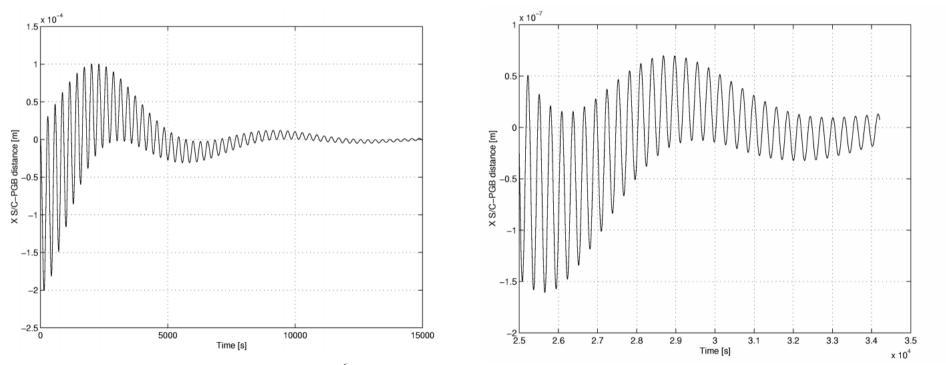


DRAG FREE CONTROL (3)

- Reducing the drag by a factor of 50,000 at the orbit frequency means reducing by the same factor the amplitude of oscillation at the orbit frequency of the spacecraft + PGB
- In 7 orbits only the control is able to reduce drag effect from $\approx 1 \text{ mm}$ to less than 10^{-8} m .



RMS of the reading capacitance sensors: 10^{-6} cm, *Bias reading capacitance sensors:* 10 micron, *Angular bias of the reading capacitance sensors:* 1 deg. Added white noise to the Drag Force = 10% of its amplitude