Cause of amateur radio failure in meteor radio observation and its substitution

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We observe radio waves of meteors using radio waves of the VHF omnidirectional radio signal VOR and radio waves of the amateur radio HRO. However, in the HRO we used conventionally, a large increase in meteor showers did not show a significant increase in the number of detections. Therefore, I tried to find out the cause of such a thing and did this research.

It was hypothesized that natural factors such as topography and the output of HRO radio waves and VOR radio waves might be different.

The VOR radio waves we use are from Asahikawa Airport. The radio waves of HRO are from Fukui Industrial High School in Sabae City, Fukui Prefecture.

The results were not examined in detail for the output. In addition, we did not obtain well-founded concrete data on natural factors. Therefore, as a future subject, I would like to carry out a control experiment of Komatsu Airport VOR and HRO where the distance and direction can be aligned.

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