Supplementary Materials

Fig. 1s: Photographs showing different types and forms of mass sliding induced by Mila earthquake in El-Kherba district: a) solifluction lobes in Ain El Kaid city, b)E-W oriented transverse cracks developed upstream of the El-Kherba district , c) lateral tearing niche (escarpment oriented NW-SE of 800 m long and presents a shear plane inclined at 40° to the NE with a horizontal rejection of about 1,7 m) d) ground movement have reaveled Roman ruins at Chaabat Ain El Gaid. e) Total collapsed houses in the lower of El Kherba District due to confluence of 2 tearing niches (2 shear planes) f) Shearing and tiping of a construction due to the upstream soil's thrust.

Fig. 2s*:* Damages occurred at several location in the Mila Basin due to seismically induced landslide: a) and b) landslides affecting some sections of the southern and northern bypass of the city of Mila; c) Sliding at Ouled Bouhallouf valley; d) sliding at Segdal district; e) and f) damage of a primary and secondary school due to local sliding at Grarem city.

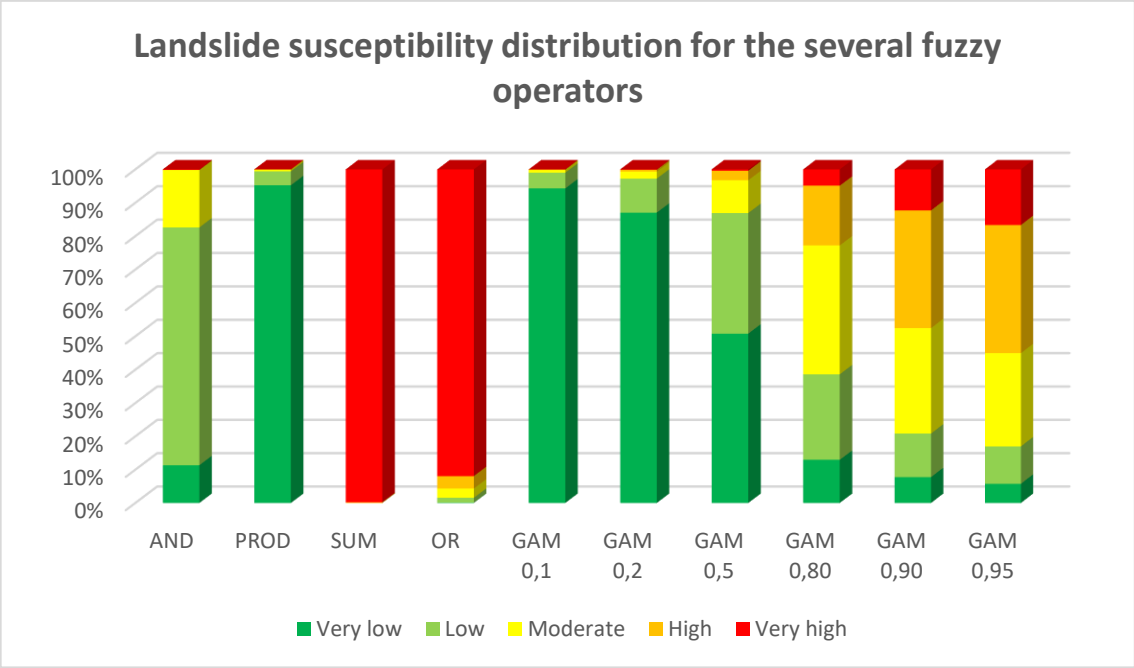

Fig.3s. Landslide susceptibility distribution for the several fuzzy operators

Table 1s: AUC score for the several fuzzy operators.

Fuzzy operator	AUC score (%)
AND	81.8
OR	94.3
Algebric Sum	96.9
Algebric product	97.1
Gamma operation	
γ=0.1	96.2
γ=0.2	91.3
γ=0.5	77.1
γ=0.8	83.1
γ=0.9	79.9
γ=0.95	82.1