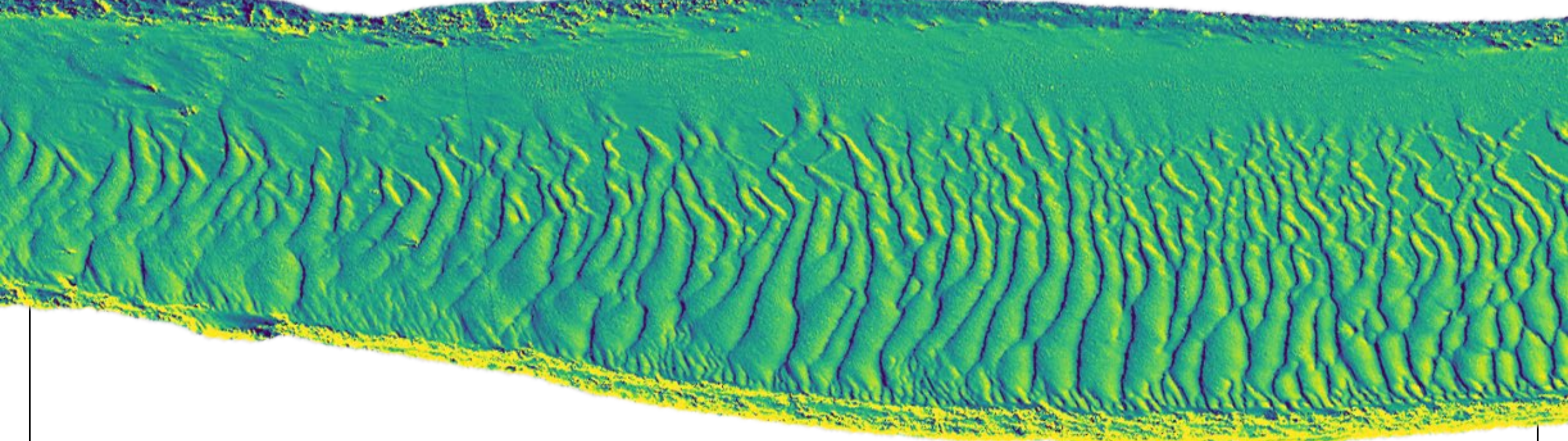




Spatial variability in dune geometry is driven by local hydraulic conditions

Sjoukje de Lange, Daniel Murphy, Ryan Bradley, Reinier Schrijvershof, Kryss Waldschläger, Ray Kostaschuk, Jeremy Venditti, Ton Hoitink
sjoukje.delange@wur.nl

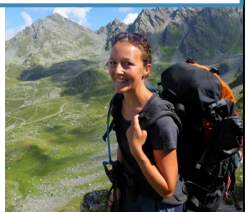
EGU 2022

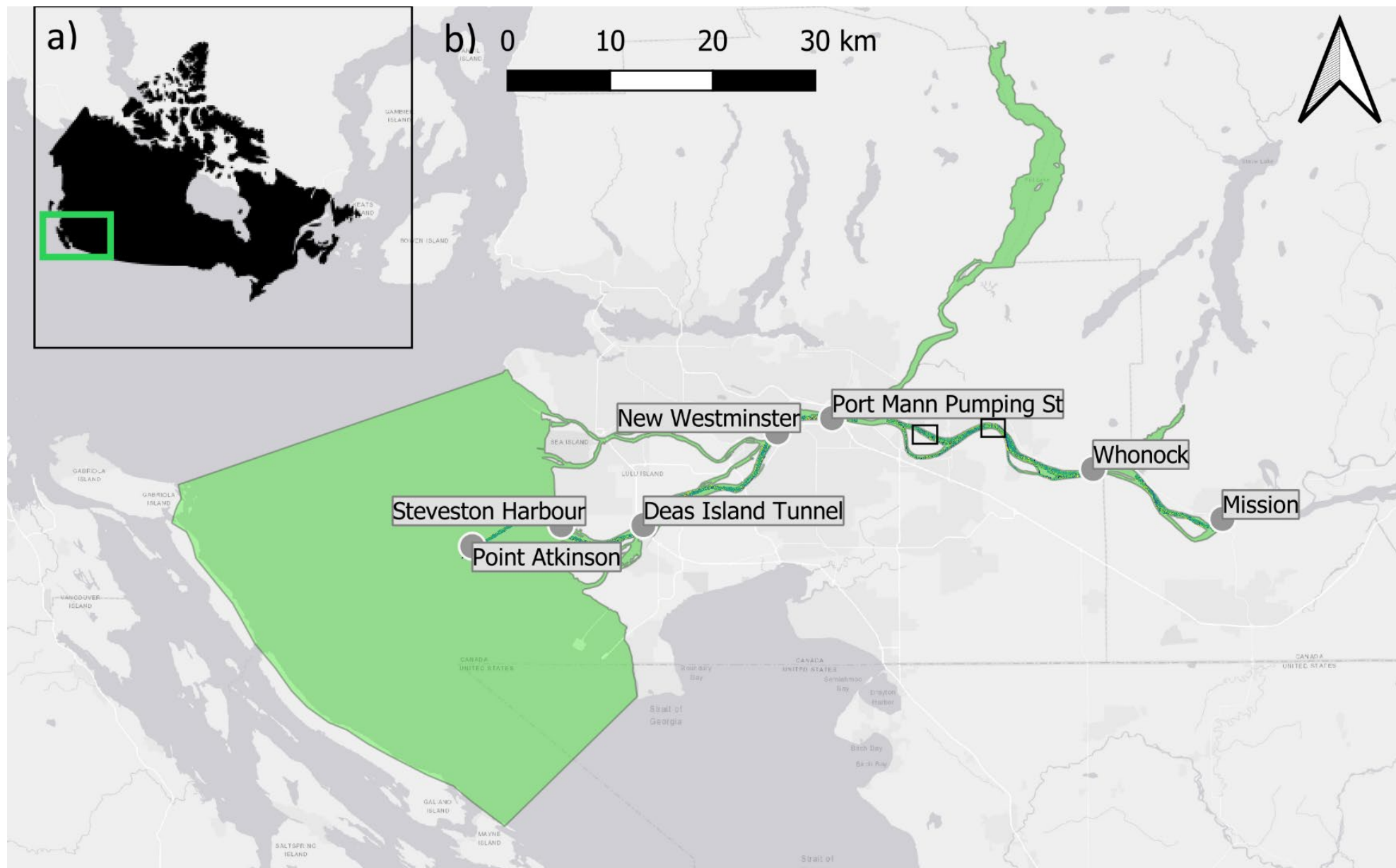


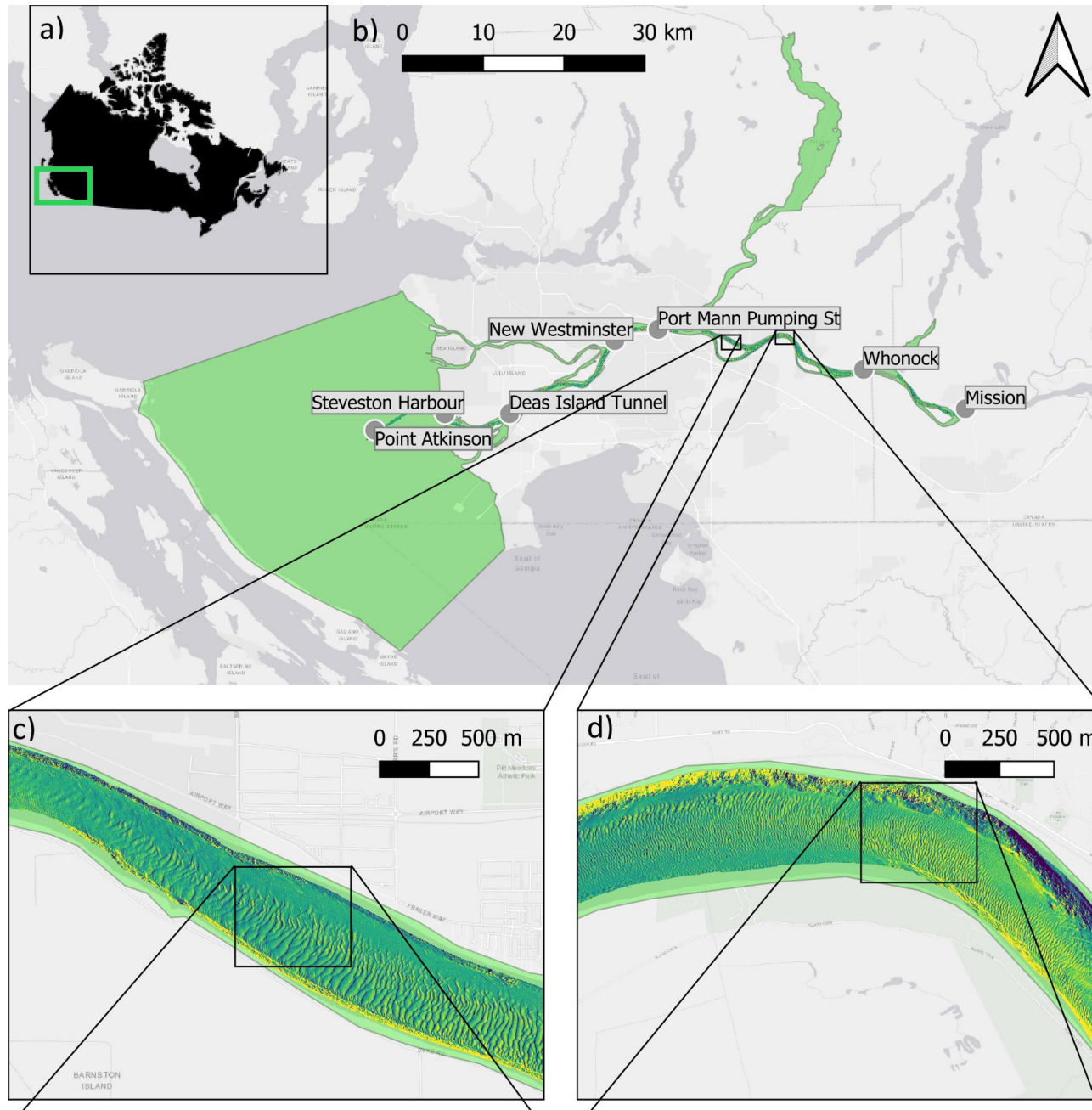
WAGENINGEN
UNIVERSITY & RESEARCH

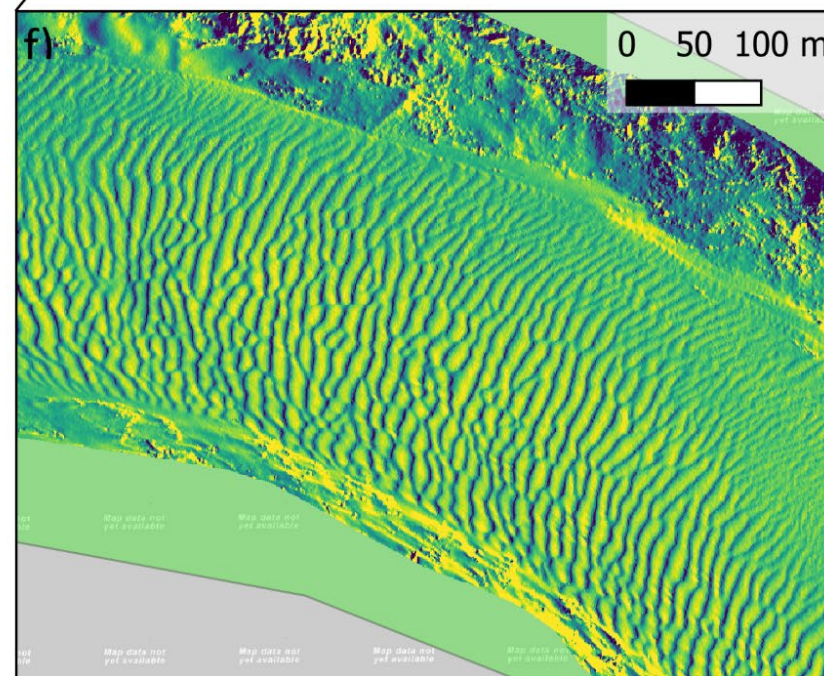
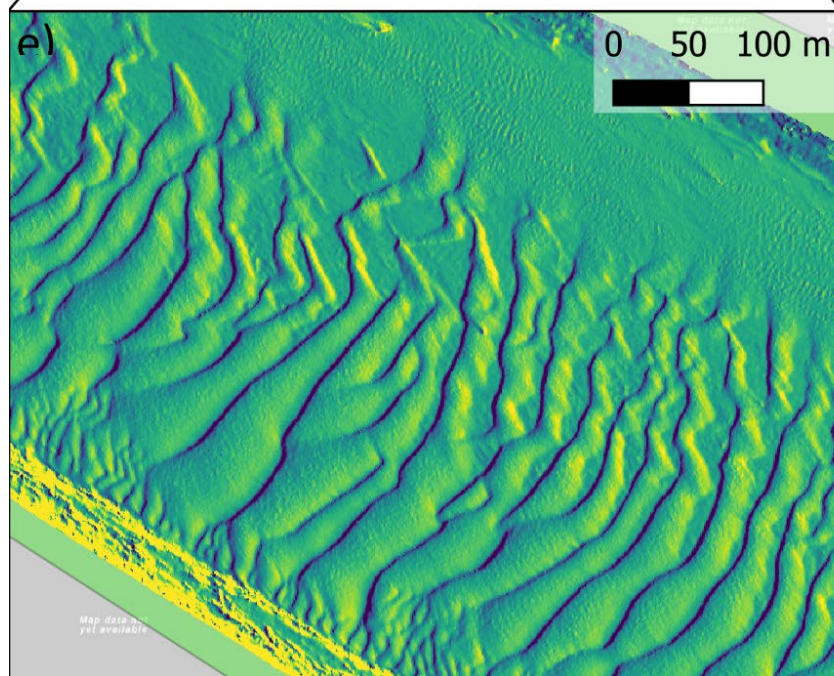
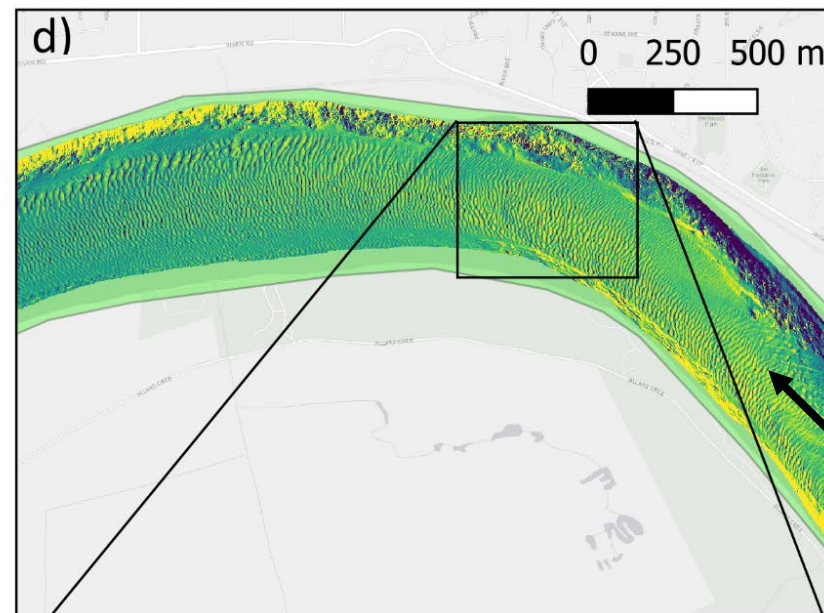
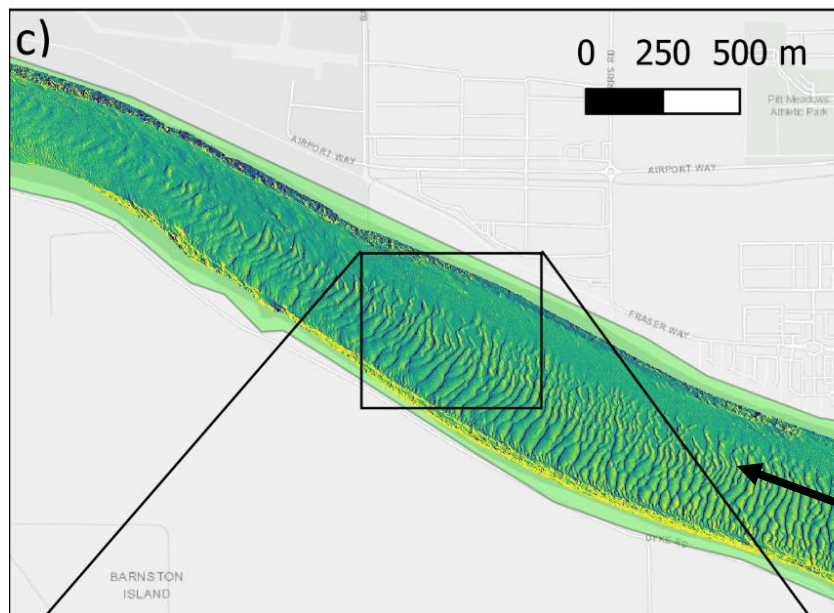


SIMON FRASER
UNIVERSITY



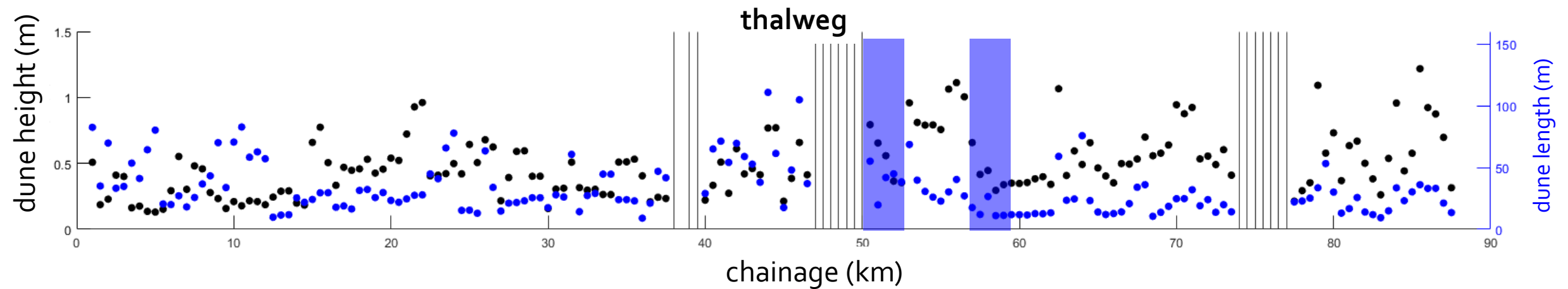


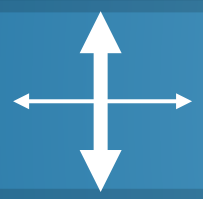




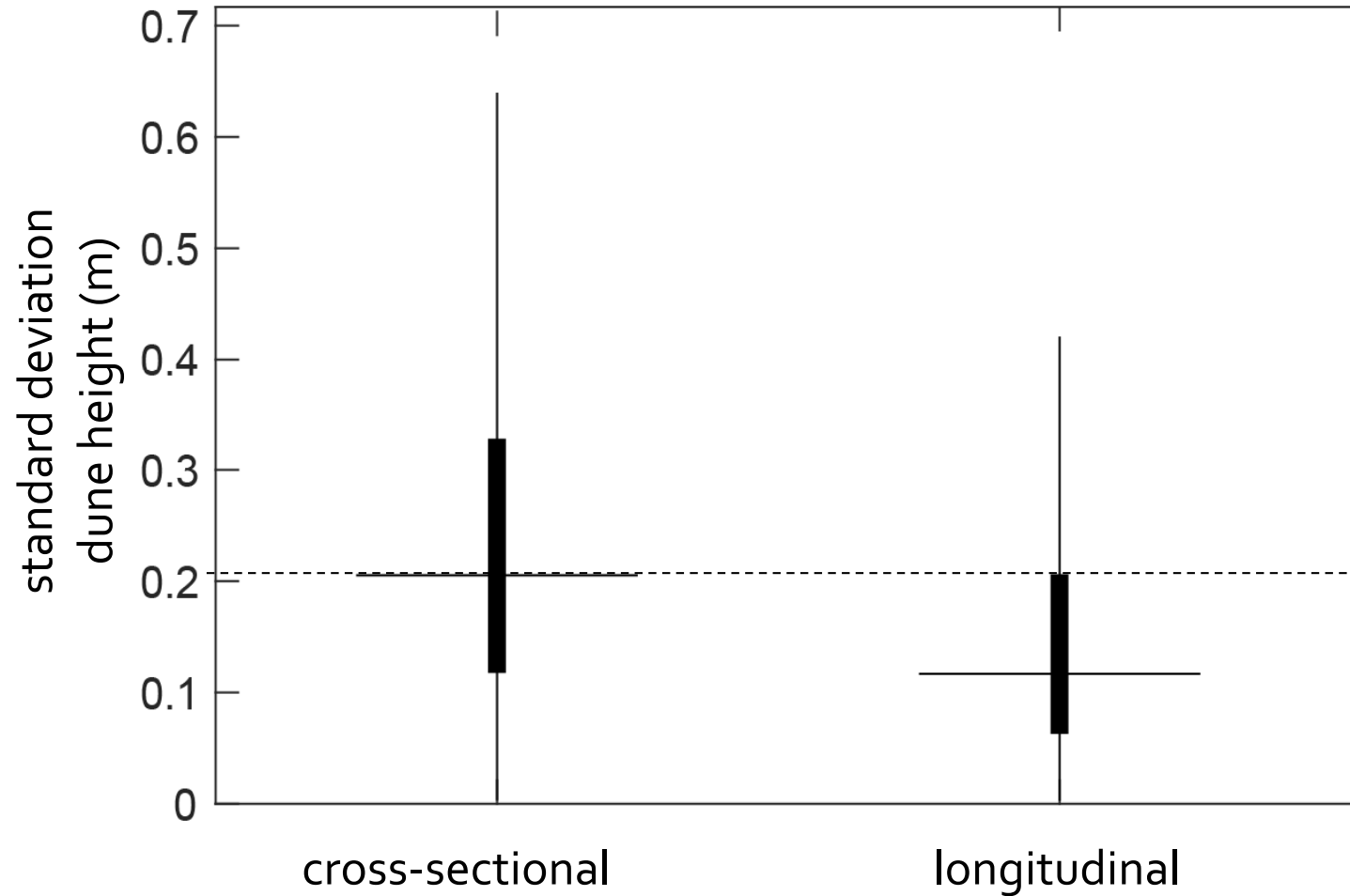


Variability in dune geometry cannot be explained by large-scale variables

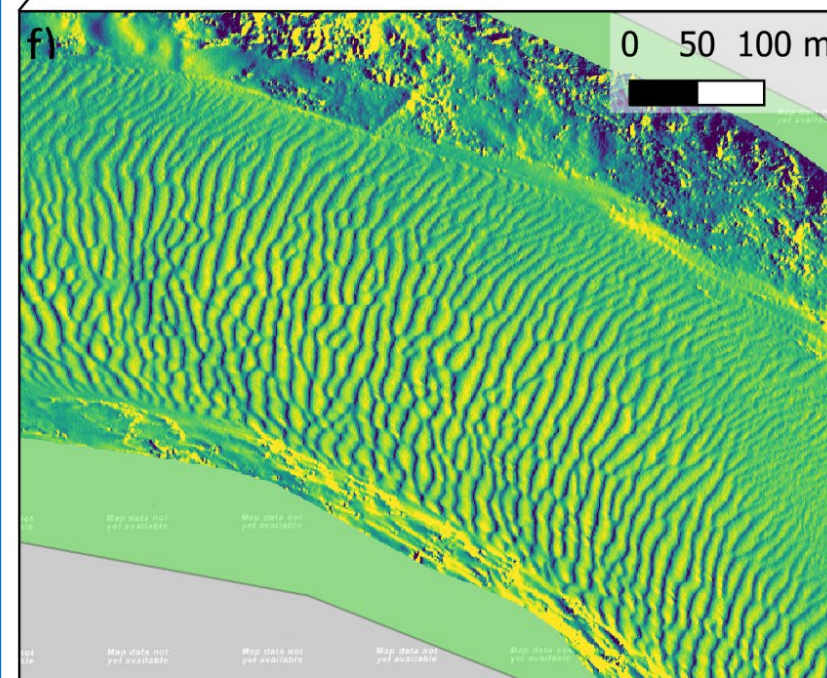
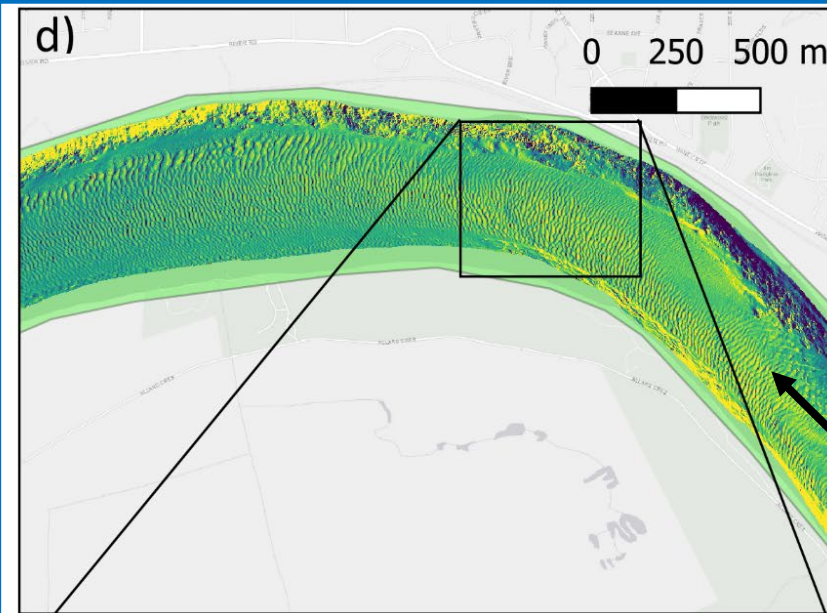
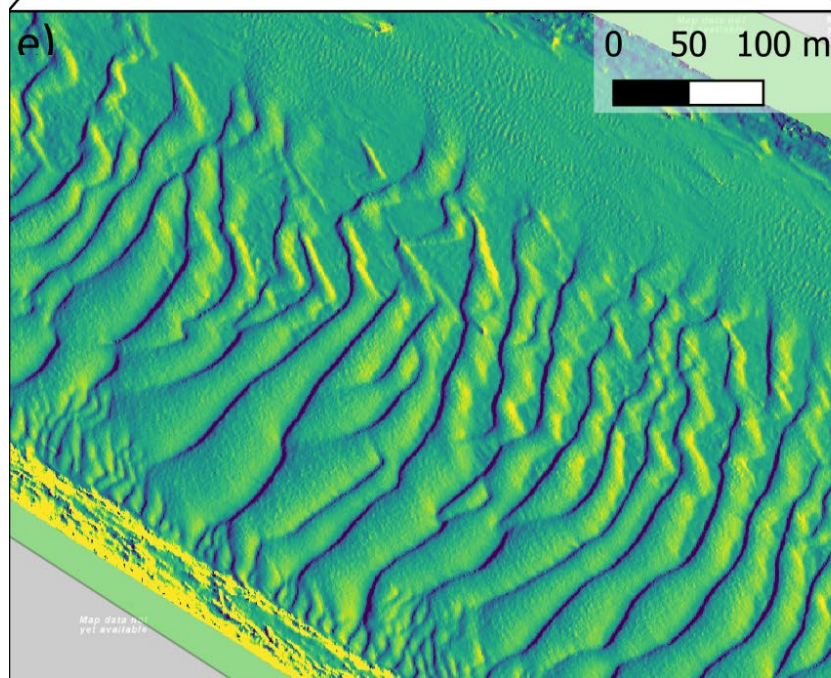
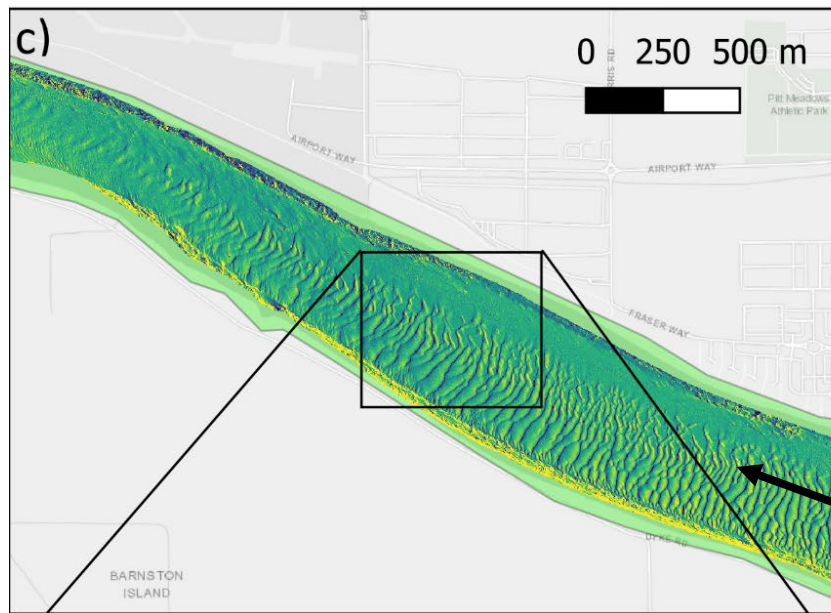




Cross-sectional variability > longitudinal variability

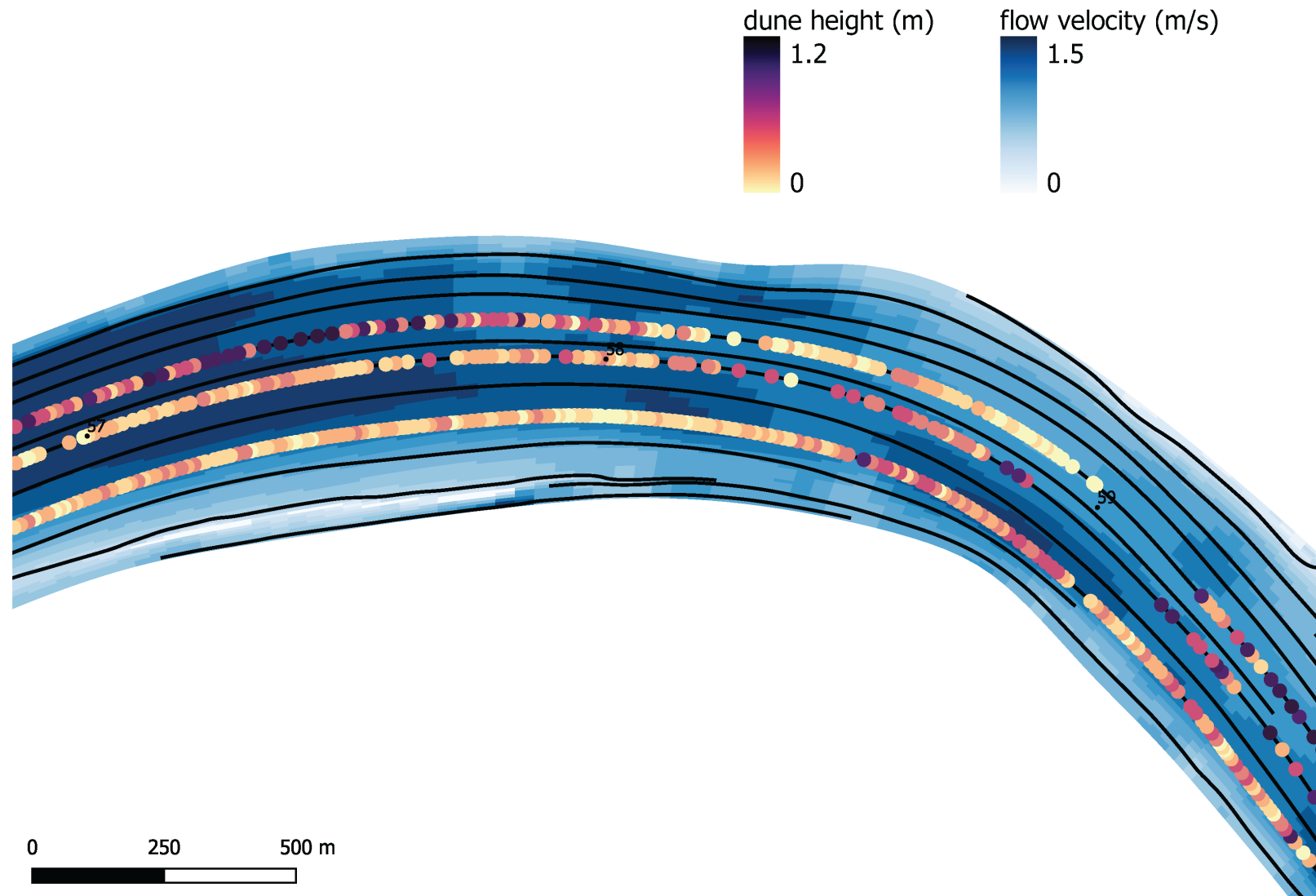




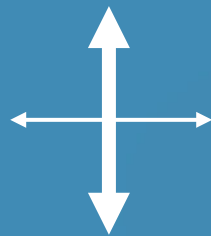
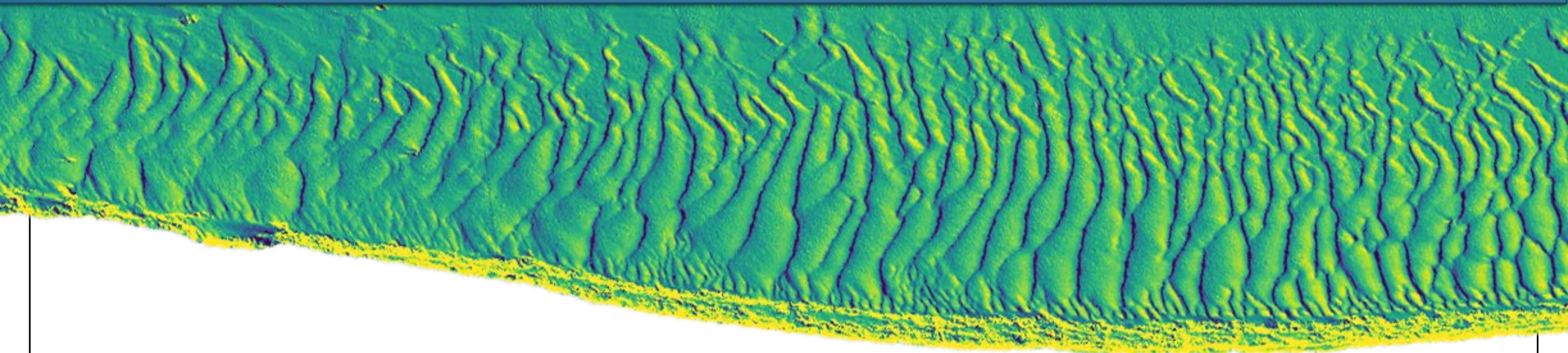




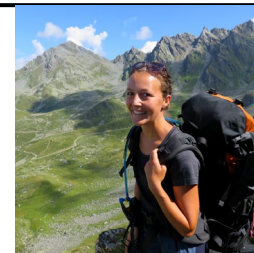
Local hydraulic conditions drive spatial variability?



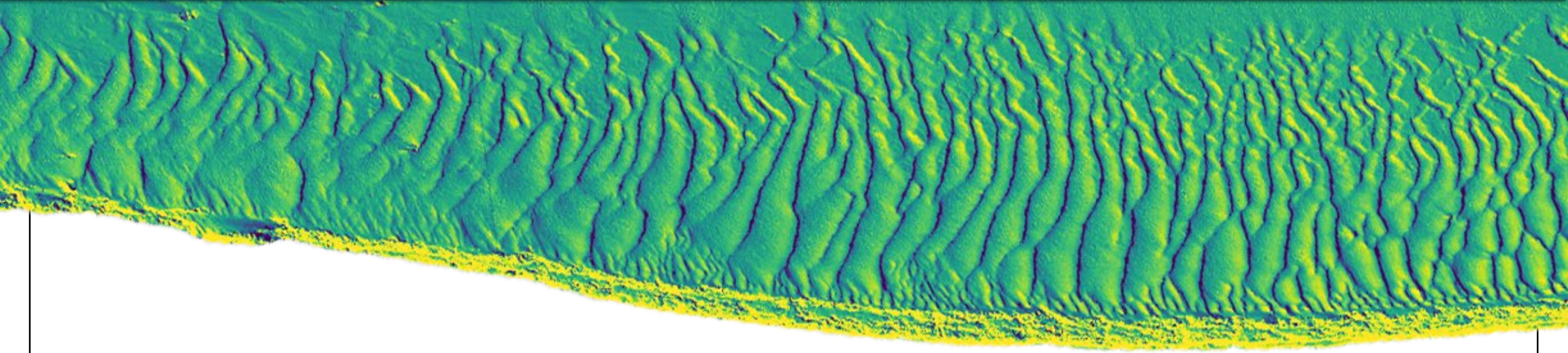
Conclusions



sjoukje.delange@wur.nl
@LangeSjoukje



Conclusions



Variability in dune geometry cannot be explained by tidal velocity amplitude, grain size, bifurcations, ...

Cross-sectional variability is larger than longitudinal variability

Local hydraulic conditions drive spatial variability



sjoukje.delange@wur.nl
@LangeSjoukje

