

Interactive comment on “Gauging the ungauged basin: how many discharge measurements are needed?” by J. Seibert and K. Beven

J. Seibert and K. Beven

jan.seibert@geo.uzh.ch

Received and published: 8 May 2009

We appreciate this comment which for brought two related papers to our attention. These studies also clearly showed that a limited number of streamflow measurements can be very useful for constraining models. Compared to our study, the previous studies had the advantage of including many more catchments from different regions. On the other hand, concentrating on fewer catchments allowed us to test these in more detail (e.g., gaugings during different years). A major new contribution of our study is the use of a Monte Carlo approach resulting in an ensemble mean rather than calibration of a single parameter set.

As pointed out in the comment, we assume that one actually can measure on the day with, for instance, the highest runoff, while it in reality is difficult, if not impossible,

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper



to predict this day in advance. The results of our 'strategies' might therefore be too optimistic. In the future, this issue could be addressed by adding some prediction uncertainty in making decisions about which days to select for gauging.

The point about other hydrological regimes is well taken, we are aware that results will differ for other climatological conditions and will clarify this in the revised version of this manuscript.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 6, 2275, 2009.

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

