

GIS AND DATA MANAGEMENT



Project	:	Blakeney Channel Survey
Client	:	Blakeney Channel Coastal Community Team
Date	:	November 2017
Keywords	:	Unmanned Aerial Vehicle (UAV) Survey • Aerial Photogrammetry • Topographic Survey • Digital Elevation Model • Historical Data Analysis • Navigation • Data Management • Data digitisation
Description	:	<p>A thorough GIS study of Blakeney Channel was requested to complement a recent aerial and topographic survey of the site, conducted by Exo Environmental. Comparing previous survey records with historical aerial photography, provided by the Historic England Archives, this work was to allow changes to the channel morphology and saltmarsh extent over the last 70 years to be identified.</p> <p>Using our specialist GIS software, historic saltmarsh extents could be overlain with our recent high resolution Unmanned Aerial Vehicle (UAV) (drone) survey data, to locate and quantify losses and gains of this protected habitat. Of particular note, was the growth of approximately 0.5ha of saltmarsh following the rerouting of a drainage rill in the 1990's, resulting in significant meandering of the Channel.</p> <p>Channel cross-section datasets from previous survey efforts dating back to the early 1980's were also digitised from paper drawings supplied, some of which contained limited, erroneous or inaccurate data. Two methods were employed to correct the historic data using: georeferencing, distances quoted on hand drawn maps, changes in saltmarsh extent and accurate topographic data obtained during our survey of the Channel. Utilising these methods allowed us to maximise accuracy of the digitised datasets and facilitate future comparative studies and long-term management of the Channel.</p>

