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Digitising archive large-format analogue aerial photography with alternative methods; Implications for photogrammetric processing

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Most large-format analogue aerial photography, especially in the form of roll negatives, is now held in centralised archives, but much still exists elsewhere, notably in the form of positive prints. Whilst many large archiving bodies have been and continue to digitise their holdings of such aerial photography using professional photogrammetric scanners, they are often prohibitive (on the grounds of cost and/or logistics) for use with low-volume, dispersed collections. Therefore, alternative methods are sought, which are presented here. Such alternatives can be subject to relatively poor geometric accuracy, making photogrammetric processing problematic. Here the results of photogrammetric processing with prints digitised using alternative methods are compared and contrasted with digitised roll negatives of the same frames. The quality of resulting elevation data are assessed against reference elevations, using a test site with topography which has remained stable over decades.