

## ***Interactive comment on “Comment: Getting the Methodology Wrong for Analysing the Hydrological Changes in Watersheds” by Nitin Bassi et al.***

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Received and published: 18 May 2018

The HESS commentary clearly violates HESS policy that criticisms should be scientific and not personal. The commentary lacks scientific rigor, and is not only personal, but insulting and vitriolic.

As an example of the lack of scientific rigor, Penny et al (2018) states "Trend analysis of the 62 rain gauges in the watershed showed that there were no statistically significant trends in rainfall at the whole watershed (see Fig. S10), subwatershed (not shown), or tank cluster (see Fig. S11) scales"

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Bassi et al.'s comment on this is as follows

"Third, the authors state that there is no significant spatial variation in rainfall at the watershed scale and for this they seem to have used rain gauging data for several locations. This is false as the average annual rainfall for 15 years (1998-2013) in Arkavathy watershed, using India Meteorological Department (IMD) gridded rainfall data sets, shows significant spatial as well as temporal variation (Fig. 2)"

The figure they show as evidence does NOT seem to have any temporal trend, and they provide no statistical evidence (eg p value, slope) as evidence of trend. Instead they claim that the data shows "temporal variation". Of course, in a monsoonal climate, rainfall will have temporal variation. But that is different from saying that it has a temporal trend.

The commentary is replete with such fallacious examples, as others have pointed out also.

But, more important than the fallacy of the science here is the vitriolic attacks on the authors. For this reason, I would argue that the authors be asked to withdraw their paper, and it should be published in HESS discussion only if they can make their arguments in a respectful, non-personal and scientific manner

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Interactive comment on Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2018-187, 2018.

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