

4D-IMADAS 2020 - 3D Forest-Cadastre

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SUMMARY

Abstract:

Based on 4D-Image Map Archive of forest area, which is 70% of the land in Japan, we could establish 3D diorama for 3D cadaster from maps, photogrammetric models and DEM data on CAD globe. Also we have created 3D-diorama of Kyoto city in 1946 aerial photos, and proceed to generate 1cm accuracy photogrammetric model from Helicopter photogrammetry. For logging road design and construction, we could use 3D diorama model on CAD globe as 3D forest-cadastre map. 3D mapper could be photogrammetric model, RTK rover and Terrain Laser Scanner mounted on Wheeled Harvester, which is the most powerful forestry machine. 4D-Image Map Archive Designed Aerial Survey (4D-IMADAS) system, which realize old cadastral inventory and 3D cadastral survey from Heian capital (794) in Japan as Historical/Archaeological Reality according to World 3D cadastral system in the future.

CAD-globe;1992 and 2019;Kyoto Univ. Ashu Forest logging road design

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