(a) UAV Trajectory During the Real-time Landing Task Location Error in X Coordinate DGPS Data **EKF** Data  $\widehat{\mathbb{E}}_{\times}$  $\widetilde{\mathbb{E}}$ 30 40 50 60 10 (b) Time(s) (e) Time(s) Location Error in Y Coordinate Coordinate(m)  $\widehat{\boldsymbol{\epsilon}}$ 10 20 30 40 50 60 40 50 60 (c) Time(s) (f) Time(s) Location Error in Z Coordinate -10 1000 800 600 400 200 DGPS 300 400 500 600 200 300 400 (m) Z 0 -200 -400 -600 \_ 100 -100 Z Coordinate(m) (d) Time(s) (g) Time(s) Y Coordinate(m)