Comment on hess-2022-275
Anonymous Referee #2

Referee comment on "Resistance parameters and permissible velocity from cohesive channels" by Jose Ramon Barros Cantalice et al., Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2022-275-RC2, 2022

- The creative and cutting-edge characteristic of this research should be much more emphasized in the conclusion and abstract.
- I recommend you should compare the empirical model in this research with the physical numerical simulation models.
- I think the sample number “n=16” (in figure 4 ~9) is too small to obtain the distinctive results, especially it comes to statistics.
- The unit “L”: Such as page 2, line 174, Q=545L/min, and also in page 10 line 246. Which does this “L” mean liter “l” or length of the channel “L”? It is very confusing.
- Figure 3 in page 13: You have to clarify the explanation of the lateral axis.
- Figure 4, the formula in this figure: Is “F” the resistance hydraulic “f”? You have to define it clearly.
- Figure 4, ~ 9, “n”: In those figures, I think the sample number “n=16” is too small to obtain the distinctive results. I think you have to make an effort to increase it.
- Table 4 ~6: You should explain the meaning of “a”, “ab”, and “c” in those tables. I think you should add the legend.
- Figure 9 in page 25: You should unify the expression of exponent such as “2â·0-05” and another expression “2â·10^-5”.
- P 28, equation (32): How was the evaluation result of equation (32)? You have to show the reader how much the critical index such as detective rate, success rate, correct rate or regression coefficient was.

Please, contemplate 10 comments above.