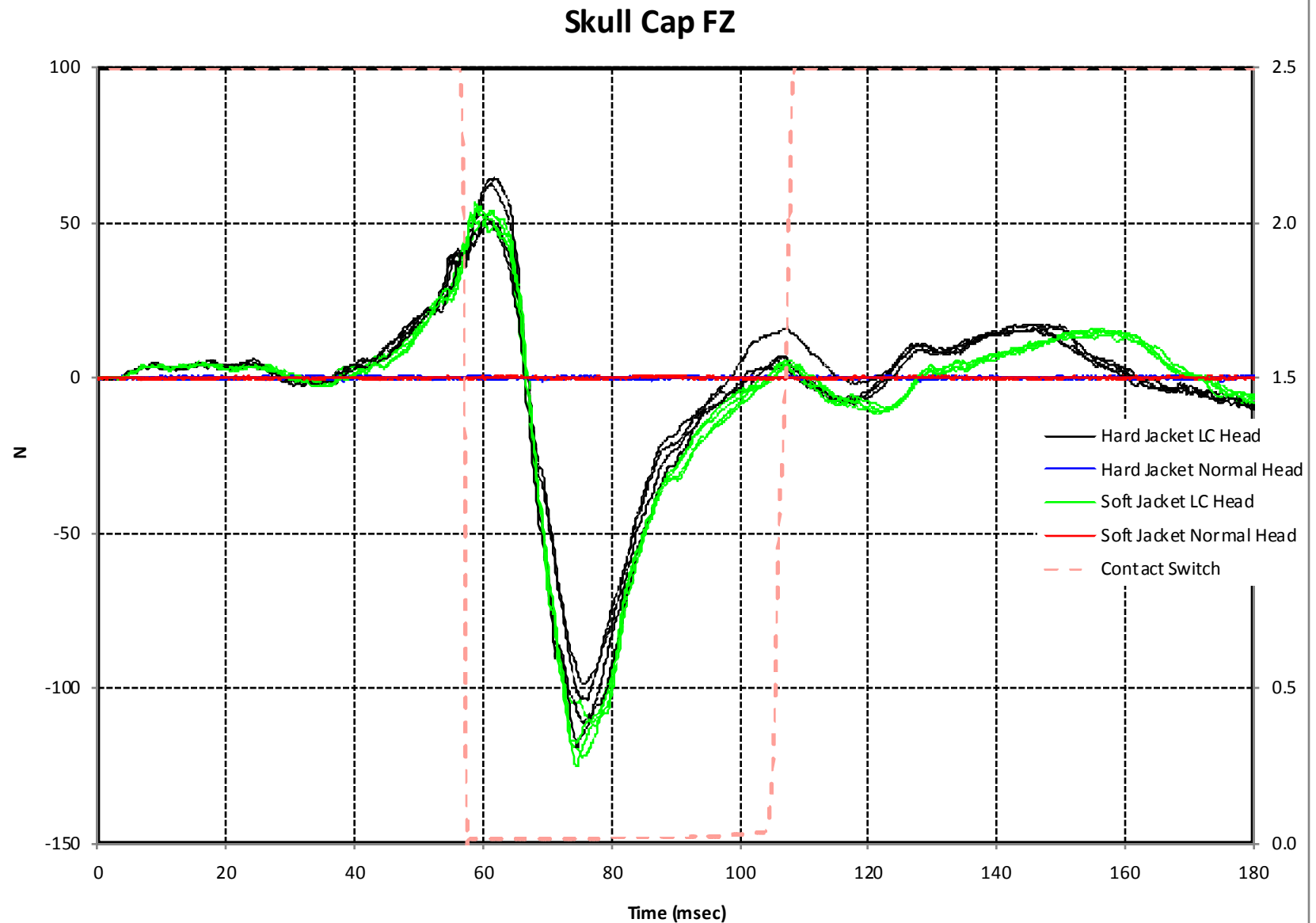


Jacket – Head DOE

Headrest

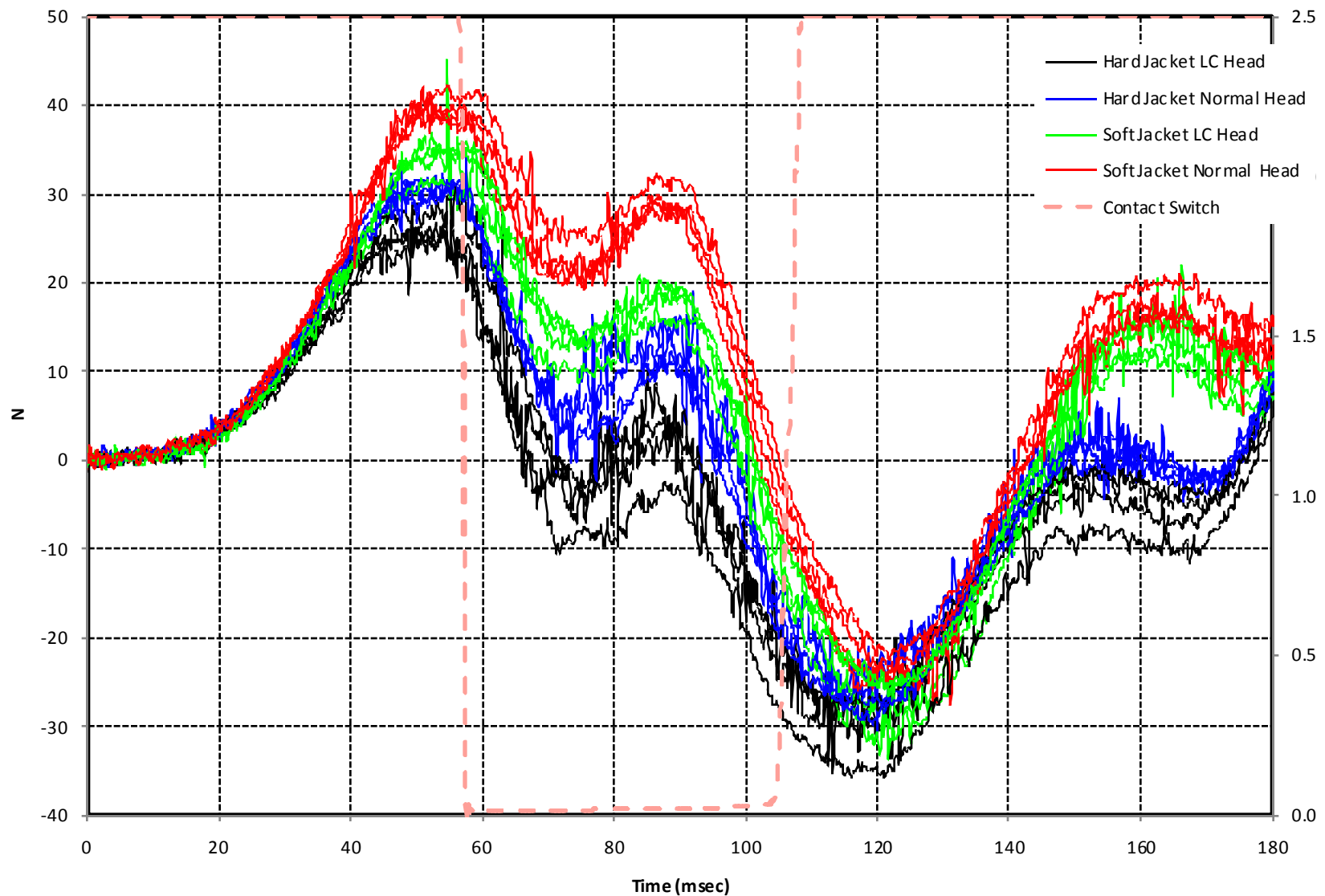
TEGID-17



Jacket – Head DOE

Headrest

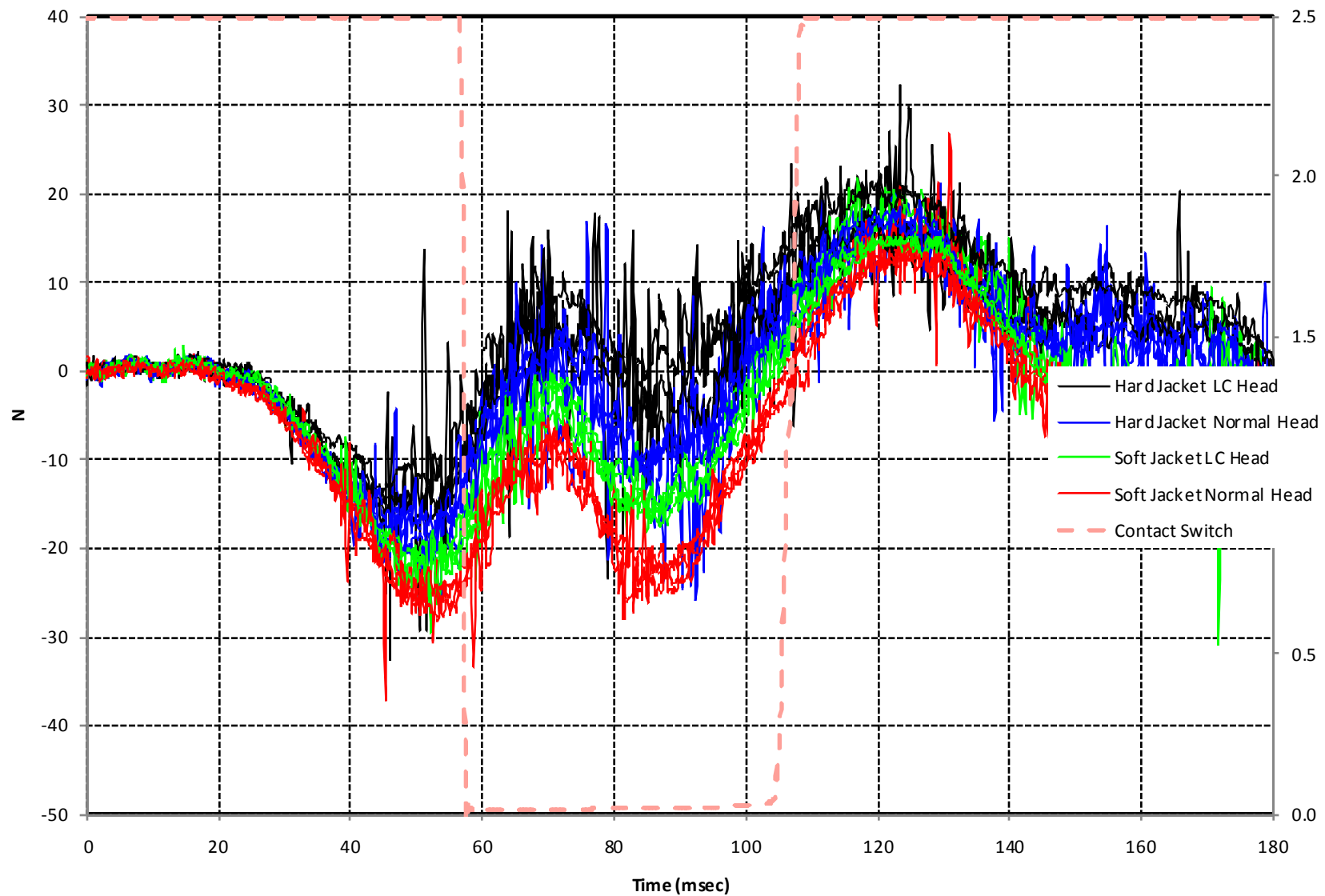
Anterior Muscle Tension - Long Tube



Jacket – Head DOE

Headrest

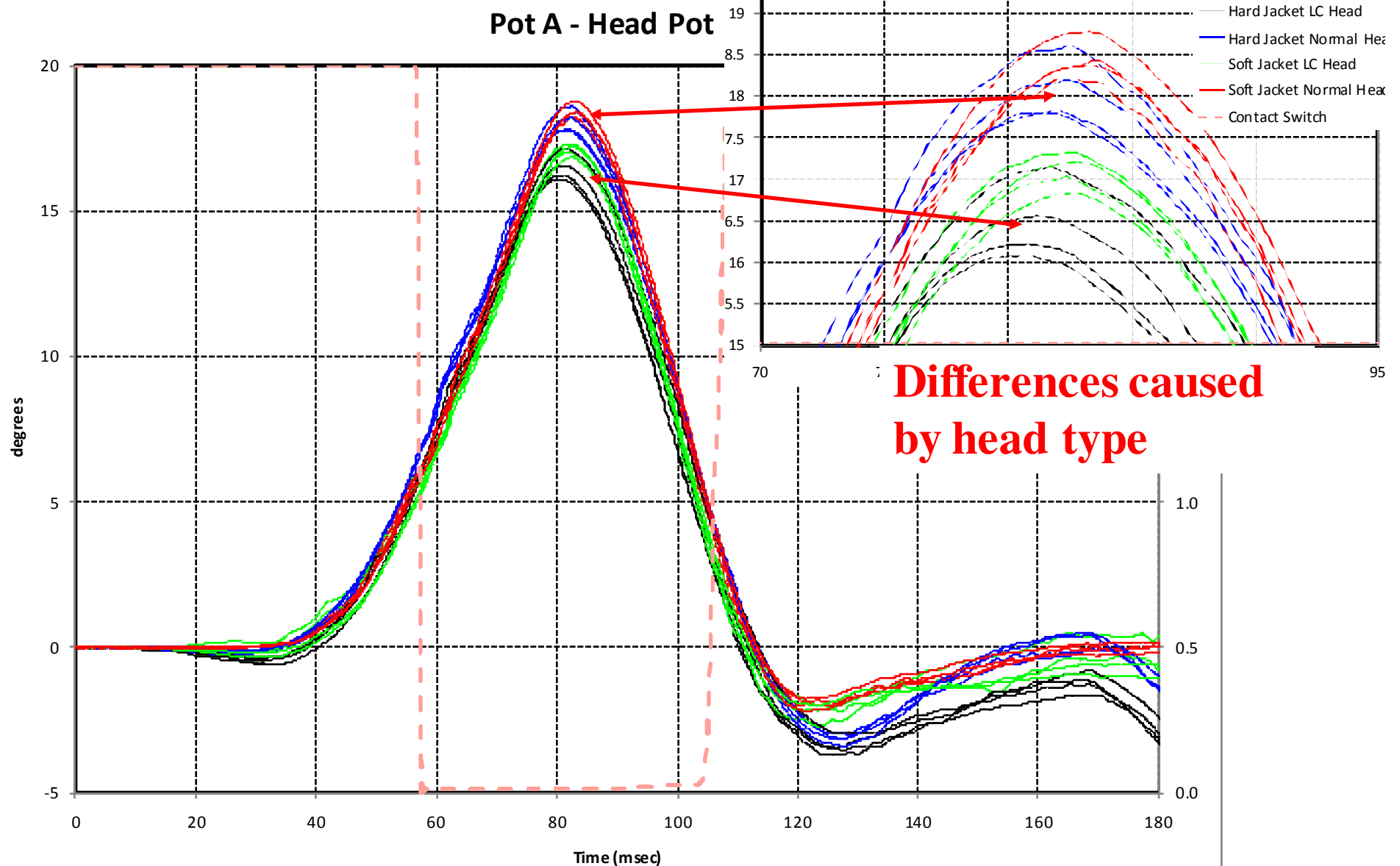
Posterior Muscle Tension - Small Tube



Jacket – Head DOE

Headrest

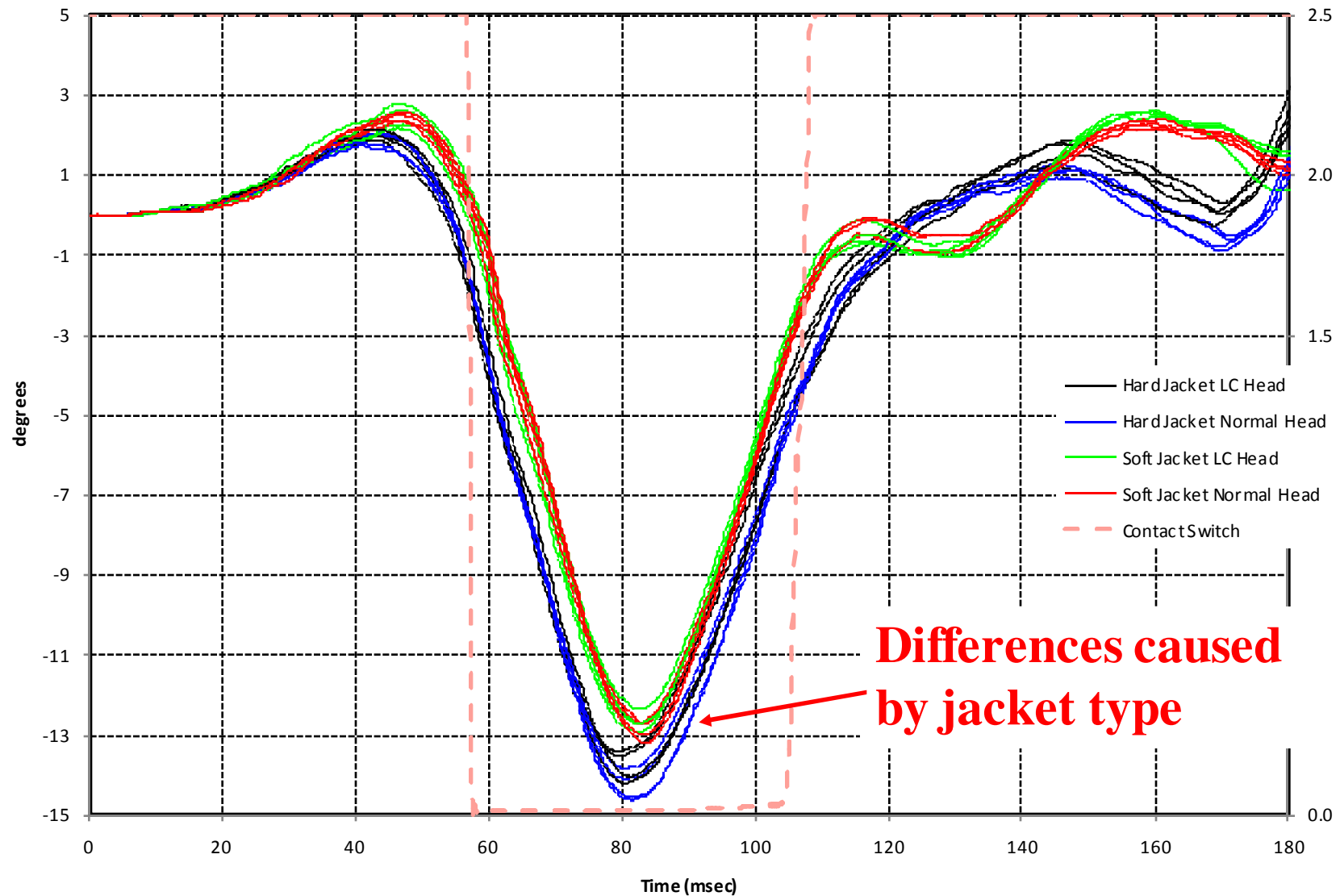
Pot A - Head Pot



Jacket – Head DOE

Headrest

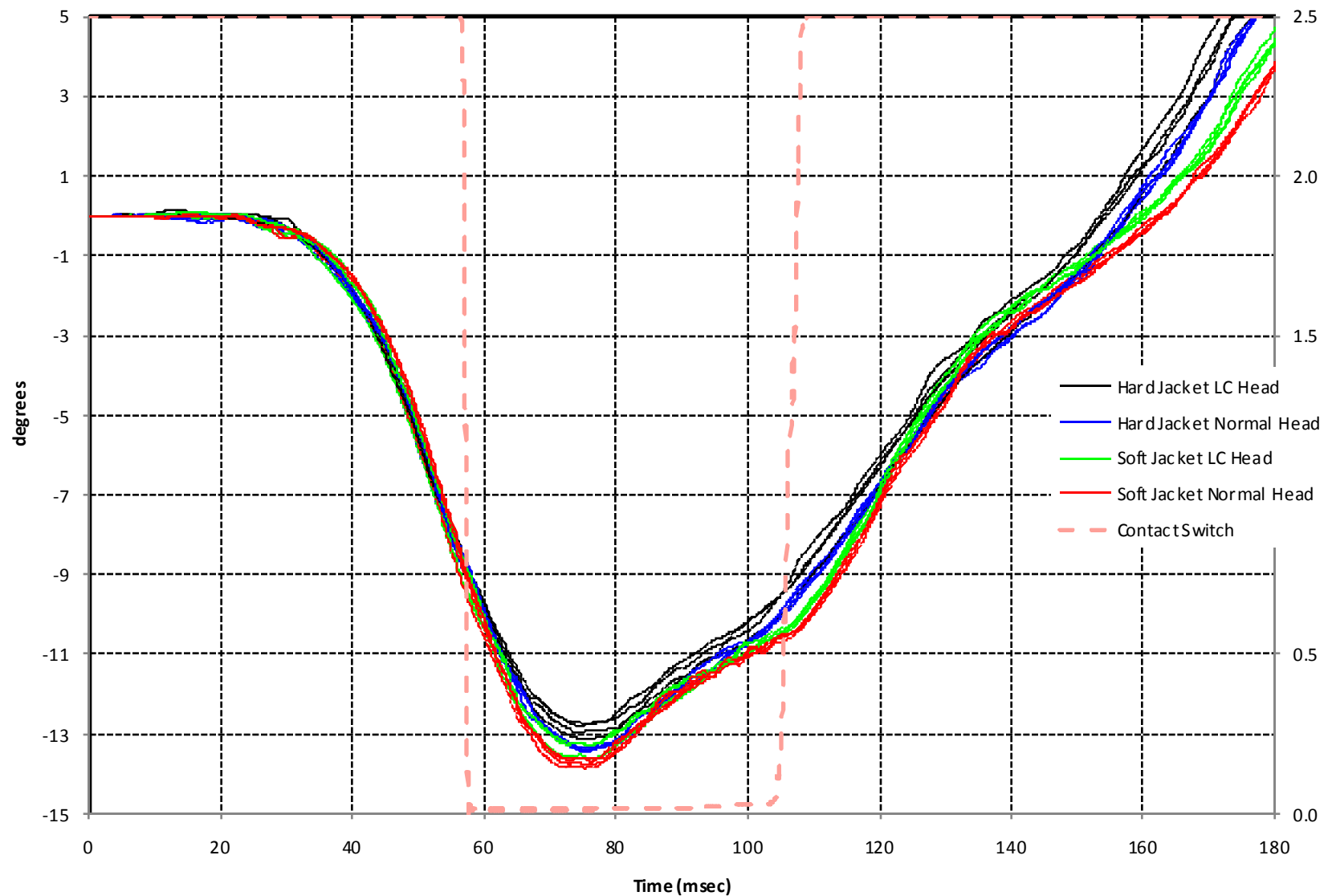
Pot B - Neck Link Pot



Jacket – Head DOE

Headrest

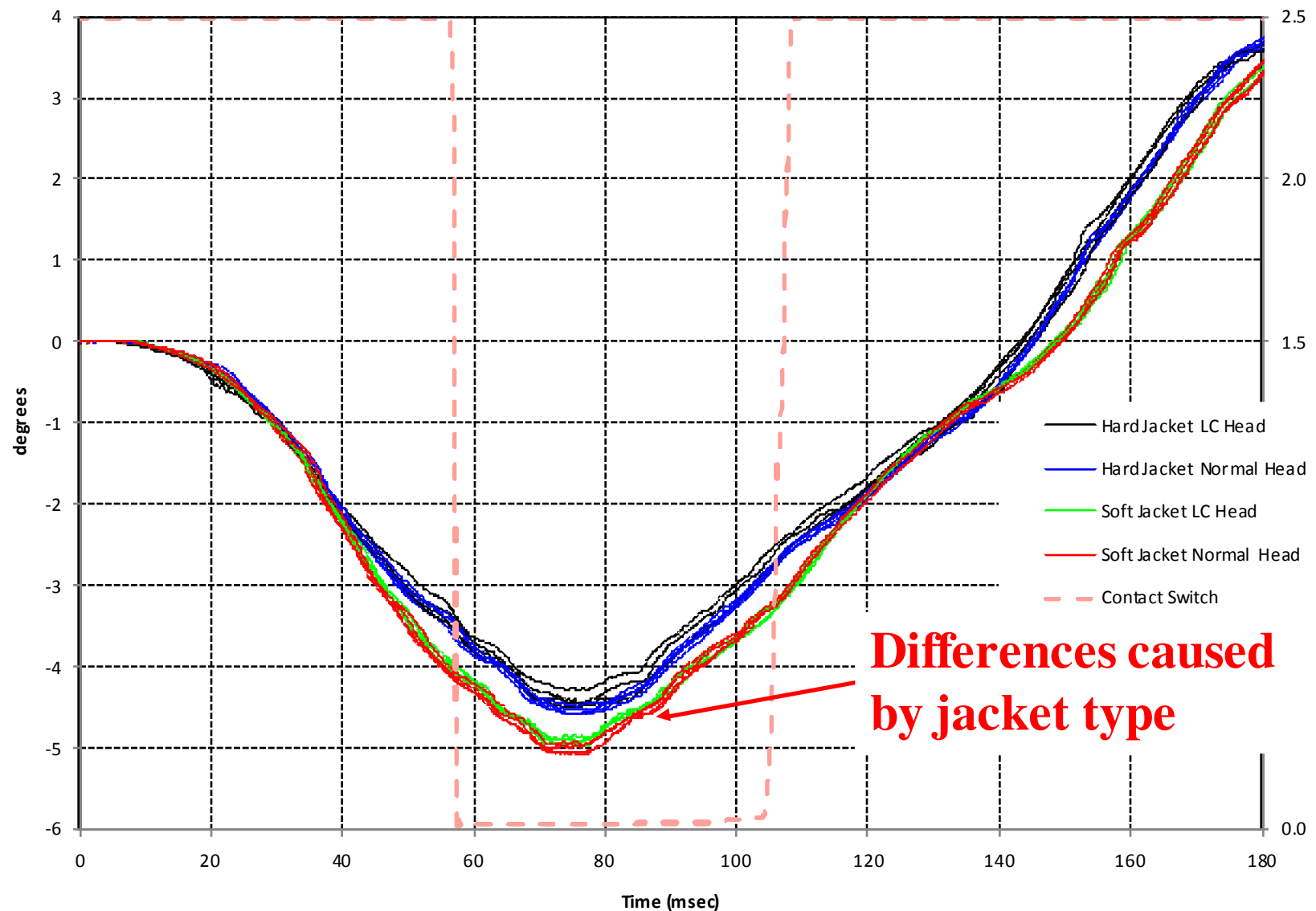
Pot C - T1 Pot



Jacket – Head DOE

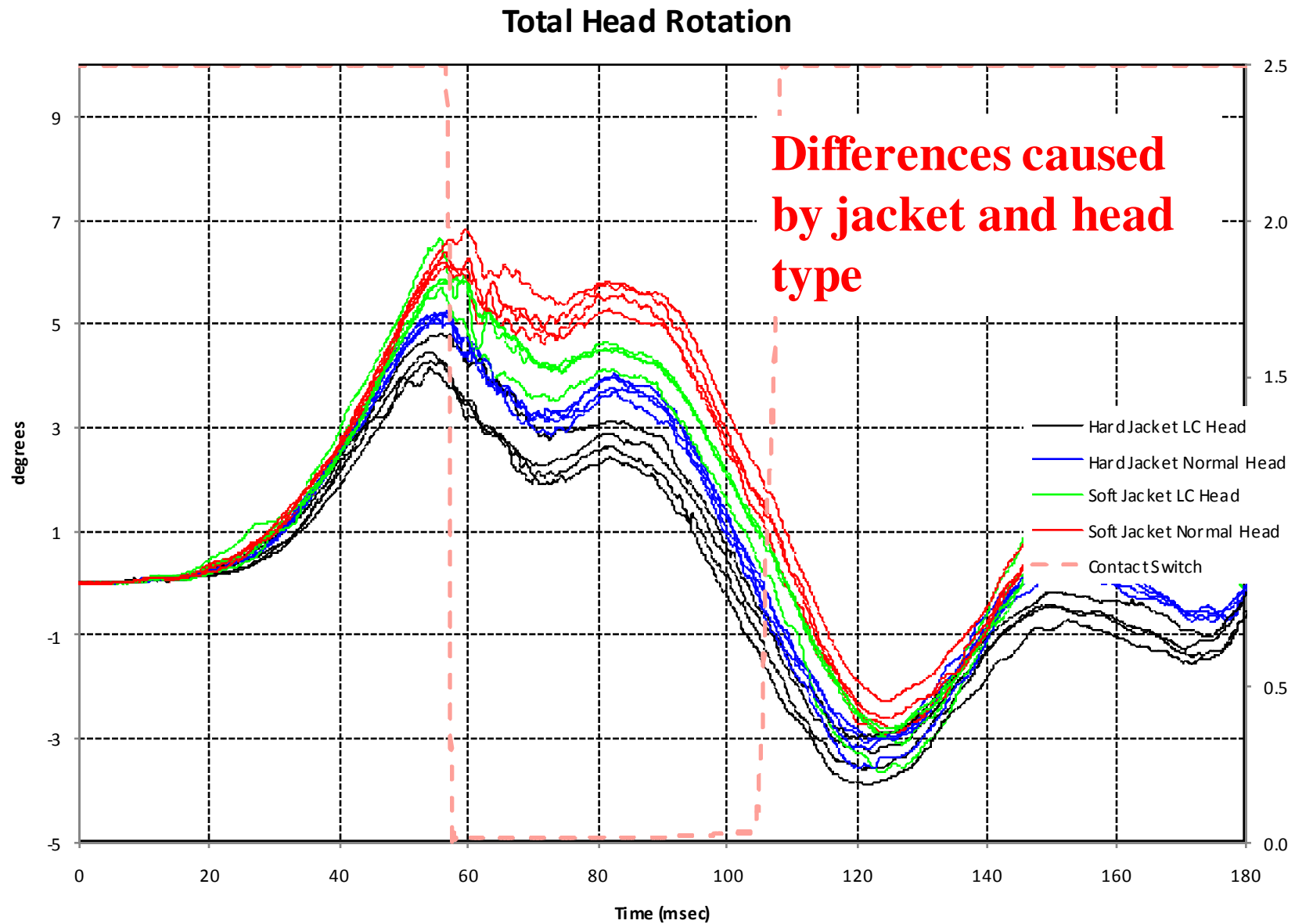
Headrest

Pot D - Sled Pot



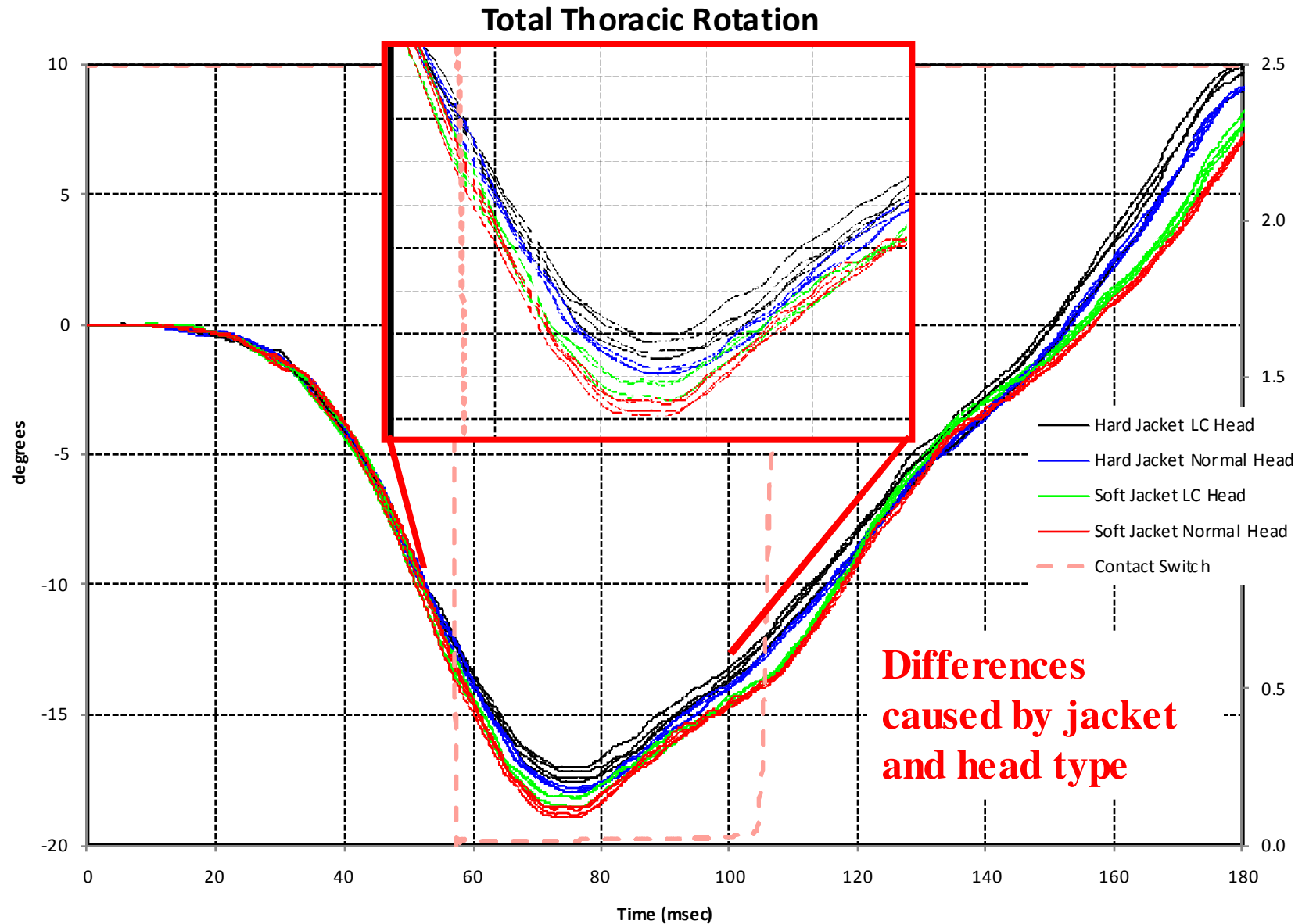
Jacket – Head DOE

Headrest



Jacket – Head DOE

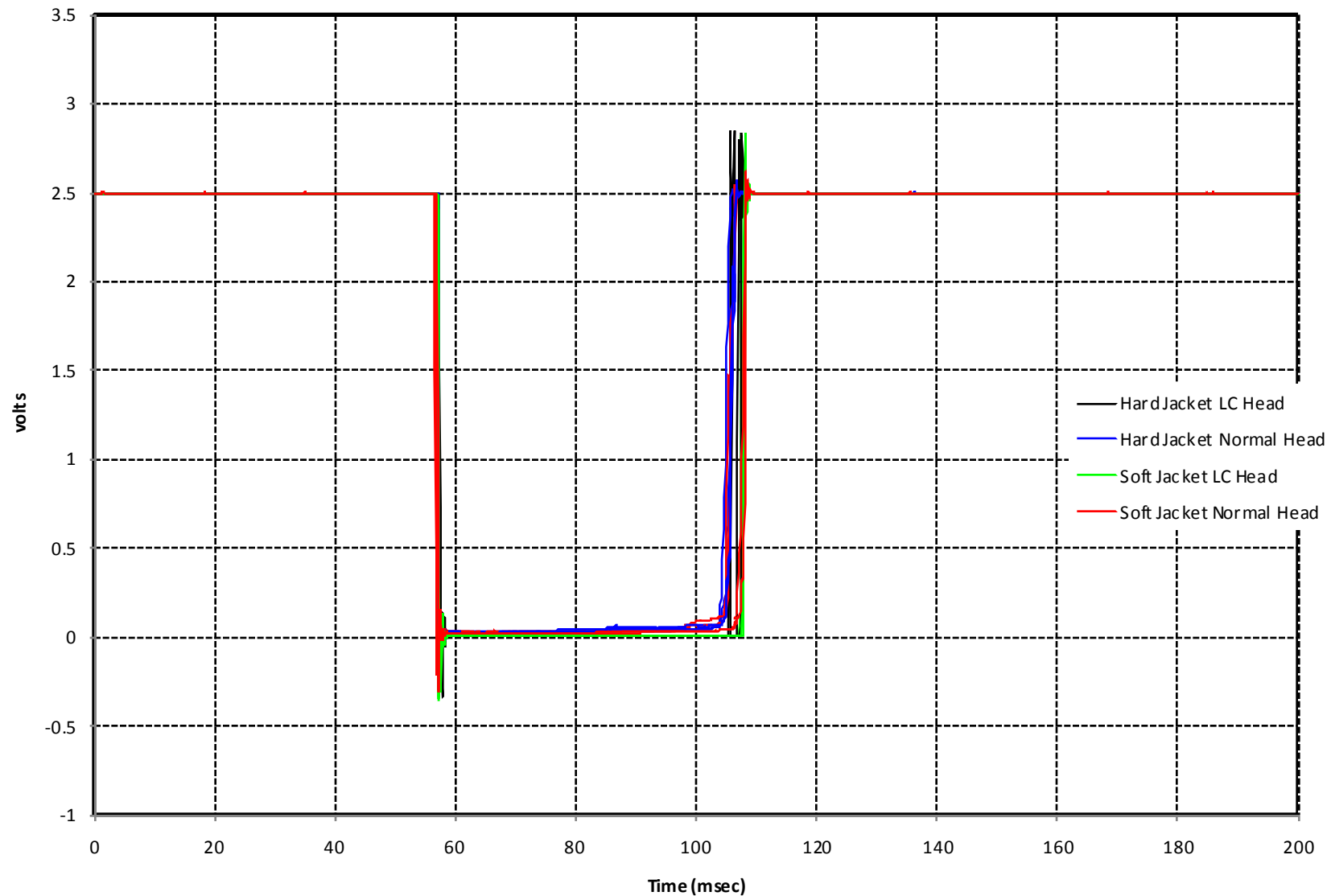
Headrest



Jacket – Head DOE

Headrest

Head Contact Switch



Jacket – Head DOE

Headrest

- Conclusions from Headrest Test
 - Head type
 - Differences between the two heads is small but evident in some channels
 - Need to determine why head type made a difference
 - Mass moment of inertia (MMI) or cap attachment rigidity
 - Contact switch works well with normal skull cap



Jacket – Head DOE

Headrest

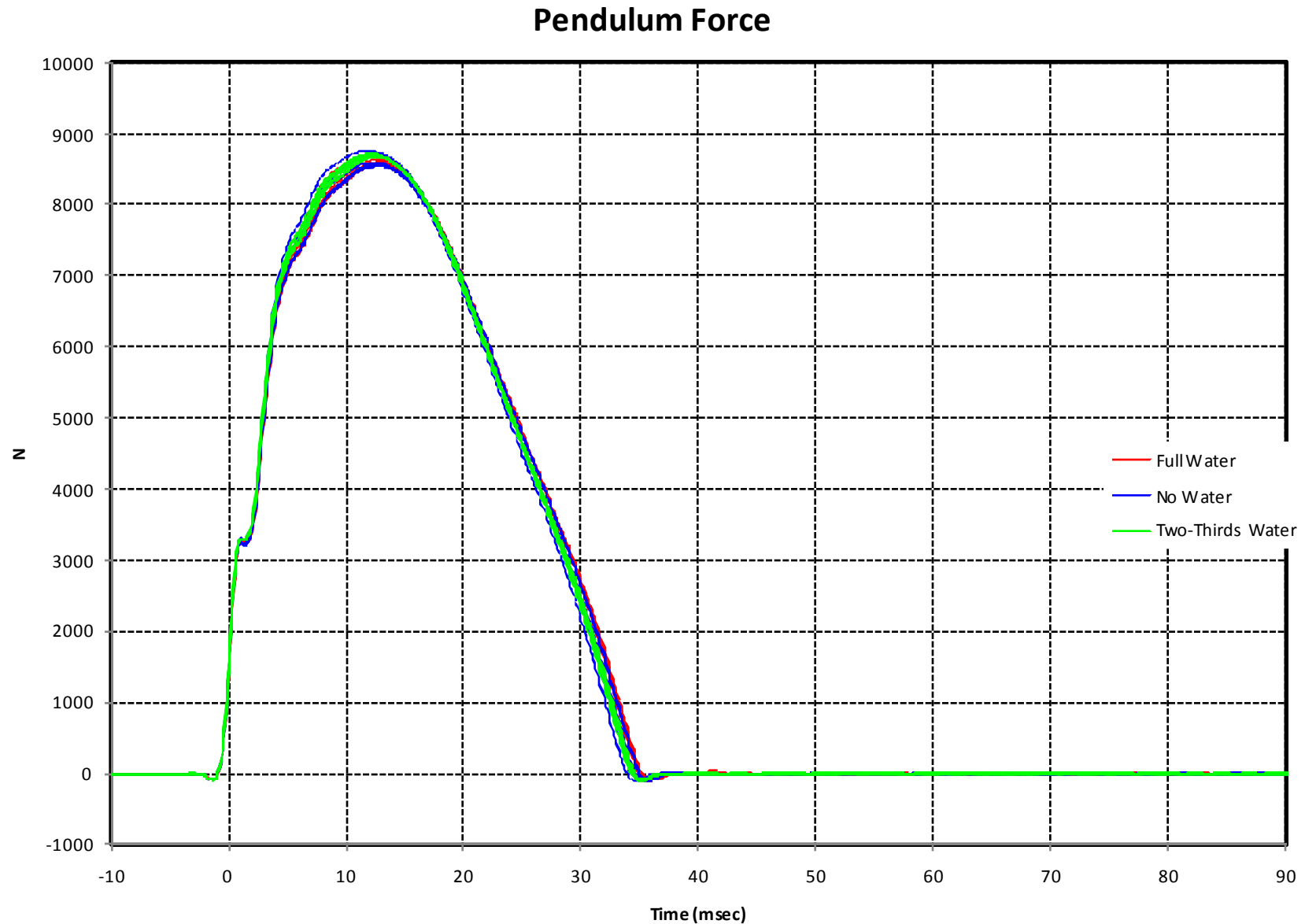
- Conclusions (continued)
 - Jacket type variable
 - Differences in jacket stiffness can be seen in many test parameters.
 - Jacket type made the largest test differences
 - Tighter manufacturing controls are in place
 - Continue to develop jacket only test
 - verify jackets in field
 - Need to see if these jackets and heads make a difference in sled testing

Variation Studies: Jacket Water Quantity

- Study Goal
 - Determine how much effect a leak of water or failure to fill the abdomen cavity has on dummy performance.
- Study Design
 - Run dummy certification series (no headrest)
 - Completely empty water from abdomen
 - Fill abdomen 2/3 full
 - Finish filling abdomen
 - Run headrest test
 - Completely empty water from abdomen
 - Fill abdomen 2/3 full
 - Finish filling abdomen

Jacket Water Series

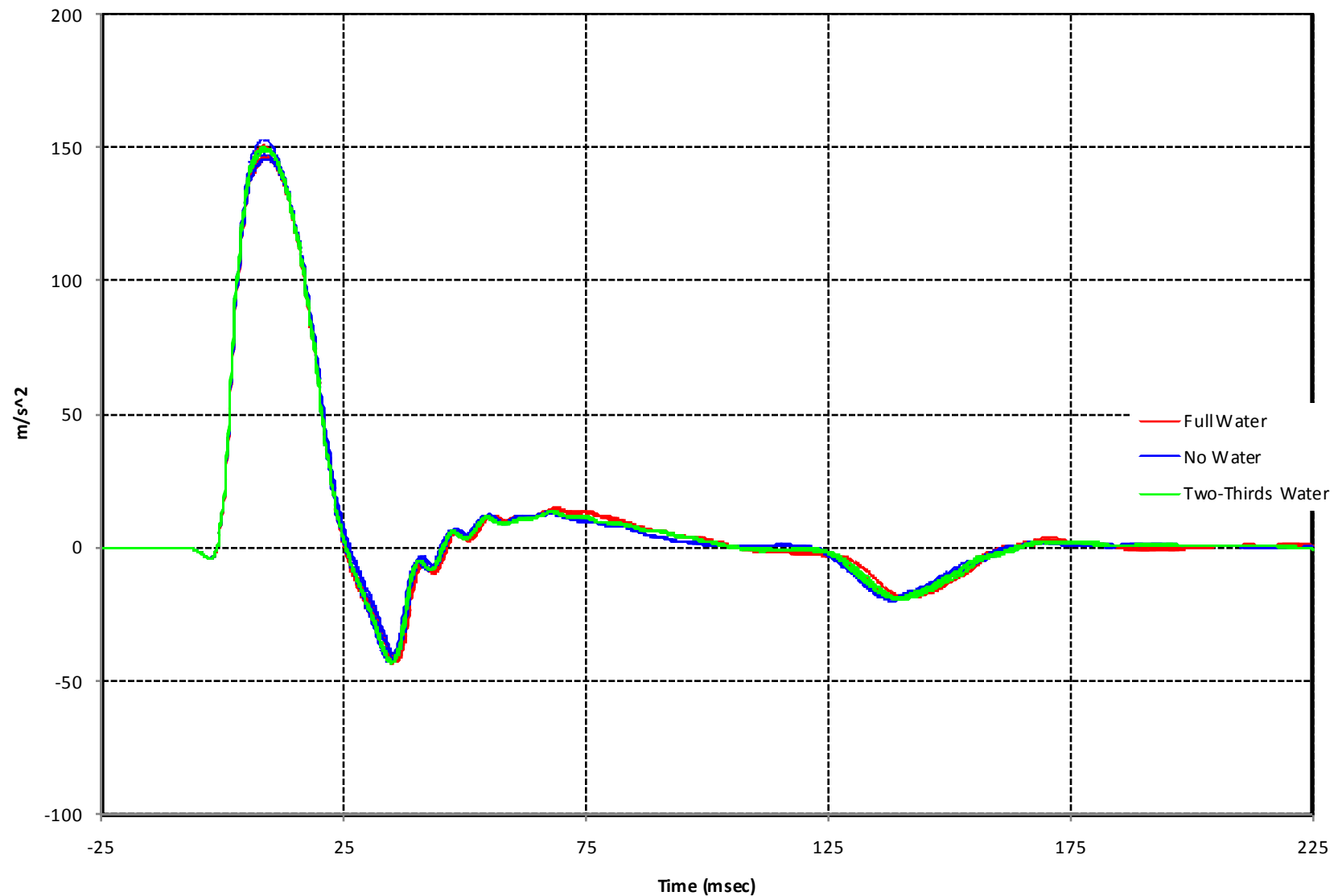
Dummy Certification



Jacket Water Series

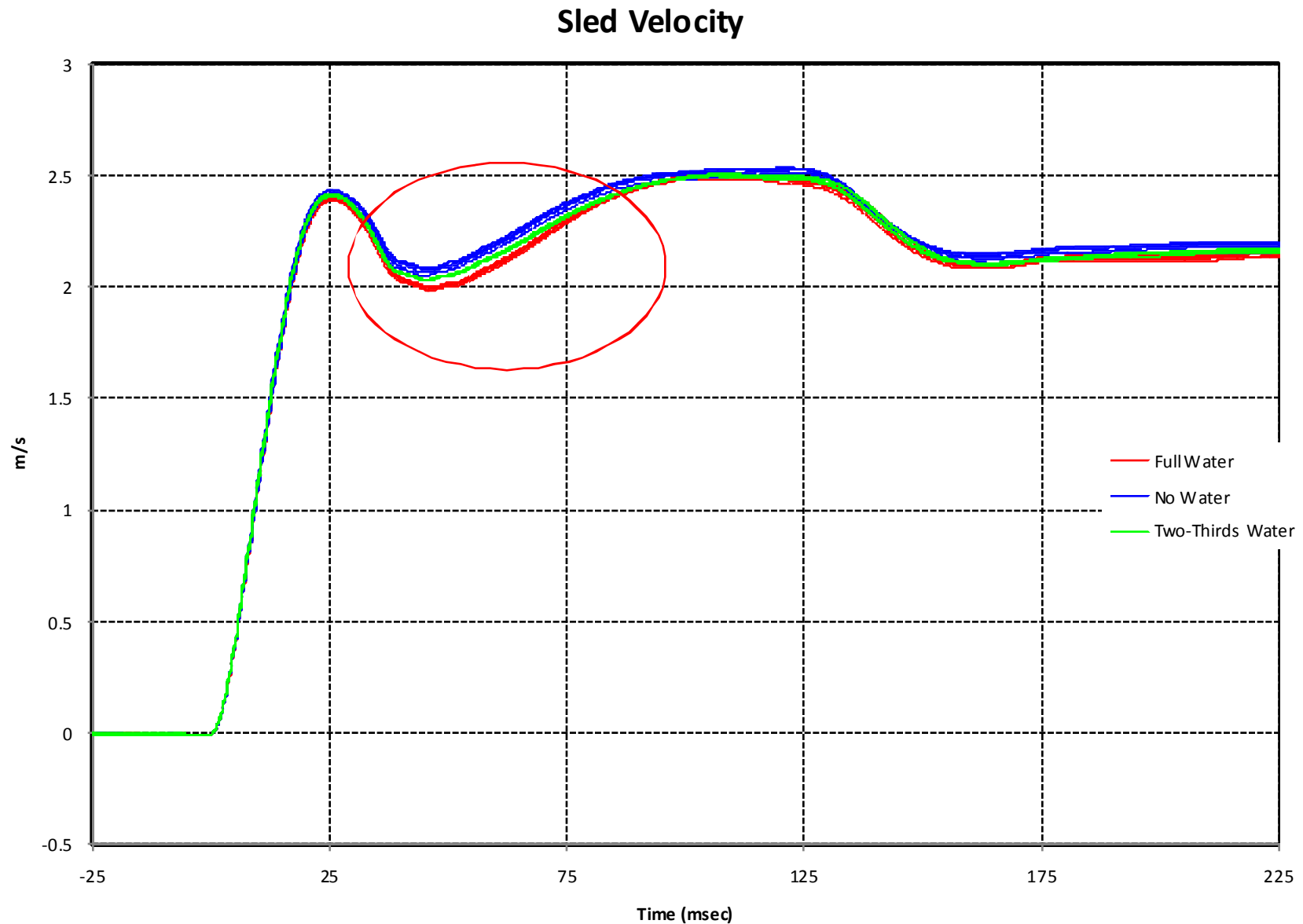
Dummy Certification

Sled Acceleration



Jacket Water Series

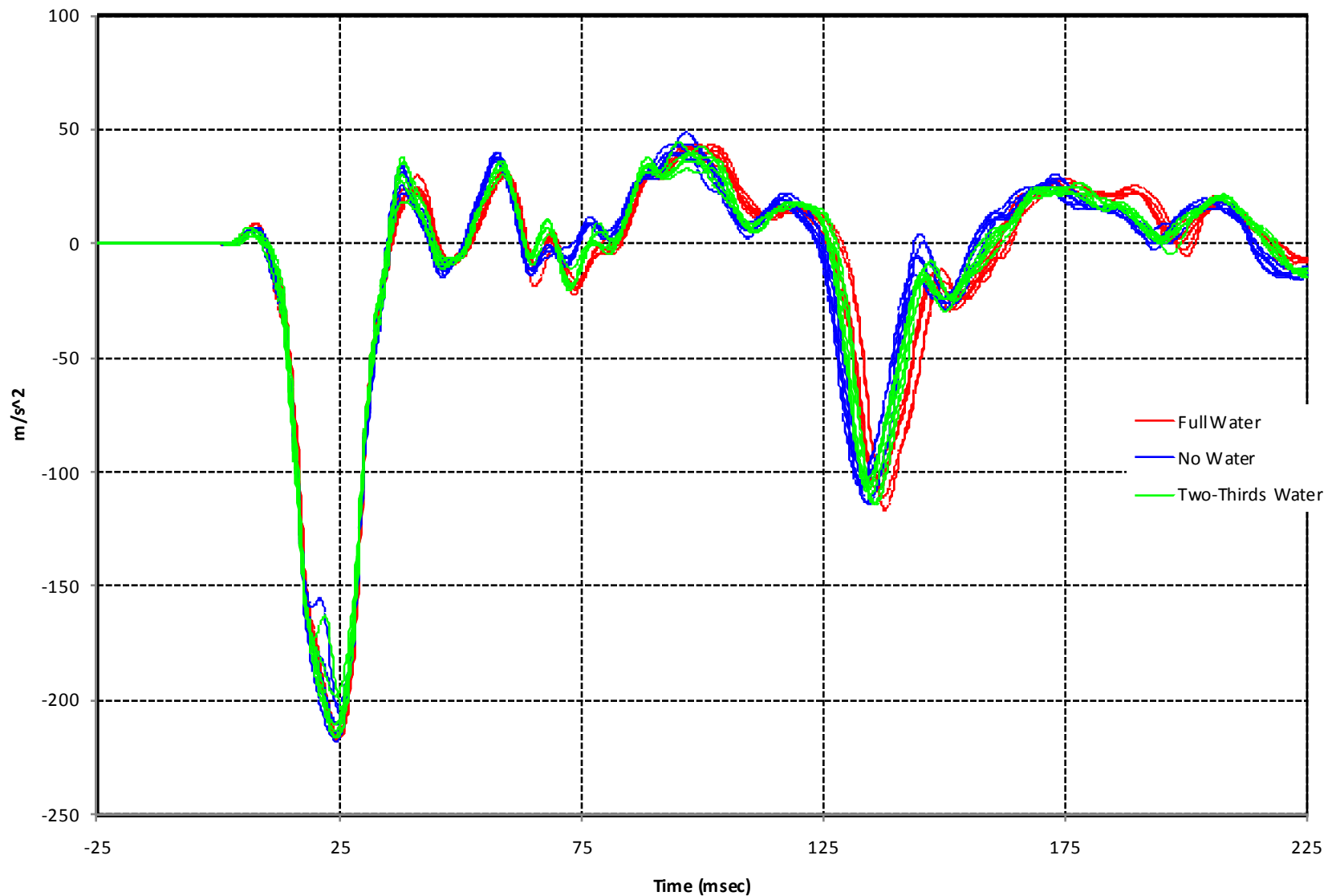
Dummy Certification



Jacket Water Series

Dummy Certification

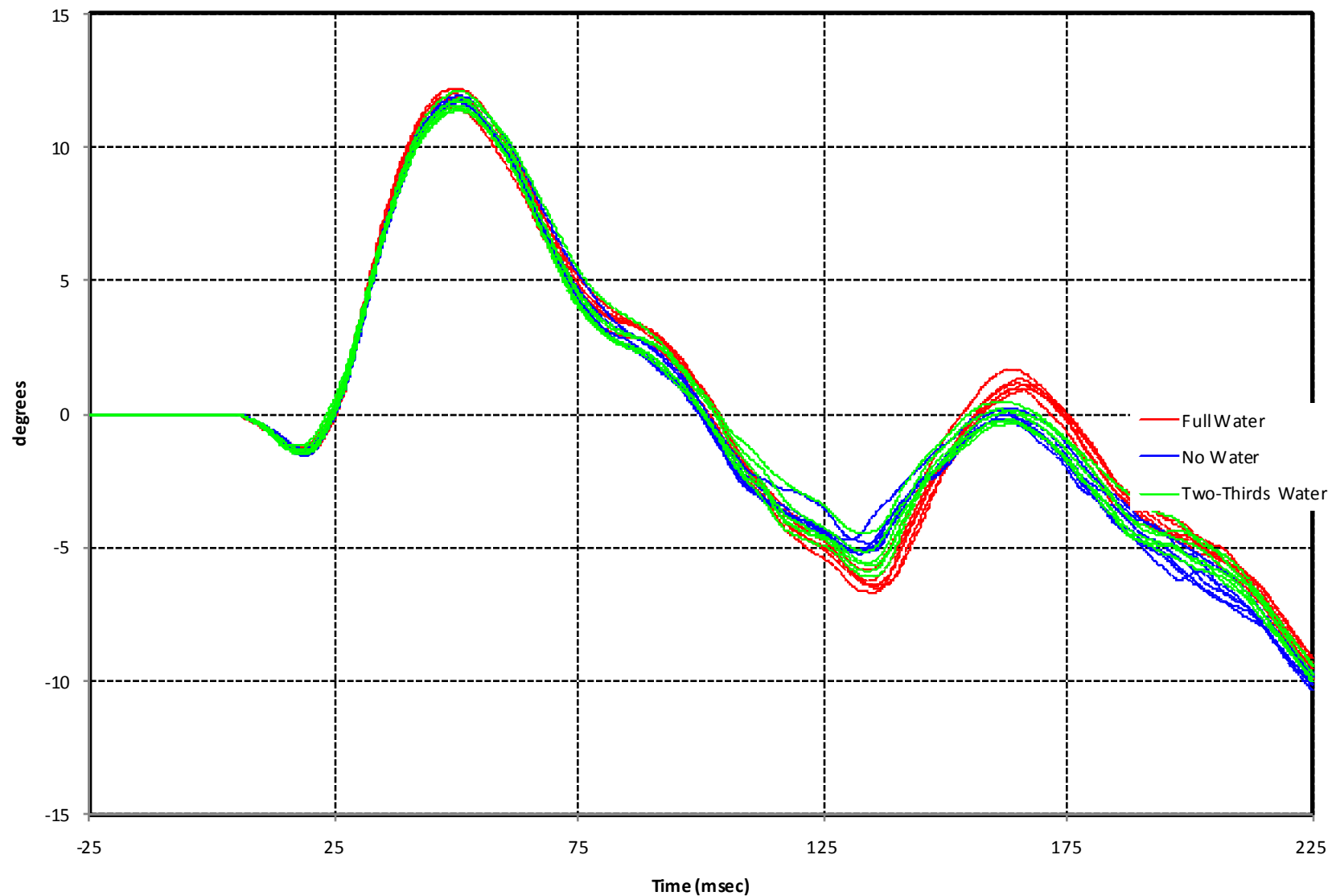
T1 X Acceleration



Jacket Water Series

Dummy Certification

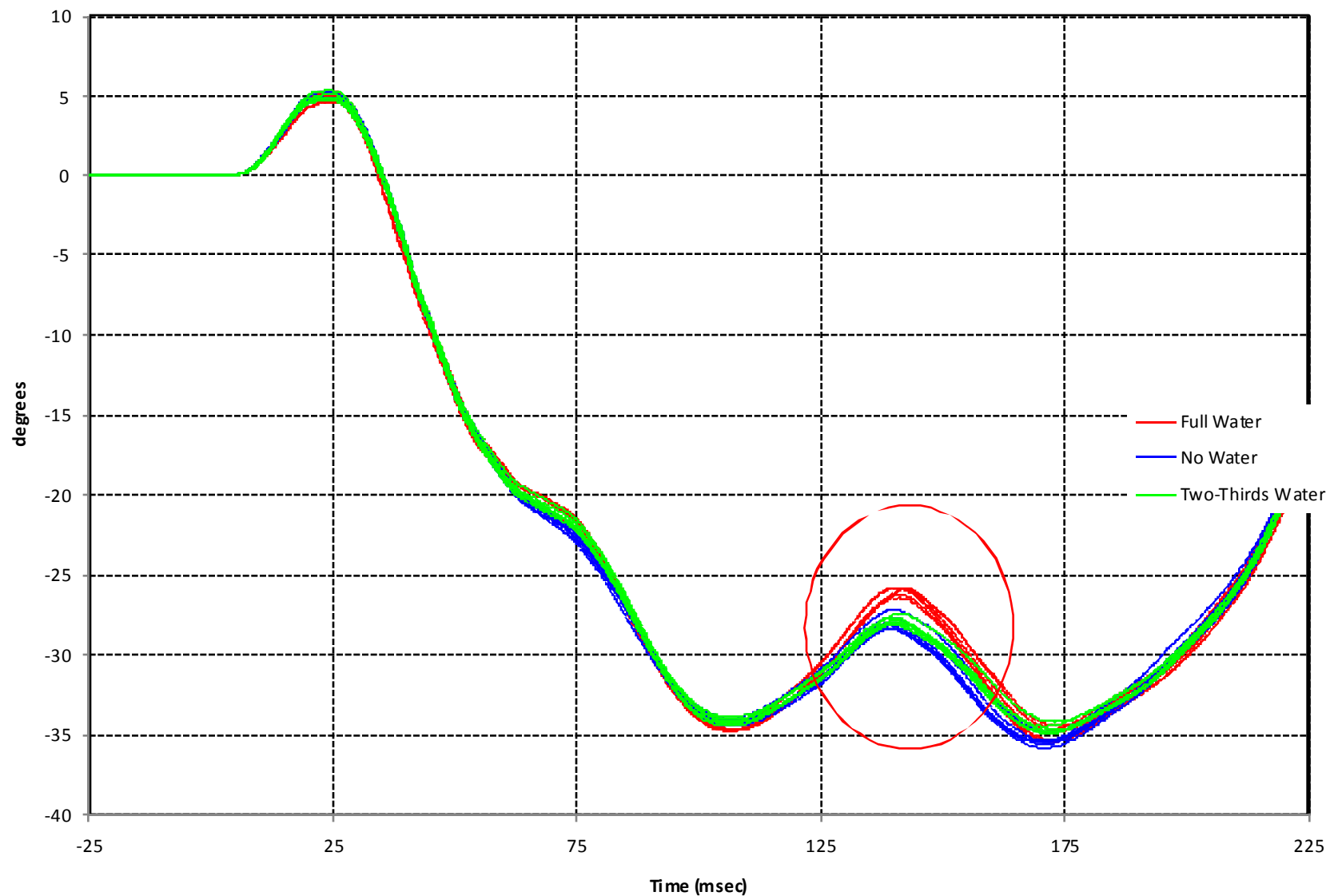
Pot A - Head Rotation about OC



Jacket Water Series

Dummy Certification

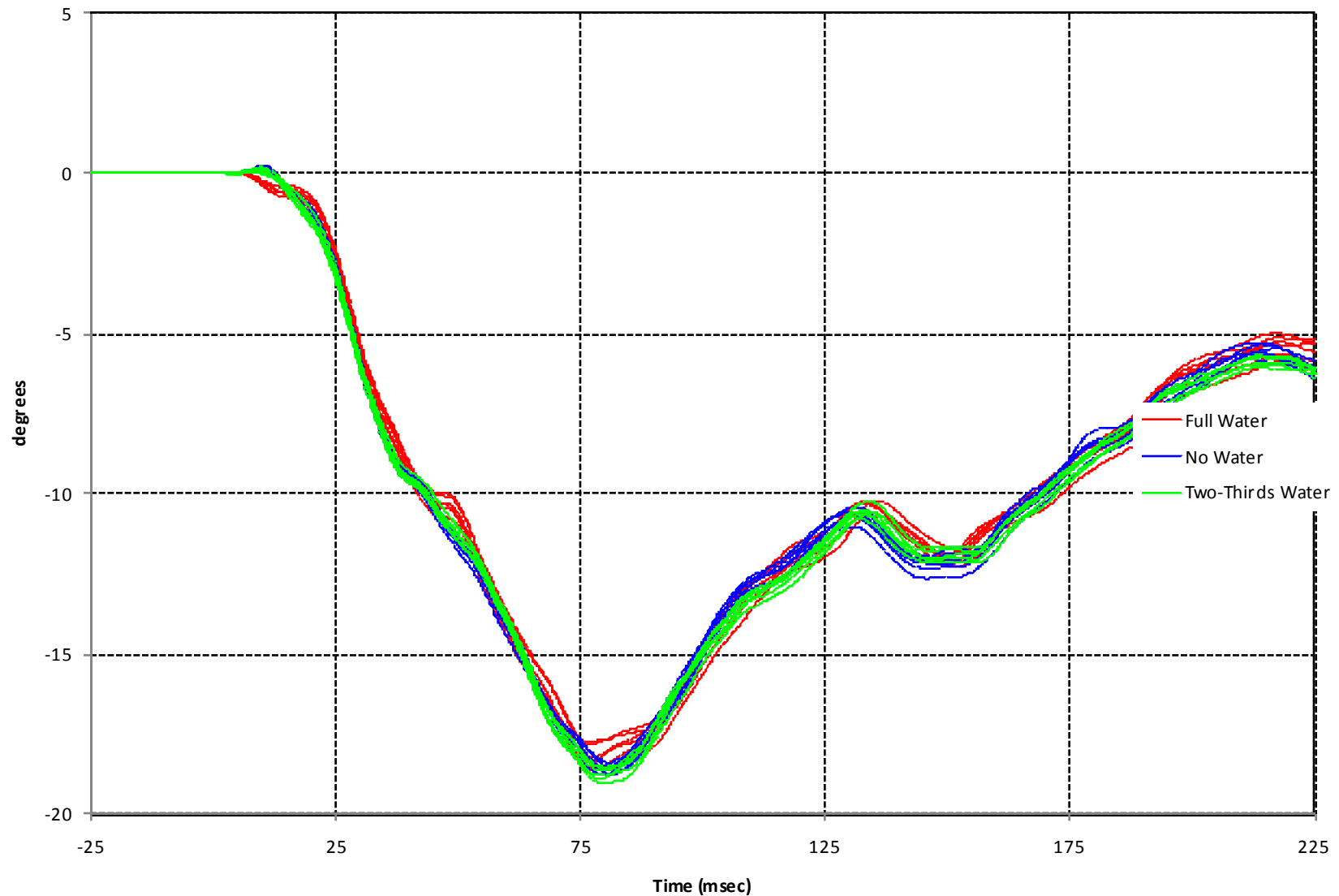
Pot B - Neck Link Rotation about T1



Jacket Water Series

Dummy Certification

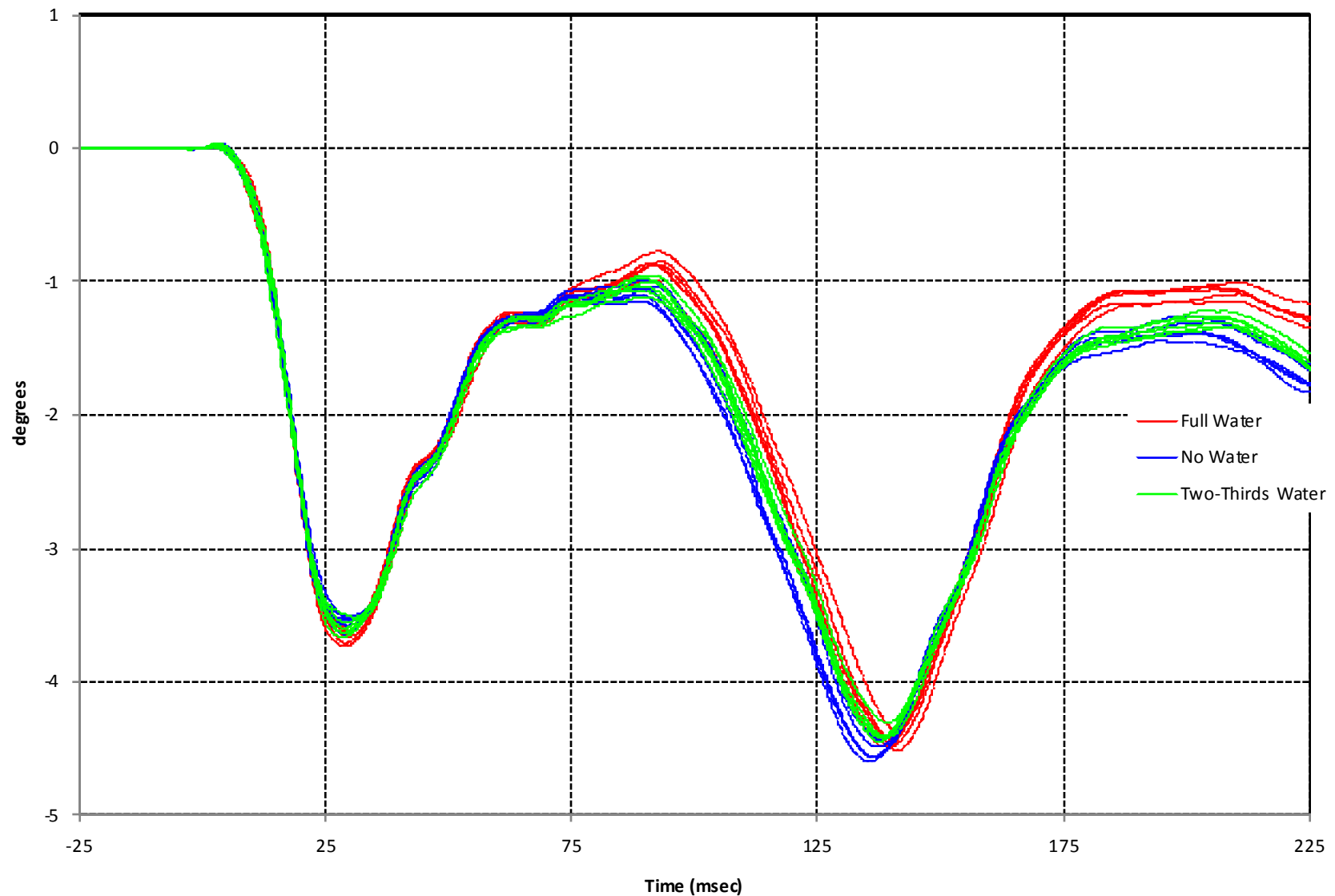
Pot C - T1 Rotation



Jacket Water Series

Dummy Certification

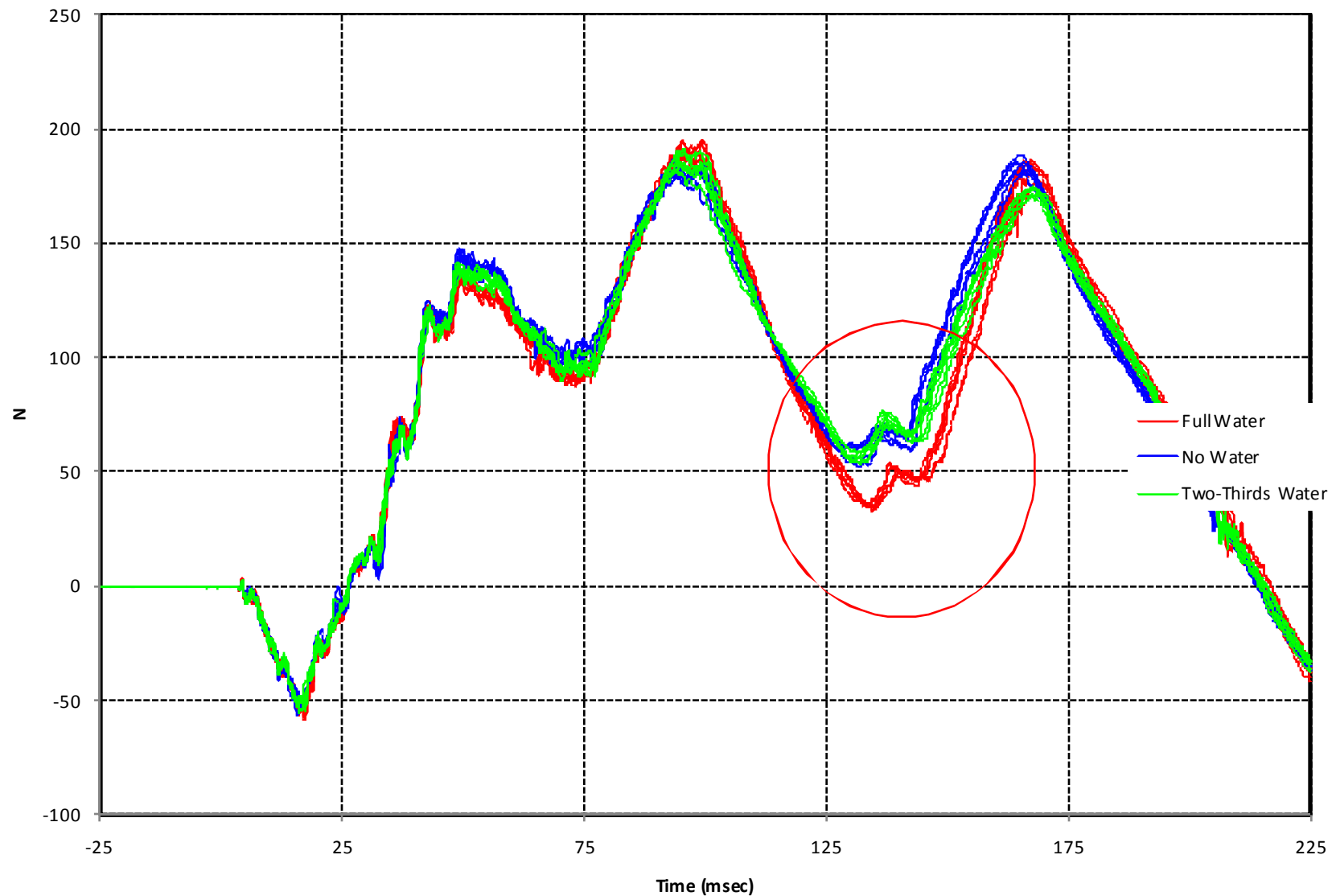
Pot D - Lower Thorax Rotation



Jacket Water Series

Dummy Certification

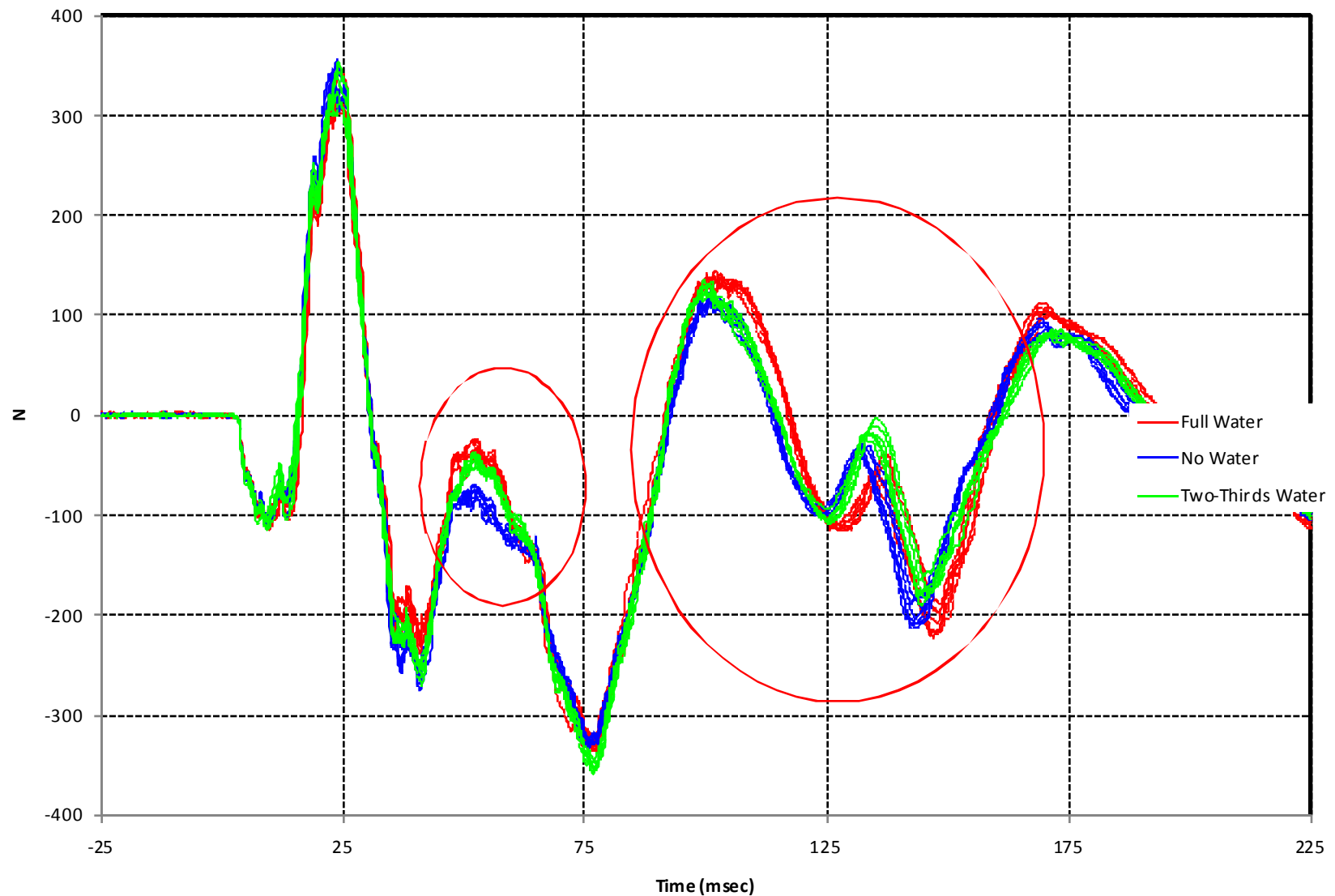
Upper Neck Force FX



Jacket Water Series

Dummy Certification

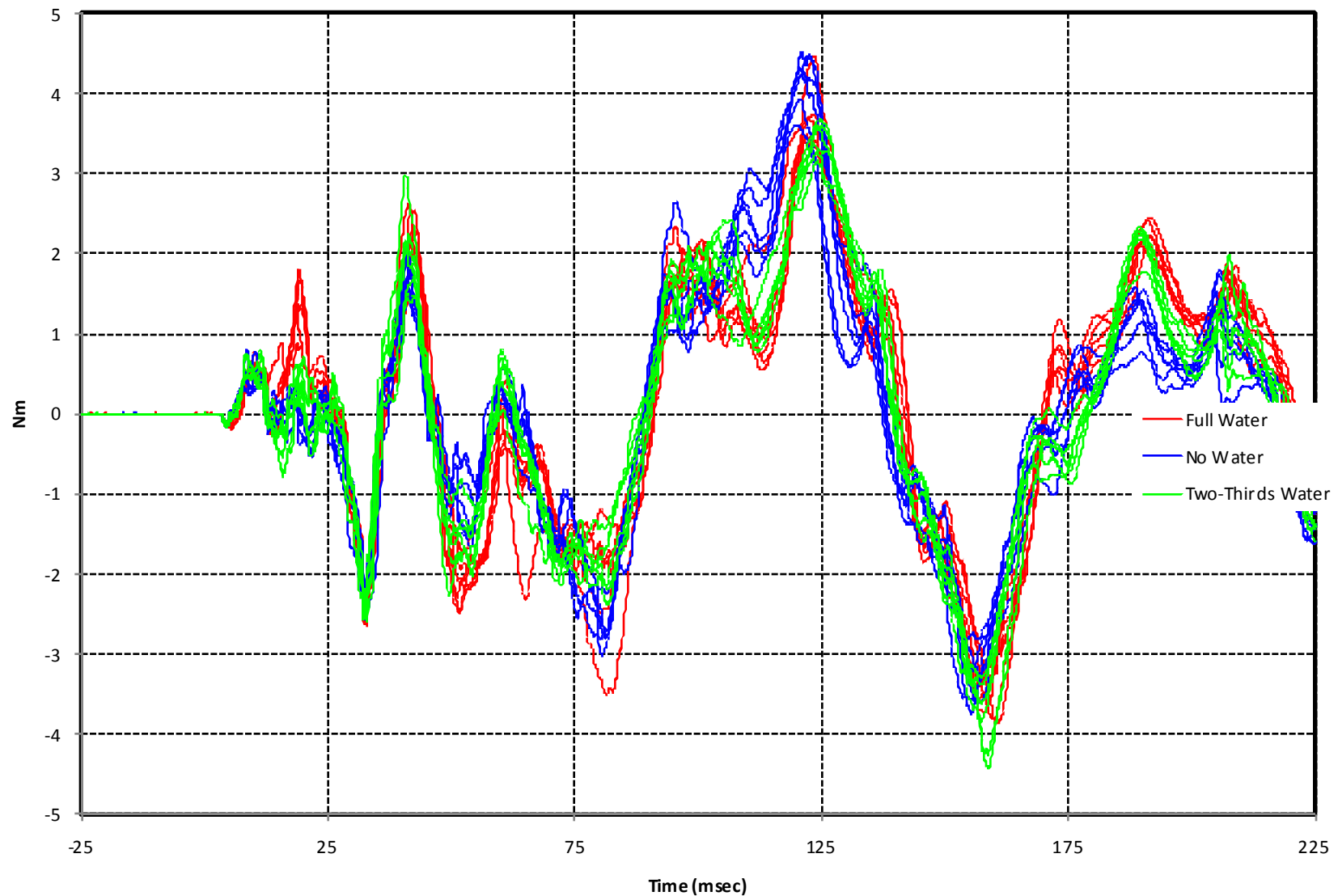
Upper Neck Force FZ



Jacket Water Series

Dummy Certification

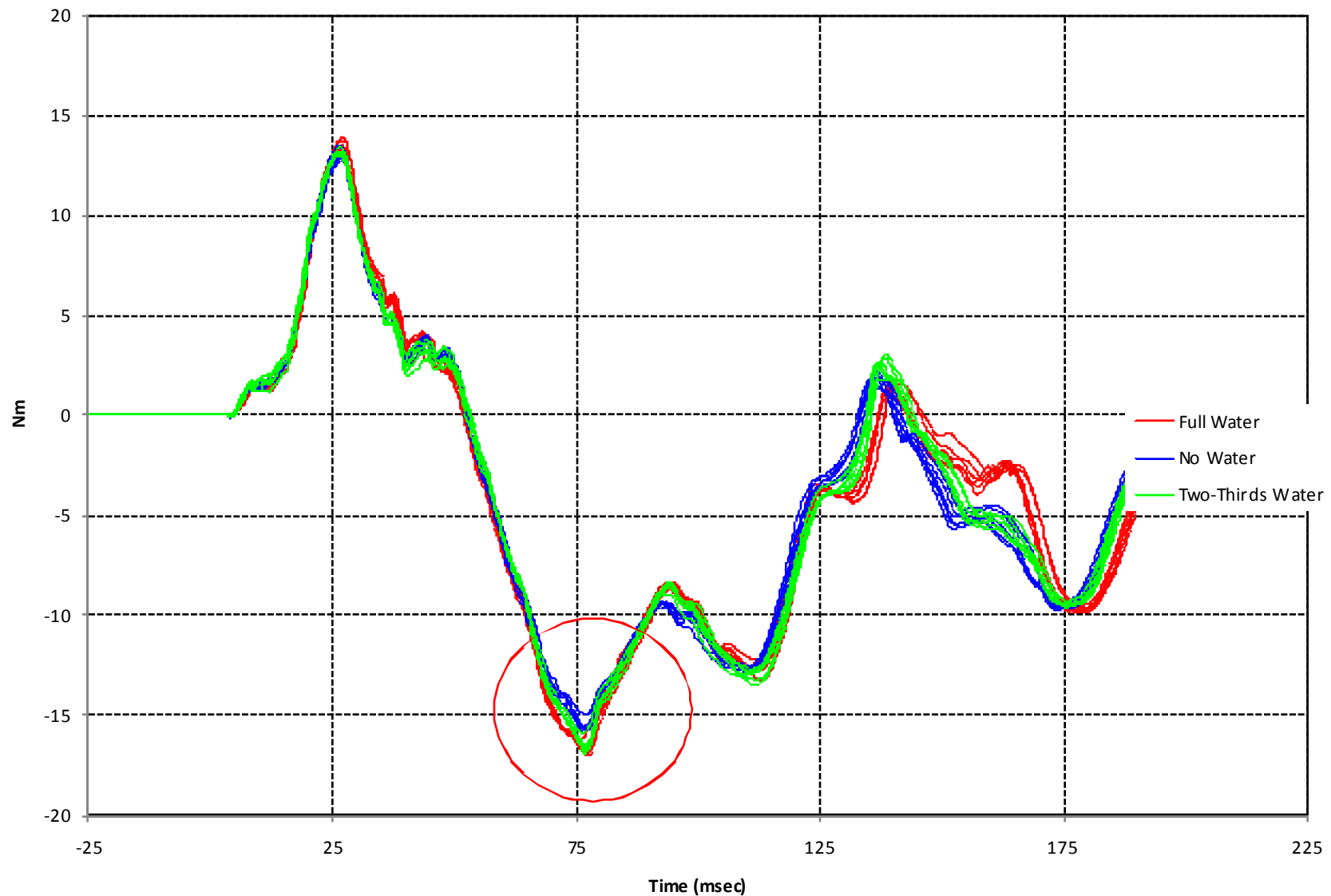
Upper Neck Moment MX



Jacket Water Series

Dummy Certification

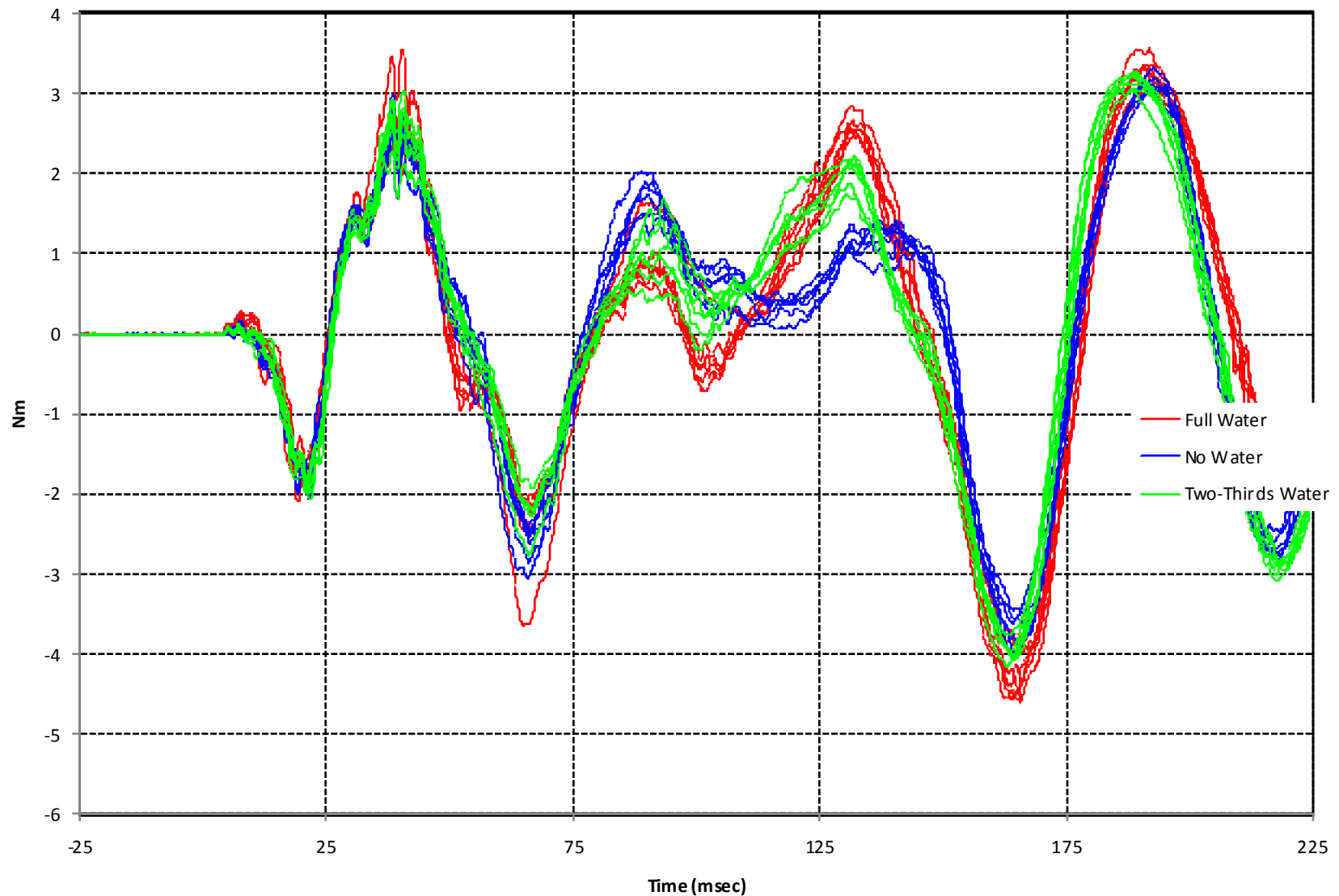
Upper Neck Moment MY



Jacket Water Series

Dummy Certification

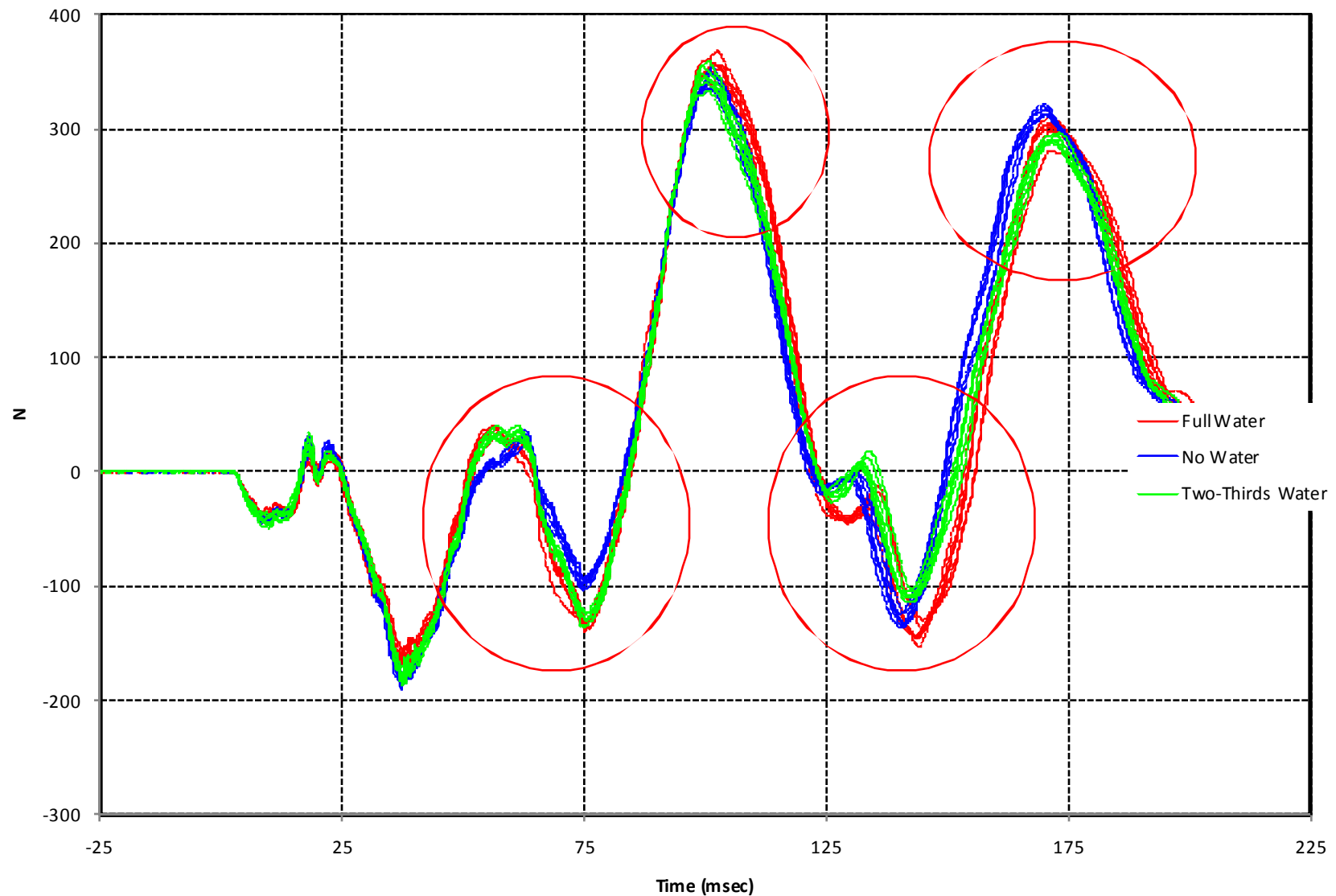
Upper Neck Moment MZ



Jacket Water Series

Dummy Certification

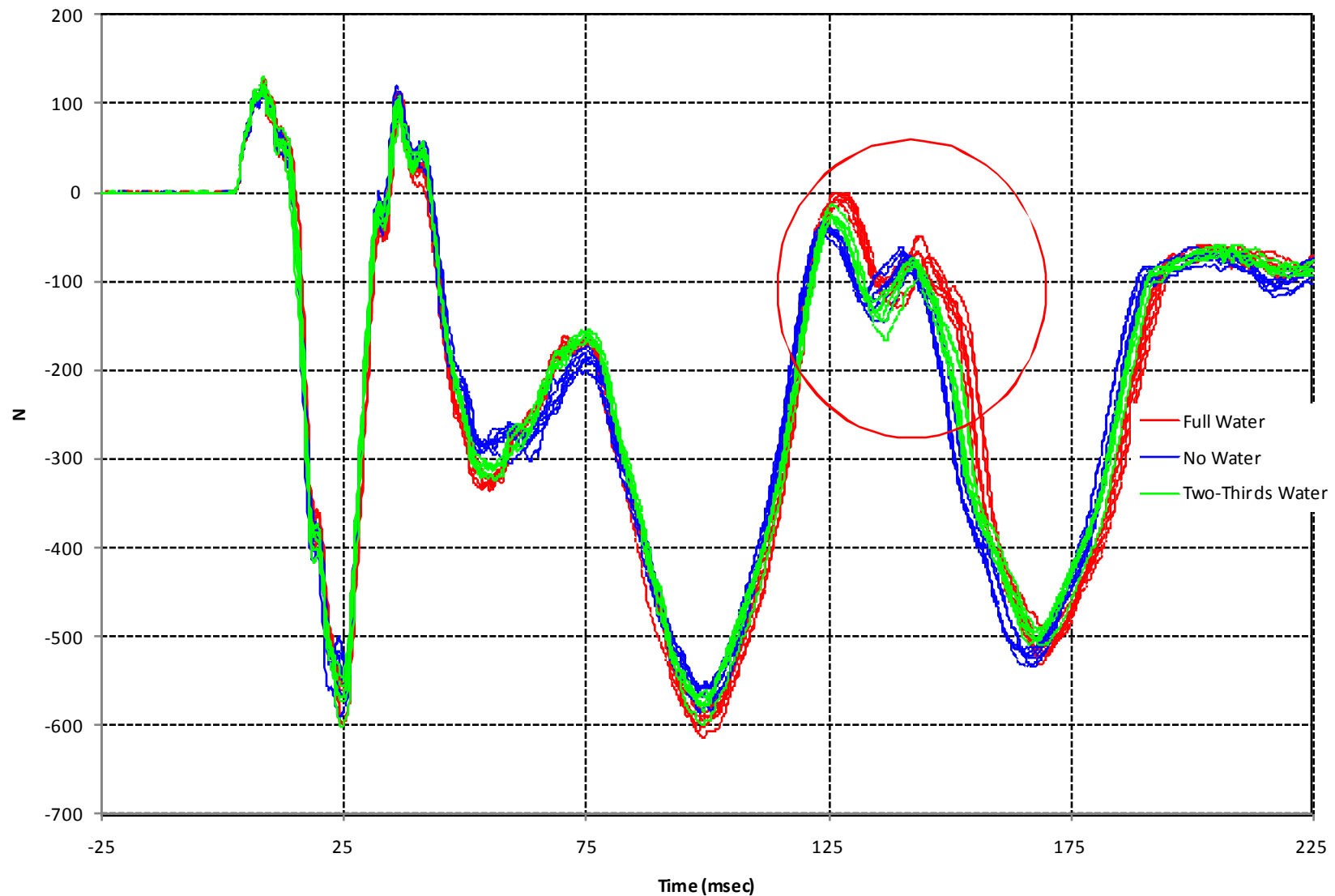
Lower Neck Force FX



Jacket Water Series

Dummy Certification

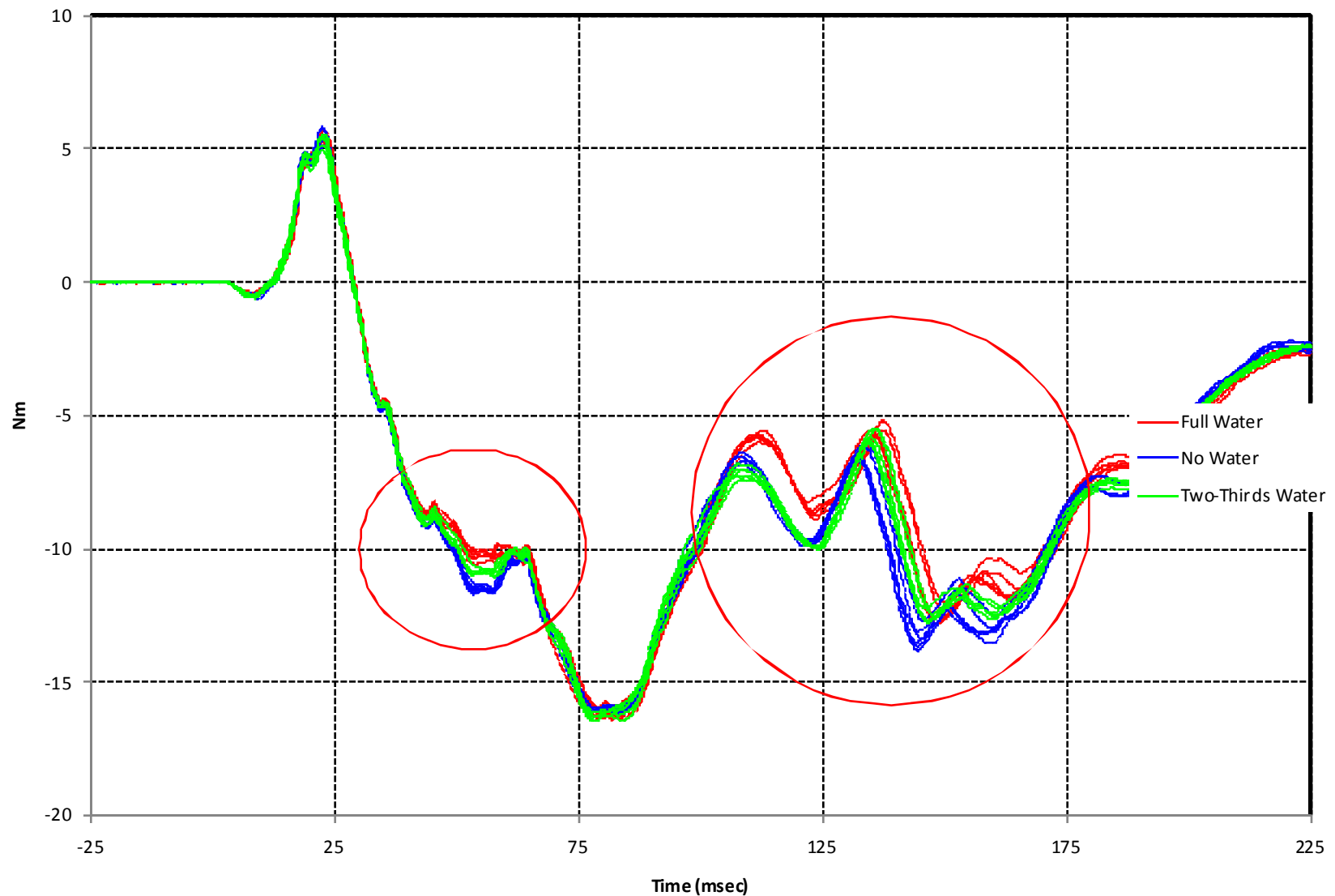
Lower Neck Force FZ



Jacket Water Series

Dummy Certification

Lower Neck Moment MY



Jacket Water Series

Dummy Certification

