Accelerometer data analysis

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Overall dynamic body acceleration (ODBA)

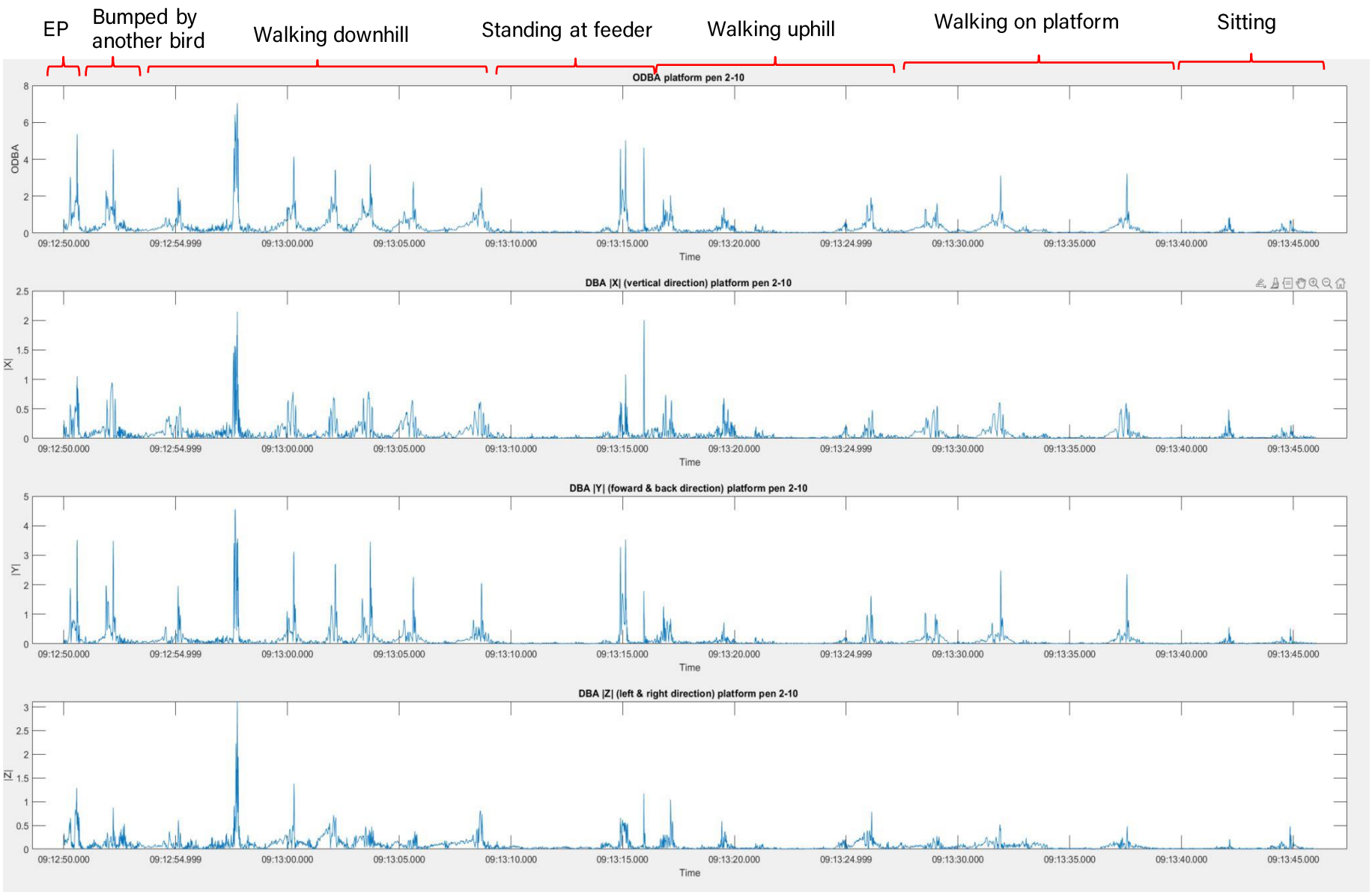
- ODBA: Integrated measure of body motion in all three axes
- Dynamic Body Acceleration related to energy expenditure (Gleiss et al., 2011)
- Activity level can be manifested by the level of energy expenditure (Lee et al., 2009)
- Using ODBA to estimate turkey activity levels
  - Remove static acceleration from the raw data
  - Subtract static acceleration from the raw data to get dynamic acceleration
  - $ODBA = |X_{dyn}| + |Y_{dyn}| + |Z_{dyn}|$

Constant force acting on a body (e.g., gravity or friction)

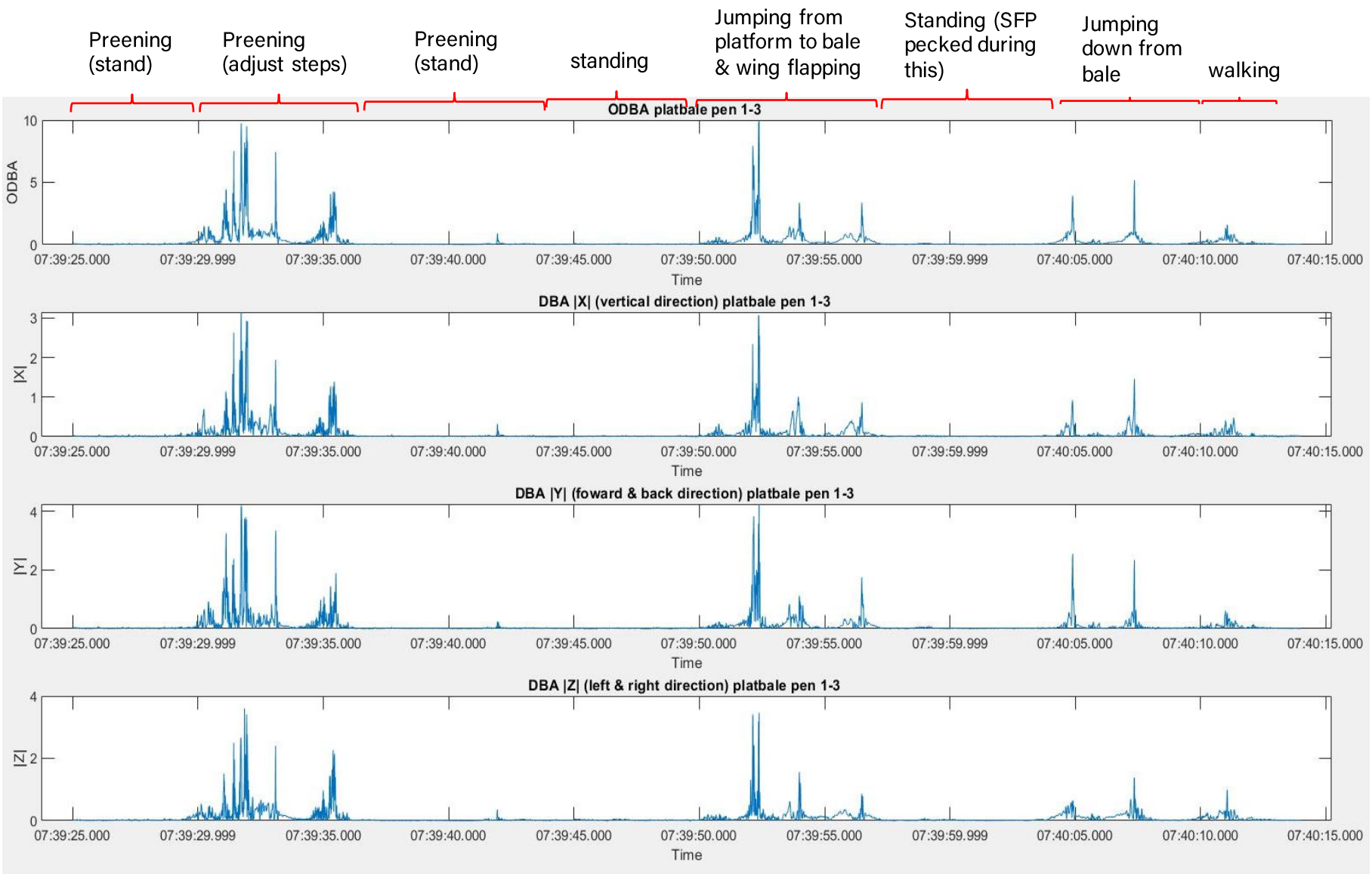
related to animal movements

Straw bale group

Platform group

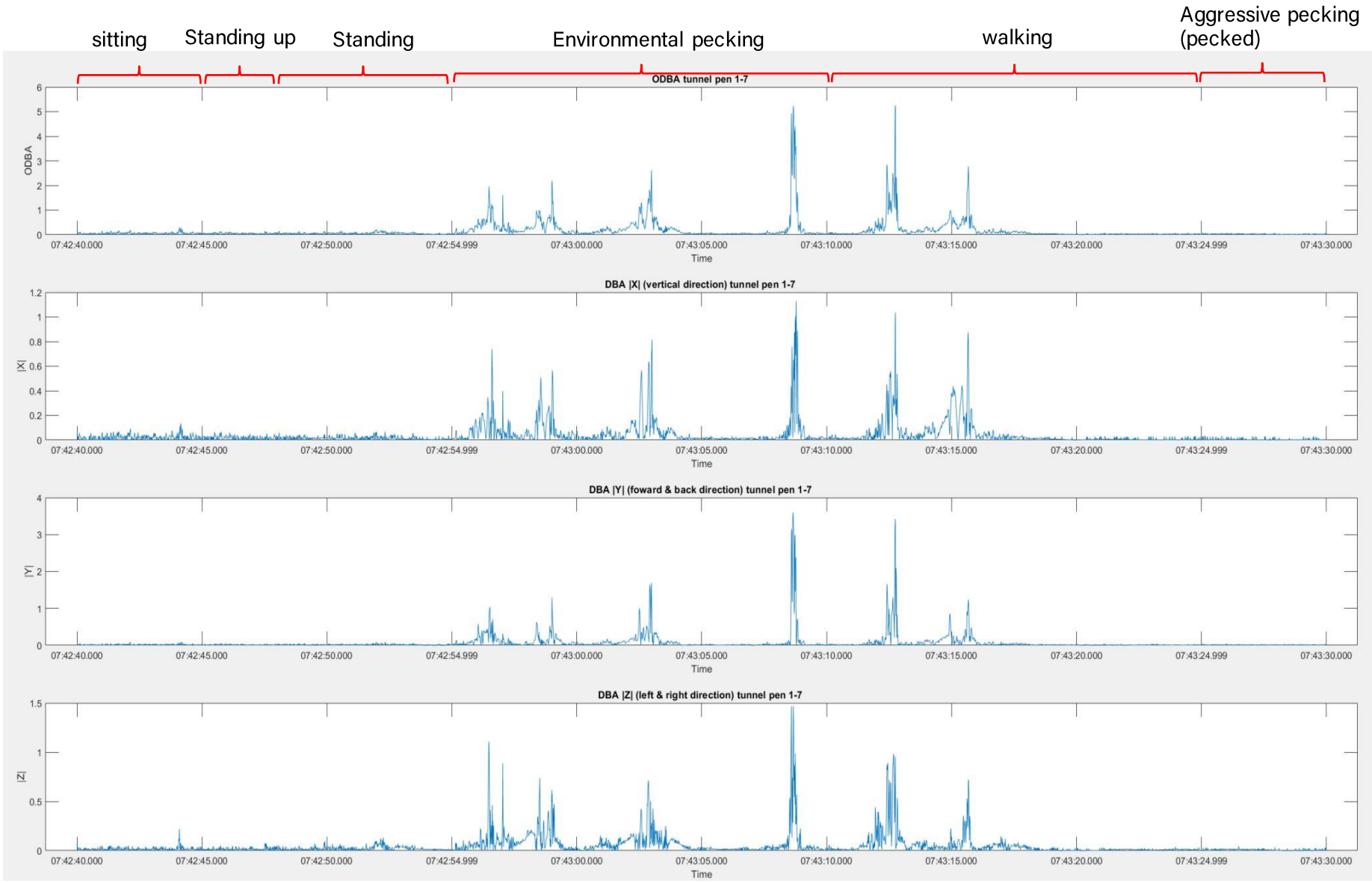


Platform + straw bale group

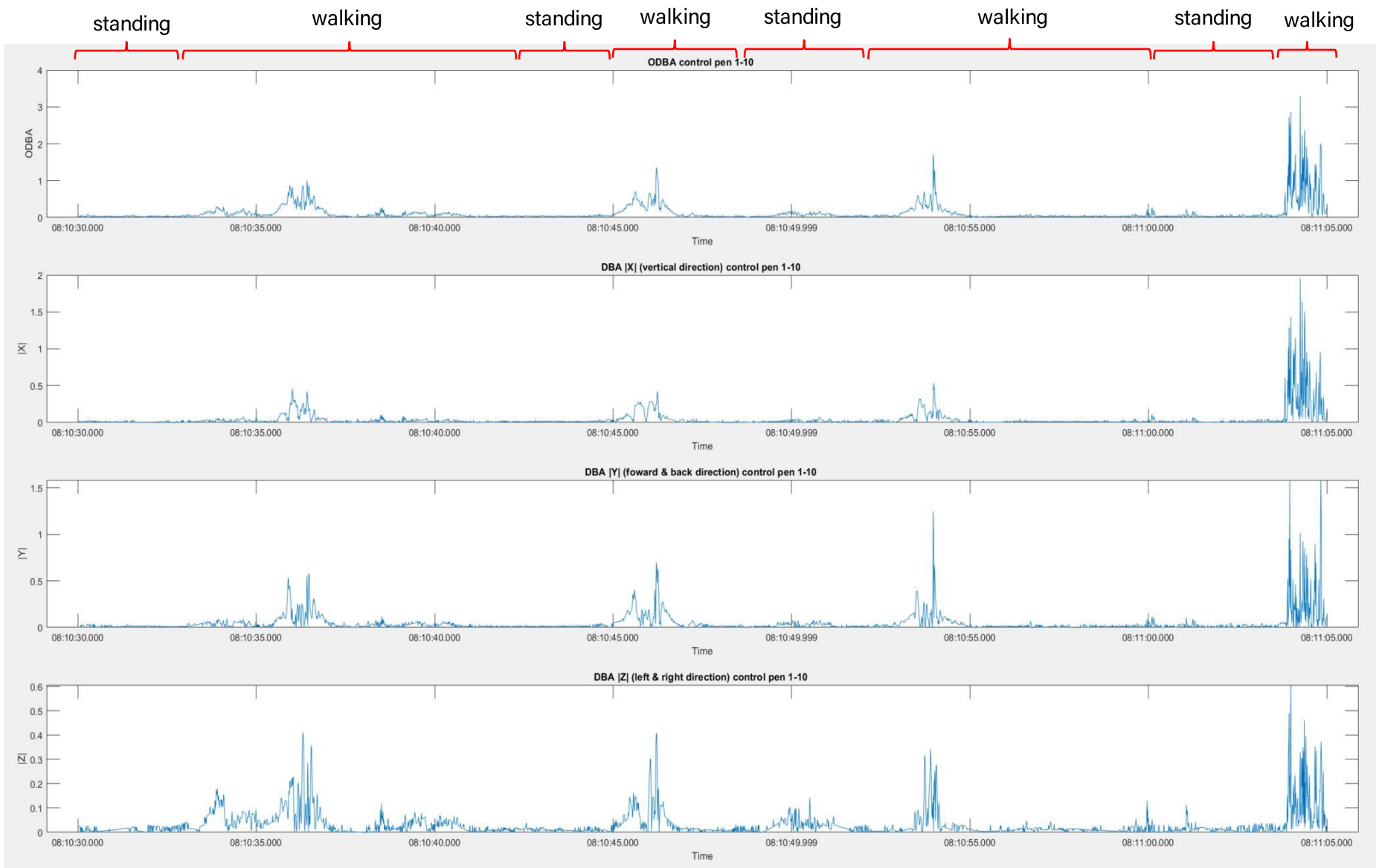


Pecking block group

Tunnel group



Control group



THANK YOU

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References

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