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3D DOCUMENTATION OF GLOBAL HISTORIC SITES: THE ' SCOTTISH TEN' PROJECT AND ITS APPLICATIONS FOR CULTURAL HERITAGE

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Abstract. The Scottish Ten project seeks to digitally document World Heritage Sites in Scotland and culturally significant international heritage sites, using technologies such as terrestrial laser scanning, aerial LiDAR, high resolution photography, digital photogrammetry, high-accuracy GPS and digital total stations. The project has numerous aims, centering around conservation, cultural heritage management, promoting Scotland's technical and scientific expertise and Scottish cultural connections. This paper focuses on the recent 3D survey work in the Heart of Neolithic Orkney World Heritage Site in Scotland. Two principal sites, Skara Brae and Maeshowe, are described, the methodologies undertaken and the results so far. Aside from generating accurate survey records, data will be utilised for analysis and interpretation, monitoring, visualisation and numerous other purposes. Although the data is still at the early stages of processing, the paper highlights the significant potential of 3D survey for understanding and managing the Heart of Neolithic Orkney and the benefits of 3D survey for cultural heritage applications in general.

[Conference Paper](#) (PDF, 3655 KB)

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