

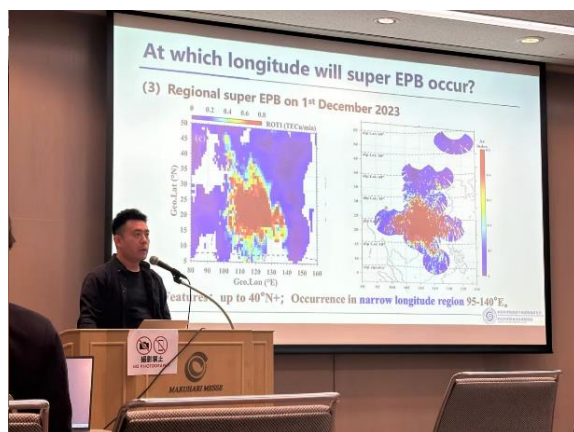
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**Report on my academic visit to Kyoto University for collaborative research on ionospheric irregularities.**

Under the support of the PBASE program, I was able to visit Kyoto University and spent about 46 days in Japan to conduct collaborative researches on ionospheric irregularities with Prof. Yokoyama. I joined the group of Prof Yokoyama from 16<sup>th</sup> April to 31<sup>th</sup> May 2025, during which I stayed in Uji Campus until 24<sup>th</sup> May and then attended the JPGU conference in Tokyo in the last week.

During my stay in Uji, I have had intensive discussion with Prof. Yokoyama on different types of ionospheric irregularities, including ionospheric plasma bubbles, E-region irregularities and valley-region irregularities. We also talked about the possibility of conducting further collaboration on super plasma bubbles and/or K-H structures by combining observations and simulations. It is also nice to meet Dr. Ajith, Dr. Huang Chun Yen and Dr. Sori in Uji Campus and have some wonderful discussions with them. On 16<sup>th</sup> May, at the invitation of Prof. Yokoyama, I had the opportunity to make a presentation titled “The spatial features of Es and E-region irregularities based on the IONISE network” inside the group. In the presentation, I reported some of our recent studies on large-scale strong Es structures by using GNSS TEC observations around China and E-region irregularities by using all-sky radars. After the presentation, the researchers inside the group showed interest in how the band-like strong Es structures are generated and drift, and provided many nice suggestions which could be useful in my future studies.



On 24<sup>th</sup> May, I departed from Uji to Tokyo to attend the JPGU conference for my first time. During the conference, I met many friends, both old friends and new friends, and had great discussions on different topics with them. The presentations and posters during multiple sessions are interesting, from which I learned a lot. During the session convened by Prof. Yamamoto, I made the report titled “Super plasma bubbles and associated structures during geomagnetic storms”, which

is mainly about the plasma bubbles extending to middle latitudes that are termed as super bubbles, and the associated super blob-like structures during strong magnetic storms.

In summary, the visit to Kyoto University is a wonderful and interesting experience for me, which is inspiring for my research career. I am very grateful to Prof. Yokoyama for providing this great opportunity to me and hope to conduct further collaboration on multiple topics in the near future.