

Heritage Recording Applications of High Resolution 3D Imaging

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The National Research Council of Canada (NRC) has developed several high-resolution 3D imaging systems as well as data modeling and display software for heritage recording applications. Numerous pilot applications development projects have been undertaken in collaboration with several Canadian museums as well as with international partners in China, Italy, the USA, the UK, France and Israel. The systems have been used to scan archaeological site features, ethnographic collections, paintings, sculptures and architectural elements on historic buildings and the results used for a wide range of heritage recording applications including archival documentation, research, conservation, replication as well as interactive 3D VR Theatre and virtual museum web applications.

For example, in 1999 and again in 2001, in collaboration with one of NRC's industrial partners, Innovision 3D, The Canadian Foundation for the Preservation of Chinese Cultural and Historical Treasures and the State Administration of Cultural Heritage (SACH), it has been used in a pilot project to demonstrate the heritage recording applications of the 3D imaging technology in the Three Gorges area of China.

The purpose of this presentation is to present an overview of the imaging systems and the heritage recording applications demonstrated to date.