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## Easy tool for digital surface modeling

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Infrastructures in Japan are always exposed to threats of natural hazards. When structures are damaged, it is necessary to estimate cost of restoration and request budget to take necessary measure. To assist this procedure, JACIC Foundation developed a software tool for cost estimation of restoration of damaged sites. The tool is a combination of close range photogrammetry and CAD. For photogrammetry, compact home-use digital cameras are available. The tool runs on a personal computer and is easy to use and cost effective. Recently, we added a function to show digital surface model as wire frame model. Users can use this tool not only for restoration of damaged sites but also for making DSM for various objects. Use of Digital cameras with GPS and digital magnetic compass adds some more interesting applications.

Keywords: Close range photogrammetry, CAD, Natural hazard, Digital surface model