Kikuchi, K., 2021: The Boreal summer intraseasonal oscillation (BSISO): A review. J. Meteor. Soc. Japan, **99**, 933-972.
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Plain Language Summary:

The tropical intraseasonal oscillation (ISO) is one of the most pronounced atmospheric variability in the tropics. The ISO is characterized by a slowly eastward moving convective envelope along the equator from the Indian Ocean to the western Pacific that tends to recur with an interval of 30-90 days. Within the envelope, a variety of organized mesoscale convective systems develop. Although the ISO is pronounced throughout the year, it exhibits a significant seasonal cycle. The ISO during boreal winter, often referred to as the Madden-Julian oscillation, displays the simple eastward propagating feature mentioned above. In contrast, the ISO during boreal summer, referred to here as the boreal summer ISO (BSISO), displays more complicated propagation features: in addition to the eastward propagation, northward propagation of the convective envelope over the Northern Indian Ocean and the western North Pacific is pronounced. It exerts a strong influence on a broad range of tropical weather and climate phenomena such as tropical cyclogenesis, monsoon onset and active/break cycles, among others. There are many review articles on the MJO, whereas there are few, if any, review articles on the BSISO to the author's knowledge. This paper attempts to provide an up-to-date review on some of the fundamental aspects of the BSISO from the viewpoint of observation, theory, and modeling.

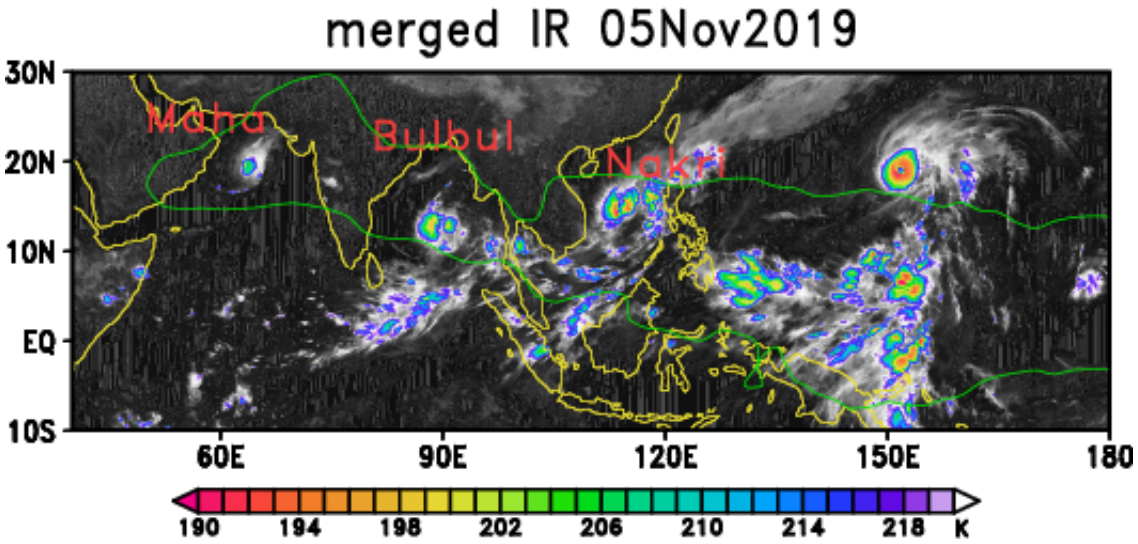

Figure 1. A snapshot of merged IR on 5 November, 2019. One of a recent significant BSISO event. Three tropical cyclones were formed in association with this event. Maha in the Arabian Sea, Bulbul in BOB, and Nakri in the SCS. At this time, Maha had weakened, Matmo and Nakri are in TC strength. A rough outline of the BSISO convective envelope is shown by solid green line.

- This paper provides an up-to-date review on some of the fundamental aspects of the BSISO from the viewpoint of observation, theory, and modeling.
- Observational aspects of the BSISO are described in a consistent manner based on the BSISO index of the bimodal ISO index (Kikuchi et al., 2012; Kikuchi 2020).