

## ***Interactive comment on “Trends in timing and magnitude of flow in the Upper Indus Basin” by M. Sharif et al.***

**Anonymous Referee #2**

Received and published: 15 October 2012

This paper assesses temporal trends in timing and magnitude of streamflow for 19 sites in the Upper Indus Basin. The paper makes good use of accepted statistical methods to analyse the data. The findings illustrate the intricacy of hydrology in the basin: for most variables there are significant increases at some sites, and significant decreases in others. For some variables, there are hardly any significant changes detected. I found the paper to be well-written and interesting. The analysis and interpretations are careful, and show evidence of considerable thought.

Below I have listed a few technical comments:

p9938: Discussion of changes in precipitation are very brief, and no comment is provided on the implications for stream flow (e.g. which sites showed an increase in winter

C4790

precipitation? which types of flow regimes would be most affected and how?). A figure on spatial distribution of precipitation changes would be useful in assisting interpretation of Fig 4.

p9939 "During the recent decade the Indus has experienced ..." Perhaps some references could be cited for the events listed here

p9945 "5.3 Trend in daily timing and magnitude variables" This section should refer the reader to the results in Table 4.

Table 4: Table caption or footnote should explain the column headed "p"

Table 5. The symbols and the meanings of values in this table are not very clear. The symbol AV is not defined - is it Annual Volume? Is the column headed "p" the significance level associated with the correlation coefficient?

Figure 1: the numbers on the map indicating gauging stations are difficult to read against the map details.

---

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 9, 9931, 2012.