The Indian summer monsoon onset has attracted a lot of attention because it heralds the beginning of the rainy season in India. The mathematicians look at onset from the point of view of internal instability in a system (tipping point) while physicists highlight the synergy between large scale circulation and moist static energy buildup. One view is based on aggregation of small-scale turbulence, the other is built upon shift in organized synoptic condition.

Similar disparity in theory remains regarding decadal changes of monsoon onset date. While some studies state that monsoon onset over Kerala had been advanced due to atmospheric heating by aerosols, some other studies point out a delay of onset dates on account of regime shift in the Pacific climate.

Despite such differences, there have been several advances in our understanding of monsoon onset and the skill of prediction by dynamical as well as statistical models. Recent research has focused on the onset of monsoon over the entire country and address the physical mechanism driving spatial variations in the onset dates. Hence it is a good time to review our understanding of summer monsoon onset over India and Asia and its prediction.

Abstract submissions open till 31st May 2019. Submit to: monsoon.workshop.iisc@gmail.com

Convenors: J. Srinivasan (DCCC) and A. Chakraborty (Centre for Atmospheric and Oceanic Sciences)