

Interactive comment on “A first investigation of hydrogeology and hydrogeophysics of the Maqu catchment in the Yellow River source region” by Mengna Li et al.

Anonymous Referee #2

Received and published: 28 December 2020

This study investigated the hydrogeology and hydrogeophysics in the Maqu catchment in the headwater area of the Yellow River Basin in the Tibetan Plateau. The investigation data can be useful for building hydrological models in the catchment to simulate the groundwater flow and potentially to understand interaction between surface-subsurface water as an example in the Tibetan Plateau with data-scarcity especially related to subsurface media processes. While, for final publication of the manuscript, minor revisions are suggested as follows.

Specific comments: -section 4.1: better to show the pictures of the core sediment - section 4.2: please discuss the potential reason for the different accuracy of the seven

C1

datasets. -section 4.3: are there any data, table or figure showing that the soil thicknesses increase from the mountain top to the slope bottom? -Table 5: better to include elevation information also -section 4.4.2: the equations should be described in section 3.

Technical corrections: -Line 148: change "the data was" to "the data were" -Figure 9: should "2019 water table depth (m)" be "hydraulic conductivity (m/d)"?

Interactive comment on Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2020-230>, 2020.

C2