

MUSER OBSERVATION AND JOINT STUDY WITH SRH

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MUSER (MingantU SpEctral Radioheliograph) in China is composed of three arrays with MUSER-L covers 30–400 MHz with 224 LPDAs, MUSER-I covers 0.4–2.0 GHz with 40 mesh antennae and MUSER-II covers 2–15 GHz with 60 dish antennae. They have observed hundreds of radio burst events since 2023. The totally datasize are more than 3 Petabyte. The SRH (Siberian Radioheliograph) in Russia is in the radio range of 3–24 GHz. It is composed of three arrays with SRH-low covers 3–6 GHz with 129 dish antennae, SRH-mid covers 6–12 GHz with 192 dish antennae, and SRH-high covers 12–24 GHz with 207 dish antennae. Both MUSER and SRH are with high spatial and temporal resolution at many frequencies simultaneously. And they can observe solar flares almost simultaneously since in the very closest time zone. One of the proposed collaboration are going to joint analyze in detail several common view solar flares, and determining the radio flux, peak frequency, spectral or spatial characteristic and there is a relationship with solar activities. This work will introduce globally the observation of MUSER, the result of searching for common view events with the MUSER and SRH, the spectral and spatial analysis of a few common view events as examples. This will be helpful in the study of Solar-Terrestrial space weather in wide radio spectral range of 30 MHz – 24 GHz.