Symbols

a semi major axis of ellipse

c velocity of light

C spring constant

D damping constant

e eccentricity of orbit

ϵ error factor

ε angle between ecliptic and equatorial plane

f frequency

F force

$\mathbf{F}_i$ coordinate frame

γ imposed force per unit of mass

i inclination

m mass

μ gravitational constant of Earth

ν true anomaly, angular position on orbit measured from perigee

$\mathbf{O}_i$ origin of coordinate frame

ϕ, Φ phase

r radius, orbit radius

R, r range

t time

T orbital period; time

V velocity

ΔV velocity increment

ω, ω_o angular frequency of orbit

ω angular rate; argument of perigee

Ω angle between vernal equinox and ascending node (see RAAN)