

# Susanta Kumar Bisoi

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## Research Publications

### Refereed Journals

1. 2020: Korsos, M.B., Georgoulis, M.K., Gyenge, N., **Bisoi, S.K.**, Yu, S., Poedts, S., Nelson, C.J., Liu, J., Yan, Y. and Erdelyi, R., *ApJ*, 896 (2), 119.
2. 2019: **Bisoi, S. K.** and Janardhan, P., "A new tool for predicting the solar cycle: Correlation between flux transport at the equator and the poles", *Solar Physics*, 295 (79).
3. 2019: **Bisoi, S. K.**, Janardhan, P., and Ananthakrishnan, S. "Another mini-solar maximum in the offing: The prediction for the amplitude of solar cycle 25", *J. Geophysical Research (Space Physics)*, 125, e2019JA027508.
4. 2019: Sasikumar Raja, K., Janardhan, P., **Bisoi, S.K.**, Ingale, M., Subramanian, P., Fujiki, K. and Maksimovic, M., "Global solar magnetic field and interplanetary scintillation during the past four solar cycles", *Solar Physics*, 294, 123.
5. 2019: M. Ingale, Janardhan P. and **Bisoi, S.K.**, "Beyond the mini-solar maximum of solar cycle 24: Declining solar magnetic fields and the response of the terrestrial magnetosphere", *J. Geophysical Research (Space Physics)*, 124, 6363-6383.
6. 2019: Huang, H., Tan, B., Masuda, S., Cheng, X., **Bisoi, S.K.** and Melnikov, V., "Localized Microwave and EUV Bright Structures in an Eruptive Prominence", *ApJ*, 874 (2), 9.
7. 2018: Janardhan, P., Fujiki, K., Ingale, M., **Bisoi, S.K.** and Rout, D., "Solar Cycle 24: An Unusual Polar Field Reversal", *Astronomy & Astrophysics*, 618, A148.
8. 2018: **Bisoi S.K.**, Sawant, H. S., Janardhan, P., Yan, Y., Chen, L., Awasthi, A. K., Srivastava, S., and Gao, G., "Decimetric emission 500" away from a flaring site: Possible scenarios from GMRT solar radio observations", *ApJ*, 862 (1), 65-79.

9. 2017: Rastogi, R.G., Chandra, H., Janardhan, P., Reinisch, B.W., and **Bisoi, S.K.**, "Post sunset equatorial spread-F at Kwajalein and interplanetary magnetic field", *Advances in Space Research*, 60 (8), 1708-1715.
10. 2016: **Bisoi, S.K.**, Chakrabarty, D., Janardhan, P., Rastogi, R.G., Yoshikawa, A., Fujiki, K., Tokumaru, M. and Yan, Y., "The prolonged southward IMF-Bz event of 2-4 May 1998: Solar, interplanetary causes and geomagnetic consequences", *J. Geophysical Research (Space Physics)*, 121, 1-23.
11. 2015: Janardhan, P., **Bisoi, S.K.**, Ananthakrishnan, S., Sridharan, R., and Jose, L., "Solar and interplanetary signatures of a Maunder-like grand solar minimum around the corner: Implications to near-earth space", *Sun and Geosphere*, 10 (2), 147-156.
12. 2015: Janardhan, P., **Bisoi, S.K.**, Ananthakrishnan, S., Tokumaru, M., Fujiki, K., Jose, L., and Sridharan, R., "A 20 Years Decline in Solar Photospheric Magnetic Fields: Inner-Heliospheric Signatures and Possible Implications?", *J. Geophysical Research (Space Physics)*, 120, 5306-5317.
13. 2014: **Bisoi, S.K.**, Janardhan, P., Ingale, M., Subramanian, P., Ananthakrishnan, S., Tokumaru, M., and Fujiki, K., "A study of density modulation index in the inner heliospheric solar wind during solar cycle 23", *ApJ*, 795, 69.
14. 2014: **Bisoi, S.K.**, Janardhan, P., D. Chakrabarty, Ananthakrishnan, S., and Divekar, A., "Changes in quasi-periodic variations of solar photospheric fields: precursor to the deep solar minimum in the cycle 23? *Solar Physics*", 289 (1), 41-61.
15. 2011: **Bisoi, S.K.**, C.H. Ishwara-Chandra, S.K. Sirothia, and Janardhan, P., "Deep GMRT 150 MHz Observations of the DEEP2 fields: Searching for High Red-shift Radio Galaxies Revisited", *J. Astrophysics & Astronomy*, 32, 613-614.
16. 2011: Janardhan, P., **Bisoi, S.K.**, Ananthakrishnan, S., Tokumaru, M. and Fujiki, K., "The prelude to the deep minimum between solar Cycles 23 and 24: Interplanetary Scintillation signatures in the inner heliosphere", *Geophysical Research Letters*, 38, L20108.
17. 2010: Janardhan, P., **Bisoi, S.K.**, and Gosain, S., "Solar Polar Fields During Cycles 21-23: Correlation with Meridional Flows", *Solar Physics*, 267, 267—277.
18. 2010: Rastogi, R.G., Janardhan, P., Ahmed, K., Das, A.C., and **Bisoi, S.K.**, "Unique observations of a geomagnetic SI<sup>+</sup> - SI<sup>-</sup> pair: Solar sources and associated solar wind fluctuations", *J. Geophysical Research (Space Physics)*, 115, A12110.

## Conference Proceedings

1. 2019: **Bisoi S.K.** and Janardhan, P., "Solar polar fields during cycle 24: An unusual polar field reversal", *Proceedings of the URSI Asia Pacific Radio Science Conference*.  
<https://doi.org./10.23919/URSIAP-RASC.2019.8738457>
2. 2019: **Bisoi S.K.**, Yan, Y., Chen, L. and Janardhan, P., "High resolution imaging of coronal Type III bursts: First MUSER solar radio observations", *Proceedings of the URSI Asia Pacific Radio Science Conference*.  
<https://doi.org./10.23919/URSIAP-RASC.2019.8738309>
3. 2019: **Bisoi S.K.**, Sawant, H. S., Janardhan, P., Yan, Y., Chen, L. and Awasthi, A. K., "A decimetric radio source 500" away from a flaring site: Possible scenarios from GMRT solar radio observations", *Proceedings of the URSI Asia Pacific Radio Science Conference*. <https://doi.org./10.23919/URSIAP-RASC.2019.8738726>
4. 2018: Koroso, M. B., Poedts, S., Gyenge, N., Georgoulis, M. K., Yu, S., **Bisoi, S.K.**, Yan, Y., Ruderman, M. S. and Erdelyi, R., "On the evolution of pre-flare patterns of a 3-dimensional model of AR 11429", *Proceedings of the IAU Symposium*, 335, 294-297.  
<https://doi.org./10.1017/S1743921317010432>
5. 2018: Janardhan, P., Fujiki, K., Ingale, M., **Bisoi, S.K.** and Ananthakrishnan, S., "Long term trends in solar photospheric fields and solar wind turbulence levels: Implications to the near-Earth space", *Proceedings of the IAU Symposium*, 340, 121-124.  
<https://doi.org/10.1017/S1743921318001710>
6. 2016: Janardhan, P., **Bisoi, S.K.** and Ananthakrishnan, S., "A 20 year decline in solar magnetic fields and solar wind microturbulence levels: Are we heading towards a Maunder like minimum", *Proceedings of the URSI Asia Pacific Radio Science Conference*, 1079-1082. <https://doi.org/10.1109/URSIAP-RASC.2016.7601383>
7. 2015: Janardhan, P., **Bisoi, S.K.** and Ananthakrishnan, S., "Declining solar polar fields and their signatures in the solar wind: Implications to near earth space", *Proceedings of the URSI Atlantic Radio Science Conference*.  
<https://doi.org/10.1109/URSI-AT-RASC.2015.7303180>
8. 2014: **Bisoi, S.K.**, Janardhan, P. and S. Ananthakrishnan, "Decline in solar polar magnetic fields and heliospheric microturbulence levels: Are we headed towards a Maunder minimum?", *Proceedings of the 40<sup>th</sup> URSI*, 1-4.  
<https://doi.org/10.1109/URSIGASS.2014.6930042>

9. 2014: **Bisoi, S.K.**, C.H. Ishwara-Chandra, S.K. Sirothia, Pal, S., and Janardhan, P., "High Red-shift Radio Galaxies from DEEP2 fields", *Proceedings of ASI Conference Series*, 13, 123-126.
10. 2013: **Bisoi, S.K.**, and Janardhan, P., "Observations of a geomagnetic  $\text{SI}^+$  -  $\text{SI}^-$  pair and associated solar wind fluctuations", *Proceedings of the IAU*, 294, 543-544.
11. 2013: **Bisoi, S.K.**, and Janardhan, P., "Peculiar behavior of solar polar fields during solar cycles 21-23: Correlation with meridional flow speed", *Solar and Astrophysical Dynamos and Magnetic Activity*, *Proceedings of the IAU*, 294, 81-82.
12. 2013: **Bisoi, S.K.**, and Janardhan, P., "Interplanetary scintillation signatures in the inner heliosphere of the deepest solar minimum in the past 100 years", *Proceedings of the IAU*, 294, 83-84.
13. 2013: **Bisoi, S.K.**, and Janardhan, P., "Asymmetry in the periodicities of solar photospheric fields: A probe to the unusual solar minimum prior to cycle 24", *Proceedings of the IAU*, 294, 85-86.