Commission H - "Radio Science for Space Weather Science and Operations"

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Space Weather perturbations are triggered by plasma processes that occur at the originating sources, e.g. magnetic reconnection causing heating, particle and plasmoid accelerations. Further plasma processes occur during propagation through the interplanetary medium where shocks and particle beams form. Finally, a wealth of processes occur through interaction with planetary magnetospheres and ionospheres. All these processes are characterised by radio emissions specific to each plasma process. Hence, radio science represents a key investigative tool for space weather phenomena including triggering, propagation and interaction. Radio physics and radio instrumentation are conceptual and experimental tools, respectively, which are needed to provide a complete analysis framework. This session is open to contributions both on radio physics for the advancement of science underpinning space weather phenomena, and for radio physics for the advancement of space weather operations, i.e., applied to space weather phenomena detection, characterisation, analysis and forecasting, as well as to ongoing and planned projects for space- and ground-based radio studies in this field.