The paper is well written, covers a large literature review in the hydrology field, but according to me completely fails in providing a convincing motivation of the hydrodynamic structure of the proposed model. More specifically:

1) It is not clear if the model is a 1D or a 2D model. Eq. (3) is the continuity equation of a 1D model, where the flow along the direction normal to direction xi is zero. The same holds for the momentum equation (4). If Eqs (3) and (4) hold for direction x1, they cannot hold for direction x2. On the other hand, authors adopt a regular structured grid, with grid size of 1 km.
2) I assume the water depth is updated at the new time level from the finite difference approximation of the continuity equation (3), but this is not discussed in the paper.
3) If Eq. (4) is the momentum equation along the xi direction of a 2D model, the 3rd resistance term on its l.h.s. must be written in the form:

$$\frac{gn^2 q_i \sqrt{q_i^2 + q_j^2}}{h^{7/3}},$$

   otherwise it depends on the grid orientation. If Eq. (4) is the momentum equation of a 1D model, the approximation of the hydraulic radius with the hydraulic depth is a very strong one, also because the channel width is a very arbitrary choice.

4) The choice of a zero convective inertia model should be discussed against other possible approximations. It is known that the error of the zero convective inertia model is larger than the error of the zero model ([1]-[4]). A trivial example is the front of a sharp shock wave, where the local inertia is positive, but the convective inertia is negative. In this case to neglect only one of the two components is worse than to neglect both.
   The advantage of the zero inertia model is that it allows an easy solution in the case of small water depths, but there are also other options that can be applied for fully diffusive models ([5]-[6]).
5) The authors carry on a sensitivity analysis of the model results for the choice of the Manning coefficient and of the channel width, but they should do the same also for the topographic elevation z. Because the adopted value, in each computational cell, is the mean elevation computed over a 1kmq area, I assume that both the averaging technique and the measurement error lead to a very large uncertainty.

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