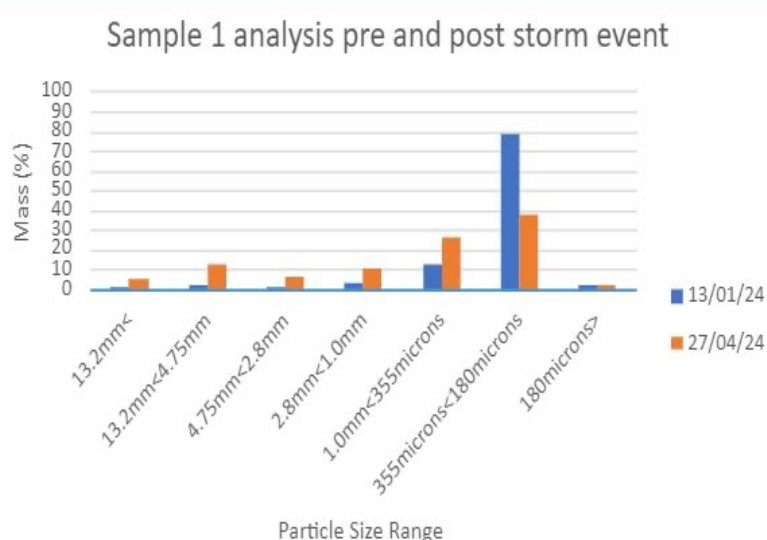


Does drone imagery show beaches' vulnerability?

Climate change continues to disproportionately affect coastal areas which might change significantly in our lifetime. There are many stakeholders, including local government, wildlife trusts, offshore energy developers, and homeowners. Our research uses aerial photogrammetry and sedimentological analyses to quantify the impacts of tidal action and climatically-forced storm events on coastal morphologies.



Coastal photogrammetry in practice



Sedimentological sample analysis pre & post storm

Beach remediation works along the coast may be causing sandbars to grow unexpectedly close to shore.

To study this, we use photographic surveys of the tidal area of the beach, using drones to take series of overlapping high resolution photographs which can be converted into 3D models of the beach. These models can then be compared with future models to identify changes down to sub-centimetre scale to improve simulations and inform decisions based on their outcomes.