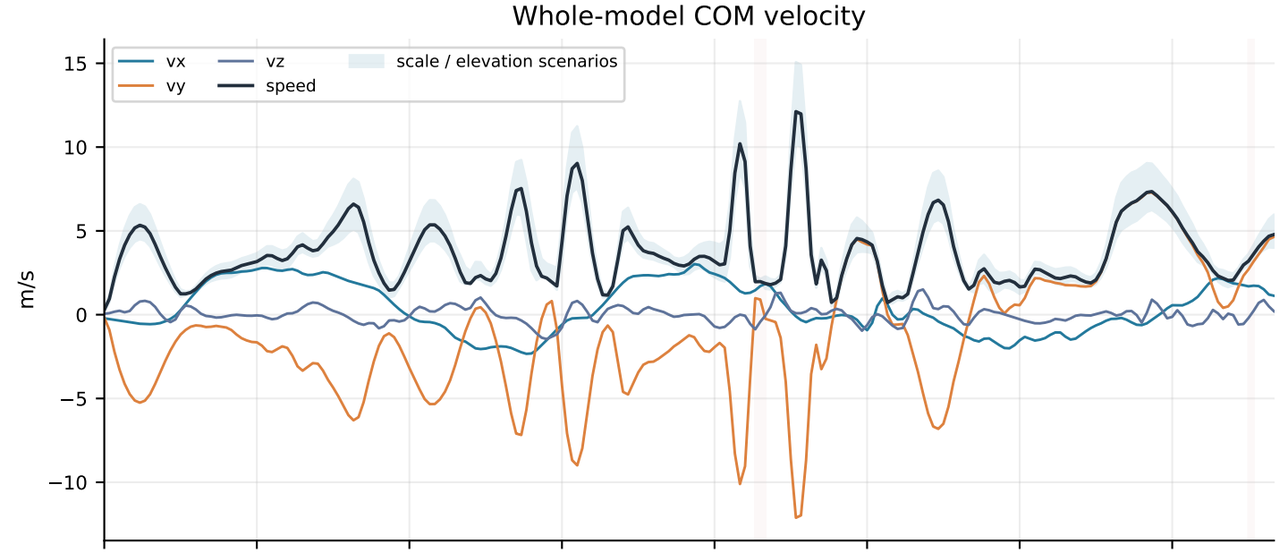
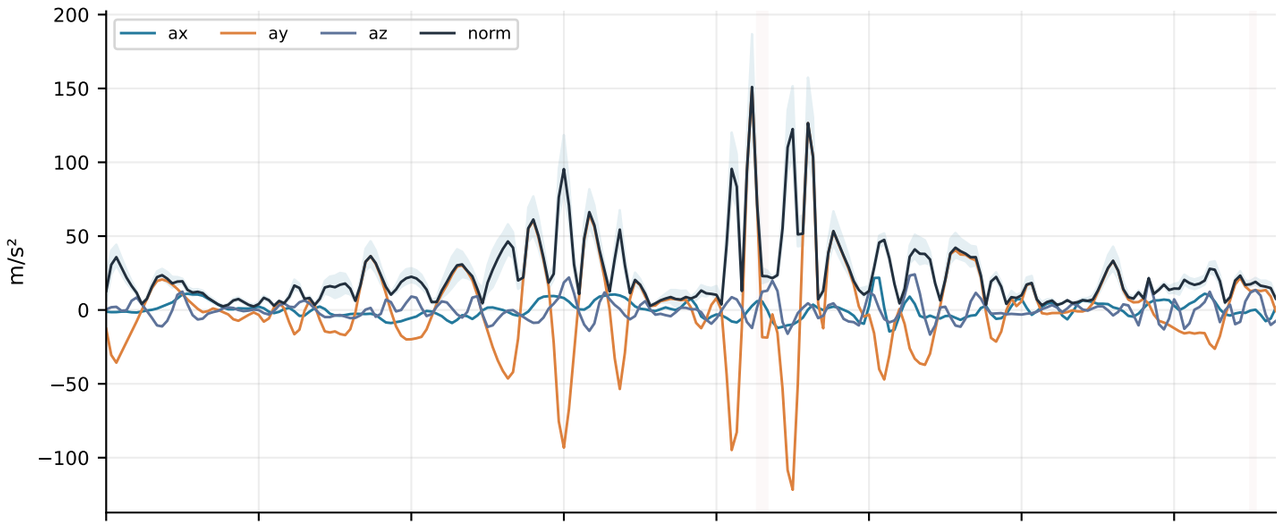
Cluster - Rocker / Counter / Loop | Conditional macro physics, WB013

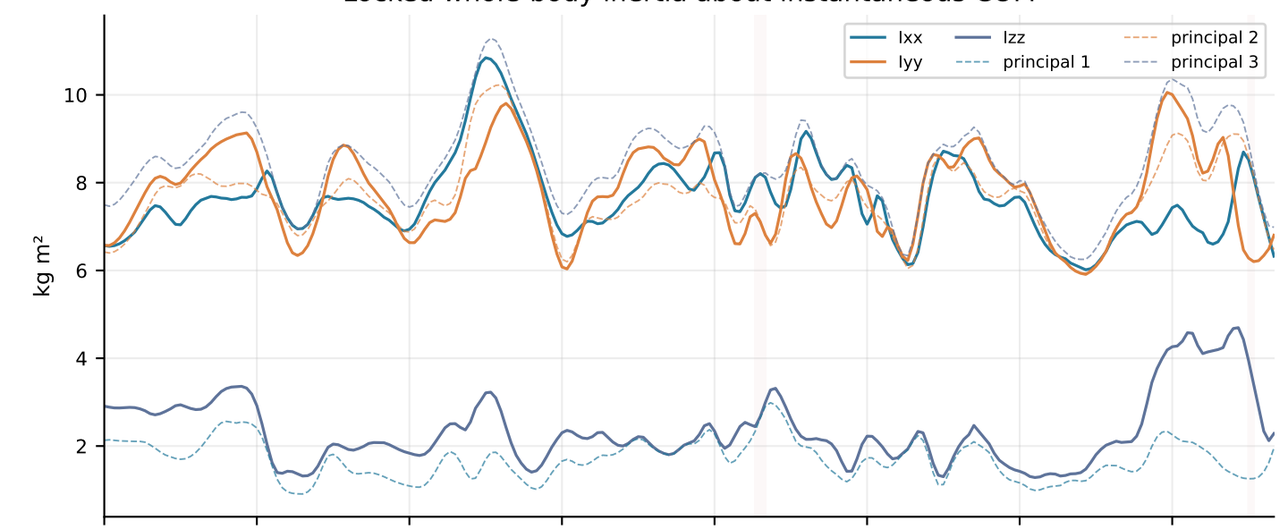
Whole-model COM velocity



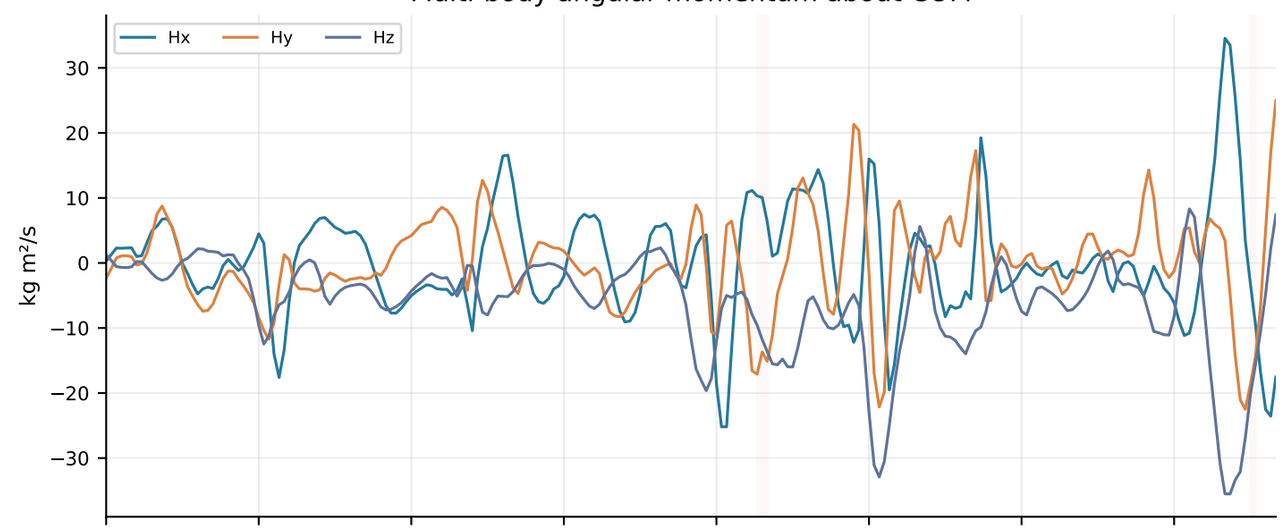
COM acceleration



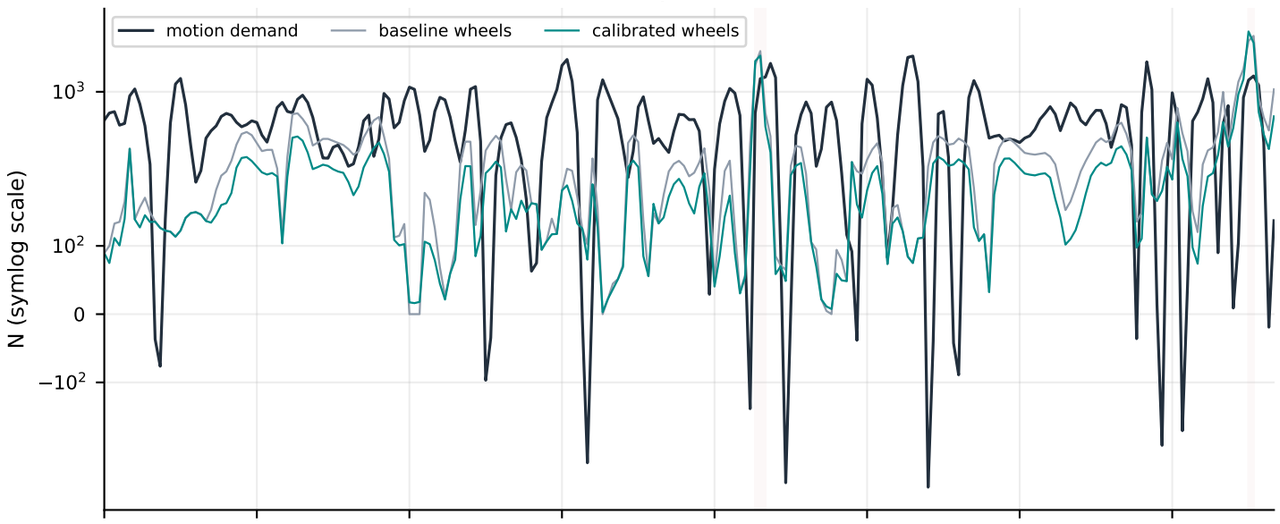
Locked whole-body inertia about instantaneous COM



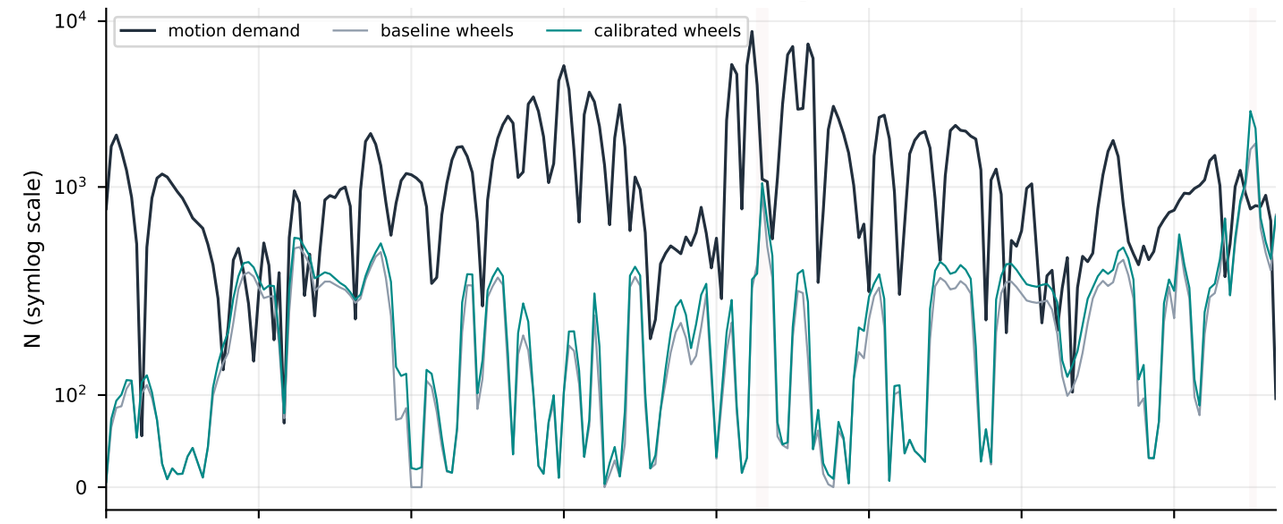
Multi-body angular momentum about COM



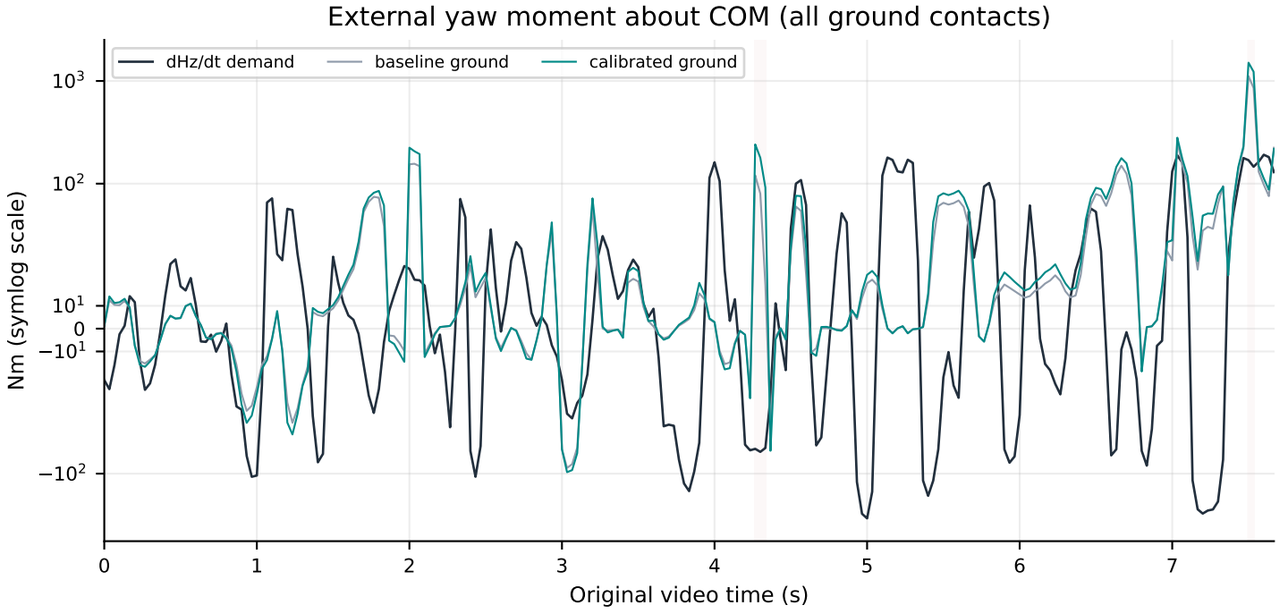
Ground / skate equivalent normal force



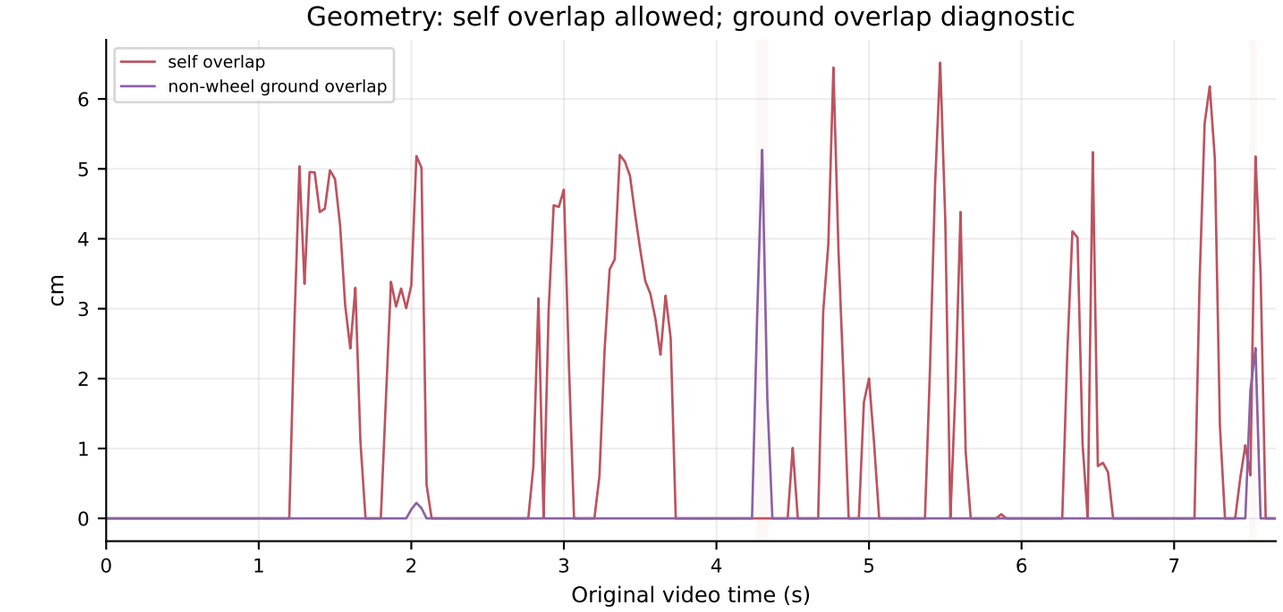
Horizontal resultant magnitude



External yaw moment about COM (all ground contacts)



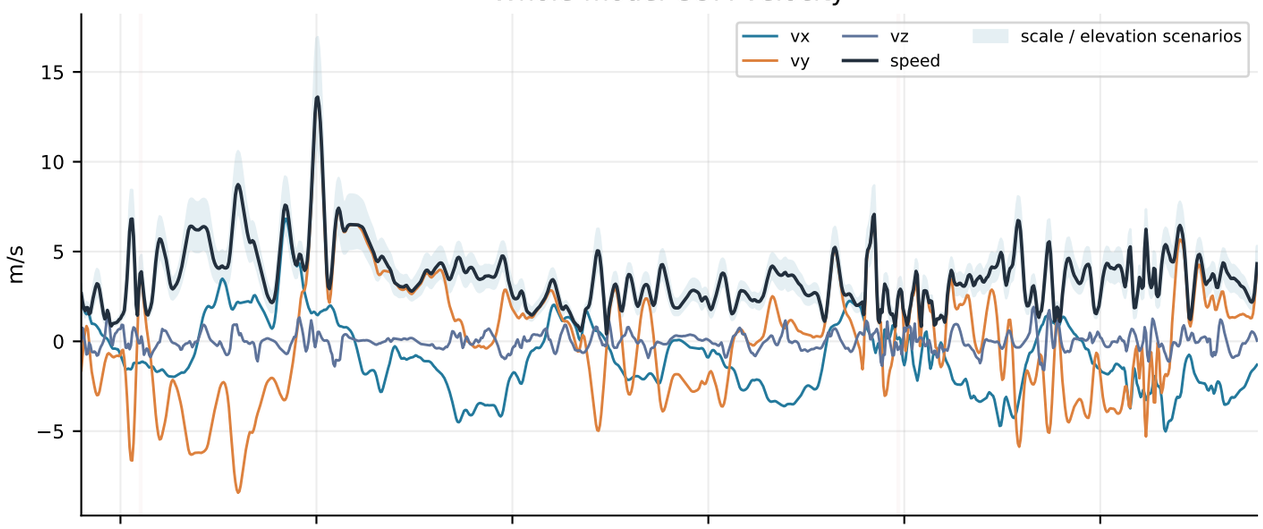
Geometry: self overlap allowed; ground overlap diagnostic



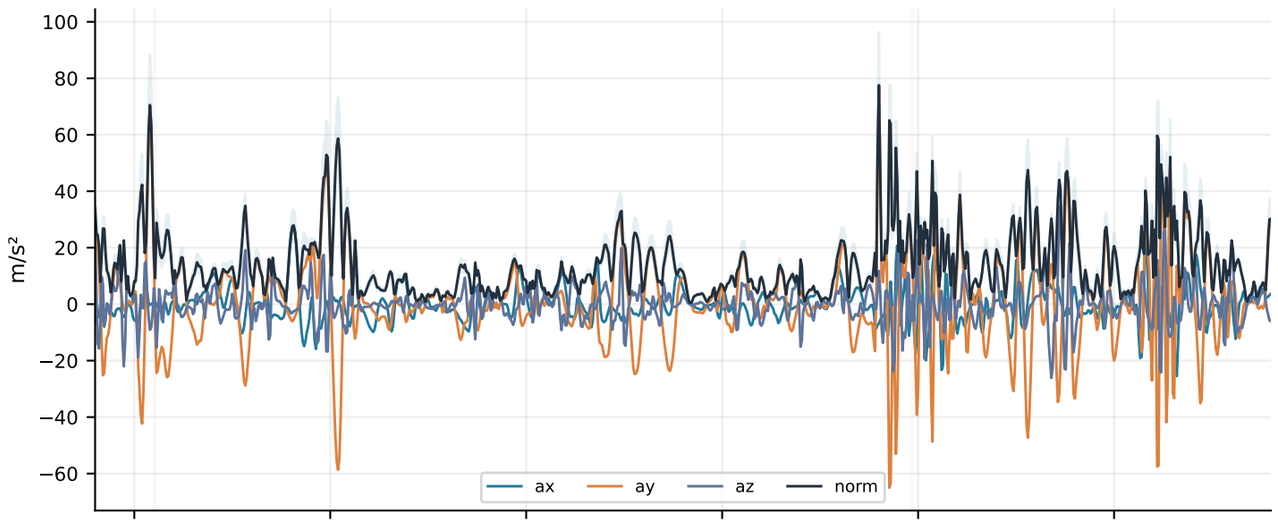
57 kg assumed body + 0.6 kg wheels. Inferred metric camera / scale. Shading is sensitivity, not confidence.
Contact forces are per-state model evaluations; only short calibration windows are forward simulations.

PyeongChang 2018 - Hanyu | Conditional macro physics, WB013

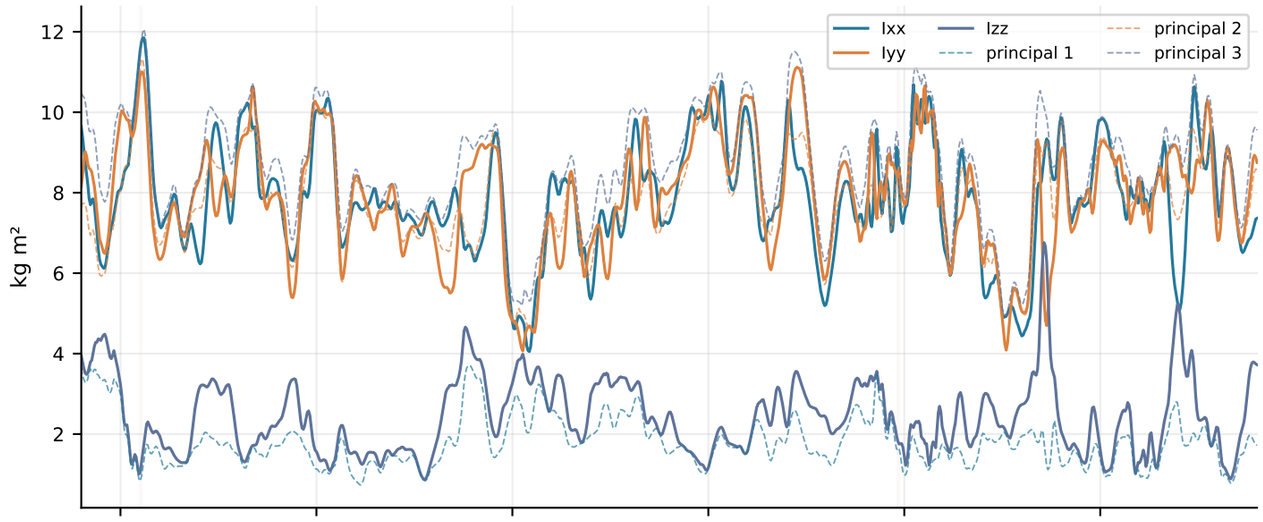
Whole-model COM velocity



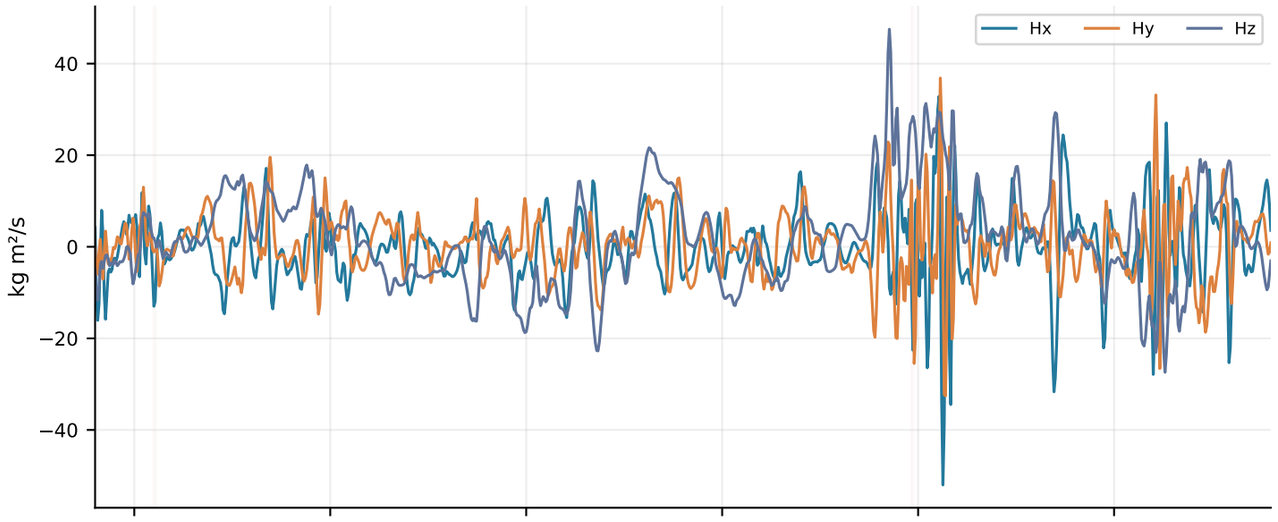
COM acceleration



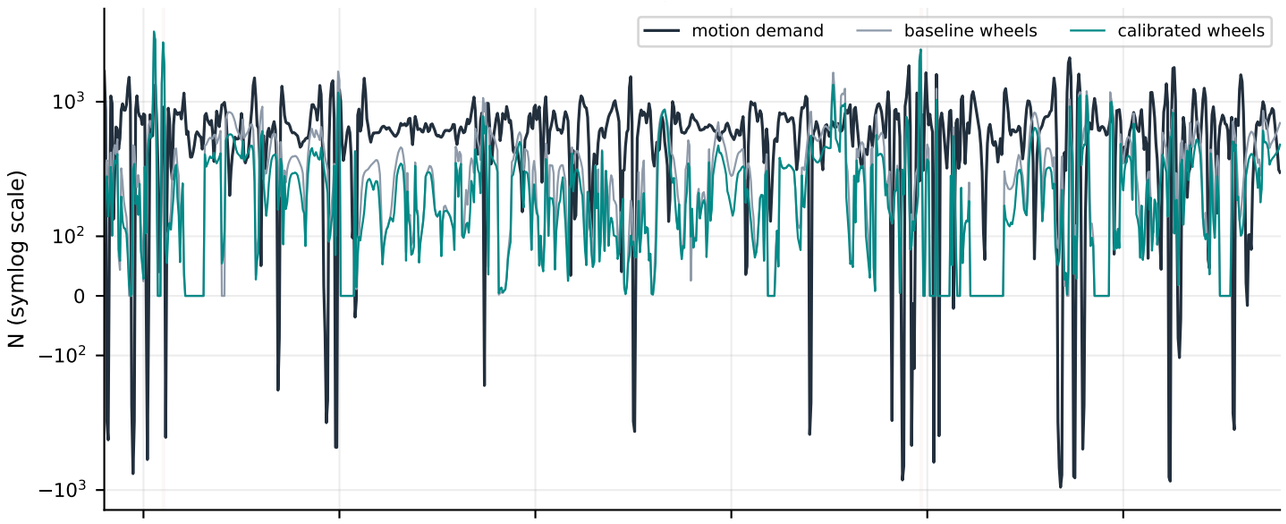
Locked whole-body inertia about instantaneous COM



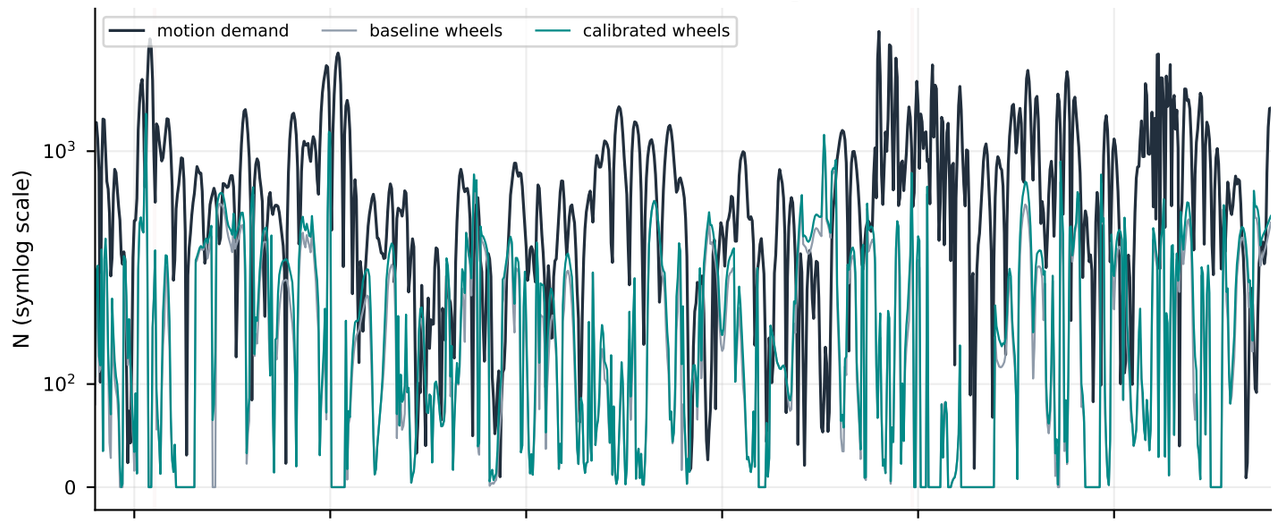
Multi-body angular momentum about COM



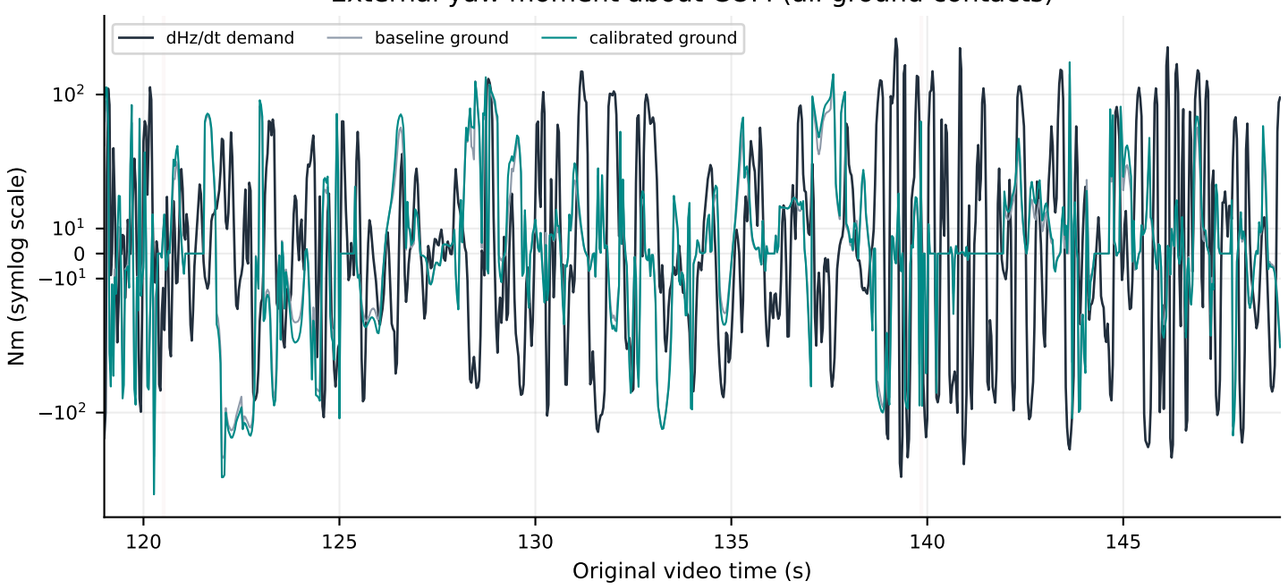
Ground / skate equivalent normal force



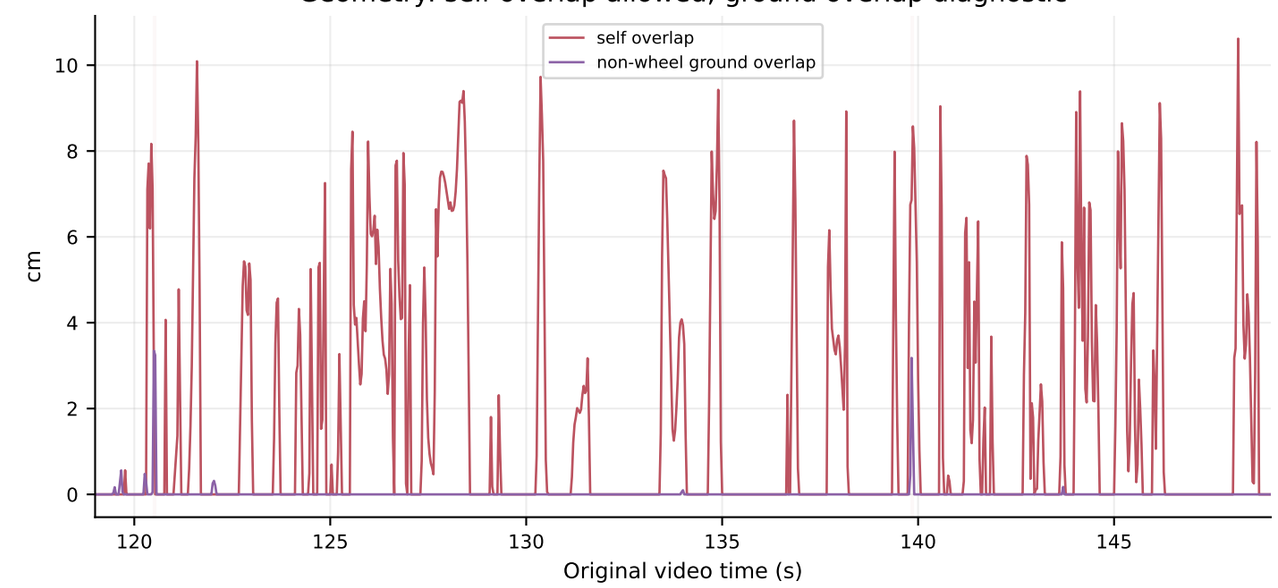
Horizontal resultant magnitude



External yaw moment about COM (all ground contacts)



Geometry: self overlap allowed; ground overlap diagnostic



57 kg assumed body + 0.6 kg wheels. Inferred metric camera / scale. Shading is sensitivity, not confidence.
Contact forces are per-state model evaluations; only short calibration windows are forward simulations.