Experimental Validation of the Piezoelectric Triple Hybrid Actuation System (TriHYBAS)

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Piezoelectric Triple Hybrid Actuation System (TriHYBAS)

- Tian-Bing Xu, Xiaoning Jiang, and Ji Su, “High Performance Piezoelectric Triple Hybrid Actuation System (TriHYBAS),” NASA Case # LAR 17618-1
Displacement Profile of TriHYBAS

Applied Unipolar Voltage: 300 V DC bias and 200 Vrms AC at 1 Hz
Displacement Vs. Applied Voltage

Displacement at center of TriHYBAS

Displacement in length direction for positive and negative components

\[ V_{DC} = \text{Peak of AC, } V_{peak} = 2^{0.5} V_{rms} \]

\[ V_{DC} = \text{Peak of } V_{AC} \]