

Earth Syst. Sci. Data Discuss., author comment AC2
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Reply on RC4

Munir Ahmad Nayak et al.

Author comment on "ERA5-based database of Atmospheric Rivers over Himalayas" by
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We have also added more information in the revised manuscript (Data Section) to justify the choice of 6-hour temporal resolution. The text there reads as:

"The 6-hourly interval is chosen for four main reasons 1.) it is a common denominator among AR detection algorithms using atmospheric reanalysis datasets (Brands et al., 2017; Bin Guan & Waliser, 2015; Mundhenk et al., 2016; Rutz et al., 2014), 2) it provides sufficient temporal information on AR events and captures the gradual changes of AR characteristics (Nash & Carvalho, 2020; Ramos et al., 2015), 3.) many studies have found minor differences in ARs based on differing the temporal resolutions (Guan & Waliser, 2015, 2017; Rutz et al., 2014; Shields et al., 2018), and 4.) as compared to 1-hourly data, it is easily-manageable on a desktop machine with small random access memory (RAM), while marginally compromising on the extent of information available on AR characteristics."