Management and Evaluation on Team Logging Operation by GPS

Efficiency and Process Improvement

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- A tower yarder uphill yarding
- Four men crew
- Thinning, selective
- Medium (4t) truck transport to Intermediate landing
- Big data
- Require for time series data time adjust
Work point distance for task - Carriage
Work point distance for task
- assistant, feller, choker-man
Work point distance for task - Leader
Work point distance for task
- assistant, feller choker-man
Work point distance for task - assistant, (feller)
Work point distance for tasks
Wave motion group work grasp
- Index structure is subject:
  ~ Dir. × Spd.
Numerical Analysis

• Productivity
  • Yarding times (distance)
    • 29 times/afternoon → 50m³ → 10+ m³/man • day
  • Labor hours for sort/process of work
    • 0.6 + 0.2 man • day for next line layout setting
    • 0.4 + 0.8 + 1.0 + 0.2 man • day for yarding/processing

• +
Conclusion

- Operation acquisition and control
  
  • Time series grasp
    • Location, process sequence
    • Team work, process timing
    • Time series model acquisition and evaluation

  • Operation log
    • Improvement
    • Advice/support
    • Work safety
    • Mobile phone App
    • Operation DataBase