

## Title

Modeling of Operation by GPS Location and Productivity of Tower Yarder

## Summary

GPS is commonly utilized to find the location of observation. Whole days location data of multi working points were obtained by GPS on each points in a forest for timber harvesting operation at a tower yarder operation site. Their mutual locations and movements were interpreted into the operation modes. Characteristics of the yarding operations were discussed by comparing operation contents of the day. The operational productivity is also estimated for the operation. Data obtained on a day are big data, even which is more than thirty thousand line, are expected to withdraw the operational pattern and to find cycle time. The automation and simplification in the process is expected to have simple way for operation observation and modeling and to make standard for operation system understanding.