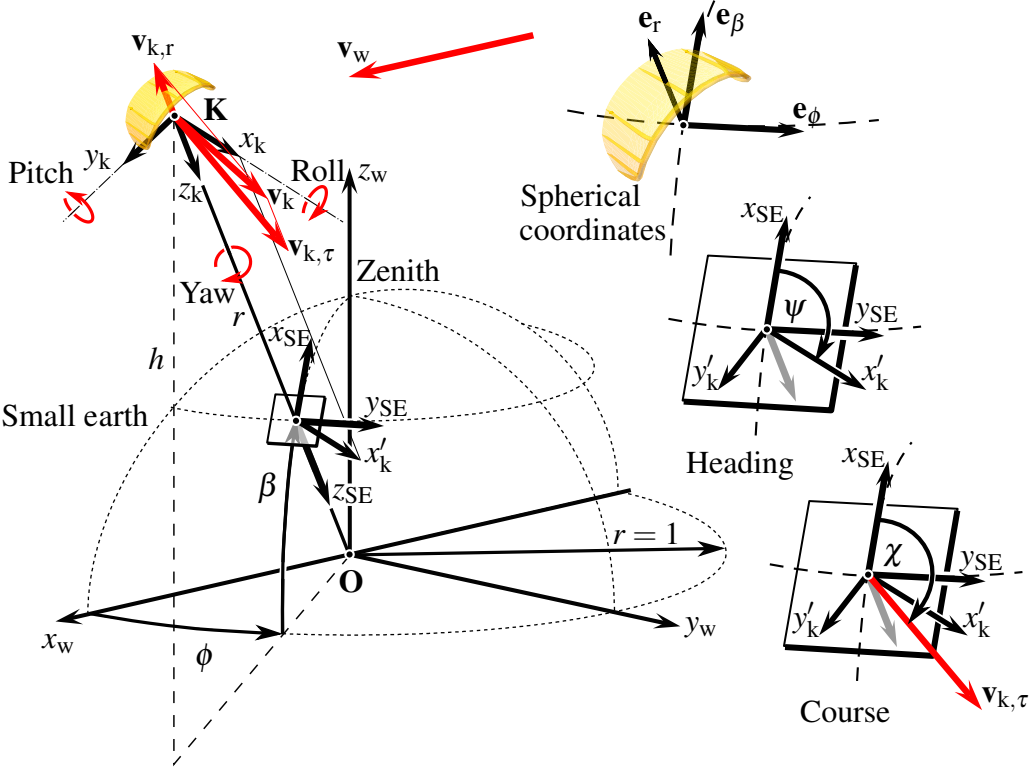
$\mathbf{v}_{k,r}$
$\mathbf{v}_w$
K
Pitch
y_k
x_k
Roll
z_w
z_k
$\mathbf{v}_k$
$\mathbf{v}_{k,\tau}$
Yaw
Zenith
r
x_{SE}
h
Small earth
y_{SE}
x'_k
β
z_{SE}
$r = 1$
O
x_w
y_w
ϕ
$\mathbf{e}_r$
$\mathbf{e}_\beta$
$\mathbf{e}_\phi$
Spherical coordinates
x_{SE}
ψ
y_{SE}
y'_k
x'_k
Heading
x_{SE}
χ
y_{SE}
y'_k
x'_k
$\mathbf{v}_{k,\tau}$
Course