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Title: Granular flow-collisional regime

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Abstract: Laboratory investigation on a steady, uniform, highly concentrated saturated granular flow, composed of spheres with a uniform diameter of 6 mm. Example of collisional regime.

Bibliography:
[1] Armanini A., Capart H., Fraccarollo L., Larcher M., (2005), Rheological stratification in experimental free-surface of granular-liquid mixture, J. Fluid Mech., 532: 269-319.
[2] Larcher, M., Fraccarollo, L., Armanini, A., & Capart, H. (2007). Set of measurement data from flume experiments on steady uniform debris flows. Journal of Hydraulic Research, 45 (sup1), 59-71.
[3] Armanini, A., Larcher, M., Fraccarollo, L., (2009). Intermittency of rheological regimes in uniform liquid-granular flows. Phys. Rev. E 79, 051306.
[4] Armanini, A. (2013). Granular flows driven by gravity. J. Hydr. Research, 51(2), 111-120.