In this work, the authors examine the sensitivity of the simulated hydrological processes to three external factors: atmospheric forcing resolution, snow and soil moisture initial conditions (ICs), and the representation of soil texture. They find the simulated hydrological processes are primarily affected by the resolution of the atmospheric forcing, followed by snow ICs, and then the soil texture. The article is well written, and can provide guidance for distributed hydrological simulation in other (mountainous) river basins. I therefore suggest minor revisions.

Minor comments:

- 1. Page 4 line 27: Remove the extra period.
- 2. Page 11 line 6: The minima is obtained? Either singular or plural.
- 3. Page 13 line 26: Missed period after the bracket.