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Poster
Solar minimum is not a single point in time but rather an extended period of low solar activity when the old and new cycle operate on the Sun. I use magnetic field and sunspot observations from HMI to study the latitudinal distribution of magnetic flux on the Sun and the transition from cycle 24 to 25 in the 2017-2021 time period. Current spot areas data are not accurate enough to study the evolution of small groups during time of low solar activity. I developed a code to derive sunspot area from the HMI pseudo-continuum images that allows to accurately detect small spots and pores, which are common during the time of minimum. I compare the HMI areas with existing datasets to demonstrate the advantage of high spatial resolution space data to measure spots, especially during times of low solar activity. The sunspot and magnetic observations from HMI show a long overlap between the two cycles during the recent minimum when both cycles coexist on the Sun but a quick transition when the new cycle 25 becomes the dominant one.
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