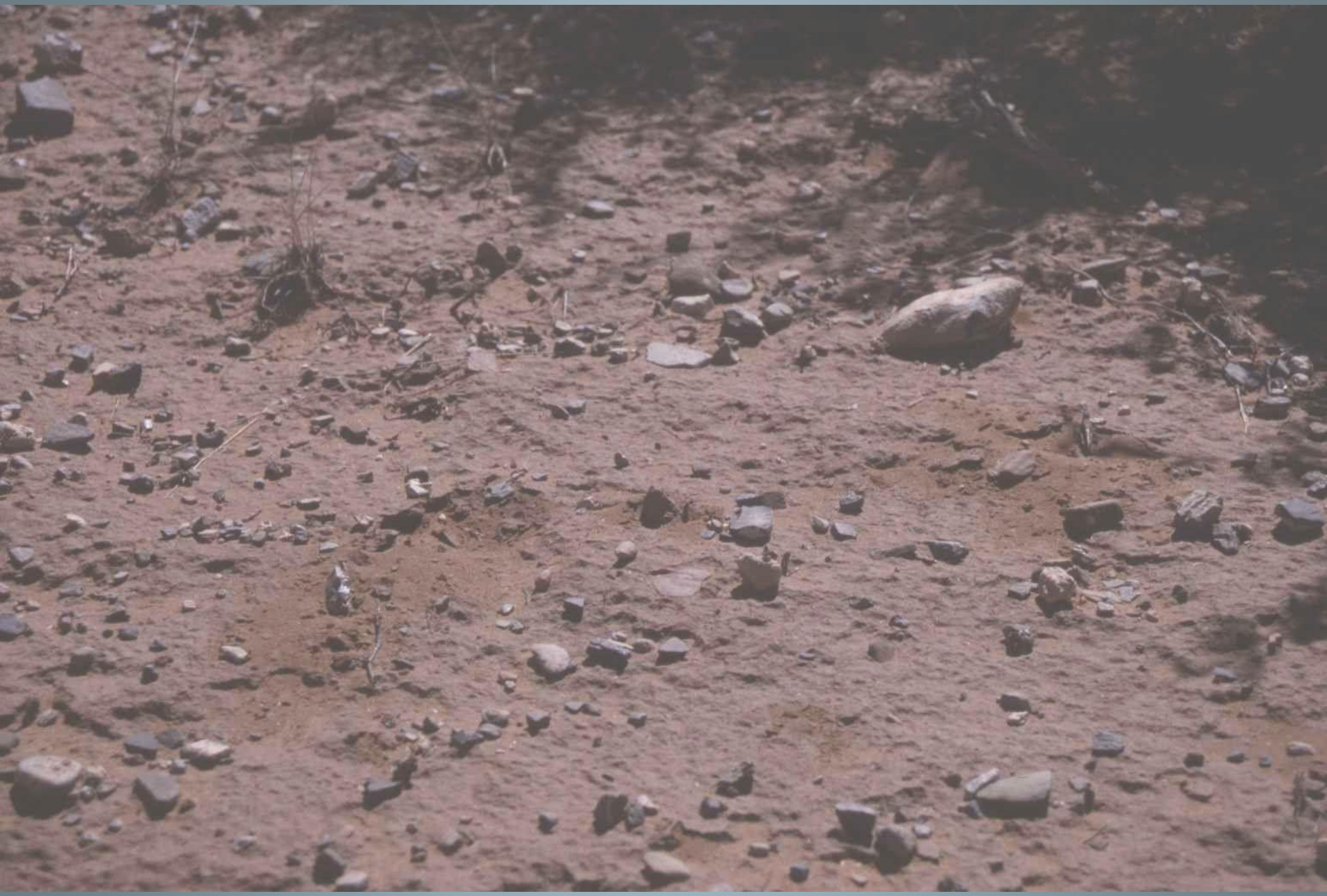
（剥離）
Sediment detachment by water

Splash Detachment and Transport

（スプラッシュ：飛沫）

EFFECTS OF ENERGY OF FALLING RAINDROPS

a) Pounding of the surface – and compaction（圧密）
b) Rearrangement of the surface to create mechanical crusts（クラスト：土壌表面に形成される薄層構造）
c) Detachment and transport



Dynamics of Runoff And Erosion Modelling (DRÆM)

Loughborough University

time

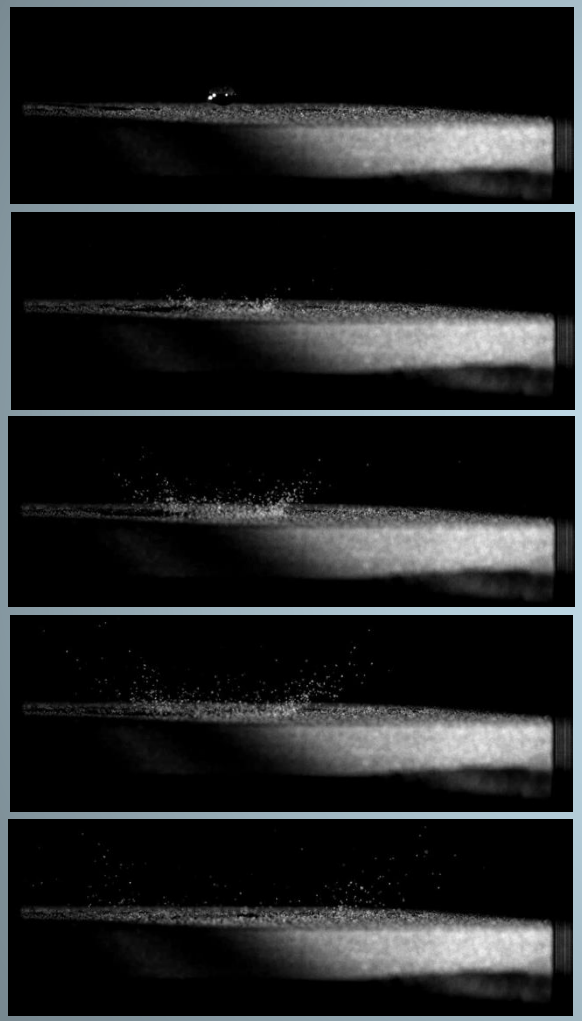
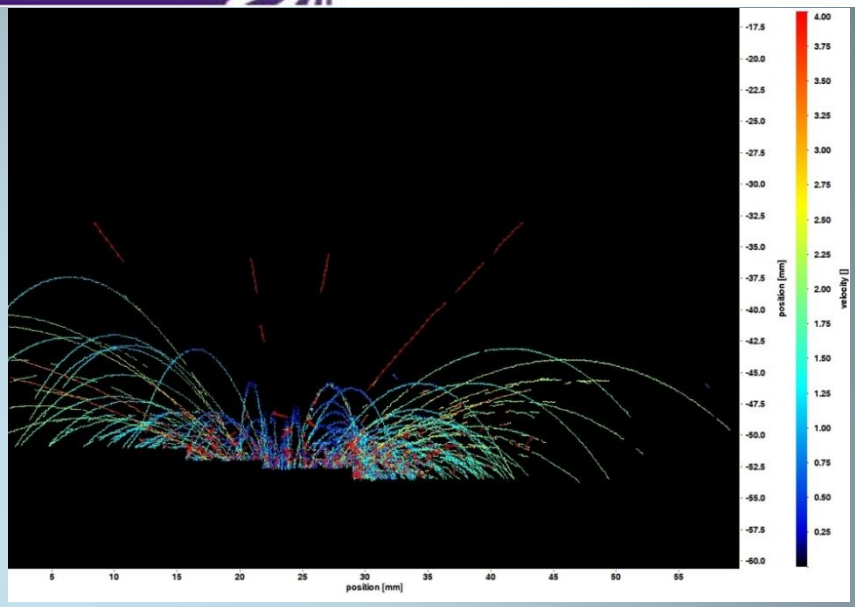
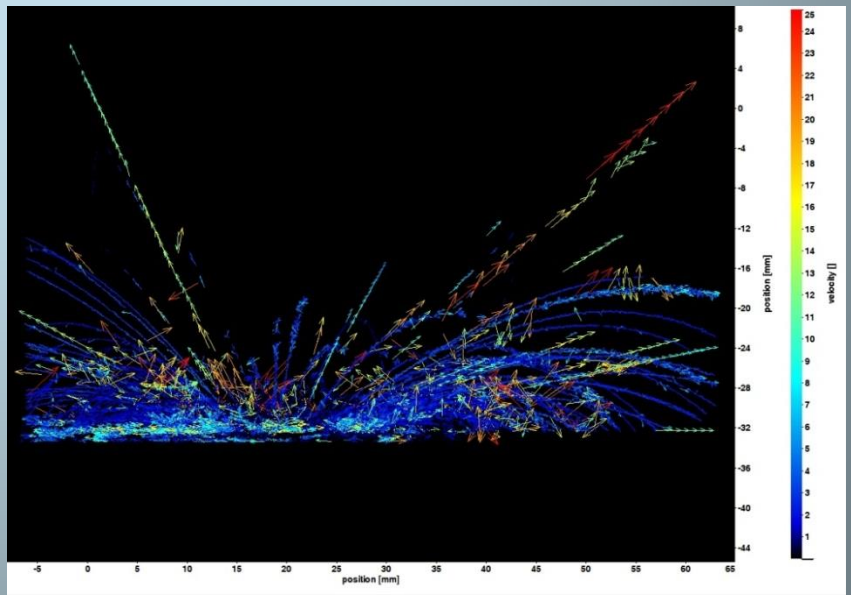
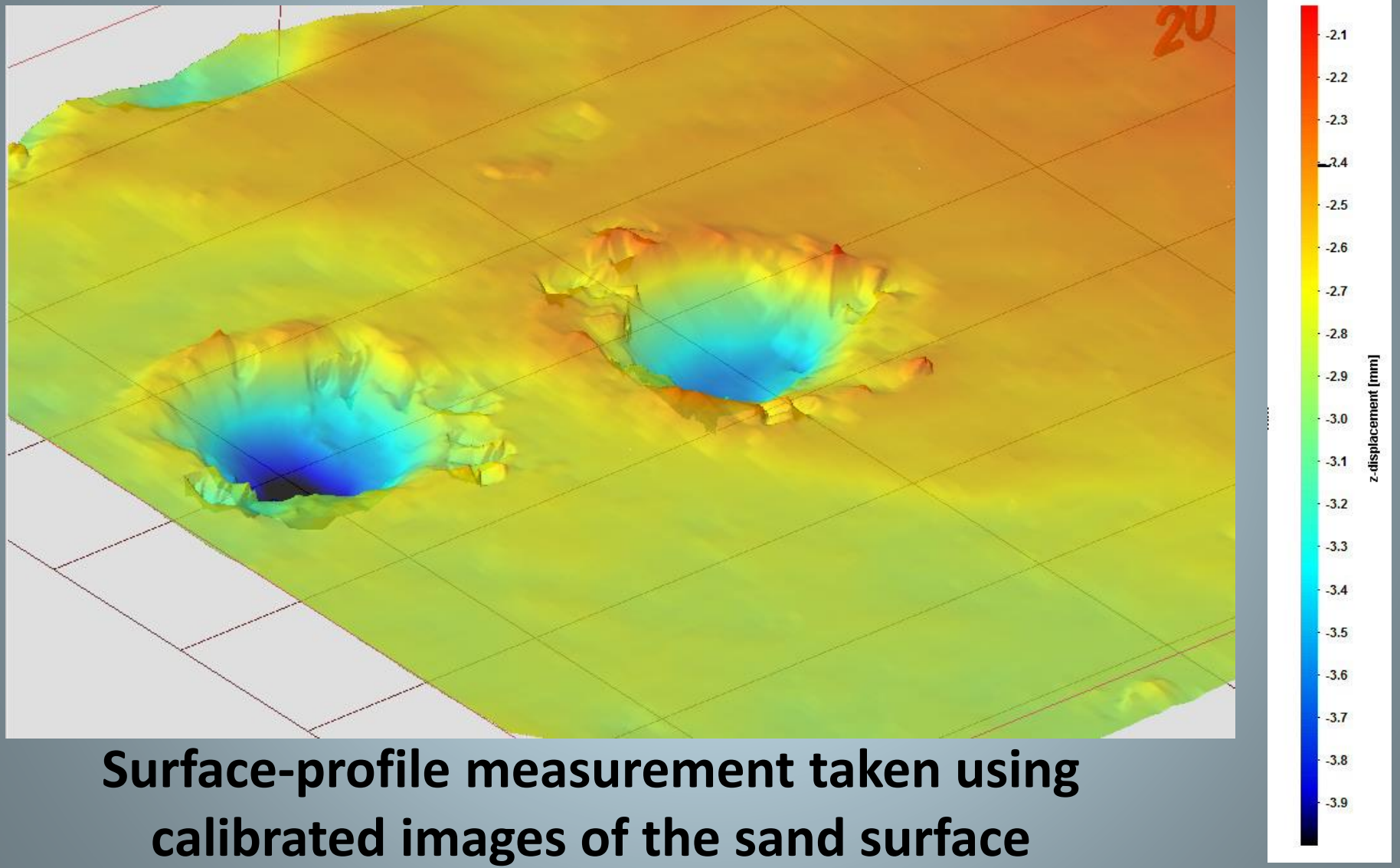


Image sequence at 3000 fps
Sequence duration 0.11 s



Trajectories of splashed particles





Surface-profile measurement taken using calibrated images of the sand surface

Long *et al.* (*forthcoming*)

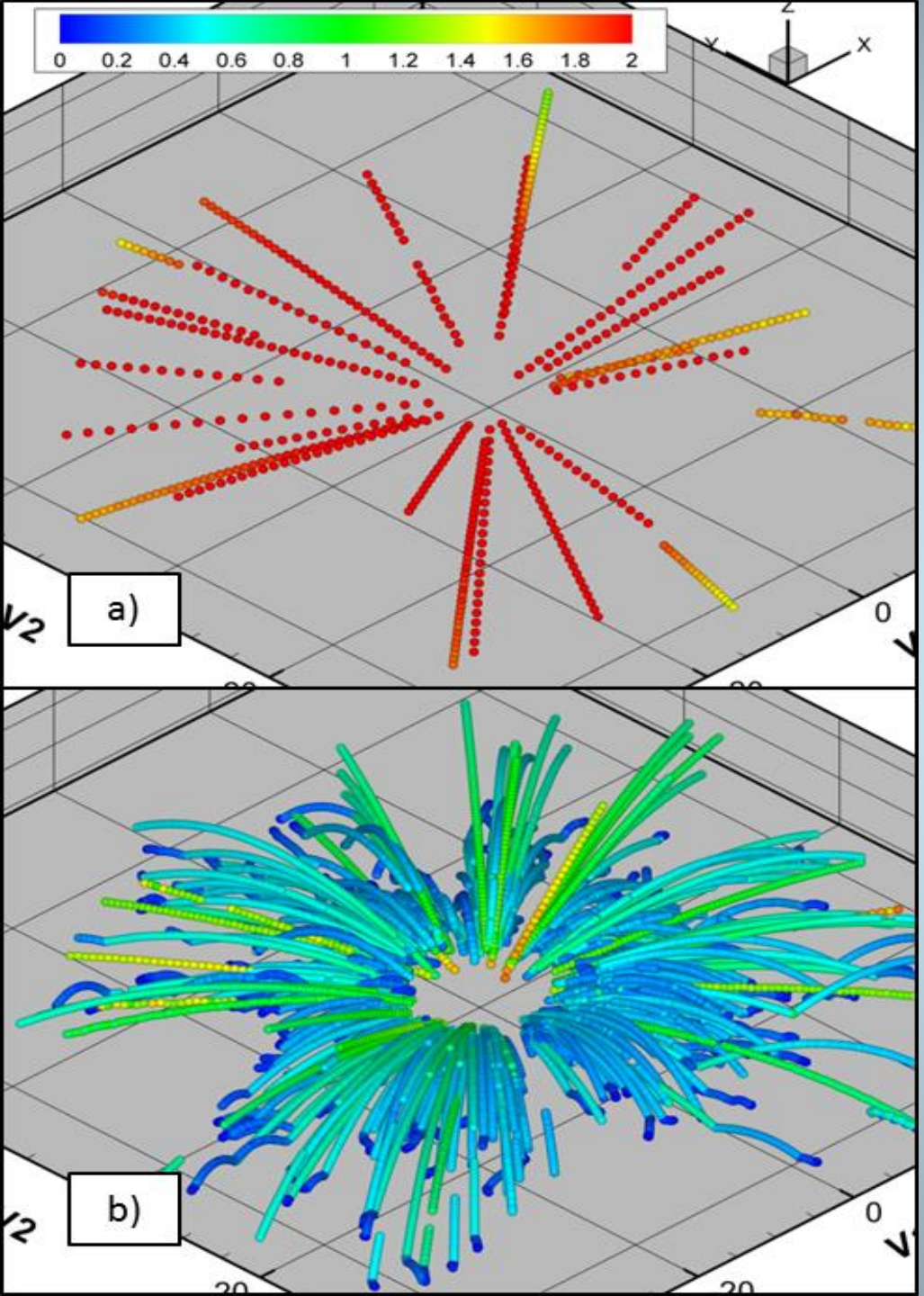
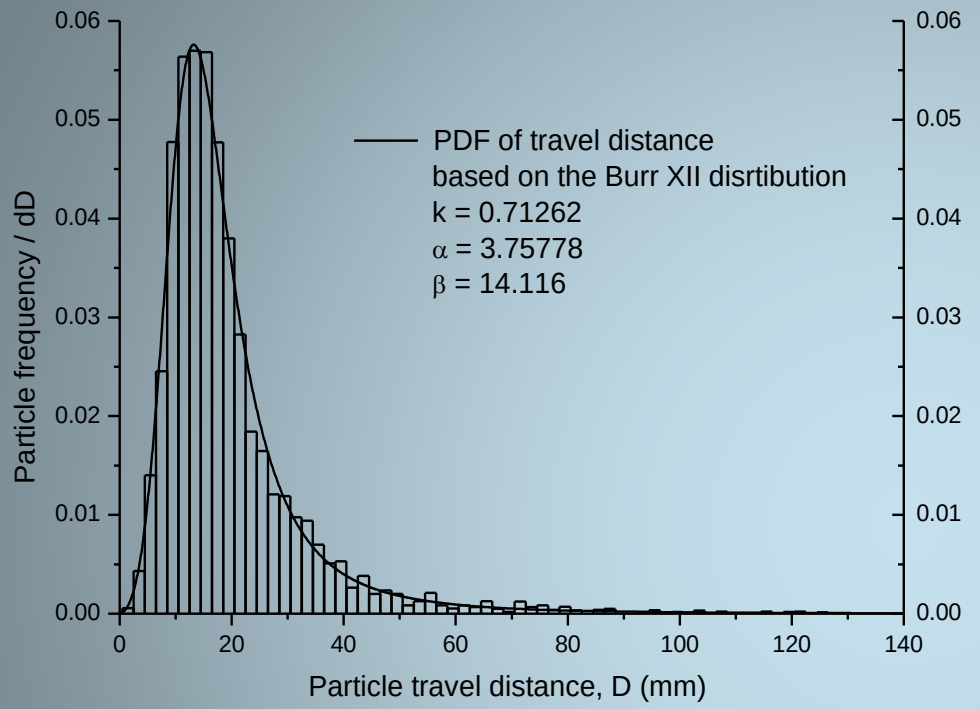
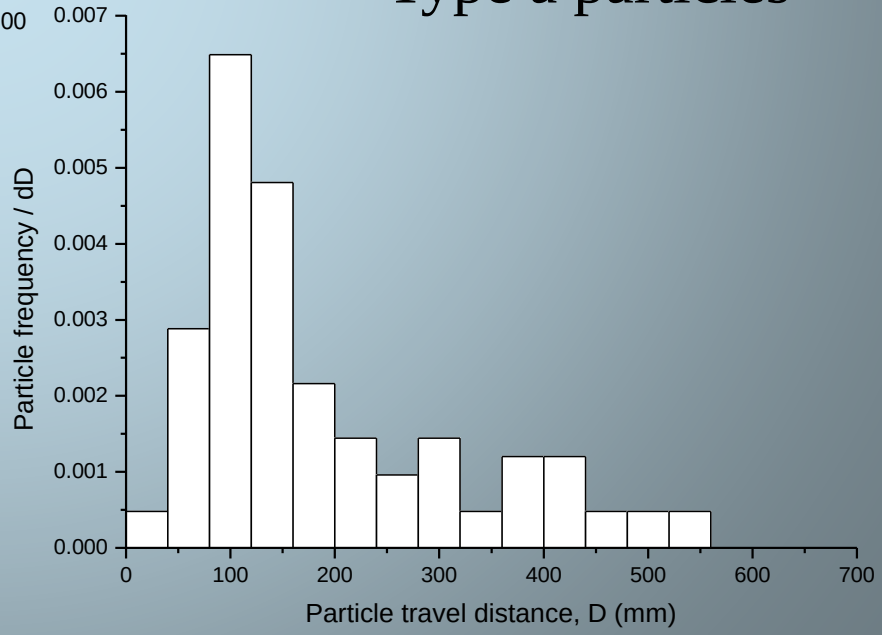


FIG. 7. Particle location tracks according to particle type: a) high velocity, low ejection angle, high displacement, b) low velocity, high ejection angle, low displacement



Type b particles

Type a particles



Detachment by raindrop impact

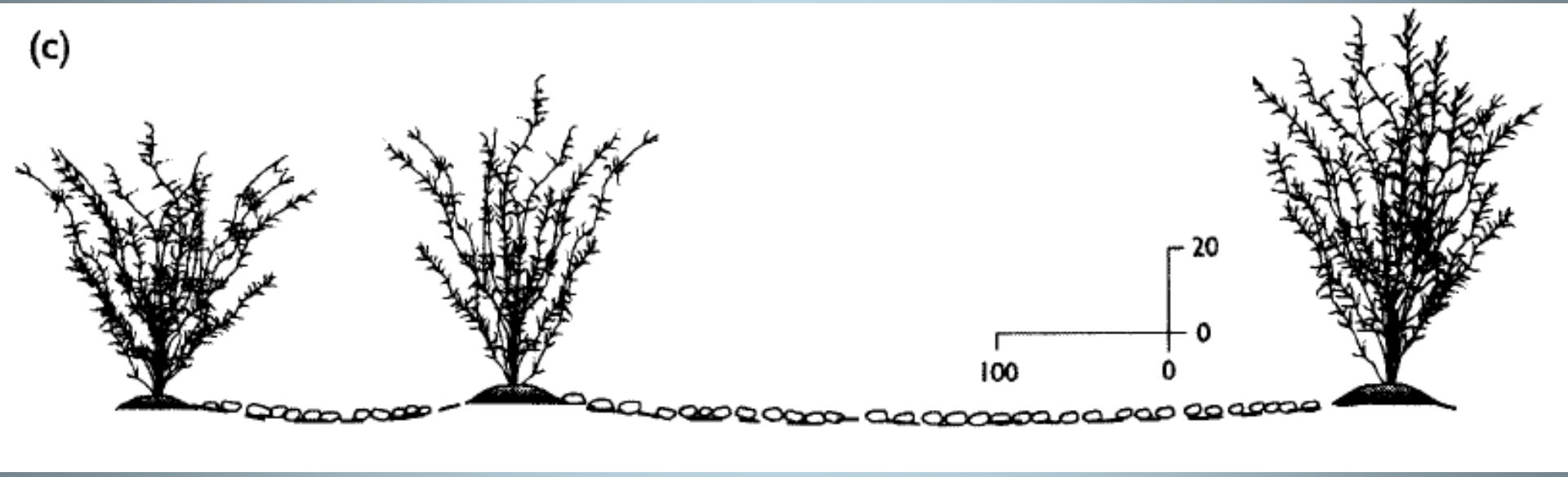
（雨滴衝撃）

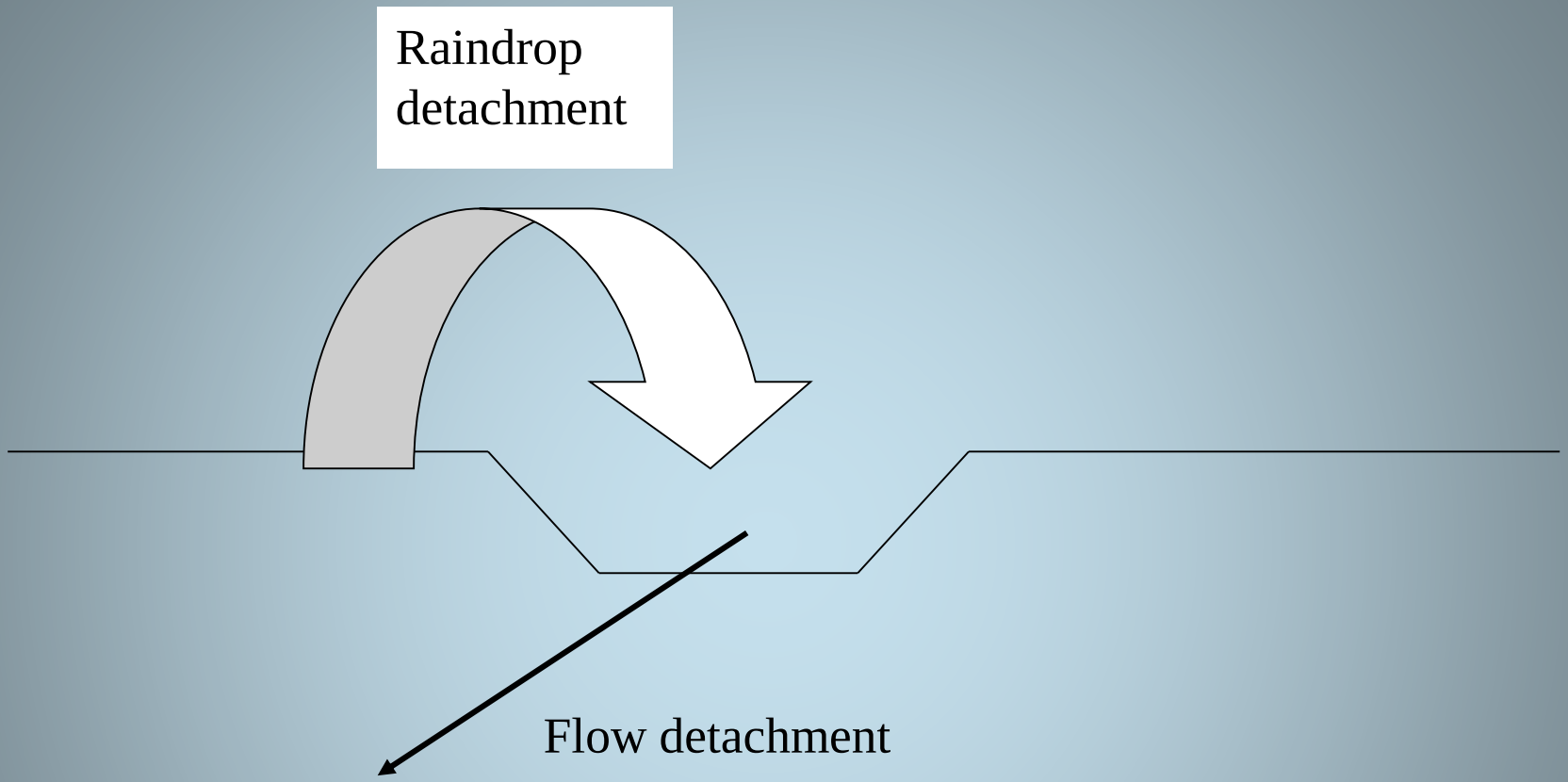
$$DET = kKE^{1.0}e^{-bh}$$

Where *KE* is rainfall kinetic energy, *k* and *b* are parameters determined by soil type and *h* is water depth


Canon


TAMRON


(c)
20
0
100
0


Raindrop detachment
Flow detachment