



## **Multi-scale evolution of a large-scale coastal blowout using aerial photography and DoDs**

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Multi-scale approaches in examining the evolution of coastal landscapes are relatively rare due to the limitations imposed by a paucity of adequate environmental data. Research efforts tend to focus on short-term, process-driven dynamics (over hours) up to medium to long-term (months to years) landscape trends, with few studies actually incorporating a range of temporal/spatial scales. A number of benefits exist in the linking of long-term landscape change analysis to the knowledge of the processes generating them, including improved modelling approaches, enhanced understanding of how the landscape functions as well as more informed science-led management.

In this study, we present preliminary results from a multi-temporal scale approach to understanding the growth and evolution of a large-scale blowout in a vegetated coastal dune field in NW England. We combine historical (7 decades) aerial mosaics and medium-term (decadal and yearly) analysis using DEMs of Difference (DoD) over a coastal dune blowout in the Sefton Dunes. Links between the trends observed here and short-term processes (hours) measured previously at the site are discussed.