General comments:

This study mainly analyzed in detail the changes in of nonlinearity and stability of streamflow recession characteristics under climate warming induced by climate variation in the Yarlung-Zangbo River basin (YRB) in the Tibetan Plateau, and the spatial divergency of the impact of climate variation between five sub-basins in YRB. The authors did a very detailed research on streamflow recession characteristics changes in the YRB, and the manuscript was well-written and easy to follow. But there are still some problems to be improved. It is acceptable for publication after minor revisions.

Additional evidence, such as the changes in total days with the mean temperature above 0 °C in a hydrological year (or the recession period), to further testify to the changes in recession characteristics under climate warming. I believe these explanations could strengthen the manuscript quality.

Minor revisions recommended:

Line 291. Figure 4: The data points of -dQ/dt~Q are usually scattered to some extent as observation errors and other disturbance in stream and catchment. However, there are pretty concentrated and regular in figure 4. I guess the presented data points of -dQ/dt~Q are more likely extracted from fitted recession segments of Q~t instead of observed hydrograph. The data points of -dQ/dt~Q should be directly calculated from observed hydrograph.

Line 40. It is weird to put the spatial resolution and timescale of data in one column in Table 1. Another column for timescale of data is better.

Variable symbols should keep italic type throughout the manuscript.

The reference part should be further improved according to the demand of the HESS.