Modelling light interception in orchards

This video shows our latest work in light interception modelling for orchards. Tree geometry is modelled using point clouds from a handheld LiDAR, while public weather data is used to model the sky at a given time and date. The light in the sky is then ray-traced through the tree to provide an estimate of light interception, distribution and absorption. The model can be applied to decision support systems, for example to inform optimal pruning practices. For more information see our arxiv preprint.