobler, J. M. Burgess, F. Berlato, M. Rott, and A. Tsvetkova (2022), A proposed network of gamma-ray burst detectors on the global navigation satellite system Galileo G2, *Astron. & Astrophys.*, **664**, A131, [10.1051/0004-6361/202142835](https://doi.org/10.1051/0004-6361/202142835).
- [123] Grygorov, K., Z. Němeček, J. Áfránková, J. Á. im Ánek, and O. Gutynska (2022), Storm-Time Magnetopause: Pressure Balance, *J. Geophys. Res.*, **127**(11), e2022JA030803, [10.1029/2022JA030803](https://doi.org/10.1029/2022JA030803).
- [124] Guo, J., B. Wang, S. Lu, Q. Lu, Y. Lin, X. Wang, R. Wang, Q. Zhang, Z. Xing, Y. Nishimura, and Y.-J. Wu (2022), Azimuthal Motion of Poleward Moving Auroral Forms, *Geophys. Res. Lett.*, **49**(16), e99753, [10.1029/2022GL099753](https://doi.org/10.1029/2022GL099753).

List of Refereed Publications
Wind Spacecraft: 2022

- [125] Guo, X., Y. Zhou, V. Florinski, and C. Wang (2022), Dynamical Coupling between Anomalous Cosmic Rays and Solar Wind in Outer Heliosphere, *Astrophys. J.*, **935**(2), 144, [10.3847/1538-4357/ac82ed](https://doi.org/10.3847/1538-4357/ac82ed).
- [126] Guo, Y., B. Ni, S. Fu, D. Wang, Y. Y. Shprits, I. S. Zhelavskaya, M. Feng, and D. Guo (2022), Identification of Controlling Geomagnetic and Solar Wind Factors for Magnetospheric Chorus Intensity Using Feature Selection Techniques, *J. Geophys. Res.*, **127**(1), e29926, [10.1029/2021JA029926](https://doi.org/10.1029/2021JA029926).
- [127] Gupta, R., S. Gupta, T. Chattopadhyay, V. Lipunov, A. J. Castro-Tirado, D. Bhattacharya, S. B. Pandey, S. R. Oates, A. Kumar, Y. D. Hu, A. F. Valeev, P. Y. Minnaev, H. Kumar, J. Vinko, Dimple, V. Sharma, A. Aryan, A. Castellón, A. Gabovich, A. Moskvitin, A. Ordasi, A. Pál, A. Pozanenko, B. B. Zhang, B. Kumar, D. Svinkin, D. Saraogi, D. Vlasenko, E. Fernández-García, E. Gorbovskoy, G. C. Anupama, K. Misra, K. Sárneczky, L. Kriskovics, M. Á. Castro-Tirado, M. D. Caballero-García, N. Tiurina, P. Balanutsa, R. R. Lopez, R. Sánchez-Ramírez, R. Szakáts, S. Belkin, S. Guziy, S. Iyyani, S. N. Tiwari, S. V. Vadawale, T. Sun, V. Bhalerao, V. Kornilov, and V. V. Sokolov (2022), Probing into emission mechanisms of GRB 190530A using time-resolved spectra and polarization studies: synchrotron origin?, *Mon. Not. Roy. Astron. Soc.*, **511**(2), 1694–1713, [10.1093/mnras/stac015](https://doi.org/10.1093/mnras/stac015).
- [128] Habarulema, J. B., M. Tshisaphungo, Z. T. Katamzi-Joseph, T. M. Matamba, and R. Nndanganeni (2022), Ionospheric Response to the M- and X-Class Solar Flares of 28 October 2021 Over the African Sector, *Space Weather*, **20**(8), e2022SW003104, [10.1029/2022SW003104](https://doi.org/10.1029/2022SW003104).
- [129] Hajra, R., and J. V. Sunny (2022), Corotating Interaction Regions during Solar Cycle 24: A Study on Characteristics and Geoeffectiveness, *Solar Phys.*, **297**(3), 30, [10.1007/s11207-022-01962-1](https://doi.org/10.1007/s11207-022-01962-1).
- [130] Hajra, R., and B. T. Tsurutani (2022), Near-Earth Sub-Alfvénic Solar Winds: Interplanetary Origins and Geomagnetic Impacts, *Astrophys. J.*, **926**(2), 135, [10.3847/1538-4357/ac4471](https://doi.org/10.3847/1538-4357/ac4471).
- [131] Hajra, S., N. Dashora, and J. S. Ivan (2022), On the Sources, Coupling and Energetics During Supersubstorms of the Solar Cycle 24, *J. Geophys. Res.*, **127**(10), e2022JA030604, [10.1029/2022JA030604](https://doi.org/10.1029/2022JA030604).
- [132] Hammer, M. D., C. C. Finlay, and N. Olsen (2022), Secular variation signals in magnetic field gradient tensor elements derived from satellite-based geomagnetic virtual observatories, *Geophys. J. Intl.*, **229**(3), 2096–2114, [10.1093/gji/ggac004](https://doi.org/10.1093/gji/ggac004).
- [133] He, Q., Z. Wang, Q. Liu, K. Liu, and L. Guo (2022), CME-related Large Decreases in the Differential Phase Delay of Tianwen-1 DOR Signals, *Astrophys. J. Lett.*, **940**(2), L45, [10.3847/2041-8213/aca2a8](https://doi.org/10.3847/2041-8213/aca2a8).

List of Refereed Publications
Wind Spacecraft: 2022

- [134] He, W., Q. Hu, C. Jiang, J. Qiu, and A. Prasad (2022), Quantitative Characterization of Magnetic Flux Rope Properties for Two Solar Eruption Events, *Astrophys. J.*, **934**(2), 103, [10.3847/1538-4357/ac78df](https://doi.org/10.3847/1538-4357/ac78df).
- [135] Henadhira Arachchige, K., O. Cohen, A. Munoz-Jaramillo, and A. R. Yeates (2022), Comparing the Performance of a Solar Wind Model from the Sun to 1 au Using Real and Synthetic Magnetograms, *Astrophys. J.*, **938**(1), 39, [10.3847/1538-4357/ac8d59](https://doi.org/10.3847/1538-4357/ac8d59).
- [136] Hervig, M. E., D. Malaspina, V. Sterken, L. B. Wilson III, S. Hunziker, and S. M. Bailey (2022), Decadal and Annual Variations in Meteoric Flux From Ulysses, Wind, and SOFIE Observations, *J. Geophys. Res.*, **127**(10), e2022JA030749, [10.1029/2022JA030749](https://doi.org/10.1029/2022JA030749).
- [137] Ho, A. Y. Q., D. A. Perley, Y. Yao, D. Svinkin, A. de Ugarte Postigo, R. A. Perley, D. A. Kann, E. Burns, I. Andreoni, E. C. Bellm, E. Bissaldi, J. S. Bloom, T. G. Brink, R. Dekany, A. J. Drake, J. F. Agüí Fernández, A. V. Filippenko, D. Frederiks, M. J. Graham, B. A. Hristov, M. M. Kasliwal, S. R. Kulkarni, H. Kumar, R. R. Laher, A. L. Lysenko, B. Mailyan, C. Malacaria, A. A. Miller, S. Poolakkil, R. Riddle, A. Ridnaia, B. Rusholme, V. Savchenko, J. Sollerman, C. Thöne, A. Tsvetkova, M. Ulanov, and A. von Kienlin (2022), Cosmological Fast Optical Transients with the Zwicky Transient Facility: A Search for Dirty Fireballs, *Astrophys. J.*, **938**(1), 85, [10.3847/1538-4357/ac8bd0](https://doi.org/10.3847/1538-4357/ac8bd0).
- [138] Horvath, I., and B. C. Lovell (2022), Duskside Sub-Auroral Polarization Streams (SAPS) and Dawnside Subauroral Flows During the Magnetically Quiet 24 November and Moderately Active 25-27 November 2008, *J. Geophys. Res.*, **127**(12), e2022JA030609, [10.1029/2022JA030609](https://doi.org/10.1029/2022JA030609).
- [139] Hu, P., G. Chen, G. Li, C. Yan, S. Zhang, G. Yang, Y. Li, Z. He, W. Jia, and M. Zhang (2022), Double Coherent Scatter Radars Observations of the Daytime F-Region Irregularities in Low-Latitudes on 29 May 2017, *Space Weather*, **20**(12), e2022SW003272, [10.1029/2022SW003272](https://doi.org/10.1029/2022SW003272).
- [140] Hu, Q., C. Zhu, W. He, J. Qiu, L. K. Jian, and A. Prasad (2022), Validation and Interpretation of a Three-dimensional Configuration of a Magnetic Cloud Flux Rope, *Astrophys. J.*, **934**(1), 50, [10.3847/1538-4357/ac7803](https://doi.org/10.3847/1538-4357/ac7803).
- [141] Huang, Y.-Y., H.-M. Zhang, K. Yan, R.-Y. Liu, and X.-Y. Wang (2022), Detection of GeV Emission from an Ultralong Gamma-Ray Burst with the Fermi Large Area Telescope, *Astrophys. J. Lett.*, **940**(2), L36, [10.3847/2041-8213/aca147](https://doi.org/10.3847/2041-8213/aca147).
- [142] Hubbert, M., C. T. Russell, Y. Qi, S. Lu, J. L. Burch, B. L. Giles, and T. E. Moore (2022), Electron-Only Reconnection as a Transition Phase From Quiet Magnetotail Current Sheets to Traditional Magnetotail Reconnection, *J. Geophys. Res.*, **127**(3), e29584, [10.1029/2021JA029584](https://doi.org/10.1029/2021JA029584).
- [143] Issan, O., and P. Riley (2022), Theoretical Refinements to the Heliospheric Upwind eXtrapolation Technique and Application to in-situ Measurements, *Front. Astron. Space Sci.*, **8**, 245, [10.3389/fspas.2021.795323](https://doi.org/10.3389/fspas.2021.795323).

List of Refereed Publications
Wind Spacecraft: 2022

- [144] James, T., and R. E. Lopez (2022), The effect of F10.7 on interhemispheric differences in ionospheric current during solstices, *Adv. Space Res.*, **69**(8), 2951–2956, [10.1016/j.asr.2022.02.006](https://doi.org/10.1016/j.asr.2022.02.006).
- [145] Jenan, R., T. L. Dammalage, and S. K. Panda (2022), Ionospheric TEC response to severe geomagnetic storm and annular solar eclipse through GNSS based TEC observations and assessment of IRI-2016 model and global ionosphere maps over Sri Lankan equatorial and low latitude region, *Astrophys. Space Sci.*, **367**(2), 24, [10.1007/s10509-022-04051-8](https://doi.org/10.1007/s10509-022-04051-8).
- [146] Jing, Y.-D., L. Zheng, S. Yang, X. Zhang, L. Lu, B. Tang, and W. Su (2022), Plasma noise in TianQin time-delay interferometry, *Phys. Rev. D*, **106**(8), 082006, [10.1103/PhysRevD.106.082006](https://doi.org/10.1103/PhysRevD.106.082006).
- [147] Johlander, A., M. Battarbee, L. Turc, U. Ganse, Y. Pfau-Kempf, M. Grandin, J. Suni, V. Tarvus, M. Bussov, H. Zhou, M. Alho, M. Dubart, H. George, K. Papadakis, and M. Palmroth (2022), Quasi-Parallel Shock Reformation Seen by Magnetospheric Multiscale and Ion-Kinetic Simulations, *Geophys. Res. Lett.*, **49**(2), e96335, [10.1029/2021GL096335](https://doi.org/10.1029/2021GL096335).
- [148] Jordana-Mitjans, N., C. G. Mundell, C. Guidorzi, R. J. Smith, E. Ramírez-Ruiz, B. D. Metzger, S. Kobayashi, A. Gomboc, I. A. Steele, M. Shrestha, M. Marongiu, A. Rossi, and B. Rothberg (2022), A Short Gamma-Ray Burst from a Protomagnetar Remnant, *Astrophys. J.*, **939**(2), 106, [10.3847/1538-4357/ac972b](https://doi.org/10.3847/1538-4357/ac972b).
- [149] Jung, J., H. K. Connor, J. A. Carter, D. Koutroumpa, C. Pagani, and K. D. Kuntz (2022), Solar Minimum Exospheric Neutral Density Near the Subsolar Magnetopause Estimated From the XMM Soft X-Ray Observations on 12 November 2008, *J. Geophys. Res.*, **127**(3), e29676, [10.1029/2021JA029676](https://doi.org/10.1029/2021JA029676).
- [150] Kalliokoski, M. M. H., E. K. J. Kilpua, A. Osmane, A. N. Jaynes, D. L. Turner, H. George, L. Turc, and M. Palmroth (2022), Phase Space Density Analysis of Outer Radiation Belt Electron Energization and Loss During Geoeffective and Nongeoeffective Sheath Regions, *J. Geophys. Res.*, **127**(3), e29662, [10.1029/2021JA029662](https://doi.org/10.1029/2021JA029662).
- [151] Kamaletdinov, S. R., I. Y. Vasko, R. Wang, A. V. Artemyev, E. V. Yushkov, and F. S. Mozer (2022), Slow electron holes in the Earth's bow shock, *Phys. Plasmas*, **29**(9), 092303, [10.1063/5.0102289](https://doi.org/10.1063/5.0102289).
- [152] Karna, N., M. A. Berger, M. Asgari-Targhi, K. Paulson, and K. Fujiki (2022), A Study of an Equatorial Coronal Hole Observed at the First Parker Solar Probe Perihelion, *Astrophys. J.*, **925**(1), 62, [10.3847/1538-4357/ac3c46](https://doi.org/10.3847/1538-4357/ac3c46).
- [153] Kavanagh, A. J., Y. Ogawa, and E. E. Woodfield (2022), Two Techniques for Determining F-Region Ion Velocities at Meso-Scales: Differences and Impacts on Joule Heating, *J. Geophys. Res.*, **127**(6), e30062, [10.1029/2021JA030062](https://doi.org/10.1029/2021JA030062).
- [154] Kay, C., M. L. Mays, and Y. M. Collado-Vega (2022), OSPREI: A Coupled Approach to Modeling CME-Driven Space Weather With Automatically Generated, User-Friendly Outputs, *Space Weather*, **20**(4), e2021SW002914, [10.1029/2021SW002914](https://doi.org/10.1029/2021SW002914).

List of Refereed Publications
Wind Spacecraft: 2022

- [155] Kay, C., T. Nieves-Chinchilla, S. J. Hofmeister, and E. Palmerio (2022), Beyond Basic Drag in Interplanetary CME Modeling: Effects of Solar Wind Pileup and High-Speed Streams, *Space Weather*, **20**(9), e2022SW003165, [10.1029/2022SW003165](https://doi.org/10.1029/2022SW003165).
- [156] Keebler, T. B., G. Tóth, B. Zieger, and M. Opher (2022), MSWIM2D: Two-dimensional Outer Heliosphere Solar Wind Modeling, *Astrophys. J. Suppl.*, **260**(2), 43, [10.3847/1538-4365/ac67eb](https://doi.org/10.3847/1538-4365/ac67eb).
- [157] Keika, K., S. Kasahara, S. Yokota, M. Hoshino, K. Seki, T. Amano, L. M. Kistler, M. Nosé, Y. Miyoshi, T. Hori, and I. Shinohara (2022), Preferential Energization of Lower-Charge-State Heavier Ions in the Near-Earth Magnetotail, *J. Geophys. Res.*, **127**(1), e29786, [10.1029/2021JA029786](https://doi.org/10.1029/2021JA029786).
- [158] Kellerman, A. C., R. Mcgranaghan, J. Bortnik, B. A. Carter, J. Hughes, R. F. Arritt, K. Venkataramani, C. H. Perry, J. McCormick, C. M. Ngwira, M. Cohen, and J. Yue (2022), Geomagnetically Induced Currents at Middle Latitudes: 1. Quiet-Time Variability, *Space Weather*, **20**(2), e2021SW002729, [10.1029/2021SW002729](https://doi.org/10.1029/2021SW002729).
- [159] Khabarova, O., J. Büchner, N. Jain, T. Sagitov, H. Malova, and R. Kislov (2022), Electron-to-ion Bulk Speed Ratio as a Parameter Reflecting the Occurrence of Strong Electron-dominated Current Sheets in the Solar Wind, *Astrophys. J.*, **933**(1), 97, [10.3847/1538-4357/ac71ab](https://doi.org/10.3847/1538-4357/ac71ab).
- [160] Khokhlachev, A. A., Y. I. Yermolaev, I. G. Lodkina, M. O. Riazantseva, and L. S. Rakhmanova (2022), Helium Abundance Variations in Interplanetary Coronal Mass Ejections, *Cosmic Res.*, **60**(2), 67–72, [10.1134/S0010952522020046](https://doi.org/10.1134/S0010952522020046).
- [161] Khokhlachev, A. A., M. O. Riazantseva, Y. I. Yermolaev, L. S. Rakhmanova, and I. G. Lodkina (2022), Medium-Scale Variations of Helium Abundance inside Coronal Mass Ejections, *Cosmic Res.*, **60**(6), 452–460, [10.1134/S0010952522060053](https://doi.org/10.1134/S0010952522060053).
- [162] Kim, K.-H., K. Takahashi, J. Lee, H. Jin, and J.-W. Kwon (2022), Mass Density Inferred From Toroidal Wave Frequencies and Energization of Low-Energy Helium Ions During H-Band EMIC Wave Interval, *J. Geophys. Res.*, **127**(8), e30523, [10.1029/2022JA030523](https://doi.org/10.1029/2022JA030523).
- [163] Kitajima, R., M. Nowada, and R. Kamimura (2022), Investigation of the relationship between geomagnetic activity and solar wind parameters based on a novel neural network (potential learning), *Earth, Planets and Space*, **74**(1), 145, [10.1186/s40623-022-01697-0](https://doi.org/10.1186/s40623-022-01697-0).
- [164] Kleimann, J., K. Dialynas, F. Fraternale, A. Galli, J. Heerikhuisen, V. Izmodenov, M. Kornbleuth, M. Opher, and N. Pogorelov (2022), The Structure of the Large-Scale Heliosphere as Seen by Current Models, *Space Sci. Rev.*, **218**(4), 36, [10.1007/s11214-022-00902-6](https://doi.org/10.1007/s11214-022-00902-6).
- [165] Klein, K.-L., S. Musset, N. Vilmer, C. Briand, S. Krucker, A. Francesco Battaglia, N. Dresing, C. Palmroos, and D. E. Gary (2022), The relativistic solar particle event on 28 October 2021: Evidence of particle acceleration within and escape from the solar corona, *Astron. & Astrophys.*, **663**, A173, [10.1051/0004-6361/202243903](https://doi.org/10.1051/0004-6361/202243903).

List of Refereed Publications
Wind Spacecraft: 2022

- [166] Koklu, K. (2022), Using artificial neural networks for comparison of the 09 March 2012 intense and 08 May 2014 weak storms, *Adv. Space Res.*, **70**(10), 2929–2940, [10.1016/j.asr.2022.07.067](https://doi.org/10.1016/j.asr.2022.07.067).
- [167] Koller, F., M. Temmer, L. Preisser, F. Plaschke, P. Geyer, L. K. Jian, O. W. Roberts, H. Hietala, and A. T. LaMoury (2022), Magnetosheath Jet Occurrence Rate in Relation to CMEs and SIRs, *J. Geophys. Res.*, **127**(4), e30124, [10.1029/2021JA030124](https://doi.org/10.1029/2021JA030124).
- [168] Kooi, J. E., D. B. Wexler, E. A. Jensen, M. N. Kenny, T. Nieves-Chinchilla, L. B. Wilson III, B. E. Wood, L. K. Jian, S. F. Fung, A. Pevtsov, N. Gopalswamy, and W. B. Manchester (2022), Modern Faraday Rotation Studies to Probe the Solar Wind, *Front. Astron. Space Sci.*, **9**, 841866, [10.3389/fspas.2022.841866](https://doi.org/10.3389/fspas.2022.841866).
- [169] Korolkov, S. D., and V. V. Izmodenov (2022), Shock-wave heating mechanism of the distant solar wind: Explanation of Voyager-2 data, *Astron. & Astrophys.*, **667**, L5, [10.1051/0004-6361/202244523](https://doi.org/10.1051/0004-6361/202244523).
- [170] Kouloumvakos, A., R. Y. Kwon, L. Rodríguez-García, D. Lario, N. Dresing, E. K. J. Kilpuu, R. Vainio, T. Török, I. Plotnikov, A. P. Rouillard, C. Downs, J. A. Linker, O. E. Malandraki, R. F. Pinto, P. Riley, and R. C. Allen (2022), The first widespread solar energetic particle event of solar cycle 25 on 2020 November 29. Shock wave properties and the wide distribution of solar energetic particles, *Astron. & Astrophys.*, **660**, A84, [10.1051/0004-6361/202142515](https://doi.org/10.1051/0004-6361/202142515).
- [171] Kozyrev, A. S., J. Benkhoff, M. L. Litvak, D. V. Golovin, F. Quarati, and A. B. Sanin (2022), Localization of cosmic gamma-ray bursts in interplanetary space with MGNS/BepiColombo and HEND/Mars Odyssey experiments, *Planet. Space Sci.*, **224**, 105594, [10.1016/j.pss.2022.105594](https://doi.org/10.1016/j.pss.2022.105594).
- [172] Krasnoselskikh, V., B. T. Tsurutani, T. Dudok de Wit, S. Walker, M. Balikhin, M. Balat-Pichelin, M. Velli, S. D. Bale, M. Maksimovic, O. Agapitov, W. Baumjohann, M. Berthomier, R. Bruno, S. R. Cranmer, B. de Pontieu, D. d. S. Meneses, J. Eastwood, R. Erdelyi, R. Ergun, V. Fedun, N. Ganushkina, A. Greco, L. Harra, P. Henri, T. Horbury, H. Hudson, J. Kasper, Y. Khotyaintsev, M. Kretzschmar, S. Krucker, H. Kucharek, Y. Langevin, B. Lavraud, J.-P. Lebreton, S. Lepri, M. Liemohn, P. Louarn, E. Moebius, F. Mozer, Z. Nemeczek, O. Panasenco, A. Retino, J. Safrankova, J. Scudder, S. Servidio, L. Sorriso-Valvo, J. Souček, A. Szabo, A. Vaivads, G. Vekstein, Z. Vörös, T. Zaqrashvili, G. Zimbardo, and A. Fedorov (2022), ICARUS: in-situ studies of the solar corona beyond Parker Solar Probe and Solar Orbiter, *Exper. Astron.*, **54**(2-3), 277–315, [10.1007/s10686-022-09878-1](https://doi.org/10.1007/s10686-022-09878-1).
- [173] Kryakunova, O. N., A. V. Belov, A. F. Yakovets, A. A. Abunin, I. L. Tsepakina, B. B. Seifullina, M. A. Abunina, N. F. Nikolayevskiy, N. S. Shlyk, and A. B. Andreyev (2022), Average characteristics of high-energy magnetospheric electron flux enhancements and the parameters of near-Earth and interplanetary medium in 1987-2021, *Mon. Not. Roy. Astron. Soc.*, **516**(4), 4782–4791, [10.1093/mnras/stac2382](https://doi.org/10.1093/mnras/stac2382).

List of Refereed Publications
Wind Spacecraft: 2022

- [174] Kumar, A., S. B. Pandey, R. Gupta, A. Aryan, A. K. Ror, S. Sharma, and N. Brahme (2022), Tale of GRB 171010A/SN 2017htp and GRB 171205A/SN 2017iuk: Magnetar origin?, *New Astron.*, **97**, 101889, [10.1016/j.newast.2022.101889](https://doi.org/10.1016/j.newast.2022.101889).
- [175] Kumar, H., R. Gupta, D. Saraogi, T. Ahumada, I. Andreoni, G. C. Anupama, A. Aryan, S. Barway, V. Bhalerao, P. Chandra, M. W. Coughlin, Dimple, A. Dutta, A. ghosh, A. Y. Q. Ho, E. C. Kool, A. Kumar, M. S. Medford, K. Misra, S. B. Pandey, D. A. Perley, R. Riddle, A. K. Ror, J. M. Setiadi, and Y. Yao (2022), The long-active afterglow of GRB 210204A: detection of the most delayed flares in a gamma-ray burst, *Mon. Not. Roy. Astron. Soc.*, **513**(2), 2777–2793, [10.1093/mnras/stac1061](https://doi.org/10.1093/mnras/stac1061).
- [176] Kumar, S., and N. Srivastava (2022), A Parametric Study of Performance of Two Solar Wind Velocity Forecasting Models During 2006-2011, *Space Weather*, **20**(9), e2022SW003069, [10.1029/2022SW003069](https://doi.org/10.1029/2022SW003069).
- [177] Kunz, M. W., T. W. Jones, and I. Zhuravleva (2022), Plasma Physics of the Intracluster Medium, in *Handbook of X-ray and Gamma-ray Astrophysics*. Edited by Cosimo Bambi and Andrea Santangelo, p. 56, [10.1007/978-981-16-4544-0_125-1](https://doi.org/10.1007/978-981-16-4544-0_125-1).
- [178] Kurazhkovskaya, N. A., and B. I. Klain (2022), The Effect of Interruption of “Serpentine Emission” (SE) in the Polar Cap during Geomagnetic Storm Sudden Commencements (SSC), *Geomag. and Aeron.*, **62**(5), 573–581, [10.1134/S0016793222040107](https://doi.org/10.1134/S0016793222040107).
- [179] Kwon, H. J., K. H. Kim, G. Jee, J. Seon, C. Lee, Y. B. Ham, J. Hong, E. Kim, T. Bullett, H. U. Auster, W. Magnes, and S. Kraft (2022), Disappearance of the Polar Cap Ionosphere During Geomagnetic Storm on 11 May 2019, *Space Weather*, **20**(6), e2022SW003054, [10.1029/2022SW003054](https://doi.org/10.1029/2022SW003054).
- [180] Lalti, A., Y. V. Khotyaintsev, D. B. Graham, A. Vaivads, K. Steinvall, and C. T. Russell (2022), Whistler Waves in the Foot of Quasi-Perpendicular Supercritical Shocks, *J. Geophys. Res.*, **127**(5), e29969, [10.1029/2021JA029969](https://doi.org/10.1029/2021JA029969).
- [181] Lalti, A., Y. V. Khotyaintsev, A. P. Dimmock, A. Johlander, D. B. Graham, and V. Olshevsky (2022), A Database of MMS Bow Shock Crossings Compiled Using Machine Learning, *J. Geophys. Res.*, **127**(8), e30454, [10.1029/2022JA030454](https://doi.org/10.1029/2022JA030454).
- [182] Lamy, L., B. Cecconi, S. Aicardi, and C. K. Louis (2022), Comment on “Locating the source field lines of Jovian decametric radio emissions” by YuMing Wang et al., *Earth Planet. Phys.*, **6**(1), 10–12, [10.26464/epp2022018](https://doi.org/10.26464/epp2022018).
- [183] Lamy, L., L. Colombar, P. Zarka, R. Prangé, M. S. Marques, C. K. Louis, W. S. Kurth, B. Cecconi, J. N. Girard, J. M. Grießmeier, and S. Yerin (2022), Determining the Beaming of Io Decametric Emissions: A Remote Diagnostic to Probe the Io-Jupiter Interaction, *J. Geophys. Res.*, **127**(4), e30160, [10.1029/2021JA030160](https://doi.org/10.1029/2021JA030160).
- [184] Lanabere, V., P. Démoulin, and S. Dasso (2022), A robust estimation of the twist distribution in magnetic clouds, *Astron. & Astrophys.*, **668**, A160, [10.1051/0004-6361/202245062](https://doi.org/10.1051/0004-6361/202245062).

List of Refereed Publications
Wind Spacecraft: 2022

- [185] Lang, S.-Y., L. Xiang, Q.-H. Li, W.-L. Zhang, and H.-W. Yu (2022), Electron Temperature Anisotropy Effects on Alpha/Proton Instability in the Solar Wind, *Universe*, **8**(9), 466, [10.3390/universe8090466](https://doi.org/10.3390/universe8090466).
- [186] Lario, D., I. G. Richardson, L. B. Wilson III, L. Berger, L. K. Jian, and D. Trotta (2022), The Extended Field-aligned Suprathermal Proton Beam and Long-lasting Trapped Energetic Particle Population Observed Upstream of a Transient Interplanetary Shock, *Astrophys. J.*, **925**(2), 198, [10.3847/1538-4357/ac3c47](https://doi.org/10.3847/1538-4357/ac3c47).
- [187] Lario, D., N. Wijsen, R. Y. Kwon, B. Sánchez-Cano, I. G. Richardson, D. Pacheco, E. Palmerio, M. L. Stevens, A. Szabo, D. Heyner, N. Dresing, R. Gómez-Herrero, F. Carraboso, A. Aran, A. Afanasiev, R. Vainio, E. Riihonen, S. Poedts, M. Brüden, Z. G. Xu, and A. Kollhoff (2022), Influence of Large-scale Interplanetary Structures on the Propagation of Solar Energetic Particles: The Multispacecraft Event on 2021 October 9, *Astrophys. J.*, **934**(1), 55, [10.3847/1538-4357/ac6efd](https://doi.org/10.3847/1538-4357/ac6efd).
- [188] Laskar, T., A. R. Escorial, G. Schroeder, W.-f. Fong, E. Berger, P. Veres, S. Bhandari, J. Rastinejad, C. D. Kilpatrick, A. Tohuavavohu, R. Margutti, K. D. Alexander, J. De-Launay, J. A. Kennea, A. Nugent, K. Paterson, and P. K. G. Williams (2022), The First Short GRB Millimeter Afterglow: The Wide-angled Jet of the Extremely Energetic SGRB 211106A, *Astrophys. J. Lett.*, **935**(1), L11, [10.3847/2041-8213/ac8421](https://doi.org/10.3847/2041-8213/ac8421).
- [189] Le, G., G. Liu, E. Yizengaw, and C. R. Englert (2022), Intense Equatorial Electrojet and Counter Electrojet Caused by the 15 January 2022 Tonga Volcanic Eruption: Space- and Ground-Based Observations, *Geophys. Res. Lett.*, **49**(11), e99002, [10.1029/2022GL099002](https://doi.org/10.1029/2022GL099002).
- [190] Li, D., and W. Chen (2022), Quasi-periodic Accelerations of Energetic Particles during a Solar Flare, *Astrophys. J. Lett.*, **931**(2), L28, [10.3847/2041-8213/ac6fd2](https://doi.org/10.3847/2041-8213/ac6fd2).
- [191] Li, G., and N. Lugaz (2022), Estimating the Injection Duration of 20 MeV Protons in Large Western Solar Energetic Particle Events, *Astrophys. J.*, **930**(1), 51, [10.3847/1538-4357/ac609c](https://doi.org/10.3847/1538-4357/ac609c).
- [192] Li, J., T. Matsuo, and L. M. Kilcommons (2022), Assimilative Mapping of Auroral Electron Energy Flux Using SSUSI Lyman-Birge-Hopfield (LBH) Emissions, *J. Geophys. Res.*, **127**(3), e29739, [10.1029/2021JA029739](https://doi.org/10.1029/2021JA029739).
- [193] Li, W., V. Angelopoulos, J. Mieth, L. Wu, and A. Li (2022), The Dawn-Dusk Tail Lobe Magnetotail Configuration and the Formation of Aurora Transpolar Arc, *J. Geophys. Res.*, **127**(10), e2022JA030676, [10.1029/2022JA030676](https://doi.org/10.1029/2022JA030676).
- [194] Li, X., Y. Wang, J. Guo, and S. Lyu (2022), Solar Energetic Particles Produced during Two Fast Coronal Mass Ejections, *Astrophys. J. Lett.*, **928**(1), L6, [10.3847/2041-8213/ac5b72](https://doi.org/10.3847/2041-8213/ac5b72).
- [195] Li, X., M. Ge, L. Lin, S.-N. Zhang, L. Song, X. Cao, B. Zhang, F. Lu, Y. Xu, S. Xiong, Y. Tuo, Y. Tan, W. Jiang, J. Qu, S. Zhang, L. Wang, J. Wang, B. Zhang, P. Zhang,

List of Refereed Publications
Wind Spacecraft: 2022

- C. Li, C. Liu, T. Li, Q. Bu, C. Cai, Y. Chen, Y. Chen, Z. Chang, L. Chen, T. Chen, Y. Chen, W. Cui, Y. Du, G. Gao, H. Gao, Y. Gu, J. Guan, C. Guo, D. Han, Y. Huang, J. Huo, S. Jia, J. Jin, L. Kong, B. Li, G. Li, W. Li, X. Li, X. Li, Z. Li, X. Liang, J. Liao, H. Liu, H. Liu, X. Liu, X. Lu, Q. Luo, T. Luo, B. Ma, R. Ma, X. Ma, B. Meng, Y. Nang, J. Nie, G. Ou, X. Ren, N. Sai, X. Song, L. Sun, L. Tao, C. Wang, P. Wang, W. Wang, Y. Wang, X. Wen, B. Wu, B. Wu, M. Wu, S. Xiao, S. Yang, Y. Yang, Q. Yi, Q. Yin, Y. You, W. Yu, F. Zhang, H. Zhang, J. Zhang, W. Zhang, W. Zhang, Y. Zhang, Y. Zhang, H. Zhao, X. Zhao, S. Zheng, and D. Zhou (2022), Quasi-periodic Oscillations of the X-Ray Burst from the Magnetar SGR J1935-2154 and Associated with the Fast Radio Burst FRB 200428, *Astrophys. J.*, **931**(1), 56, [10.3847/1538-4357/ac6587](https://doi.org/10.3847/1538-4357/ac6587).
- [196] Li, X.-Y., Z.-Y. Liu, Q.-G. Zong, J.-J. Liu, S.-Y. Fu, X.-Z. Zhou, Y.-X. Hao, C. J. Pollock, C. T. Russell, R. E. Ergun, and P.-A. Lindqvist (2022), ULF Wave-Induced Ion Pitch Angle Evolution in the Dayside Outer Magnetosphere, *Geophys. Res. Lett.*, **49**(8), e98108, [10.1029/2022GL098108](https://doi.org/10.1029/2022GL098108).
- [197] Li, X.-Y., H.-N. He, and D.-M. Wei (2022), On the Jet Structures of GRB 050820A and GRB 070125, *Res. Astron. Astrophys.*, **22**(8), 085021, [10.1088/1674-4527/ac7a98](https://doi.org/10.1088/1674-4527/ac7a98).
- [198] Li, Y.-X., C. Yue, Q. Ma, J. Liu, Q.-G. Zong, X.-Z. Zhou, Z. Hu, L. Li, J. Ren, Y.-F. Wang, and Y. Liu (2022), Simultaneous Cross-Energy Ion Response and Wave Generation After the Impact of an Interplanetary Shock, *J. Geophys. Res.*, **127**(11), e2022JA030636, [10.1029/2022JA030636](https://doi.org/10.1029/2022JA030636).
- [199] Lin, C.-H., and J. Chen (2022), Drag Force on Coronal Mass Ejections (CMEs), *J. Geophys. Res.*, **127**(6), e28744, [10.1029/2020JA028744](https://doi.org/10.1029/2020JA028744).
- [200] Lin, D., J. A. Irwin, E. Berger, and R. Nguyen (2022), Discovery of Three Candidate Magnetar-powered Fast X-Ray Transients from Chandra Archival Data, *Astrophys. J.*, **927**(2), 211, [10.3847/1538-4357/ac4fc6](https://doi.org/10.3847/1538-4357/ac4fc6).
- [201] Lin, D., W. Wang, K. Garcia-Sage, J. Yue, V. Merkin, J. M. McInerney, K. Pham, and K. Sorathia (2022), Thermospheric Neutral Density Variation During the “SpaceX” Storm: Implications From Physics-Based Whole Geospace Modeling, *Space Weather*, **20**(12), e2022SW003254, [10.1029/2022SW003254](https://doi.org/10.1029/2022SW003254).
- [202] Lingri, D., H. Mavromichalaki, M. Abunina, A. Belov, E. Eroshenko, I. Daglis, and A. Abunin (2022), Precursory Signals of Forbush Decreases Not Connected with Shock Waves, *Solar Phys.*, **297**(2), 24, [10.1007/s11207-022-01951-4](https://doi.org/10.1007/s11207-022-01951-4).
- [203] Lipatov, A. S., L. A. Avanov, and B. L. Giles (2022), Hybrid Kinetic Model of the Interaction Between the Dense Plasma Clouds and Magnetospheric Plasma on Large Time and Spatial Scales, and Comparison With MMS Observations, *J. Geophys. Res.*, **127**(7), e30493, [10.1029/2022JA030493](https://doi.org/10.1029/2022JA030493).
- [204] Lipunov, V., V. Kornilov, K. Zhirkov, N. Tyurina, E. Gorbovskoy, D. Vlasenko, S. Simakov, V. Topolev, C. Francile, R. Podesta, F. Podesta, D. Svinkin, N. Budnev, O. Gress, P. Balanutsa, A. Kuznetsov, A. Chasovnikov, M. Serra-Ricart, A. Gabovich,

List of Refereed Publications
Wind Spacecraft: 2022

- E. Minkina, G. Antipov, S. Svertilov, A. Tlatov, V. Senik, Y. Tselik, Y. Kechin, and V. Yurkov (2022), Orphan optical flare as SOSS emission afterglow, localization in time, *Mon. Not. Roy. Astron. Soc.*, **516**(4), 4980–4987, [10.1093/mnras/stac1906](https://doi.org/10.1093/mnras/stac1906).
- [205] Lipunov, V., V. Kornilov, E. Gorbovskoy, N. Tyurina, D. Vlasenko, P. Balanutsa, A. Kuznetsov, O. A. Gress, K. Zhirkov, A. Chasovnikov, V. Topolev, V. Senik, K. Francile, F. Podesta, R. Podesta, D. Buckley, R. Rebolo, M. Serra, N. M. Budnev, A. Tlatov, Y. Kechin, Y. Tselik, V. Yurkov, A. Gabovich, D. Dormidontov, D. Kuvshinov, E. Minkina, O. Ershova, D. Cheryasov, and V. Vladimirov (2022), Strategy and Results of MASTER Network Follow-Up Observations of LIGO and Virgo Gravitational Wave Events within the Observational Sets O1, O2, and O3, *Astron. Rep.*, **66**(12), 1118–1253, [10.1134/S1063772922110129](https://doi.org/10.1134/S1063772922110129).
- [206] Lipunov, V. M., V. G. Kornilov, V. V. Topolev, N. V. Tyurina, E. S. Gorbovskoy, S. G. Simakov, K. K. Zhirkov, D. S. Vlasenko, C. Francile, R. Podesta, F. Podesta, D. S. Svinkin, N. M. Budnev, P. V. Balanutsa, D. V. Cheryasov, A. R. Chasovnikov, R. Rebolo, M. Serra-Ricart, O. A. Gress, O. A. Ershova, V. V. Yurkov, A. S. Gabovich, A. G. Tlatov, E. M. Minkina, V. V. Vladimirov, A. S. Kuznetsov, G. A. Antipov, S. I. Svertilov, Y. Tselik, and Y. Kechin (2022), The First Detection of an Orphan Burst at the Rise Phase, *Astron. Lett.*, **48**(11), 623–635, [10.1134/S1063773722110093](https://doi.org/10.1134/S1063773722110093).
- [207] Lissa, D., K. Venkatesh, D. S. V. V. D. Prasad, and K. Niranjan (2022), Distinct ionospheric response to three different geomagnetic storms during 2016 using GPS-TEC observations over the Indian equatorial and low latitude sectors, *Adv. Space Res.*, **70**(4), 1089–1103, [10.1016/j.asr.2022.05.027](https://doi.org/10.1016/j.asr.2022.05.027).
- [208] Liu, J., T. Higuchi, L. R. Lyons, S. Ohtani, J. Wu, Y. Zou, V. Angelopoulos, and C. P. Wang (2022), The Occurrence of Embedded Region 1 and 2 Currents Depends on Geomagnetic Activity Level, *J. Geophys. Res.*, **127**(11), e2022JA030539, [10.1029/2022JA030539](https://doi.org/10.1029/2022JA030539).
- [209] Liu, J., D. Zhang, S. Sun, Y. Hao, and Z. Xiao (2022), Latitudinal and interhemispheric differences of the ionospheric semi-diurnal lunitidal perturbations during the 2009 Arctic sudden stratospheric warming event in the eastern Asia-Australia sector, *Earth, Planets and Space*, **74**(1), 22, [10.1186/s40623-022-01581-x](https://doi.org/10.1186/s40623-022-01581-x).
- [210] Liu, M., Z. Yang, Y. D. Liu, B. Lembége, K. Issautier, L. B. Wilson III, S. Zhao, V. K. Jagarlamudi, X. Zhao, J. Huang, and N. Chrysaphi (2022), Properties of a Supercritical Quasi-perpendicular Interplanetary Shock Propagating in the Terrestrial Foreshock Region, *Astrophys. J. Suppl.*, **263**(1), 11, [10.3847/1538-4365/ac94c8](https://doi.org/10.3847/1538-4365/ac94c8).
- [211] Liu, N., Y. Jin, Z. He, J. Yu, K. Li, and J. Cui (2022), Simultaneous Evolutions of Inner Magnetospheric Plasmaspheric Hiss and EMIC Waves Under the Influence of a Heliospheric Plasma Sheet, *Geophys. Res. Lett.*, **49**(10), e98798, [10.1029/2022GL098798](https://doi.org/10.1029/2022GL098798).
- [212] Liu, T. Z., H. Zhang, D. Turner, A. Vu, and V. Angelopoulos (2022), Statistical Study of Favorable Foreshock Ion Properties for the Formation of Hot Flow Anomalies and Foreshock Bubbles, *J. Geophys. Res.*, **127**(8), e30273, [10.1029/2022JA030273](https://doi.org/10.1029/2022JA030273).

List of Refereed Publications
Wind Spacecraft: 2022

- [213] Liu, X., J. Liu, W. Wang, S.-R. Zhang, K. Zhang, J. Lei, L. Liu, X. Chen, S. Li, Q.-H. Zhang, and Z.-Y. Xing (2022), Explaining Solar Flare-Induced Ionospheric Ion Upflow at Millstone Hill (42.6°N), *J. Geophys. Res.*, **127**(7), e30185, [10.1029/2021JA030185](https://doi.org/10.1029/2021JA030185).
- [214] Liu, Y. Y., H. S. Fu, J. B. Cao, Y. Yu, C. M. Liu, Z. Wang, Z. Z. Guo, and R. J. He (2022), Categorizing MHD Discontinuities in the Inner Heliosphere by Utilizing the PSP Mission, *J. Geophys. Res.*, **127**(3), e29983, [10.1029/2021JA029983](https://doi.org/10.1029/2021JA029983).
- [215] Liu, Z., L. Wang, and X. Guo (2022), Acceleration of Solar Wind Suprathermal Electrons at the Earth's Bow Shock, *Astrophys. J.*, **935**(1), 39, [10.3847/1538-4357/ac8157](https://doi.org/10.3847/1538-4357/ac8157).
- [216] Liu, Z. Y., and Q. G. Zong (2022), Ionospheric Oxygen Outflows Directly Injected Into the Inner Magnetosphere: Van Allen Probes Statistics, *J. Geophys. Res.*, **127**(10), e2022JA030611, [10.1029/2022JA030611](https://doi.org/10.1029/2022JA030611).
- [217] Liu, Z. Y., Q. G. Zong, H. Zhang, J. T. Zhao, R. Rankin, C. J. Pollock, and G. Le (2022), Ion Behavior at Shocklets: A Case Study of MMS Observations, *Geophys. Res. Lett.*, **49**(17), e00449, [10.1029/2022GL100449](https://doi.org/10.1029/2022GL100449).
- [218] Loto'aniu, P. T. M., K. Romich, W. Rowland, S. Codrescu, D. Biesecker, J. Johnson, H. J. Singer, A. Szabo, and M. Stevens (2022), Validation of the DSCOVR Spacecraft Mission Space Weather Solar Wind Products, *Space Weather*, **20**(10), e2022SW003085, [10.1029/2022SW003085](https://doi.org/10.1029/2022SW003085).
- [219] Louis, C., C. Jackman, S. Mangham, K. Smith, E. O'Dwyer, A. Empey, B. Cecconi, A. Boudouma, P. Zarka, and S. Maloney (2022), The "SPectrogram Analysis and Cataloguing Environment" (SPACE) Labelling Tool, *Front. Astron. Space Sci.*, **9**, 332, [10.3389/fspas.2022.1001166](https://doi.org/10.3389/fspas.2022.1001166).
- [220] Lu, L., L. Feng, and W. Gan (2022), Spatially Resolved Moving Radio Burst Associated with an EUV Wave, *Astrophys. J. Lett.*, **931**(1), L8, [10.3847/2041-8213/ac6ced](https://doi.org/10.3847/2041-8213/ac6ced).
- [221] Lu, X., H. Zhang, T. Liu, A. Vu, C. Pollock, and B. Wang (2022), Statistical Study of Foreshock Density Holes, *J. Geophys. Res.*, **127**(4), e29981, [10.1029/2021JA029981](https://doi.org/10.1029/2021JA029981).
- [222] Lugaz, N., T. M. Salman, B. Zhuang, N. Al-Haddad, C. Scolini, C. J. Farrugia, W. Yu, R. M. Winslow, C. Möstl, E. E. Davies, and A. B. Galvin (2022), A Coronal Mass Ejection and Magnetic Ejecta Observed In Situ by STEREO-A and Wind at 55° Angular Separation, *Astrophys. J.*, **929**(2), 149, [10.3847/1538-4357/ac602f](https://doi.org/10.3847/1538-4357/ac602f).
- [223] Luhmann, J. G., Y. Li, C. O. Lee, L. K. Jian, C. N. Arge, and P. Riley (2022), Solar Cycle Variability in Coronal Holes and Their Effects on Solar Wind Sources, *Space Weather*, **20**(10), e2022SW003110, [10.1029/2022SW003110](https://doi.org/10.1029/2022SW003110).
- [224] Luo, Z., L. Xie, S. Fu, Z. Pu, Y. Xiong, X. Zhou, Q. Zong, L. Li, C. T. Russell, R. E. Ergun, J. L. Burch, J. B. Blake, R. B. Torbert, and P. A. Lindqvist (2022), Energetic Electron Microinjections Observed by MMS in the Dusk Plasma Sheet and Drift Resonance Interpretation, *Geophys. Res. Lett.*, **49**(13), e98652, [10.1029/2022GL098652](https://doi.org/10.1029/2022GL098652).

List of Refereed Publications
Wind Spacecraft: 2022

- [225] Lv, J.-T., X.-X. Zhang, F. He, and R.-L. Lin (2022), A Statistical Model of Inner Magnetospheric Electron Density: Van Allen Probes Observations, *Space Weather*, **20**(10), e2022SW003182, [10.1029/2022SW003182](https://doi.org/10.1029/2022SW003182).
- [226] Lysenko, A. L., M. V. Ulanov, A. A. Kuznetsov, G. D. Fleishman, D. D. Frederiks, L. K. Kashapova, Z. Y. Sokolova, D. S. Svinkin, and A. E. Tsvetkova (2022), KW-Sun: The Konus-Wind Solar Flare Database in Hard X-Ray and Soft Gamma-Ray Ranges, *Astrophys. J. Suppl.*, **262**(1), 32, [10.3847/1538-4365/ac8b87](https://doi.org/10.3847/1538-4365/ac8b87).
- [227] Ma, B., L. Chen, D. Wu, M. Pulupa, and S. D. Bale (2022), Discrepancy between the Low-frequency Cutoffs of Type III Radio Bursts Based on Simultaneous Observations by WIND and PSP, *Astrophys. J. Lett.*, **932**(2), L26, [10.3847/2041-8213/ac7525](https://doi.org/10.3847/2041-8213/ac7525).
- [228] Ma, D., X. Chu, J. Bortnik, S. G. Claudepierre, W. K. Tobiska, A. Cruz, S. D. Bouwer, J. F. Fennell, and J. B. Blake (2022), Modeling the Dynamic Variability of Sub-Relativistic Outer Radiation Belt Electron Fluxes Using Machine Learning, *Space Weather*, **20**(8), e2022SW003079, [10.1029/2022SW003079](https://doi.org/10.1029/2022SW003079).
- [229] Ma, J., X. Gao, H. Chen, B. T. Tsurutani, Y. Ke, R. Chen, and Q. Lu (2022), The Effects of Substorm Injection of Energetic Electrons and Enhanced Solar Wind Ram Pressure on Whistler-Mode Chorus Waves: A Statistical Study, *J. Geophys. Res.*, **127**(11), e2022JA030502, [10.1029/2022JA030502](https://doi.org/10.1029/2022JA030502).
- [230] Ma, L., Y. Yu, X. Tian, and J. Cao (2022), An Empirical Model of the Proton Isotropic Boundary (IB), *J. Geophys. Res.*, **127**(9), e30843, [10.1029/2022JA030843](https://doi.org/10.1029/2022JA030843).
- [231] Ma, Y., S. Wang, C. Shen, N. Ren, T. Chen, P. Shao, P. E, Y. V. Bogdanova, and J. L. Burch (2022), Rotational Discontinuities in the Magnetopause of an Open Magnetosphere, *J. Geophys. Res.*, **127**(8), e29126, [10.1029/2021JA029126](https://doi.org/10.1029/2021JA029126).
- [232] Macneil, A. R., M. J. Owens, A. J. Finley, and S. P. Matt (2022), A statistical evaluation of ballistic backmapping for the slow solar wind: the interplay of solar wind acceleration and corotation, *Mon. Not. Roy. Astron. Soc.*, **509**(2), 2390–2403, [10.1093/mnras/stab2965](https://doi.org/10.1093/mnras/stab2965).
- [233] Madanian, H., T. Z. Liu, T. D. Phan, K. J. Trattner, T. Karlsson, and M. W. Liemohn (2022), Asymmetric Interaction of a Solar Wind Reconnecting Current Sheet and Its Magnetic Hole With Earth's Bow Shock and Magnetopause, *J. Geophys. Res.*, **127**(4), e30079, [10.1029/2021JA030079](https://doi.org/10.1029/2021JA030079).
- [234] Maggiolo, R., L. Maes, G. Cessateur, F. Darrouzet, J. De Keyser, and H. Gunell (2022), The Earth's Magnetic Field Enhances Solar Energy Deposition in the Upper Atmosphere, *J. Geophys. Res.*, **127**(12), e2022JA030899, [10.1029/2022JA030899](https://doi.org/10.1029/2022JA030899).
- [235] Maharana, A., A. Isavnin, C. Scolini, N. Wijsen, L. Rodriguez, M. Mierla, J. Magdalenić, and S. Poedts (2022), Implementation and validation of the FRi3D flux rope model in EUHFORIA, *Adv. Space Res.*, **70**(6), 1641–1662, [10.1016/j.asr.2022.05.056](https://doi.org/10.1016/j.asr.2022.05.056).

List of Refereed Publications
Wind Spacecraft: 2022

- [236] Mahmoudian, A. (2022), Investigation of ground magnetic perturbation in the mid-latitude during active geomagnetic condition, *Adv. Space Res.*, **69**(10), 3692–3704, [10.1016/j.asr.2022.02.038](https://doi.org/10.1016/j.asr.2022.02.038).
- [237] Man, H., M. Zhou, Z. Zhong, and X. Deng (2022), Intense Energy Conversion Events at the Magnetopause Boundary Layer, *Geophys. Res. Lett.*, **49**(8), e98069, [10.1029/2022GL098069](https://doi.org/10.1029/2022GL098069).
- [238] Mann, G., C. Vocks, and A. Warmuth (2022), Type III radio bursts and excitation of Langmuir waves by energetic electrons, *Astron. & Astrophys.*, **660**, A91, [10.1051/0004-6361/202142804](https://doi.org/10.1051/0004-6361/202142804).
- [239] Mansilla, G. A., and M. M. Zossi (2022), Ionospheric response to the 26 August 2018 geomagnetic storm along 280° E and 316° E in the South American sector, *Adv. Space Res.*, **69**(1), 48–58, [10.1016/j.asr.2021.08.002](https://doi.org/10.1016/j.asr.2021.08.002).
- [240] Manweiler, J. W., A. Breneman, J. Niehof, B. Larsen, G. Romeo, G. Stephens, A. Halfford, C. Kletzing, L. E. Brown, H. Spence, G. Reeves, R. Friedel, S. Smith, R. Skoug, B. Blake, D. Baker, S. Kanekal, V. Hoxie, A. Jaynes, J. Wygant, J. Bonnell, D. Crawford, M. Gkioulidou, L. J. Lanzerotti, D. G. Mitchell, A. Gerrard, A. Ukhorskiy, T. Sotirelis, R. J. Barnes, R. Millan, and B. Harris (2022), Science of the Van Allen Probes Science Operations Centers, *Space Sci. Rev.*, **218**(8), 66, [10.1007/s11214-022-00919-x](https://doi.org/10.1007/s11214-022-00919-x).
- [241] Marchezi, J. P., L. Dai, L. R. Alves, L. A. Da Silva, D. G. Sibeck, A. D. Lago, V. M. Souza, P. R. Jauer, L. E. A. Veira, F. R. Cardoso, V. Deggeroni, M. V. Alves, C. Wang, H. Li, and Z. Liu (2022), Electron Flux Variability and Ultra-Low Frequency Wave Activity in the Outer Radiation Belt Under the Influence of Interplanetary Coronal Mass Ejections and High-Speed Solar Wind Streams: A Statistical Analysis From the Van Allen Probes Era, *J. Geophys. Res.*, **127**(8), e29887, [10.1029/2021JA029887](https://doi.org/10.1029/2021JA029887).
- [242] Markovskii, S. A., and B. J. Vasquez (2022), Observational Analysis and Numerical Modeling of the Solar Wind Fluctuation Spectra during Intervals of Plasma Instability, *Astrophys. J.*, **941**(1), 72, [10.3847/1538-4357/ac9f42](https://doi.org/10.3847/1538-4357/ac9f42).
- [243] Marshall, R. A., E. A. Pearce, C. L. Waters, and M. Terkildsen (2022), Forecasting GIC Activity Associated With Solar Wind Shocks for the Australian Region Power Network, *Space Weather*, **20**(11), e2021SW003029, [10.1029/2021SW003029](https://doi.org/10.1029/2021SW003029).
- [244] Martinić, K., M. Dumbović, M. Temmer, A. Veronig, and B. Vršnak (2022), Determination of coronal mass ejection orientation and consequences for their propagation, *Astron. & Astrophys.*, **661**, A155, [10.1051/0004-6361/202243433](https://doi.org/10.1051/0004-6361/202243433).
- [245] Martinović, M. M., K. G. Klein, and H. G. Krishnan (2022), Wind/Waves Antenna Length Determined Using Quasi-Thermal Noise Spectroscopy, *Res. Notes Amer. Astron. Soc.*, **6**(8), 166, [10.3847/2515-5172/ac8b0a](https://doi.org/10.3847/2515-5172/ac8b0a).
- [246] Mei, A., G. Oganesyan, A. Tsvetkova, M. E. Ravasio, B. Banerjee, F. Brighenti, S. Ronchini, M. Branchesi, and D. Frederiks (2022), Constraints on the Physics of the Prompt

List of Refereed Publications
Wind Spacecraft: 2022

Emission from Distant and Energetic Gamma-Ray Burst GRB 220101A, *Astrophys. J.*, **941**(1), 82, [10.3847/1538-4357/aca091](https://doi.org/10.3847/1538-4357/aca091).

- [247] Melkumyan, A. A., A. V. Belov, M. A. Abunina, N. S. Shlyk, A. A. Abunin, V. A. Oleneva, and V. G. Yanke (2022), Features of the Behavior of Time Parameters of Forbush Decreases Associated with Different Types of Solar and Interplanetary Sources, *Geomag. and Aeron.*, **62**(1-2), 17–31, [10.1134/S0016793222010133](https://doi.org/10.1134/S0016793222010133).
- [248] Melkumyan, A. A., A. V. Belov, M. A. Abunina, N. C. Shlyk, A. A. Abunin, V. A. Oleneva, and V. G. Yanke (2022), Similarities and Differences between Forbush Decreases Associated with Streams from Coronal Holes, Filament Ejections, and Ejections from Active Regions, *Geomag. and Aeron.*, **62**(3), 159–177, [10.1134/S0016793222030112](https://doi.org/10.1134/S0016793222030112).
- [249] Melkumyan, A. A., A. V. Belov, M. A. Abunina, A. A. Abunin, N. S. Shlyk, V. A. Oleneva, and V. G. Yanke (2022), Forbush decreases associated with coronal mass ejections from active and non-active regions: statistical comparison, *Mon. Not. Roy. Astron. Soc.*, **515**(3), 4430–4444, [10.1093/mnras/stac2017](https://doi.org/10.1093/mnras/stac2017).
- [250] Mendes, O., B. Adhikari, M. O. Domingues, E. Echer, and R. S. Takeshi (2022), Interrelationships of Similar Magnetic Effects at Low and High Latitudes During High-Intensity Long-Duration Auroral Activity Events: Case Studies, *Brazilian J. Phys.*, **52**(5), 156, [10.1007/s13538-022-01160-1](https://doi.org/10.1007/s13538-022-01160-1).
- [251] Mendes, O., K. Schneider, M. O. Domingues, M. Farge, N. B. Trivedi, P. Frick, and N. Nguyen van yen (2022), Geomagnetically Induced Current Analyzed with Wavelet Extraction, *Brazilian J. Phys.*, **52**(6), 192, [10.1007/s13538-022-01177-6](https://doi.org/10.1007/s13538-022-01177-6).
- [252] Meng, X., D. S. Ozturk, O. P. Verkhoglyadova, R. H. Varney, A. S. Reimer, J. L. Semeter, S. R. Kaepller, and W. Zhan (2022), Energy Deposition by Mesoscale High-Latitude Electric Fields Into the Thermosphere During the 26 October 2019 Geomagnetic Storm, *J. Geophys. Res.*, **127**(12), e2022JA030716, [10.1029/2022JA030716](https://doi.org/10.1029/2022JA030716).
- [253] Meng, Y.-Z. (2022), Evidence of Photosphere Emission Origin for Gamma-Ray Burst Prompt Emission, *Astrophys. J. Suppl.*, **263**(2), 39, [10.3847/1538-4365/ac98b1](https://doi.org/10.3847/1538-4365/ac98b1).
- [254] Miceli, D., and L. Nava (2022), Gamma-Ray Bursts Afterglow Physics and the VHE Domain, *Galaxies*, **10**(3), 66, [10.3390/galaxies10030066](https://doi.org/10.3390/galaxies10030066).
- [255] Michotte de Welle, B., N. Aunai, G. Nguyen, B. Lavraud, V. Génot, A. Jeandet, and R. Smets (2022), Global Three-Dimensional Draping of Magnetic Field Lines in Earth's Magnetosheath From In-Situ Spacecraft Measurements, *J. Geophys. Res.*, **127**(12), e2022JA030996, [10.1029/2022JA030996](https://doi.org/10.1029/2022JA030996).
- [256] Milan, S. E., G. E. Bower, J. A. Carter, L. J. Paxton, B. J. Anderson, and M. R. Hairston (2022), Lobe Reconnection and Cusp-Aligned Auroral Arcs, *J. Geophys. Res.*, **127**(6), e30089, [10.1029/2021JA030089](https://doi.org/10.1029/2021JA030089).

List of Refereed Publications
Wind Spacecraft: 2022

- [257] Milan, S. E., J. A. Carter, G. E. Bower, A. L. Fleetham, and B. J. Anderson (2022), Influence of Off-Sun-Earth Line Distance on the Accuracy of L1 Solar Wind Monitoring, *J. Geophys. Res.*, **127**(6), e30212, [10.1029/2021JA030212](https://doi.org/10.1029/2021JA030212).
- [258] Mishra, R. K., A. Silwal, R. Baral, B. Adhikari, C. R. Braga, S. P. Gautam, P. K. Das, and Y. Migoya-Orue (2022), Wavelet Analysis of Forbush Decreases at High-Latitude Stations During Geomagnetic Disturbances, *Solar Phys.*, **297**(2), 26, [10.1007/s11207-022-01948-z](https://doi.org/10.1007/s11207-022-01948-z).
- [259] Mogilevsky, M. M., D. V. Chugunin, A. A. Chernyshov, V. I. Kolpak, I. L. Moiseenko, Y. Kasahara, and Y. Miyoshi (2022), Channeling of Auroral Kilometric Radiation During Geomagnetic Disturbances, *Sov. Phys.-JETPL*, **115**(10), 602–607, [10.1134/S0021364022600707](https://doi.org/10.1134/S0021364022600707).
- [260] Mohery, M., H. M. Farid, and A. Ali (2022), The Response of the Earth's Lower Ionosphere to Gamma-Ray Solar Flares and their Associated X-ray, *Res. Astron. Astrophys.*, **22**(4), 045013, [10.1088/1674-4527/ac56cc](https://doi.org/10.1088/1674-4527/ac56cc).
- [261] Mohlolo, S. T., N. E. Engelbrecht, and S. E. S. Ferreira (2022), A detailed comparison of techniques used to model drift in numerical cosmic ray modulation models, *Adv. Space Res.*, **69**(6), 2574–2588, [10.1016/j.asr.2021.12.035](https://doi.org/10.1016/j.asr.2021.12.035).
- [262] Montes-Doria, D., R. F. González, J. Cantó, and S. Kurtz (2022), Predicted free-free emission at radio wavelengths from Coronal Mass Ejections: event on 2011 March 7, *Mon. Not. Roy. Astron. Soc.*, **509**(2), 1892–1898, [10.1093/mnras/stab3085](https://doi.org/10.1093/mnras/stab3085).
- [263] Moresco, M., L. Amati, L. Amendola, S. Birrer, J. P. Blakeslee, M. Cantiello, A. Cimatti, J. Darling, M. Della Valle, M. Fishbach, C. Grillo, N. Hamaus, D. Holz, L. Izzo, R. Jimenez, E. Lusso, M. Meneghetti, E. Piedipalumbo, A. Pisani, A. Pourtsidou, L. Pozzetti, M. Quartin, G. Risaliti, P. Rosati, and L. Verde (2022), Unveiling the Universe with emerging cosmological probes, *Living Reviews in Relativity*, **25**(1), 6, [10.1007/s41114-022-00040-z](https://doi.org/10.1007/s41114-022-00040-z).
- [264] Morozova, A. L., T. Barata, and T. Barlyanova (2022), PCA-MRM Model to Forecast TEC at Middle Latitudes, *Atmosphere*, **13**(2), 323, [10.3390/atmos13020323](https://doi.org/10.3390/atmos13020323).
- [265] Mostafa, N., E. Ghamry, A. Ellithi, M. Gobashy, and A. Fathy (2022), Multi-space observations of the storm sudden commencement (September 2017) and its effect on the geomagnetic field, *Adv. Space Res.*, **70**(3), 641–651, [10.1016/j.asr.2022.04.023](https://doi.org/10.1016/j.asr.2022.04.023).
- [266] Mostafavi, P., L. F. Burlaga, I. H. Cairns, S. A. Fuselier, F. Fraternale, D. A. Gurnett, T. K. Kim, W. S. Kurth, N. V. Pogorelov, E. Provornikova, J. D. Richardson, D. L. Turner, and G. P. Zank (2022), Shocks in the Very Local Interstellar Medium, *Space Sci. Rev.*, **218**(4), 27, [10.1007/s11214-022-00893-4](https://doi.org/10.1007/s11214-022-00893-4).
- [267] Möstl, C., A. J. Weiss, M. A. Reiss, T. Amerstorfer, R. L. Bailey, J. Hinterreiter, M. Bauer, D. Barnes, J. A. Davies, R. A. Harrison, J. L. Freiherr von Forstner, E. E. Davies, D. Heyner, T. Horbury, and S. D. Bale (2022), Multipoint Interplanetary Coronal Mass Ejections Observed with Solar Orbiter, BepiColombo, Parker Solar Probe, Wind, and STEREO-A, *Astrophys. J. Lett.*, **924**(1), L6, [10.3847/2041-8213/ac42d0](https://doi.org/10.3847/2041-8213/ac42d0).

List of Refereed Publications
Wind Spacecraft: 2022

- [268] Motoba, T., M. I. Sitnov, G. K. Stephens, and D. J. Gershman (2022), A New Perspective on Magnetotail Electron and Ion Divergent Flows: MMS Observations, *J. Geophys. Res.*, **127**(10), e2022JA030514, [10.1029/2022JA030514](https://doi.org/10.1029/2022JA030514).
- [269] Munakata, K., M. Kozai, C. Kato, Y. Hayashi, R. Kataoka, A. Kadokura, M. Tokumaru, R. R. S. Mendonça, E. Echer, A. D. Lago, M. Rockenbach, N. J. Schuch, J. V. Bageston, C. R. Braga, H. K. A. Jassar, M. M. Sharma, M. L. Duldig, J. E. Humble, I. Sabbah, P. Evenson, P. S. Mangeard, T. Kuwabara, D. Ruffolo, A. Sáiz, W. Mitthumsiri, W. Nuntniyakul, and J. Kóta (2022), Large-amplitude Bidirectional Anisotropy of Cosmic-Ray Intensity Observed with Worldwide Networks of Ground-based Neutron Monitors and Muon Detectors in 2021 November, *Astrophys. J.*, **938**(1), 30, [10.3847/1538-4357/ac91c5](https://doi.org/10.3847/1538-4357/ac91c5).
- [270] Murase, K., M. Mukhopadhyay, A. Kheirandish, S. S. Kimura, and K. Fang (2022), Neutrinos from the Brightest Gamma-Ray Burst?, *Astrophys. J. Lett.*, **941**(1), L10, [10.3847/2041-8213/aca3ae](https://doi.org/10.3847/2041-8213/aca3ae).
- [271] Muratova, N., A. Fedotova, and J. Shamsutdinova (2022), Results of joint observations with solar spectropolarimeter of meter range wavelengths and other instruments, *Solar-Terr. Phys.*, **8**(1), 24–33, [10.12737/stp-81202203](https://doi.org/10.12737/stp-81202203).
- [272] Murphy, D., A. Ulyanov, S. McBreen, J. Mangan, R. Dunwoody, M. Doyle, C. O'Toole, J. Thompson, J. Reilly, S. Walsh, B. Shortt, A. Martin-Carrillo, and L. Hanlon (2022), A compact instrument for gamma-ray burst detection on a CubeSat platform II, *Exper. Astron.*, **53**(3), 961–990, [10.1007/s10686-022-09842-z](https://doi.org/10.1007/s10686-022-09842-z).
- [273] Mursula, K., T. Qvick, L. Holappa, and T. Asikainen (2022), Magnetic Storms During the Space Age: Occurrence and Relation to Varying Solar Activity, *J. Geophys. Res.*, **127**(12), e2022JA030830, [10.1029/2022JA030830](https://doi.org/10.1029/2022JA030830).
- [274] Nagai, T., and I. Shinohara (2022), Solar Wind Energy Input: The Primary Control Factor of Magnetotail Reconnection Site, *J. Geophys. Res.*, **127**(8), e30653, [10.1029/2022JA030653](https://doi.org/10.1029/2022JA030653).
- [275] Narock, T., A. Narock, L. F. G. Dos Santos, and T. Nieves-Chinchilla (2022), Identification of Flux Rope Orientation via Neural Networks, *Front. Astron. Space Sci.*, **9**, 838442, [10.3389/fspas.2022.838442](https://doi.org/10.3389/fspas.2022.838442).
- [276] Newman, D. L., S. Eriksson, and G. Lapenta (2022), Tripolar guide magnetic fields due to island coalescence in solar wind current sheets: Simulation and theory, *Phys. Plasmas*, **29**(11), 112905, [10.1063/5.0102906](https://doi.org/10.1063/5.0102906).
- [277] Nguyen, G., N. Aunai, B. Michotte de Welle, A. Jeandet, B. Lavraud, and D. Fontaine (2022), Massive Multi-Mission Statistical Study and Analytical Modeling of the Earth's Magnetopause: 1. A Gradient Boosting Based Automatic Detection of Near-Earth Regions, *J. Geophys. Res.*, **127**(1), e29773, [10.1029/2021JA029773](https://doi.org/10.1029/2021JA029773).
- [278] Nguyen, G., N. Aunai, B. Michotte de Welle, A. Jeandet, B. Lavraud, and D. Fontaine (2022), Massive Multi-Mission Statistical Study and Analytical Modeling of the

List of Refereed Publications
Wind Spacecraft: 2022

- Earth's Magnetopause: 2. Shape and Location, *J. Geophys. Res.*, **127**(1), e29774, [10.1029/2021JA029774](https://doi.org/10.1029/2021JA029774).
- [279] Nguyen, G., N. Aunai, B. Michotte de Welle, A. Jeandet, B. Lavraud, and D. Fontaine (2022), Massive Multi-Mission Statistical Study and Analytical Modeling of the Earth's Magnetopause: 4. On the Near-Cusp Magnetopause Indentation, *J. Geophys. Res.*, **127**(1), e29776, [10.1029/2021JA029776](https://doi.org/10.1029/2021JA029776).
- [280] Nguyen, G., N. Aunai, B. Michotte de Welle, A. Jeandet, B. Lavraud, and D. Fontaine (2022), Massive Multi-Mission Statistical Study and Analytical Modeling of the Earth's Magnetopause: 3. An Asymmetric Non Indented Magnetopause Analytical Model, *J. Geophys. Res.*, **127**(1), e30112, [10.1029/2021JA030112](https://doi.org/10.1029/2021JA030112).
- [281] Nieves-Chinchilla, T., N. Alzate, H. Cremades, L. Rodríguez-García, L. F. G. Dos Santos, A. Narock, H. Xie, A. Szabo, E. Palmerio, V. Krupar, M. Pulupa, D. Lario, M. L. Stevens, L. B. Wilson III, R.-Y. Kwon, M. L. Mays, O. C. St. Cyr, P. Hess, K. K. Reeves, D. B. Seaton, T. Niembro, S. D. Bale, and J. C. Kasper (2022), Direct First Parker Solar Probe Observation of the Interaction of Two Successive Interplanetary Coronal Mass Ejections in 2020 November, *Astrophys. J.*, **930**(1), 88, [10.3847/1538-4357/ac590b](https://doi.org/10.3847/1538-4357/ac590b).
- [282] Nilsson, H., A. Moeslinger, H. N. Williamson, S. Bergman, H. Gunell, G. Stenberg Wieser, Y. Futaana, T. Karlsson, E. Behar, and M. Holmström (2022), Upstream solar wind speed at comet 67P. Reconstruction method, model comparison, and results, *Astron. & Astrophys.*, **659**, A18, [10.1051/0004-6361/202142867](https://doi.org/10.1051/0004-6361/202142867).
- [283] Ning, Z., Y. Wang, Z. Hong, and D. Li (2022), Detections of Multi-Periodic Oscillations During a Circular Ribbon Flare, *Solar Phys.*, **297**(1), 2, [10.1007/s11207-021-01935-w](https://doi.org/10.1007/s11207-021-01935-w).
- [284] Nishimura, Y., J. Goldstein, C. Martinis, Q. Ma, W. Li, S. R. Zhang, A. J. Coster, S. Mrak, J. L. Semeter, N. Nishitani, J. M. Ruohoniemi, and S. G. Shepherd (2022), Multi-Scale Density Structures in the Plasmaspheric Plume During a Geomagnetic Storm, *J. Geophys. Res.*, **127**(3), e30230, [10.1029/2021JA030230](https://doi.org/10.1029/2021JA030230).
- [285] Nishimura, Y., A. Hussein, P. J. Erickson, B. Gallardo-Lacourt, and V. Angelopoulos (2022), Statistical Study of Magnetospheric Conditions for SAPS and SAID, *Geophys. Res. Lett.*, **49**(9), e98469, [10.1029/2022GL098469](https://doi.org/10.1029/2022GL098469).
- [286] Nishino, M. N., H. Hasegawa, Y. Saito, N. Kitamura, Y. Miyashita, T. Nagai, S. Yokota, C. T. Russell, D. J. Gershman, and B. L. Giles (2022), Transport Path of Cold-Dense Plasmas in the Dusk Magnetotail Plasma Sheet: MMS Observations, *J. Geophys. Res.*, **127**(1), e29747, [10.1029/2021JA029747](https://doi.org/10.1029/2021JA029747).
- [287] Nishino, M. N., Y. Kasahara, Y. Harada, Y. Saito, H. Tsunakawa, A. Kumamoto, S. Yokota, F. Takahashi, M. Matsushima, H. Shibuya, H. Shimizu, Y. Miyashita, Y. Goto, and T. Ono (2022), An event study on broadband electric field noises and electron distributions in the lunar wake boundary, *Earth, Planets and Space*, **74**(1), 9, [10.1186/s40623-021-01566-2](https://doi.org/10.1186/s40623-021-01566-2).

List of Refereed Publications
Wind Spacecraft: 2022

- [288] Nishino, M. N., H. Hasegawa, Y. Saito, B. Lavraud, Y. Miyashita, M. Nowada, S. Kasahara, and T. Nagai (2022), Asymmetric deformation of the Earth's magnetosphere under low Alfvén Mach number solar wind: Observations and MHD simulation, *Earth, Planets and Space*, **74**(1), 180, [10.1186/s40623-022-01744-w](https://doi.org/10.1186/s40623-022-01744-w).
- [289] Ó Fionnagáin, D., R. D. Kavanagh, A. A. Vidotto, S. V. Jeffers, P. Petit, S. Marsden, J. Morin, and A. Golden (2022), Coronal Mass Ejections and Type II Radio Emission Variability during a Magnetic Cycle on the Solar-type Star ϵ Eridani, *Astrophys. J.*, **924**(2), 115, [10.3847/1538-4357/ac35de](https://doi.org/10.3847/1538-4357/ac35de).
- [290] O'Connor, B., E. Troja, S. Dichiara, P. Beniamini, S. B. Cenko, C. Kouveliotou, J. B. González, J. Durbak, P. Gatkine, A. Kutyrev, T. Sakamoto, R. Sánchez-Ramírez, and S. Veilleux (2022), A deep survey of short GRB host galaxies over z 0-2: implications for offsets, redshifts, and environments, *Mon. Not. Roy. Astron. Soc.*, **515**(4), 4890–4928, [10.1093/mnras/stac1982](https://doi.org/10.1093/mnras/stac1982).
- [291] Oikonomou, C., H. Haralambous, A. Paul, S. Ray, L. Alfonsi, C. Cesaroni, and D. Sur (2022), Investigation of the negative ionospheric response of the 8 September 2017 geomagnetic storm over the European sector, *Adv. Space Res.*, **70**(4), 1104–1120, [10.1016/j.asr.2022.05.035](https://doi.org/10.1016/j.asr.2022.05.035).
- [292] Ou, J., A. Du, Y. Ge, H. Luo, Y. Zhang, and Z. Guo (2022), Statistical Study on the North-South Asymmetric Distribution of the Mid-Low-Latitude Nightside Disturbed Magnetic Fields, *J. Geophys. Res.*, **127**(3), e29970, [10.1029/2021JA029970](https://doi.org/10.1029/2021JA029970).
- [293] Owens, M. J., N. Chakraborty, H. Turner, M. Lang, P. Riley, M. Lockwood, L. A. Barnard, and Y. Chi (2022), Rate of Change of Large-Scale Solar-Wind Structure, *Solar Phys.*, **297**(7), 83, [10.1007/s11207-022-02006-4](https://doi.org/10.1007/s11207-022-02006-4).
- [294] Pal, S., D. Nandy, and E. K. J. Kilpua (2022), Magnetic cloud prediction model for forecasting space weather relevant properties of Earth-directed coronal mass ejections, *Astron. & Astrophys.*, **665**, A110, [10.1051/0004-6361/202243513](https://doi.org/10.1051/0004-6361/202243513).
- [295] Palacios, J. C., S. Bourouaine, and J. C. Perez (2022), On the Statistics of Elsasser Increments in Solar Wind and Magnetohydrodynamic Turbulence, *Astrophys. J. Lett.*, **940**(1), L20, [10.3847/2041-8213/ac92f6](https://doi.org/10.3847/2041-8213/ac92f6).
- [296] Palmerio, E., C. O. Lee, M. L. Mays, J. G. Luhmann, D. Lario, B. Sánchez-Cano, I. G. Richardson, R. Vainio, M. L. Stevens, C. M. S. Cohen, K. Steinvall, C. Möstl, A. J. Weiss, T. Nieves-Chinchilla, Y. Li, D. E. Larson, D. Heyner, S. D. Bale, A. B. Galvin, M. Holmström, Y. V. Khotyaintsev, M. Maksimovic, and I. G. Mitrofanov (2022), CMEs and SEPs During November-December 2020: A Challenge for Real-Time Space Weather Forecasting, *Space Weather*, **20**(5), e2021SW002993, [10.1029/2021SW002993](https://doi.org/10.1029/2021SW002993).
- [297] Palmerio, E., C. O. Lee, I. G. Richardson, T. Nieves-Chinchilla, L. F. G. Dos Santos, J. R. Gruesbeck, N. V. Nitta, M. L. Mays, J. S. Halekas, C. Zeitlin, S. Xu, M. Holmström, Y. Futaana, T. Mulligan, B. J. Lynch, and J. G. Luhmann (2022), CME Evolution in

List of Refereed Publications
Wind Spacecraft: 2022

the Structured Heliosphere and Effects at Earth and Mars During Solar Minimum, *Space Weather*, **20**(9), e2022SW003215, [10.1029/2022SW003215](https://doi.org/10.1029/2022SW003215).

- [298] Palmroos, C., J. Gieseler, N. Dresing, D. E. Morosan, E. Asvestari, A. Yli-Laurila, D. J. Price, S. Valkila, and R. Vainio (2022), Solar Energetic Particle Time Series Analysis with Python, *Front. Astron. Space Sci.*, **9**, 395, [10.3389/fspas.2022.1073578](https://doi.org/10.3389/fspas.2022.1073578).
- [299] Panaitescu, A. D., and W. T. Vestrand (2022), Properties of the Prompt Optical Counterpart Arising from the Cooling of Electrons in Gamma-Ray Bursts, *Astrophys. J.*, **938**(2), 155, [10.3847/1538-4357/ac9315](https://doi.org/10.3847/1538-4357/ac9315).
- [300] Pandey, D., B. Pande, and S. Pande (2022), Comparative analysis of type III solar radio bursts associated with solar particle events and its impact on space weather for solar cycle 23 & 24, *Astrophys. Space Sci.*, **367**(9), 91, [10.1007/s10509-022-04129-3](https://doi.org/10.1007/s10509-022-04129-3).
- [301] Pandya, M., V. Bhaskara, Y. Ebihara, and G. D. Reeves (2022), L-Value and Energy Dependence of 0.1-50 keV O⁺, He⁺, and H⁺ Ions for CME and CIR Storms Over the Entire Van Allen Probes Era, *J. Geophys. Res.*, **127**(9), e30568, [10.1029/2022JA030568](https://doi.org/10.1029/2022JA030568).
- [302] Papaioannou, A., A. Kouloumvakos, A. Mishev, R. Vainio, I. Usoskin, K. Herbst, A. P. Rouillard, A. Anastasiadis, J. Gieseler, R. Wimmer-Schweingruber, and P. Kühl (2022), The first ground-level enhancement of solar cycle 25 on 28 October 2021, *Astron. & Astrophys.*, **660**, L5, [10.1051/0004-6361/202142855](https://doi.org/10.1051/0004-6361/202142855).
- [303] Pappa Kalaivani, P., O. Prakash, A. Shanmugaraju, G. Michalek, and G. Selvarani (2022), Kinematic Study of Radio-Loud CMEs Associated with Solar Flares and DH Type-II Radio Emissions During Solar Cycles 23 and 24, *Solar Phys.*, **297**(5), 57, [10.1007/s11207-022-01985-8](https://doi.org/10.1007/s11207-022-01985-8).
- [304] Park, J.-S., Q. Q. Shi, X. Shi, J.-H. Shue, A. W. Degeling, M. Nowada, A. M. Tian, K.-H. Kim, T. Pitkänen, and Y. Zhang (2022), Radial Interplanetary Magnetic Field-Induced North-South Asymmetry in the Solar Wind-Magnetosphere-Ionosphere Coupling: A Case Study, *J. Geophys. Res.*, **127**(2), e2021JA030020, [10.1029/2021JA030020](https://doi.org/10.1029/2021JA030020).
- [305] Parsotan, T., and H. Ito (2022), GRB Prompt Emission: Observed Correlations and Their Interpretations, *Universe*, **8**(6), 310, [10.3390/universe8060310](https://doi.org/10.3390/universe8060310).
- [306] Patel, B. D., B. Joshi, K.-S. Cho, R.-S. Kim, and Y.-J. Moon (2022), Near-Earth Interplanetary Coronal Mass Ejections and Their Association with DH Type II Radio Bursts During Solar Cycles 23 and 24, *Solar Phys.*, **297**(10), 139, [10.1007/s11207-022-02073-7](https://doi.org/10.1007/s11207-022-02073-7).
- [307] Pecora, F., W. H. Matthaeus, L. Primavera, A. Greco, R. Chhiber, R. Bandyopadhyay, and S. Servidio (2022), Magnetic Switchback Occurrence Rates in the Inner Heliosphere: Parker Solar Probe and 1 au, *Astrophys. J. Lett.*, **929**(1), L10, [10.3847/2041-8213/ac62d4](https://doi.org/10.3847/2041-8213/ac62d4).
- [308] Pedersen, M. N., H. Vanhamäki, A. T. Aikio, C. L. Waters, J. W. Gjerloev, S. Käki, and A. B. Workayehu (2022), Effect of ICME-Driven Storms on Field-Aligned and Ionospheric Currents From AMPERE and SuperMAG, *J. Geophys. Res.*, **127**(8), e30423, [10.1029/2022JA030423](https://doi.org/10.1029/2022JA030423).

List of Refereed Publications
Wind Spacecraft: 2022

- [309] Pereira, F. B., G. Anduwan, and T. E. Girish (2022), On the association of predominant polarity of North-South component of IMF in the GSE system near 1 AU with solar polar magnetic fields during 1967-2020, *New Astron.*, **92**, 101723, [10.1016/j.newast.2021.101723](https://doi.org/10.1016/j.newast.2021.101723).
- [310] Petrinec, S. M., J. L. Burch, S. A. Fuselier, K. J. Trattner, B. L. Giles, and R. J. Strange-way (2022), On the Occurrence of Magnetic Reconnection Along the Terrestrial Magnetopause, Using Magnetospheric Multiscale (MMS) Observations in Proximity to the Reconnection Site, *J. Geophys. Res.*, **127**(6), e29669, [10.1029/2021JA029669](https://doi.org/10.1029/2021JA029669).
- [311] Pi, G., A. Pitňa, G.-Q. Zhao, Z. Němeček, J. Šafránková, and T.-C. Tsai (2022), Properties of Magnetic Field Fluctuations in Long-Lasting Radial IMF Events from Wind Observation, *Atmosphere*, **13**(2), 173, [10.3390/atmos13020173](https://doi.org/10.3390/atmos13020173).
- [312] Piersanti, M., D. Del Moro, A. Parmentier, M. Martucci, F. Palma, A. Sotgiu, C. Plainaki, G. D'Angelo, F. Berrilli, D. Recchiuti, E. Papini, L. Giovannelli, G. Napoletano, R. Iuppa, P. Diego, A. Cicone, M. Mergé, C. De Donato, C. De Santis, R. Sparvoli, P. Ubertini, R. Battiston, and P. Picozza (2022), On the Magnetosphere-Ionosphere Coupling During the May 2021 Geomagnetic Storm, *Space Weather*, **20**(6), e2021SW003016, [10.1029/2021SW003016](https://doi.org/10.1029/2021SW003016).
- [313] Poppe, A. R., J. S. Halekas, and Y. Harada (2022), A Comprehensive Model for Pickup Ion Formation at the Moon, *J. Geophys. Res.*, **127**(10), e2022JE007422, [10.1029/2022JE007422](https://doi.org/10.1029/2022JE007422).
- [314] Porowski, C., M. Bzowski, and M. Tokumaru (2022), A New 3D Solar Wind Speed and Density Model Based on Interplanetary Scintillation, *Astrophys. J. Suppl.*, **259**(1), 2, [10.3847/1538-4365/ac35d7](https://doi.org/10.3847/1538-4365/ac35d7).
- [315] Pryor, W. R., G. R. Gladstone, K. D. Rutherford, and W. K. Tobiska (2022), Supporting Evidence for a Galactic Ly α Background from Cassini UVIS Data, *Astron. J.*, **164**(2), 46, [10.3847/1538-3881/ac7570](https://doi.org/10.3847/1538-3881/ac7570).
- [316] Qi, Y., and A. de Ruiter (2022), Trajectory correction for lunar flyby transfers to libration point orbits using continuous thrust, *Astrodynamic*, **6**(3), 285–300, [10.1007/s42064-020-0097-2](https://doi.org/10.1007/s42064-020-0097-2).
- [317] Qiu, H., D.-S. Han, B. Wang, H. Feng, B. Li, S. Zhou, R. Shi, H. Yang, and Y. L. Zhang (2022), In Situ Observation of a Magnetopause Indentation that Is Correspondent to Throat Aurora and Is Caused by Magnetopause Reconnection, *Geophys. Res. Lett.*, **49**(15), e99408, [10.1029/2022GL099408](https://doi.org/10.1029/2022GL099408).
- [318] Qiu, H.-X., D.-S. Han, H.-D. Zhang, H.-G. Yang, H.-T. Feng, X. Yu, R. Shi, S. Zhou, and Y. L. Zhang (2022), A Comparative Study on the Factors Controlling the Cusp Auroral Intensity Between the Northern and Southern Hemispheres, *J. Geophys. Res.*, **127**(4), e30216, [10.1029/2021JA030216](https://doi.org/10.1029/2021JA030216).

List of Refereed Publications
Wind Spacecraft: 2022

- [319] Qiu, S., Z. Zhang, H. Yousof, W. Soon, M. Jia, W. Tang, and X. Dou (2022), The interplanetary origins of geomagnetic storm with $Dst_{min} \leq -50$ nT during solar cycle 24 (2009–2019), *Adv. Space Res.*, **70**(7), 2047–2057, [10.1016/j.asr.2022.06.025](https://doi.org/10.1016/j.asr.2022.06.025).
- [320] Qiu, S., Y. Xie, M. Shi, H. Yousof, W. Soon, Z. Ren, M. Jia, and X. Dou (2022), Observations and Analysis of the Mid-Latitude Atmospheric Electric Field During Geomagnetic Activity, *J. Geophys. Res.*, **127**(11), e2022JA030785, [10.1029/2022JA030785](https://doi.org/10.1029/2022JA030785).
- [321] Rahmanifard, F., A. P. Jordan, W. C. de Wet, N. A. Schwadron, J. K. Wilson, M. J. Owens, H. E. Spence, and P. Riley (2022), Evidence From Galactic Cosmic Rays That the Sun Has Likely Entered a Secular Minimum in Solar Activity, *Space Weather*, **20**(2), e2021SW002796, [10.1029/2021SW002796](https://doi.org/10.1029/2021SW002796).
- [322] Raptis, S., T. Karlsson, A. Vaivads, M. Lindberg, A. Johlander, and H. Trollvik (2022), On Magnetosheath Jet Kinetic Structure and Plasma Properties, *Geophys. Res. Lett.*, **49**(21), e2022GL100678, [10.1029/2022GL100678](https://doi.org/10.1029/2022GL100678).
- [323] Rasca, A. P., S. Fatemi, and W. M. Farrell (2022), Modeling the Lunar Wake Response to a CME Using a Hybrid PIC Model, *Planet. Sci. J.*, **3**(1), 4, [10.3847/PSJ/ac3fba](https://doi.org/10.3847/PSJ/ac3fba).
- [324] Rastegarnia, F., R. Moradi, J. A. Rueda, R. Ruffini, L. Li, S. Eslamzadeh, Y. Wang, and S. S. Xue (2022), The structure of the ultrarelativistic prompt emission phase and the properties of the black hole in GRB 180720B, *European Physical Journal C*, **82**(9), 778, [10.1140/epjc/s10052-022-10750-x](https://doi.org/10.1140/epjc/s10052-022-10750-x).
- [325] Reames, D. V. (2022), Energy Spectra vs. Element Abundances in Solar Energetic Particles and the Roles of Magnetic Reconnection and Shock Acceleration, *Solar Phys.*, **297**(3), 32, [10.1007/s11207-022-01961-2](https://doi.org/10.1007/s11207-022-01961-2).
- [326] Reames, D. V. (2022), A Perspective on Solar Energetic Particles, *Front. Astron. Space Sci.*, **9**, 890864, [10.3389/fspas.2022.890864](https://doi.org/10.3389/fspas.2022.890864).
- [327] Reames, D. V. (2022), Solar Energetic Particles: Spatial Extent and Implications of the H and He Abundances, *Space Sci. Rev.*, **218**(6), 48, [10.1007/s11214-022-00917-z](https://doi.org/10.1007/s11214-022-00917-z).
- [328] Rice, R. C., K. Nykyri, X. Ma, and B. L. Burkholder (2022), Characteristics of Kelvin-Helmholtz Waves as Observed by the MMS From September 2015 to March 2020, *J. Geophys. Res.*, **127**(3), e29685, [10.1029/2021JA029685](https://doi.org/10.1029/2021JA029685).
- [329] Richardson, J. D., L. F. Burlaga, H. Elliott, W. S. Kurth, Y. D. Liu, and R. von Steiger (2022), Observations of the Outer Heliosphere, Heliosheath, and Interstellar Medium, *Space Sci. Rev.*, **218**(4), 35, [10.1007/s11214-022-00899-y](https://doi.org/10.1007/s11214-022-00899-y).
- [330] Riley, P., R. M. Caplan, C. Downs, J. A. Linker, and R. Lionello (2022), Comparing and Contrasting the Properties of the Inner Heliosphere for the Three Most Recent Solar Minima, *J. Geophys. Res.*, **127**(8), e30261, [10.1029/2022JA030261](https://doi.org/10.1029/2022JA030261).

List of Refereed Publications
Wind Spacecraft: 2022

- [331] Roberts, O. W., O. Alexandrova, L. Sorriso-Valvo, Z. Vörös, R. Nakamura, D. Fischer, A. Varsani, C. P. Escoubet, M. Volwerk, P. Canu, S. Lion, and K. Yearby (2022), Scale-Dependent Kurtosis of Magnetic Field Fluctuations in the Solar Wind: A Multi-Scale Study With Cluster 2003-2015, *J. Geophys. Res.*, **127**(9), e29483, [10.1029/2021JA029483](https://doi.org/10.1029/2021JA029483).
- [332] Rodin, A. E., and V. A. Fedorova (2022), Discovery of Emission Pulses from Magnetar SGR 1935+2154, *Astron. Rep.*, **66**(1), 32–37, [10.1134/S1063772922010061](https://doi.org/10.1134/S1063772922010061).
- [333] Rossi, A., B. Rothberg, E. Palazzi, D. A. Kann, P. D'Avanzo, L. Amati, S. Klose, A. Perego, E. Pian, C. Guidorzi, A. S. Pozanenko, S. Savaglio, G. Stratta, G. Agapito, S. Covino, F. Cusano, V. D'Elia, M. De Pasquale, M. Della Valle, O. Kuhn, L. Izzo, E. Loffredo, N. Masetti, A. Melandri, P. Y. Minaev, A. N. Guelbenzu, D. Paris, S. Paiani, C. Plantet, F. Rossi, R. Salvaterra, S. Schulze, C. Veillet, and A. A. Volnova (2022), The Peculiar Short-duration GRB 200826A and Its Supernova, *Astrophys. J.*, **932**(1), 1, [10.3847/1538-4357/ac60a2](https://doi.org/10.3847/1538-4357/ac60a2).
- [334] Rossi, A., D. D. Frederiks, D. A. Kann, M. De Pasquale, E. Pian, G. Lamb, P. D'Avanzo, L. Izzo, A. J. Levan, D. B. Malesani, A. Melandri, A. Nicuesa Guelbenzu, S. Schulze, R. Strausbaugh, N. R. Tanvir, L. Amati, S. Campana, A. Cucchiara, G. Ghirlanda, M. Della Valle, S. Klose, R. Salvaterra, R. L. C. Starling, G. Stratta, A. E. Tsvetkova, S. D. Vergani, A. D'Aì, D. Burgarella, S. Covino, V. D'Elia, A. de Ugarte Postigo, H. Faúse, J. P. U. Fynbo, F. Frontera, C. Guidorzi, K. E. Heintz, N. Masetti, E. Maiorano, C. G. Mundell, S. R. Oates, M. J. Page, E. Palazzi, J. Palmerio, G. Pugliese, A. Rau, A. Saccardi, B. Sbarufatti, D. S. Svinkin, G. Tagliaferri, A. J. van der Horst, D. J. Watson, M. V. Ulanov, K. Wiersema, D. Xu, and J. Zhang (2022), A blast from the infant Universe: The very high-z GRB 210905A, *Astron. & Astrophys.*, **665**, A125, [10.1051/0004-6361/202243225](https://doi.org/10.1051/0004-6361/202243225).
- [335] Rüdisser, H. T., A. Windisch, U. V. Amerstorfer, C. Möstl, T. Amerstorfer, R. L. Bailey, and M. A. Reiss (2022), Automatic Detection of Interplanetary Coronal Mass Ejections in Solar Wind In Situ Data, *Space Weather*, **20**(10), e2022SW003149, [10.1029/2022SW003149](https://doi.org/10.1029/2022SW003149).
- [336] Ruohotie, J., E. K. J. Kilpua, S. W. Good, and M. Ala-Lahti (2022), Small-scale flux ropes in ICME sheaths, *Front. Astron. Space Sci.*, **9**, 943247, [10.3389/fspas.2022.943247](https://doi.org/10.3389/fspas.2022.943247).
- [337] Safargaleev, V. V. (2022), Estimation of the Propagation Time of the Solar Wind Pressure Pulse between a Shock Wave and the Magnetopause Based on Simultaneous Satellite and Ground-Based Observations, *Geomag. and Aeron.*, **62**(6), 694–703, [10.1134/S0016793222060123](https://doi.org/10.1134/S0016793222060123).
- [338] Sakurai, T., A. N. Wright, K. Takahashi, T. Elsden, Y. Ebihara, N. Sato, A. Kadokura, Y. Tanaka, and T. Hori (2022), Poleward Moving Auroral Arcs and Pc5 Oscillations, *J. Geophys. Res.*, **127**(8), e30362, [10.1029/2022JA030362](https://doi.org/10.1029/2022JA030362).
- [339] Salafia, O. S., A. Colombo, F. Gabrielli, and I. Mandel (2022), Constraints on the merging binary neutron star mass distribution and equation of state based on the incidence of jets in the population, *Astron. & Astrophys.*, **666**, A174, [10.1051/0004-6361/202243260](https://doi.org/10.1051/0004-6361/202243260).

List of Refereed Publications
Wind Spacecraft: 2022

- [340] Salzano, M., M. R. Lessard, S. Noh, H. Kim, C. Waters, M. J. Engebretson, R. Horne, M. Clilverd, A. Kadokura, Y. Tanaka, K.-H. Kim, J. Matzka, T. Fromm, J. Goldstein, and M. J. Kim (2022), Modeling the Effects of Drift Shell Splitting in Two Case Studies of Simultaneous Observations of Substorm-Driven Pi1B and IPDP-Type EMIC Waves, *J. Geophys. Res.*, **127**(10), e2022JA030600, [10.1029/2022JA030600](https://doi.org/10.1029/2022JA030600).
- [341] Samara, E., B. Laperre, R. Kieokaew, M. Temmer, C. Verbeke, L. Rodriguez, J. Magdalenić, and S. Poedts (2022), Dynamic Time Warping as a Means of Assessing Solar Wind Time Series, *Astrophys. J.*, **927**(2), 187, [10.3847/1538-4357/ac4af6](https://doi.org/10.3847/1538-4357/ac4af6).
- [342] Samara, E., J. Magdalenić, L. Rodriguez, S. G. Heinemann, M. K. Georgoulis, S. J. Hofmeister, and S. Poedts (2022), Influence of coronal hole morphology on the solar wind speed at Earth, *Astron. & Astrophys.*, **662**, A68, [10.1051/0004-6361/202142793](https://doi.org/10.1051/0004-6361/202142793).
- [343] Samsonov, A., J. A. Carter, A. Read, S. Sembay, G. Branduardi-Raymont, D. Sibeck, and P. Escoubet (2022), Finding Magnetopause Standoff Distance Using a Soft X-Ray Imager: 1. Magnetospheric Masking, *J. Geophys. Res.*, **127**(12), e2022JA030848, [10.1029/2022JA030848](https://doi.org/10.1029/2022JA030848).
- [344] Samsonov, A., S. Sembay, A. Read, J. A. Carter, G. Branduardi-Raymont, D. Sibeck, and P. Escoubet (2022), Finding Magnetopause Standoff Distance Using a Soft X-ray Imager: 2. Methods to Analyze 2-D X-ray Images, *J. Geophys. Res.*, **127**(12), e2022JA030850, [10.1029/2022JA030850](https://doi.org/10.1029/2022JA030850).
- [345] Sapunova, O. V., N. L. Borodkova, G. N. Zastenker, and Y. I. Yermolaev (2022), Variations of He⁺⁺ Ion Parameters at Interplanetary and Earth's Bow Shock Fronts, *Geomag. and Aeron.*, **62**(5), 505–513, [10.1134/S0016793222050103](https://doi.org/10.1134/S0016793222050103).
- [346] Sarin, N., R. Hamburg, E. Burns, G. Ashton, P. D. Lasky, and G. P. Lamb (2022), Low-efficiency long gamma-ray bursts: a case study with AT2020blt, *Mon. Not. Roy. Astron. Soc.*, **512**(1), 1391–1399, [10.1093/mnras/stac601](https://doi.org/10.1093/mnras/stac601).
- [347] Sasikumar Raja, K., M. Maksimovic, E. P. Kontar, X. Bonnin, P. Zarka, L. Lamy, H. Reid, N. Vilmer, A. Lecacheux, V. Krupar, B. Cecconi, L. Nora, and L. Denis (2022), Spectral Analysis of Solar Radio Type III Bursts from 20 kHz to 410 MHz, *Astrophys. J.*, **924**(2), 58, [10.3847/1538-4357/ac34ed](https://doi.org/10.3847/1538-4357/ac34ed).
- [348] Savin, S. P., V. V. Lyakhov, V. M. Neshchadim, L. M. Zelenyi, Z. Nemecek, J. Shafrankova, C. Wang, S. I. Klimov, S. A. Skalskii, M. O. Ryazantseva, L. S. Rakhmanova, J. Blecki, and L. A. Lezhen (2022), Bow Shock Eigenmodes and Their Interconnection with Magnetospheric Resonances, *Sov. Phys.–JETP*, **134**(3), 321–326, [10.1134/S1063776122030116](https://doi.org/10.1134/S1063776122030116).
- [349] Schonfeld, S. J., C. J. Henney, S. I. Jones, and C. N. Arge (2022), Solar Polar Flux Redistribution Based on Observed Coronal Holes, *Astrophys. J.*, **932**(2), 115, [10.3847/1538-4357/ac6ba1](https://doi.org/10.3847/1538-4357/ac6ba1).

List of Refereed Publications
Wind Spacecraft: 2022

- [350] Schwartz, S. J., K. A. Goodrich, L. B. Wilson III, D. L. Turner, K. J. Trattner, H. Kucharek, I. Gingell, S. A. Fuselier, I. J. Cohen, H. Madanian, R. E. Ergun, D. J. Gershman, and R. J. Strangeway (2022), Energy Partition at Collisionless Supercritical Quasi-Perpendicular Shocks, *J. Geophys. Res.*, **127**(10), e2022JA030637, [10.1029/2022JA030637](https://doi.org/10.1029/2022JA030637).
- [351] Scudder, J. D. (2022), Solar Wind Electron Pressure Gradients, Suprathermal Spectral Hardness, and Strahl Localization Organized by Single-point Measurements of 0.1 nV m^{-1} Ambipolar E_{\parallel} , *Astrophys. J.*, **934**(2), 151, [10.3847/1538-4357/ac6871](https://doi.org/10.3847/1538-4357/ac6871).
- [352] Shah, A., Q. UL-Haque, S. Mahmood, and S. Ur-Rehman (2022), Non-Gaussian speed distributions: OMNI multisatellite data and simulations based on two temperature model, *Phys. Plasmas*, **29**(2), 022903, [10.1063/5.0071169](https://doi.org/10.1063/5.0071169).
- [353] Shaikh, Z. I., and A. N. Raghav (2022), Evolution of Earth's magnetosheath as a planar magnetic structure, *Mon. Not. Roy. Astron. Soc.*, **511**(4), 4963–4970, [10.1093/mnras/stac276](https://doi.org/10.1093/mnras/stac276).
- [354] Shaikh, Z. I., and A. N. Raghav (2022), Statistical Plasma Properties of the Planar and Nonplanar ICME Magnetic Clouds during Solar Cycles 23 and 24, *Astrophys. J.*, **938**(2), 146, [10.3847/1538-4357/ac8f2b](https://doi.org/10.3847/1538-4357/ac8f2b).
- [355] Shan, L. L., Y. B. Yao, J. Kong, C. Z. Zhai, C. Zhou, and X. X. Chen (2022), Three-Dimensional Reconstruction of Tongue of Ionization During the 11 October 2010 Geomagnetic Storm and Evolution Analysis With TIEGCM, *Space Weather*, **20**(4), e2021SW002862, [10.1029/2021SW002862](https://doi.org/10.1029/2021SW002862).
- [356] Sharma, R., D. Oberoi, M. Battaglia, and S. Krucker (2022), Detection of Ubiquitous Weak and Impulsive Nonthermal Emissions from the Solar Corona, *Astrophys. J.*, **937**(2), 99, [10.3847/1538-4357/ac87fc](https://doi.org/10.3847/1538-4357/ac87fc).
- [357] Shen, F., C. Shen, M. Xu, Y. Liu, X. Feng, and Y. Wang (2022), Propagation characteristics of coronal mass ejections (CMEs) in the corona and interplanetary space, *Rev. Mod. Plasma Phys.*, **6**(1), 8, [10.1007/s41614-022-00069-1](https://doi.org/10.1007/s41614-022-00069-1).
- [358] Shen, H.-W., J.-H. Shue, J. Dombeck, and D.-S. Han (2022), Influences of IMF B_y Polarity on Dayside Electron Precipitation in Terms of Energy Channels, *J. Geophys. Res.*, **127**(3), e30082, [10.1029/2021JA030082](https://doi.org/10.1029/2021JA030082).
- [359] Shi, C., M. Velli, A. Tenerani, V. Réville, and F. Rappazzo (2022), Influence of the Heliospheric Current Sheet on the Evolution of Solar Wind Turbulence, *Astrophys. J.*, **928**(1), 93, [10.3847/1538-4357/ac558b](https://doi.org/10.3847/1538-4357/ac558b).
- [360] Shi, T., I. Manchester, Ward, E. Landi, B. van der Holst, J. Szente, Y. Chen, G. Tóth, L. Bertello, and A. Pevtsov (2022), AWSOM Magnetohydrodynamic Simulation of a Solar Active Region with Realistic Spectral Synthesis, *Astrophys. J.*, **928**(1), 34, [10.3847/1538-4357/ac52ab](https://doi.org/10.3847/1538-4357/ac52ab).

List of Refereed Publications
Wind Spacecraft: 2022

- [361] Shi, X., M. D. Hartinger, J. B. H. Baker, B. S. Murphy, P. A. Bedrosian, A. Kelbert, and E. J. Rigler (2022), Characteristics and Sources of Intense Geoelectric Fields in the United States: Comparative Analysis of Multiple Geomagnetic Storms, *Space Weather*, **20**(4), e2021SW002967, [10.1029/2021SW002967](https://doi.org/10.1029/2021SW002967).
- [362] Shi, X., H. Fu, Z. Huang, C. Ma, and L. Xia (2022), The Solar Cycle Dependence of In Situ Properties of Two Types of Interplanetary CMEs during 1999-2020, *Astrophys. J.*, **940**(2), 103, [10.3847/1538-4357/ac9b20](https://doi.org/10.3847/1538-4357/ac9b20).
- [363] Shinbori, A., Y. Otsuka, T. Sori, T. Tsugawa, and M. Nishioka (2022), Statistical Behavior of Large-Scale Ionospheric Disturbances From High Latitudes to Mid-Latitudes During Geomagnetic Storms Using 20-yr GNSS-TEC Data: Dependence on Season and Storm Intensity, *J. Geophys. Res.*, **127**(1), e29687, [10.1029/2021JA029687](https://doi.org/10.1029/2021JA029687).
- [364] Shinbori, A., Y. Otsuka, T. Sori, M. Nishioka, S. Perwitasari, T. Tsuda, and N. Nishitani (2022), Electromagnetic conjugacy of ionospheric disturbances after the 2022 Hunga Tonga-Hunga Ha'apai volcanic eruption as seen in GNSS-TEC and SuperDARN Hokkaido pair of radars observations, *Earth, Planets and Space*, **74**(1), 106, [10.1186/s40623-022-01665-8](https://doi.org/10.1186/s40623-022-01665-8).
- [365] Shlyk, N. S., A. V. Belov, M. A. Abunina, A. A. Abunin, V. A. Oleneva, and V. G. Yanke (2022), Forbush decreases caused by paired interacting solar wind disturbances, *Mon. Not. Roy. Astron. Soc.*, **511**(4), 5897–5908, [10.1093/mnras/stac478](https://doi.org/10.1093/mnras/stac478).
- [366] Siddique, I., S. Sajjad, and K. Motiwala (2022), The Prompt Emission of GRB 130518A and the Study of Its Outflow through Hybrid Jet Models, *Astrophys. J.*, **938**(2), 159, [10.3847/1538-4357/ac8d05](https://doi.org/10.3847/1538-4357/ac8d05).
- [367] Sierra-Porta, D. (2022), On the fractal properties of cosmic rays and Sun dynamics cross-correlations, *Astrophys. Space Sci.*, **367**(12), 116, [10.1007/s10509-022-04151-5](https://doi.org/10.1007/s10509-022-04151-5).
- [368] Silva, G. B. D., L. R. Alves, W. Tu, A. L. Padilha, V. M. Souza, L. F. Li, X. Lyu, and M. B. Pádua (2022), Modeling Radiation Belt Electron Dropouts During Moderate Geomagnetic Storms Using Radial Diffusion Coefficients Estimated With Global MHD Simulations, *J. Geophys. Res.*, **127**(9), e30602, [10.1029/2022JA030602](https://doi.org/10.1029/2022JA030602).
- [369] Simms, L. E., M. J. Engebretson, and G. D. Reeves (2022), Removing Diurnal Signals and Longer Term Trends From Electron Flux and ULF Correlations: A Comparison of Spectral Subtraction, Simple Differencing, and ARIMAX Models, *J. Geophys. Res.*, **127**(2), e2021JA030021, [10.1029/2021JA030021](https://doi.org/10.1029/2021JA030021).
- [370] Sindhua, G., J. Singh, E. Asvestari, and B. Raghavendra Prasad (2022), Modeling a Coronal Mass Ejection as a Magnetized Structure with EUHFORIA, *Astrophys. J.*, **925**(1), 25, [10.3847/1538-4357/ac3bd2](https://doi.org/10.3847/1538-4357/ac3bd2).
- [371] Singh, R., Y. S. Lee, S. M. Song, Y. H. Kim, J. Y. Yun, S. Sripathi, and B. Rajesh (2022), Ionospheric Density Oscillations Associated With Recurrent Prompt Penetration Electric Fields During the Space Weather Event of 4 November 2021 Over the East-Asian Sector, *J. Geophys. Res.*, **127**(6), e30456, [10.1029/2022JA030456](https://doi.org/10.1029/2022JA030456).

List of Refereed Publications
Wind Spacecraft: 2022

- [372] Singh, T., T. K. Kim, N. V. Pogorelov, and C. N. Arge (2022), Ensemble Simulations of the 2012 July 12 Coronal Mass Ejection with the Constant-turn Flux Rope Model, *Astrophys. J.*, **933**(2), 123, [10.3847/1538-4357/ac73f3](https://doi.org/10.3847/1538-4357/ac73f3).
- [373] Song, X.-Y., S.-L. Xiong, S.-N. Zhang, C.-K. Li, X.-B. Li, Y. Huang, C. Guidorzi, F. Frontera, C.-Z. Liu, X.-F. Li, G. Li, J.-Y. Liao, C. Cai, Q. Luo, S. Xiao, Q.-B. Yi, Y.-G. Zheng, D.-K. Zhou, J.-C. Liu, W.-C. Xue, Y.-Q. Zhang, C. Zheng, Z. Chang, Z.-W. Li, X.-F. Lu, A.-M. Zhang, Y.-F. Zhang, Y.-J. Jin, T.-P. Li, F.-J. Lu, L.-M. Song, M. Wu, Y.-P. Xu, X. Ma, M.-Y. Ge, S.-M. Jia, B. Li, J.-Y. Nie, L.-J. Wang, J. Zhang, S.-J. Zheng, X.-J. Yang, and R.-J. Yang (2022), The First Insight-HXMT Gamma-Ray Burst Catalog: The First Four Years, *Astrophys. J. Suppl.*, **259**(2), 46, [10.3847/1538-4365/ac4d22](https://doi.org/10.3847/1538-4365/ac4d22).
- [374] Soni, S. L., and E. Ebenezer (2022), Kinematics and interplanetary characteristics of a halo Coronal Mass Ejection: a multi-wavelength analysis, *Astrophys. Space Sci.*, **367**(4), 40, [10.1007/s10509-022-04067-0](https://doi.org/10.1007/s10509-022-04067-0).
- [375] Sori, T., A. Shinbori, Y. Otsuka, T. Tsugawa, M. Nishioka, and A. Yoshikawa (2022), Generation Mechanisms of Plasma Density Irregularity in the Equatorial Ionosphere During a Geomagnetic Storm on 21-22 December 2014, *J. Geophys. Res.*, **127**(5), e30240, [10.1029/2021JA030240](https://doi.org/10.1029/2021JA030240).
- [376] Sori, T., Y. Otsuka, A. Shinbori, M. Nishioka, and S. Perwitasari (2022), Geomagnetic conjugacy of plasma bubbles extending to mid-latitudes during a geomagnetic storm on March 1, 2013, *Earth, Planets and Space*, **74**(1), 120, [10.1186/s40623-022-01682-7](https://doi.org/10.1186/s40623-022-01682-7).
- [377] Stanislavsky, A. A., I. N. Bubnov, A. A. Koval, and S. N. Yerin (2022), Parker Solar Probe detects solar radio bursts related with a behind-the-limb active region, *Astron. & Astrophys.*, **657**, A21, [10.1051/0004-6361/202141984](https://doi.org/10.1051/0004-6361/202141984).
- [378] Staples, F. A., A. Kellerman, K. R. Murphy, I. J. Rae, J. K. Sandhu, and C. Forsyth (2022), Resolving Magnetopause Shadowing Using Multimission Measurements of Phase Space Density, *J. Geophys. Res.*, **127**(2), e2021JA029298, [10.1029/2021JA029298](https://doi.org/10.1029/2021JA029298).
- [379] Starkey, M. J., M. A. Dayeh, S. A. Fuselier, S. M. Petrinec, D. J. McComas, K. Ogasawara, J. R. Szalay, and N. A. Schwadron (2022), Determining the Near-Instantaneous Curvature of Earth's Bow Shock Using Simultaneous IBEX and MMS Observations, *J. Geophys. Res.*, **127**(3), e30036, [10.1029/2021JA030036](https://doi.org/10.1029/2021JA030036).
- [380] Starkey, M. J., M. A. Dayeh, S. A. Fuselier, S. M. Petrinec, D. J. McComas, K. Ogasawara, J. R. Szalay, N. A. Schwadron, and J. M. Sokół (2022), Solar Wind Impact on ENAs From Earth's Subsolar Magnetosheath, *J. Geophys. Res.*, **127**(11), e2022JA030965, [10.1029/2022JA030965](https://doi.org/10.1029/2022JA030965).
- [381] Stauning, P. (2022), The Polar Cap (PC) Index: PCS Version Based on Dome-C Data, *Space Weather*, **20**(4), e2021SW002941, [10.1029/2021SW002941](https://doi.org/10.1029/2021SW002941).
- [382] Stauning, P. (2022), Comment on "The PC Index Variations During 23/24 Solar Cycles: Relation to Solar Wind Parameters and Magnetic Disturbances" by Troschichiev et al., *J. Geophys. Res.*, **127**(11), e2022JA030314, [10.1029/2022JA030314](https://doi.org/10.1029/2022JA030314).

List of Refereed Publications
Wind Spacecraft: 2022

- [383] Sun, J., G. Wang, T. Zhang, H. Hu, and H. Yang (2022), Evidence of Alfvén Waves Generated by Mode Coupling in the Magnetotail Lobe, *Geophys. Res. Lett.*, **49**(1), e96359, [10.1029/2021GL096359](https://doi.org/10.1029/2021GL096359).
- [384] Sun, W., R. M. Dewey, S. Aizawa, J. Huang, J. A. Slavin, S. Fu, Y. Wei, and C. F. Bowers (2022), Review of Mercury's dynamic magnetosphere: Post-MESSENGER era and comparative magnetospheres, *Sci. China Earth Sci.*, **65**(1), 25–74, [10.1007/s11430-021-9828-0](https://doi.org/10.1007/s11430-021-9828-0).
- [385] Sun, Y., Z. Xie, H. Wang, X. Huang, and Q. Hu (2022), Solar Wind Speed Prediction via Graph Attention Network, *Space Weather*, **20**(7), e2022SW003128, [10.1029/2022SW003128](https://doi.org/10.1029/2022SW003128).
- [386] Suresh, K., N. Gopalswamy, and A. Shanmugaraju (2022), Arrival Time Estimates of Earth-Directed CME-Driven Shocks, *Solar Phys.*, **297**(1), 3, [10.1007/s11207-021-01914-1](https://doi.org/10.1007/s11207-021-01914-1).
- [387] Svinkin, D. S., K. Hurley, A. V. Ridnaia, A. L. Lysenko, D. D. Frederiks, S. V. Golenetskii, A. E. Tsvetkova, M. V. Ulanov, A. Kokomov, T. L. Cline, I. Mitrofanov, D. Golovin, A. Kozyrev, M. Litvak, A. Sanin, A. Goldstein, M. S. Briggs, C. Wilson-Hodge, E. Burns, A. von Kienlin, X. L. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, S. Barthelmy, J. Cummings, H. Krimm, D. M. Palmer, A. Tohuvavohu, K. Yamaoka, M. Ohno, Y. Fukazawa, Y. Hanabata, T. Takahashi, M. Tashiro, Y. Terada, T. Murakami, K. Makishima, W. Boynton, C. W. Fellows, K. P. Harshman, H. Enos, R. Starr, J. Goldsten, R. Gold, A. Ursi, M. Tavani, A. Bulgarelli, C. Casentini, E. Del Monte, Y. Evangelista, M. Galli, F. Longo, M. Marisaldi, N. Parmiggiani, C. Pittori, M. Romani, F. Verrecchia, D. M. Smith, W. Hajdas, S. Xiao, C. Cai, Q. B. Yi, Y. Q. Zhang, S. L. Xiong, X. B. Li, Y. Huang, C. K. Li, S. N. Zhang, L. M. Song, C. Z. Liu, X. Q. Li, W. X. Peng, and I. Martinez-Castellanos (2022), The Second Catalog of Interplanetary Network Localizations of Konus Short-duration Gamma-Ray Bursts, *Astrophys. J. Suppl.*, **259**(2), 34, [10.3847/1538-4365/ac4607](https://doi.org/10.3847/1538-4365/ac4607).
- [388] Svinkin, D. S., K. Hurley, A. V. Ridnaia, A. L. Lysenko, D. D. Frederiks, S. V. Golenetskii, A. E. Tsvetkova, M. V. Ulanov, A. Kokomov, T. L. Cline, I. Mitrofanov, D. Golovin, A. Kozyrev, M. Litvak, A. Sanin, A. Goldstein, M. S. Briggs, C. Wilson-Hodge, E. Burns, A. von Kienlin, X. L. Zhang, A. Rau, V. Savchenko, E. Bozzo, C. Ferrigno, S. Barthelmy, J. Cummings, H. Krimm, D. M. Palmer, A. Tohuvavohu, K. Yamaoka, M. Ohno, Y. Fukazawa, Y. Hanabata, T. Takahashi, M. Tashiro, Y. Terada, T. Murakami, K. Makishima, W. Boynton, C. W. Fellows, K. P. Harshman, H. Enos, R. Starr, J. Goldsten, R. Gold, A. Ursi, M. Tavani, A. Bulgarelli, C. Casentini, M. E. Del, Y. Evangelista, M. Galli, F. Longo, M. Marisaldi, N. Parmiggiani, C. Pittori, M. Romani, F. Verrecchia, D. M. Smith, W. Hajdas, S. Xiao, C. Cai, Q. B. Yi, Y. Q. Zhang, S. L. Xiong, X. B. Li, Y. Huang, C. K. Li, S. N. Zhang, L. M. Song, C. Z. Liu, X. Q. Li, W. X. Peng, and I. Martinez-Castellanos (2022), VizieR Online Data Catalog: 2nd cat. of IPN localizations of Konus short GRBs (Svinkin+, 2022), *VizieR Online Data Catalog*, J/ApJS/259/34.

List of Refereed Publications
Wind Spacecraft: 2022

- [389] Swarnalingam, N., D. L. Wu, and N. Gopalswamy (2022), Interhemispheric Asymmetries in Ionospheric Electron Density Responses During Geomagnetic Storms: A Study Using Space-Based and Ground-Based GNSS and AMPERE Observations, *J. Geophys. Res.*, **127**(5), e30247, [10.1029/2021JA030247](https://doi.org/10.1029/2021JA030247).
- [390] Swiger, B. M., M. W. Liemohn, N. Y. Ganushkina, and S. V. Dubyagin (2022), Energetic Electron Flux Predictions in the Near-Earth Plasma Sheet From Solar Wind Driving, *Space Weather*, **20**(11), e2022SW003150, [10.1029/2022SW003150](https://doi.org/10.1029/2022SW003150).
- [391] Syiemlieh, R., M. Adhikary, P. K. Panigrahi, and E. Saikia (2022), Analyzing Dominant 13.5 and 27 day Periods of Solar Terrestrial Interaction: A New Insight into Solar Cycle Activities, *Res. Astron. Astrophys.*, **22**(8), 085005, [10.1088/1674-4527/ac7129](https://doi.org/10.1088/1674-4527/ac7129).
- [392] Szabo, P. S., A. R. Poppe, H. Biber, A. Mutzke, J. Pichler, N. Jäggi, A. Galli, P. Wurz, and F. Aumayr (2022), Deducing Lunar Regolith Porosity From Energetic Neutral Atom Emission, *Geophys. Res. Lett.*, **49**(21), e2022GL101232, [10.1029/2022GL101232](https://doi.org/10.1029/2022GL101232).
- [393] Szente, J., E. Landi, and B. van der Holst (2022), Charge State Calculation for Global Solar Wind Modeling, *Astrophys. J.*, **926**(1), 35, [10.3847/1538-4357/ac3918](https://doi.org/10.3847/1538-4357/ac3918).
- [394] Takahashi, K., C. Crabtree, A. Y. Ukhorskiy, A. Boyd, R. E. Denton, D. Turner, M. Gkioulidou, M. Vellante, and H. E. Spence (2022), Van Allen Probes Observations of Symmetric Stormtime Compressional ULF Waves, *J. Geophys. Res.*, **127**(2), e2021JA030115, [10.1029/2021JA030115](https://doi.org/10.1029/2021JA030115).
- [395] Takalo, J. (2022), Extracting Hale Cycle Related Components from Cosmic-Ray Data Using Principal Component Analysis, *Solar Phys.*, **297**(9), 113, [10.1007/s11207-022-02048-8](https://doi.org/10.1007/s11207-022-02048-8).
- [396] Talpeanu, D. C., S. Poedts, E. D'Huys, and M. Mierla (2022), Study of the propagation, in situ signatures, and geoeffectiveness of shear-induced coronal mass ejections in different solar winds, *Astron. & Astrophys.*, **658**, A56, [10.1051/0004-6361/202141977](https://doi.org/10.1051/0004-6361/202141977).
- [397] Tang, R., Y. Tao, J. Li, Z. Chen, X. Deng, and H. Li (2022), The Short-Time Prediction of the Energetic Electron Flux in the Planetary Radiation Belt Based on Stacking Ensemble-Learning Algorithm, *Space Weather*, **20**(2), e2021SW002969, [10.1029/2021SW002969](https://doi.org/10.1029/2021SW002969).
- [398] Tarnopolski, M. (2022), Graph-based clustering of gamma-ray bursts, *Astron. & Astrophys.*, **657**, A13, [10.1051/0004-6361/202038645](https://doi.org/10.1051/0004-6361/202038645).
- [399] Tatischeff, V., P. Ubertini, T. Mizuno, and L. Natalucci (2022), Orbits and Background of Gamma-Ray Space Instruments, in *Handbook of X-ray and Gamma-ray Astrophysics*. Edited by Cosimo Bambi and Andrea Santangelo, p. 53, [10.1007/978-981-16-4544-0_47-1](https://doi.org/10.1007/978-981-16-4544-0_47-1).
- [400] Thana, Y. (2022), Time Series Forecasting of Hourly Relativistic Electrons at Geostationary Orbit during Solar Cycles 23-24, *Geomag. and Aeron.*, **62**(3), 278–287, [10.1134/S0016793222030185](https://doi.org/10.1134/S0016793222030185).

List of Refereed Publications
Wind Spacecraft: 2022

- [401] Thapa, T., A. Silwal, B. Adhikari, S. P. Gautam, P. Baruwal, and A. Panthi (2022), Variability of relativistic electron flux ($E > 2$ MeV) during geo-magnetically quiet and disturbed days: a case study, *Astrophys. Space Sci.*, **367**(11), 114, [10.1007/s10509-022-04141-7](https://doi.org/10.1007/s10509-022-04141-7).
- [402] Thompson, D. J., and C. A. Wilson-Hodge (2022), Fermi Gamma-Ray Space Telescope, in *Handbook of X-ray and Gamma-ray Astrophysics*. Edited by Cosimo Bambi and Andrea Santangelo, p. 29, [10.1007/978-981-16-4544-0-58-1](https://doi.org/10.1007/978-981-16-4544-0-58-1).
- [403] Tian, P., B. Yu, H. Ye, X. Xue, J. Wu, and T. Chen (2022), Estimation Model of Global Ionospheric Irregularities: An Artificial Intelligence Approach, *Space Weather*, **20**(9), e2022SW003160, [10.1029/2022SW003160](https://doi.org/10.1029/2022SW003160).
- [404] Torres, J., L. Zhao, P. K. Chan, and M. Zhang (2022), A Machine Learning Approach to Predicting SEP Events Using Properties of Coronal Mass Ejections, *Space Weather*, **20**(7), e2021SW002797, [10.1029/2021SW002797](https://doi.org/10.1029/2021SW002797).
- [405] Troshichev, O. A., S. A. Dolgacheva, and D. A. Sormakov (2022), Invariability of relationships between the solar wind electric field E_{KL} and the magnetic activity indices PC, AL and Dst, *J. Atmos. Solar-Terr. Phys.*, **235**, 105894, [10.1016/j.jastp.2022.105894](https://doi.org/10.1016/j.jastp.2022.105894).
- [406] Troshichev, O. A., S. A. Dolgacheva, and D. A. Sormakov (2022), Comment on “The Use of Invalid Polar Cap South (PCS) Indices in Publications” by Stauning, *J. Geophys. Res.*, **127**(10), e2022JA030820, [10.1029/2022JA030820](https://doi.org/10.1029/2022JA030820).
- [407] Troshichev, O. A., S. A. Dolgacheva, N. A. Stepanov, and D. A. Sormakov (2022), Reply to Comment by Stauning on “The PC Index Variations During 23/24 Solar Cycles: Relation to Solar Wind Parameters and Magnetic Disturbances”, *J. Geophys. Res.*, **127**(11), e2022JA030519, [10.1029/2022JA030519](https://doi.org/10.1029/2022JA030519).
- [408] Tsurutani, B. T., and R. Hajra (2022), Extremely Slow ($V_{sw} < 300$ km s $^{-1}$) Solar Winds (ESSWs) at 1 au: Causes of Extreme Geomagnetic Quiet at Earth, *Astrophys. J.*, **936**(2), 155, [10.3847/1538-4357/ac7444](https://doi.org/10.3847/1538-4357/ac7444).
- [409] Tsvetkova, A., D. Frederiks, D. Svinkin, R. Aptekar, T. L. Cline, S. Golenetskii, K. Hurley, A. Lysenko, A. Ridnaia, and M. Ulanov (2022), VizieR Online Data Catalog: Konus-Wind catalog of GRBs with redshifts. II. (Tsvetkova+, 2021), *VizieR Online Data Catalog*, J/ApJ/908/83.
- [410] Tsyganenko, N. A., V. A. Andreeva, M. I. Sitnov, and G. K. Stephens (2022), Magnetosphere Distortions During the “Satellite Killer” Storm of February 3-4, 2022, as Derived From a Hybrid Empirical Model and Archived Data Mining, *J. Geophys. Res.*, **127**(12), e2022JA031006, [10.1029/2022JA031006](https://doi.org/10.1029/2022JA031006).
- [411] Turner, H., M. Owens, M. Lang, S. Gonzi, and P. Riley (2022), Quantifying the Effect of ICME Removal and Observation Age for in Situ Solar Wind Data Assimilation, *Space Weather*, **20**(8), e2022SW003109, [10.1029/2022SW003109](https://doi.org/10.1029/2022SW003109).

List of Refereed Publications
Wind Spacecraft: 2022

- [412] Upendran, V., P. Tigas, B. Ferdousi, T. Bloch, M. C. M. Cheung, S. Ganju, A. Bhatt, R. M. McGranaghan, and Y. Gal (2022), Global Geomagnetic Perturbation Forecasting Using Deep Learning, *Space Weather*, **20**(6), e2022SW003045, [10.1029/2022SW003045](https://doi.org/10.1029/2022SW003045).
- [413] Ursi, A., M. Romani, F. Verrecchia, C. Pittori, M. Tavani, M. Marisaldi, M. Galli, C. Labanti, N. Parmiggiani, A. Bulgarelli, A. Addis, L. Baroncelli, M. Cardillo, C. Casentini, P. W. Cattaneo, A. Chen, A. Di Piano, F. Fusichino, F. Longo, F. Lucarelli, A. Morselli, G. Piano, and S. Vercellone (2022), The Second AGILE MCAL Gamma-Ray Burst Catalog: 13 yr of Observations, *Astrophys. J.*, **925**(2), 152, [10.3847/1538-4357/ac3df7](https://doi.org/10.3847/1538-4357/ac3df7).
- [414] Ursi, A., M. Romani, G. Piano, F. Verrecchia, F. Longo, C. Pittori, M. Tavani, A. Bulgarelli, M. Cardillo, C. Casentini, P. W. Cattaneo, E. Costa, M. Feroci, V. Fioretti, L. Foffano, F. Lucarelli, M. Marisaldi, A. Morselli, L. Pacciani, N. Parmiggiani, P. Tempesta, A. Trois, and S. Vercellone (2022), AGILE Observations of GRB 220101A: A “New Year’s Burst” with an Exceptionally Huge Energy Release, *Astrophys. J.*, **933**(2), 214, [10.3847/1538-4357/ac746c](https://doi.org/10.3847/1538-4357/ac746c).
- [415] Varela, J., A. S. Brun, A. Strugarek, V. Réville, P. Zarka, and F. Pantellini (2022), MHD study of the planetary magnetospheric response during extreme solar wind conditions: Earth and exoplanet magnetospheres applications, *Astron. & Astrophys.*, **659**, A10, [10.1051/0004-6361/202141181](https://doi.org/10.1051/0004-6361/202141181).
- [416] Vasko, I. Y., K. Alimov, T. Phan, S. D. Bale, F. S. Mozer, and A. V. Artemyev (2022), Kinetic-scale Current Sheets in the Solar Wind at 1 au: Scale-dependent Properties and Critical Current Density, *Astrophys. J. Lett.*, **926**(2), L19, [10.3847/2041-8213/ac4fc4](https://doi.org/10.3847/2041-8213/ac4fc4).
- [417] Vasquez, B. J., S. A. Markovskii, and C. W. Smith (2022), Three-dimensional Hybrid Simulation Results of a Variable Magnetic Helicity Signature at Proton Kinetic Scales, *Astrophys. J.*, **924**(2), 41, [10.3847/1538-4357/ac3bbc](https://doi.org/10.3847/1538-4357/ac3bbc).
- [418] Vemareddy, P., P. Démoulin, K. Sasikumar Raja, J. Zhang, N. Gopalswamy, and N. Vasantharaju (2022), Eruption of the EUV Hot Channel from the Solar Limb and Associated Moving Type IV Radio Burst, *Astrophys. J.*, **927**(1), 108, [10.3847/1538-4357/ac4dfe](https://doi.org/10.3847/1538-4357/ac4dfe).
- [419] Vencloviene, J., D. Kiznys, and J. Zaltauskaitė (2022), Statistical Associations Between Geomagnetic Activity, Solar Wind, Solar Proton Events, and Winter NAO and AO Indices, *Earth Space Sci.*, **9**(6), e02179, [10.1029/2021EA002179](https://doi.org/10.1029/2021EA002179).
- [420] Vereshchagin, G., L. Li, and D. Bégué (2022), Is magnetically dominated outflow required to explain GRBs?, *Mon. Not. Roy. Astron. Soc.*, **512**(4), 4846–4851, [10.1093/mnras/stac757](https://doi.org/10.1093/mnras/stac757).
- [421] Verscharen, D., R. T. Wicks, O. Alexandrova, R. Bruno, D. Burgess, C. H. K. Chen, R. D’Amicis, J. De Keyser, T. D. de Wit, L. Franci, J. He, P. Henri, S. Kasahara, Y. Khotyaintsev, K. G. Klein, B. Lavraud, B. A. Maruca, M. Maksimovic, F. Plaschke, S. Poedts, C. S. Reynolds, O. Roberts, F. Sahraoui, S. Saito, C. S. Salem, J. Saur, S. Servidio, J. E. Stawarz, Š. Štverák, and D. Told (2022), A Case for Electron-Astrophysics, *Exper. Astron.*, **54**(2-3), 473–519, [10.1007/s10686-021-09761-5](https://doi.org/10.1007/s10686-021-09761-5).

List of Refereed Publications
Wind Spacecraft: 2022

- [422] Vlasov, V. I., R. D. Dagkesamanskii, V. A. Potapov, S. A. Tyul'bashev, and I. V. Chashei (2022), On Long-Term Variations in Solar Wind and Solar Activity Parameters with Possible Application to the Global Climate Problem, *Bull. Lebedev Phys. Inst.*, **49**(1), 6–9, [10.3103/S106833562201002X](https://doi.org/10.3103/S106833562201002X).
- [423] Vlasova, N. A., Y. I. Logachev, G. A. Bazilevskaya, E. A. Ginzburg, E. I. Daibog, V. N. Ishkov, V. V. Kalegaev, L. L. Lazutin, M. D. Nguyen, G. M. Surova, and O. S. Yakovchuk (2022), Catalogs of Solar Proton Events as a Tool for Studying Space Weather, *Cosmic Res.*, **60**(3), 151–164, [10.1134/S001095252203008X](https://doi.org/10.1134/S001095252203008X).
- [424] Vokhmyanin, M., and N. Zolotova (2022), Long-term North-South Asymmetry of the Heliospheric Current Sheet, *Astrophys. J.*, **928**(1), 56, [10.3847/1538-4357/ac5630](https://doi.org/10.3847/1538-4357/ac5630).
- [425] Vršnak, B., M. Dumbović, B. Heber, and A. Kirin (2022), Analytic modeling of recurrent Forbush decreases caused by corotating interaction regions, *Astron. & Astrophys.*, **658**, A186, [10.1051/0004-6361/202140846](https://doi.org/10.1051/0004-6361/202140846).
- [426] Vu, A., T. Z. Liu, H. Zhang, and C. Pollock (2022), Statistical Study of Foreshock Bubbles, Hot Flow Anomalies, and Spontaneous Hot Flow Anomalies and Their Substructures Observed by MMS, *J. Geophys. Res.*, **127**(2), e2021JA030029, [10.1029/2021JA030029](https://doi.org/10.1029/2021JA030029).
- [427] Walker, S. N., R. J. Boynton, Y. Y. Shprits, M. A. Balikhin, and A. Y. Drozdov (2022), Forecast of the Energetic Electron Environment of the Radiation Belts, *Space Weather*, **20**(12), e2022SW003124, [10.1029/2022SW003124](https://doi.org/10.1029/2022SW003124).
- [428] Wang, B. T., X. Cheng, H. Q. Song, and M. D. Ding (2022), Overexpansion-dominated coronal mass ejection formation and induced radio bursts, *Astron. & Astrophys.*, **666**, A166, [10.1051/0004-6361/202244275](https://doi.org/10.1051/0004-6361/202244275).
- [429] Wang, C.-P., K. Takahashi, X. Xing, and J. Bortnik (2022), Plasmaspheric Pi2 Pulsation Enhancement in Response to Plasma Sheet Pi2 Wave Source: Statistical Study Using Van Allen Probes and THEMIS Conjunctions, *J. Geophys. Res.*, **127**(5), e30399, [10.1029/2022JA030399](https://doi.org/10.1029/2022JA030399).
- [430] Wang, C.-P., X. Xing, X. Wang, L. A. Avanov, Y. Lin, R. J. Strangeway, and H. Y. Wei (2022), Effect of IMF B_y on the Entry of Solar Wind Ions Into the Near-Earth Tail Lobe: Global Hybrid Simulation and MMS Observation, *J. Geophys. Res.*, **127**(9), e30800, [10.1029/2022JA030800](https://doi.org/10.1029/2022JA030800).
- [431] Wang, H., C. Xiang, X. Liu, J. Lv, and F. Shen (2022), Implicit Solar Coronal Magneto-hydrodynamic (MHD) Modeling with a Low-dissipation Hybridized AUSM-HLL Riemann Solver, *Astrophys. J.*, **935**(1), 46, [10.3847/1538-4357/ac78e0](https://doi.org/10.3847/1538-4357/ac78e0).
- [432] Wang, J., X. Yan, Z. Xue, L. Yang, Q. Li, Z. Xu, L. Yang, and Y. Peng (2022), Two Homologous Quasi-periodic Fast-mode Propagating Wave Trains Induced by Two Small-scale Filament Eruptions, *Astrophys. J. Lett.*, **936**(1), L12, [10.3847/2041-8213/ac8b79](https://doi.org/10.3847/2041-8213/ac8b79).
- [433] Wang, L. (2022), Interplanetary energetic electrons observed in Earth's polar cusp/cap/lobes, *Rev. Mod. Plasma Phys.*, **6**(1), 12, [10.1007/s41614-022-00073-5](https://doi.org/10.1007/s41614-022-00073-5).

List of Refereed Publications
Wind Spacecraft: 2022

- [434] Wang, P., Z. Chen, X. Deng, J. Wang, R. Tang, H. Li, S. Hong, and Z. Wu (2022), The Prediction of Storm-Time Thermospheric Mass Density by LSTM-Based Ensemble Learning, *Space Weather*, **20**(3), e2021SW002950, [10.1029/2021SW002950](https://doi.org/10.1029/2021SW002950).
- [435] Wang, X., C. Tang, B. Ni, Z. Su, and J. Zhang (2022), The Seed Populations in the Earth's Outer Radiation Belt During the Main Phase of Magnetic Storms: A Statistical Study, *J. Geophys. Res.*, **127**(3), e30193, [10.1029/2021JA030193](https://doi.org/10.1029/2021JA030193).
- [436] Wang, X.-G., Y.-Z. Chen, X.-L. Huang, L.-J. Chen, W. Zheng, V. D'Elia, M. De Pasquale, A. S. Pozanenko, L.-P. Xin, G. Stratta, T. Ukwatta, C. Akerlof, J.-J. Geng, X.-H. Han, V.-P. Hentunen, E. V. Klunko, N. P. M. Kuin, M. Nissinen, W. Rujopakarn, V. V. Rumyantsev, E. S. Rykoff, T. Salmi, B. E. Schaefer, A. A. Volnova, X.-F. Wu, J.-Y. Wei, E.-W. Liang, B. Zhang, and A. V. Filippenko (2022), GRB 110213A: A Study of Afterglow Electromagnetic Cascade Radiation, *Astrophys. J.*, **939**(1), 39, [10.3847/1538-4357/ac937c](https://doi.org/10.3847/1538-4357/ac937c).
- [437] Wang, Y., D. R. Themens, C. Wang, Y.-Z. Ma, A. Reimer, R. Varney, R. Gilies, Z.-Y. Xing, Q.-H. Zhang, and P. T. Jayachandran (2022), Simultaneous Observations of a Polar Cap Sporadic-E Layer by Twin Incoherent Scatter Radars at Resolute, *J. Geophys. Res.*, **127**(6), e30366, [10.1029/2022JA030366](https://doi.org/10.1029/2022JA030366).
- [438] Wang, Y., D. Lyu, X. Wu, and G. Qin (2022), The Quantitative Relation of the Time Profiles of Intensities in the Well-connected Solar Energetic Particle Events, *Astrophys. J.*, **940**(1), 67, [10.3847/1538-4357/ac99da](https://doi.org/10.3847/1538-4357/ac99da).
- [439] Wang, Z., J. Lu, H. Hu, J. Liu, Z. Hu, M. Wang, B. Li, X. Chen, Y. Wu, H. Zhang, and H. Guan (2022), HMB Variations Measured by SuperDARN During the Extremely Radial IMFs: Is the Coupling Function Applicable in Radial IMF?, *J. Geophys. Res.*, **127**(2), e2021JA029589, [10.1029/2021JA029589](https://doi.org/10.1029/2021JA029589).
- [440] Waters, J. E., C. M. Jackman, D. K. Whiter, C. Forsyth, A. R. Fogg, L. Lamy, B. Cecconi, X. Bonnin, and K. Issautier (2022), A Perspective on Substorm Dynamics Using 10 Years of Auroral Kilometric Radiation Observations From Wind, *J. Geophys. Res.*, **127**(9), e30449, [10.1029/2022JA030449](https://doi.org/10.1029/2022JA030449).
- [441] Watson, A. S., C. W. Smith, A. V. Marchuk, M. R. Argall, C. J. Joyce, P. A. Isenberg, B. J. Vasquez, N. A. Schwadron, M. Bzowski, M. A. Kubiak, and N. Murphy (2022), High-latitude Observations of Inertial-range Turbulence by the Ulysses Spacecraft During the Solar Minimum of 1993-96, *Astrophys. J.*, **927**(1), 43, [10.3847/1538-4357/ac4588](https://doi.org/10.3847/1538-4357/ac4588).
- [442] Wei, X., C. Cai, J. Yang, and Y. Ma (2022), Magnetosheath Filamentary Structures Driven by Foreshock Energetic Ions, *J. Geophys. Res.*, **127**(9), e30266, [10.1029/2022JA030266](https://doi.org/10.1029/2022JA030266).
- [443] Wellbrock, A., G. H. Jones, N. Dresing, A. J. Coates, C. Simon Wedlund, H. Nilsson, B. Sanchez-Cano, E. Palmerio, L. Turc, M. Myllys, P. Henri, C. Goetz, O. Witasse, T. A. Nordheim, and K. Mandt (2022), Observations of a Solar Energetic Particle Event From

List of Refereed Publications
Wind Spacecraft: 2022

Inside and Outside the Coma of Comet 67P, *J. Geophys. Res.*, **127**(12), e2022JA030398, [10.1029/2022JA030398](https://doi.org/10.1029/2022JA030398).

- [444] West, M. J., D. B. Seaton, E. D’Huys, M. Mierla, M. Laurenza, K. A. Meyer, D. Berghmans, L. R. Rachmeler, L. Rodriguez, and K. Stegen (2022), A Review of the Extended EUV Corona Observed by the Sun Watcher with Active Pixels and Image Processing (SWAP) Instrument, *Solar Phys.*, **297**(10), 136, [10.1007/s11207-022-02063-9](https://doi.org/10.1007/s11207-022-02063-9).
- [445] Wijsen, N., A. Aran, C. Scolini, D. Lario, A. Afanasiev, R. Vainio, B. Sanahuja, J. Pomoell, and S. Poedts (2022), Observation-based modelling of the energetic storm particle event of 14 July 2012, *Astron. & Astrophys.*, **659**, A187, [10.1051/0004-6361/202142698](https://doi.org/10.1051/0004-6361/202142698).
- [446] Wilson III, L. B., K. A. Goodrich, D. L. Turner, I. J. Cohen, P. L. Whittlesey, and S. J. Schwartz (2022), The need for accurate measurements of thermal velocity distribution functions in the solar wind, *Front. Astron. Space Sci.*, **9**, 369, [10.3389/fspas.2022.1063841](https://doi.org/10.3389/fspas.2022.1063841).
- [447] Wing, S., J. R. Johnson, D. L. Turner, A. Y. Ukhorskiy, and A. J. Boyd (2022), Untangling the Solar Wind and Magnetospheric Drivers of the Radiation Belt Electrons, *J. Geophys. Res.*, **127**(4), e30246, [10.1029/2021JA030246](https://doi.org/10.1029/2021JA030246).
- [448] Wing, S., D. L. Turner, A. Y. Ukhorskiy, J. R. Johnson, T. Sotirelis, R. Nikoukar, and G. Romeo (2022), Modeling Radiation Belt Electrons With Information Theory Informed Neural Networks, *Space Weather*, **20**(8), e2022SW003090, [10.1029/2022SW003090](https://doi.org/10.1029/2022SW003090).
- [449] Wu, C.-C., K. Liou, L. Hutting, and B. E. Wood (2022), Magnetohydrodynamic Simulation of Multiple Coronal Mass Ejections: An Effect of “Pre-events”, *Astrophys. J.*, **935**(2), 67, [10.3847/1538-4357/ac7f2a](https://doi.org/10.3847/1538-4357/ac7f2a).
- [450] Wu, Q., W. Wang, D. Lin, C. Huang, and Y. Zhang (2022), Penetrating Electric Field Simulated by the MAGE and Comparison With ICON Observation, *J. Geophys. Res.*, **127**(9), e30467, [10.1029/2022JA030467](https://doi.org/10.1029/2022JA030467).
- [451] Xiao, S., S.-L. Xiong, C. Cai, L.-M. Song, S.-J. Zheng, W.-X. Peng, P. Wang, R. Qiao, D.-Y. Guo, J. Wang, X.-B. Li, X.-Y. Song, Y. Yuan, X.-L. Fan, X.-Y. Zhao, Y. Huang, X. Ma, P. Zhang, B. Li, M.-Y. Ge, Y.-L. Tuo, W. Chen, H.-M. Zhang, J.-J. He, C.-Y. Li, Q.-B. Yi, Y. Zhao, Y.-Q. Zhang, C. Zheng, W.-C. Xue, J.-C. Liu, Z. Zhang, C.-K. Li, X.-L. Zhang, H.-Y. Zhao, G.-Y. Zhao, Z.-W. Guo, S.-L. Xie, C.-W. Wang, B.-X. Zhang, Y. Wang, Q.-X. Li, C. Li, K. Zhang, D.-L. Shi, S.-Y. Zhao, M. Yao, Z.-H. An, C. Chen, K. Gong, Y.-Q. Liu, M. Gao, X.-Q. Li, Y.-G. Li, X.-H. Liang, X.-J. Liu, X.-L. Sun, J.-Z. Wang, X.-Y. Wen, Y.-B. Xu, Y.-P. Xu, S. Yang, C.-Y. Zhang, D.-L. Zhang, F. Zhang, G. Chen, F.-J. Lu, G.-X. Sun, F. Zhang, and S.-N. Zhang (2022), Energetic transients joint analysis system for multi-INstrument (ETJASMIN) for GECAM - I. Positional, temporal, and spectral analyses, *Mon. Not. Roy. Astron. Soc.*, **514**(2), 2397–2406, [10.1093/mnras/stac999](https://doi.org/10.1093/mnras/stac999).
- [452] Xue, Z., Z. Yuan, X. Yu, D. Deng, Z. Huang, and T. Raita (2022), EMIC Waves Observed Throughout the Inner Magnetosphere Driven by Abrupt Enhancement of the Solar Wind Pressure, *Geophys. Res. Lett.*, **49**(9), e98954, [10.1029/2022GL098954](https://doi.org/10.1029/2022GL098954).

List of Refereed Publications
Wind Spacecraft: 2022

- [453] Yadav, S., K. Shiokawa, Y. Otsuka, and M. Connors (2022), Statistical Study of Subauroral Arc Detachment at Athabasca, Canada: New Insights on STEVE, *J. Geophys. Res.*, **127**(9), e29856, [10.1029/2021JA029856](https://doi.org/10.1029/2021JA029856).
- [454] Yadav, S., L. R. Lyons, J. Liu, Y. Nishimura, S. Tian, Y. Zou, and E. F. Donovan (2022), Association of Equatorward Extending Auroral Streamers With Ground Magnetic Perturbations and Geosynchronous Injections, *J. Geophys. Res.*, **127**(11), e2022JA030919, [10.1029/2022JA030919](https://doi.org/10.1029/2022JA030919).
- [455] Yamamoto, K., K. Seki, A. Matsuoka, S. Imajo, M. Teramoto, M. Kitahara, Y. Kasahara, A. Kumamoto, F. Tsuchiya, M. Shoji, S. Nakamura, Y. Miyoshi, and I. Shinohara (2022), A Statistical Study of the Solar Wind Dependence of Multi-Harmonic Toroidal ULF Waves Observed by the Arase Satellite, *J. Geophys. Res.*, **127**(1), e29840, [10.1029/2021JA029840](https://doi.org/10.1029/2021JA029840).
- [456] Yamasaki, S., K. Kashiyama, and K. Murase (2022), Multi-wavelength constraints on the outflow properties of the extremely bright millisecond radio bursts from the galactic magnetar SGR 1935 + 2154, *Mon. Not. Roy. Astron. Soc.*, **511**(3), 3138–3149, [10.1093/mnras/stac234](https://doi.org/10.1093/mnras/stac234).
- [457] Yamazaki, Y., J. Matzka, C. Stolle, G. Kervalishvili, J. Rauberg, O. Bronkalla, A. Morschhauser, S. Bruinsma, Y. Y. Shprits, and D. R. Jackson (2022), Geomagnetic Activity Index Hpo, *Geophys. Res. Lett.*, **49**(10), e98860, [10.1029/2022GL098860](https://doi.org/10.1029/2022GL098860).
- [458] Yamazaki, Y., G. Soares, and J. Matzka (2022), Geomagnetic Detection of the Atmospheric Acoustic Resonance at 3.8 mHz During the Hunga Tonga Eruption Event on 15 January 2022, *J. Geophys. Res.*, **127**(7), e30540, [10.1029/2022JA030540](https://doi.org/10.1029/2022JA030540).
- [459] Yang, H.-F., G.-Q. Zhao, H.-Q. Feng, G. Pi, Q. Liu, L. Xiang, and Q.-H. Li (2022), A Study on Low Frequency Electromagnetic Cyclotron Waves in the Solar Wind, *Res. Astron. Astrophys.*, **22**(6), 065007, [10.1088/1674-4527/ac67bc](https://doi.org/10.1088/1674-4527/ac67bc).
- [460] Yao, X., P. A. Muñoz, and J. Büchner (2022), Non-thermal electron velocity distribution functions due to 3D kinetic magnetic reconnection for solar coronal plasma conditions, *Phys. Plasmas*, **29**(2), 022104, [10.1063/5.0061151](https://doi.org/10.1063/5.0061151).
- [461] Yao, Y., A. Y. Q. Ho, P. Medvedev, A. J. Nayana, D. A. Perley, S. R. Kulkarni, P. Chandra, S. Sazonov, M. Gilfanov, G. Khorunzhev, D. K. Khatami, and R. Sunyaev (2022), The X-Ray and Radio Loud Fast Blue Optical Transient AT2020mrf: Implications for an Emerging Class of Engine-driven Massive Star Explosions, *Astrophys. J.*, **934**(2), 104, [10.3847/1538-4357/ac7a41](https://doi.org/10.3847/1538-4357/ac7a41).
- [462] Yardley, S. (2022), The unknown origins of solar energetic particles, *Astron. Geophys.*, **63**(3), 3.28–3.31, [10.1093/astrokeo/atac038](https://doi.org/10.1093/astrokeo/atac038).
- [463] Yardley, S. L., L. M. Green, A. W. James, D. Stansby, and T. Mihailescu (2022), The Magnetic Field Environment of Active Region 12673 That Produced the Energetic Particle Events of September 2017, *Astrophys. J.*, **937**(2), 57, [10.3847/1538-4357/ac8d69](https://doi.org/10.3847/1538-4357/ac8d69).

List of Refereed Publications
Wind Spacecraft: 2022

- [464] Yermolaev, Y. I., I. G. Lodkina, A. A. Khokhlachev, M. Y. Yermolaev, M. O. Riazantseva, L. S. Rakhmanova, N. L. Borodkova, O. V. Sapunova, and A. V. Moskaleva (2022), Dynamics of Large-Scale Solar-Wind Streams Obtained by the Double Superposed Epoch Analysis: 5. Influence of the Solar Activity Decrease, *Universe*, **8**(9), 472, [10.3390/universe8090472](https://doi.org/10.3390/universe8090472).
- [465] Yermolaev, Y. I., I. G. Lodkina, A. A. Khokhlachev, and M. Y. Yermolaev (2022), Peculiarities of the Heliospheric State and the Solar-Wind/Magnetosphere Coupling in the Era of Weakened Solar Activity, *Universe*, **8**(10), 495, [10.3390/universe8100495](https://doi.org/10.3390/universe8100495).
- [466] Yin, Z.-F., X.-Z. Zhou, Z.-J. Hu, C. Yue, Q.-G. Zong, Y.-X. Hao, Z.-Y. Liu, X.-R. Chen, L. Li, S.-Y. Fu, H. O. Funsten, and J. W. Manweiler (2022), Localized Excitation of Electromagnetic Ion Cyclotron Waves From Anisotropic Protons Filtered by Magnetic Dips, *J. Geophys. Res.*, **127**(6), e30531, [10.1029/2022JA030531](https://doi.org/10.1029/2022JA030531).
- [467] Yogesh, D. Chakrabarty, and N. Srivastava (2022), A holistic approach to understand helium enrichment in interplanetary coronal mass ejections: new insights, *Mon. Not. Roy. Astron. Soc.*, **513**(1), L106–L111, [10.1093/mnrasl/slac044](https://doi.org/10.1093/mnrasl/slac044).
- [468] Yoon, P. H., M. Sarfraz, Z. Ali, C. S. Salem, and J. Seough (2022), Proton cyclotron and mirror instabilities in marginally stable solar wind plasma, *Mon. Not. Roy. Astron. Soc.*, **509**(4), 4736–4744, [10.1093/mnras/stab3286](https://doi.org/10.1093/mnras/stab3286).
- [469] Younas, W., M. Khan, C. Amory-Mazaudier, and P. O. Amaechi (2022), Ionospheric Response to the Coronal Hole Activity of August 2020: A Global Multi-Instrumental Overview, *Space Weather*, **20**(12), e2022SW003176, [10.1029/2022SW003176](https://doi.org/10.1029/2022SW003176).
- [470] Yu, W., N. Al-Haddad, C. J. Farrugia, N. Lugaz, F. Regnault, and A. Galvin (2022), Investigating the Asymmetry of Magnetic Field Profiles of “Simple” Magnetic Ejecta through an Expansion-modified Flux Rope Model, *Astrophys. J.*, **937**(2), 86, [10.3847/1538-4357/ac88c3](https://doi.org/10.3847/1538-4357/ac88c3).
- [471] Zhai, H., H. Fu, Z. Huang, and L. Xia (2022), Charge States, Helium Abundance, and FIP Bias of the Interplanetary CMEs Classified by Flares and Hot Channels, *Astrophys. J.*, **928**(2), 136, [10.3847/1538-4357/ac56e4](https://doi.org/10.3847/1538-4357/ac56e4).
- [472] Zhang, D., Q.-H. Zhang, Y. Z. Ma, K. Oksavik, L. R. Lyons, Z.-Y. Xing, M. Hairston, Z. X. Deng, and J. J. Liu (2022), The Dependence of Cold and Hot Patches on Local Plasma Transport and Particle Precipitation in Northern Hemisphere Winter, *Geophys. Res. Lett.*, **49**(12), e98671, [10.1029/2022GL098671](https://doi.org/10.1029/2022GL098671).
- [473] Zhang, D., W. Liu, J. Du, Y. Yu, X. Li, T. E. Sarris, and J. Cao (2022), Response of Electric Field in Terrestrial Magnetosphere to Interplanetary Shock, *Astrophys. J.*, **938**(1), 70, [10.3847/1538-4357/ac90cc](https://doi.org/10.3847/1538-4357/ac90cc).
- [474] Zhang, L.-L., L.-P. Xin, J. Wang, X.-H. Han, D. Xu, Z.-P. Zhu, C. Wu, J.-Y. Wei, and E.-W. Liang (2022), Photometric and Spectroscopic Observations of GRB 210104A: Bright Reverse-shock Emission and Dense Circumburst Environment, *Astrophys. J.*, **941**(1), 63, [10.3847/1538-4357/aca08f](https://doi.org/10.3847/1538-4357/aca08f).

List of Refereed Publications
Wind Spacecraft: 2022

- [475] Zhang, W., Y. Nishimura, B. Wang, K. J. Hwang, M. D. Hartinger, E. F. Donovan, V. Angelopoulos, and D. Hampton (2022), Identifying the Structure and Propagation of Dawnside Pc5 ULF Waves Using Space-Ground Conjunctions, *J. Geophys. Res.*, **127**(12), e2022JA030473, [10.1029/2022JA030473](https://doi.org/10.1029/2022JA030473).
- [476] Zhang, Y., Q. Zhang, D. Song, S. Li, J. Dai, Z. Xu, and H. Ji (2022), Statistical Analysis of Circular-ribbon Flares, *Astrophys. J. Suppl.*, **260**(1), 19, [10.3847/1538-4365/ac5f4c](https://doi.org/10.3847/1538-4365/ac5f4c).
- [477] Zhang, Y., T. Sun, C. Wang, L. Ji, J. A. Carter, S. Sembay, D. Koutroumpa, Y. D. Liu, G. Liang, W. Liu, W. Sun, and X. Zhao (2022), Solar Wind Charge Exchange Soft X-Ray Emissions in the Magnetosphere during an Interplanetary Coronal Mass Ejection Compared to Its Driven Sheath, *Astrophys. J. Lett.*, **932**(1), L1, [10.3847/2041-8213/ac7521](https://doi.org/10.3847/2041-8213/ac7521).
- [478] Zhang, Y., L. J. Paxton, R. Schaefer, and W. H. Swartz (2022), Thermospheric Conditions Associated With the Loss of 40 Starlink Satellites, *Space Weather*, **20**(10), e2022SW003168, [10.1029/2022SW003168](https://doi.org/10.1029/2022SW003168).
- [479] Zhang, Y., K. A. Firoz, W. Gan, Y. Li, and H. Jia (2022), A Study of the Possible Mechanism of the Ground Level Enhancement on 28 October 2021, *Solar Phys.*, **297**(12), 155, [10.1007/s11207-022-02087-1](https://doi.org/10.1007/s11207-022-02087-1).
- [480] Zhao, A., Y. Wang, H. Feng, L. Cheng, X. Li, Q. Cai, H. Li, and G. Zhao (2022), The Radial Evolution of Magnetic Clouds From Helios to Ulysses, *Astrophys. J.*, **931**(1), 55, [10.3847/1538-4357/ac69c8](https://doi.org/10.3847/1538-4357/ac69c8).
- [481] Zhao, G. Q., Y. Lin, X. Y. Wang, H. Q. Feng, D. J. Wu, and J. C. Kasper (2022), Two Correlations with Enhancement Near the Proton Gyroradius Scale in Solar Wind Turbulence: Parker Solar Probe (PSP) and Wind Observations, *Astrophys. J.*, **924**(2), 92, [10.3847/1538-4357/ac3747](https://doi.org/10.3847/1538-4357/ac3747).
- [482] Zhao, P.-W., Q.-W. Tang, Y.-C. Zou, and K. Wang (2022), Detection of a Prompt Fast-variable Thermal Component in the Multipulse Short Gamma-Ray Burst 170206A, *Astrophys. J.*, **929**(2), 179, [10.3847/1538-4357/ac6176](https://doi.org/10.3847/1538-4357/ac6176).
- [483] Zhao, S. Q., H. Yan, T. Z. Liu, M. Liu, and H. Wang (2022), Multispacecraft Analysis of the Properties of Magnetohydrodynamic Fluctuations in Sub-Alfvénic Solar Wind Turbulence at 1 au, *Astrophys. J.*, **937**(2), 102, [10.3847/1538-4357/ac822e](https://doi.org/10.3847/1538-4357/ac822e).
- [484] Zhao, X. X., Q. G. Zong, J. J. Liu, C. Yue, X. Z. Zhou, Y. X. Hao, X. R. Chen, D. Y. Klimushkin, A. V. Rubtsov, J. B. Blake, S. G. Claudepierre, and G. D. Reeves (2022), Normal- and Reversed-Boomerang Stripes on Electron Pitch Angle Distributions: Solar Wind Dynamic Pressure Effect, *Geophys. Res. Lett.*, **49**(2), e96526, [10.1029/2021GL096526](https://doi.org/10.1029/2021GL096526).
- [485] Zhao, Y., L. Yan, Z. Yao, Y. Wei, R. Guo, H. Lai, and B. Zhang (2022), Auroral responses to the visit of comet 73P/Schwassmann-Wachmann 3 in 2006, *Geosci. Lett.*, **9**(1), 36, [10.1186/s40562-022-00245-8](https://doi.org/10.1186/s40562-022-00245-8).

List of Refereed Publications
Wind Spacecraft: 2022

- [486] Zhou, Y.-L., and H. Lühr (2022), Initial Response of Nightside Auroral Currents to a Sudden Commencement: Observations of Electrojet and Substorm Onset, *J. Geophys. Res.*, **127**(4), e30050, [10.1029/2021JA030050](https://doi.org/10.1029/2021JA030050).
- [487] Zhou, Z., X. Xu, P. Zuo, Y. Wang, Q. Xu, Y. Ye, J. Wang, M. Wang, Q. Chang, X. Wang, and L. Luo (2022), Evidence for Plasma Heating at Thin Current Sheets in the Solar Wind, *Astrophys. J. Lett.*, **924**(2), L22, [10.3847/2041-8213/ac4701](https://doi.org/10.3847/2041-8213/ac4701).
- [488] Zhu, Q., G. Lu, A. Maute, Y. Deng, and B. Anderson (2022), Assessment of Using Field-Aligned Currents to Drive the Global Ionosphere Thermosphere Model: A Case Study for the 2013 St Patrick's Day Geomagnetic Storm, *Space Weather*, **20**(9), e2022SW003170, [10.1029/2022SW003170](https://doi.org/10.1029/2022SW003170).
- [489] Zhuang, B., N. Lugaz, M. Temmer, T. Gou, and N. Al-Haddad (2022), Acceleration and Expansion of a Coronal Mass Ejection in the High Corona: Role of Magnetic Reconnection, *Astrophys. J.*, **933**(2), 169, [10.3847/1538-4357/ac75d4](https://doi.org/10.3847/1538-4357/ac75d4).
- [490] Zirnstein, E. J., T. K. Kim, M. A. Dayeh, J. S. Rankin, D. J. McComas, and P. Swaczyna (2022), Explanation of Heliospheric Energetic Neutral Atom Fluxes Observed by the Interstellar Boundary Explorer, *Astrophys. J. Lett.*, **937**(2), L38, [10.3847/2041-8213/ac92e2](https://doi.org/10.3847/2041-8213/ac92e2).
- [491] Zirnstein, E. J., B. L. Shrestha, D. J. McComas, M. A. Dayeh, J. Heerikhuisen, D. B. Reisenfeld, J. M. Sokół, and P. Swaczyna (2022), Oblique and rippled heliosphere structures from the Interstellar Boundary Explorer, *Nature Astron.*, **6**, 1398–1413, [10.1038/s41550-022-01798-6](https://doi.org/10.1038/s41550-022-01798-6).