

## Hard-Coded Values

| <b>Description</b>                  | <b>Value</b>           | <b>File</b>            | <b>Line</b> |
|-------------------------------------|------------------------|------------------------|-------------|
| Boom end mass density               | 8500 kg/m <sup>3</sup> | CubeSatSimulation.m    | 127         |
| Drag coefficient of surfaces        | 2.7                    | CubeSatSimulation.m    | 159         |
| Hysteresis rod radius               | 0.1 mm                 | CubeSatSimulation.m    | 246         |
| Hysteresis rod length               | 95 mm                  | CubeSatSimulation.m    | 246         |
| Hysteresis rod remanence            | 0.004 T                | RHSCubeSatHysteresis.m | 224         |
| Hysteresis rod saturation induction | 0.027 T                | RHSCubeSatHysteresis.m | 225         |
| Hysteresis rod coercivity           | 12 A/m                 | RHSCubeSatHysteresis.m | 226         |
| Magnetic north pole latitude        | 80.65° N               | NorthDeviation.m       | 33          |
| Magnetic north pole longitude       | 72.68° W               | NorthDeviation.m       | 34          |