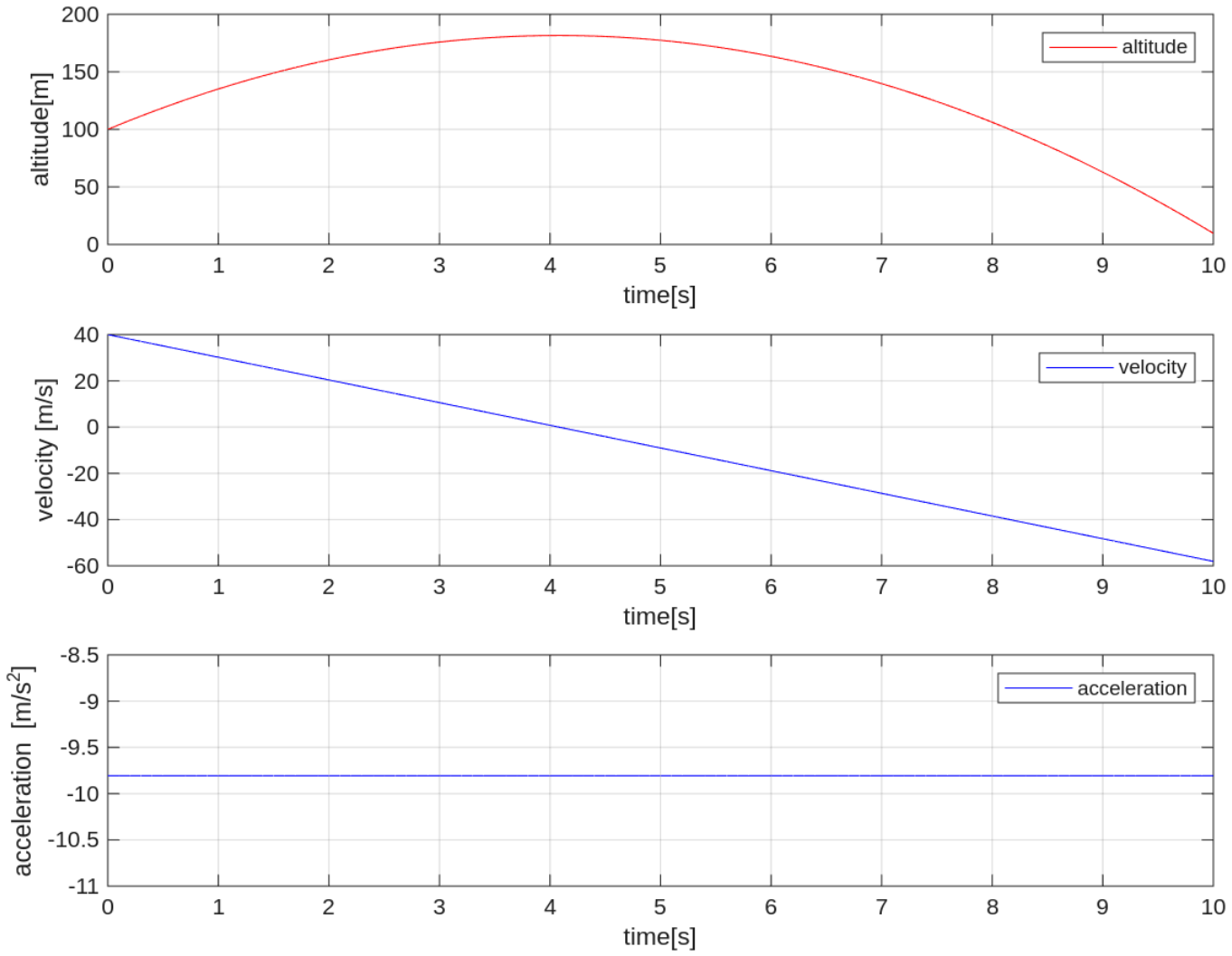
202511262320

Practice 01. Simulation

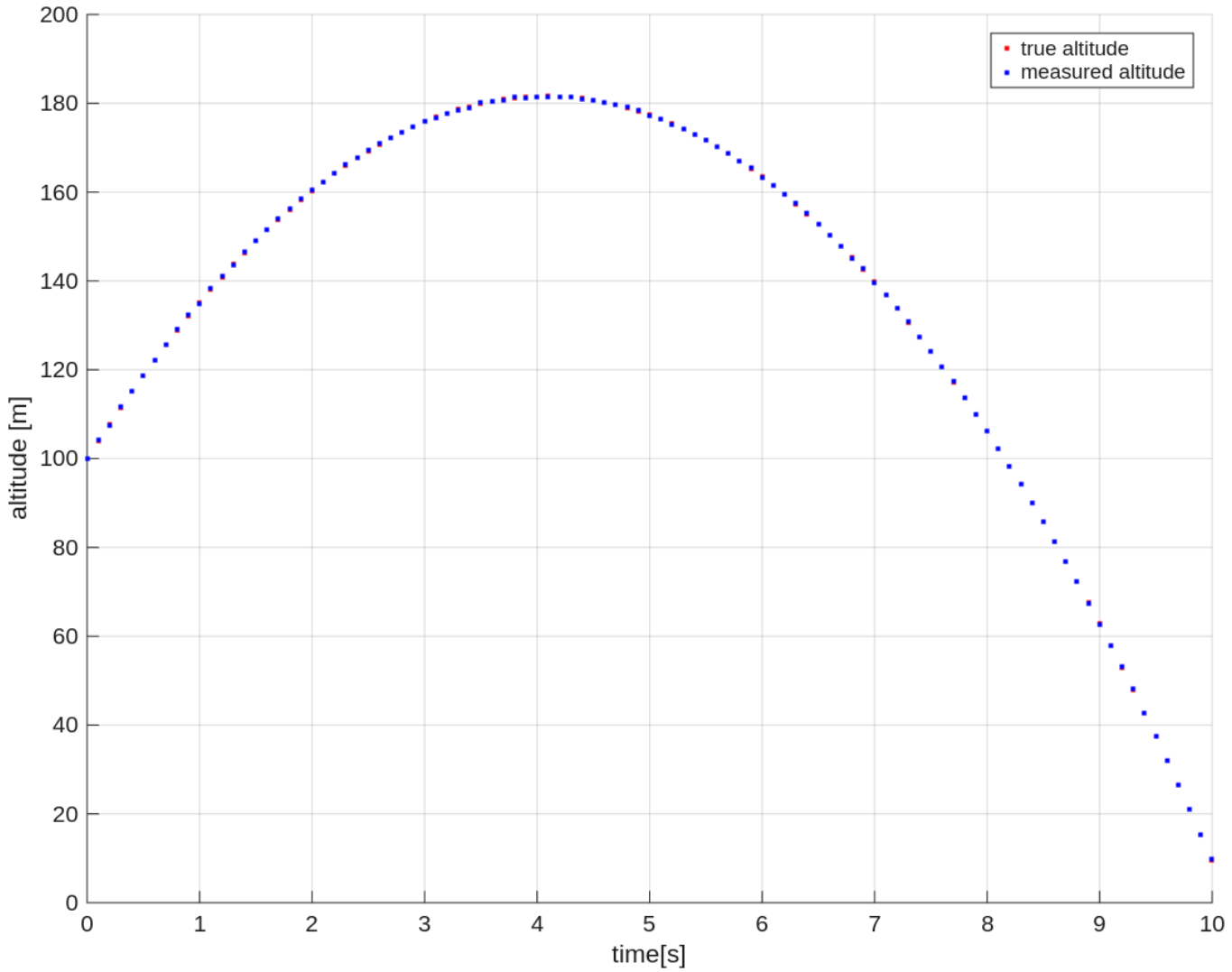
1.1

> simulate the r_t, v_t, and a_t from time t=0 to t=10



1.2

> simulate r_t^range, which is a range sensor simulation data for the previous simulation



Practice 2. Least Square

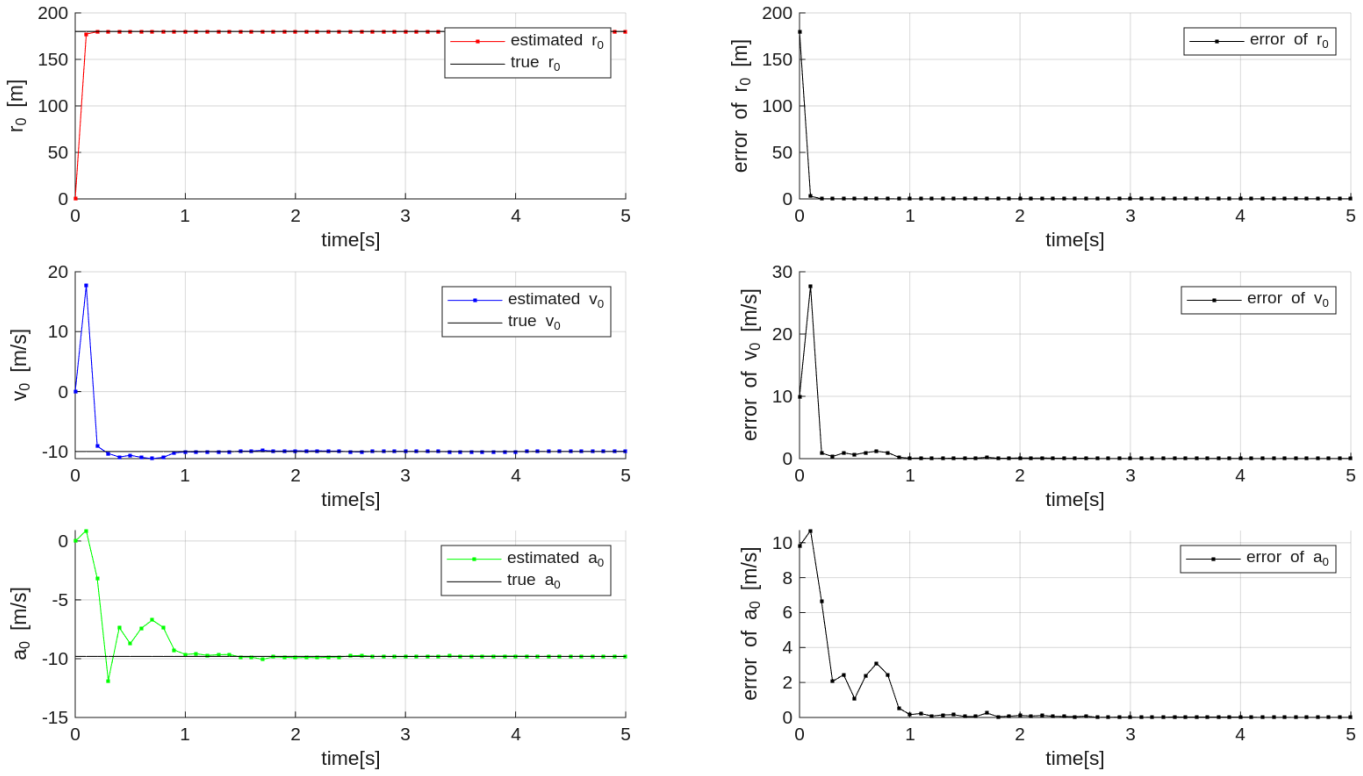
2.1

> find the r0, v0, and a0 using given data through least square estimation.

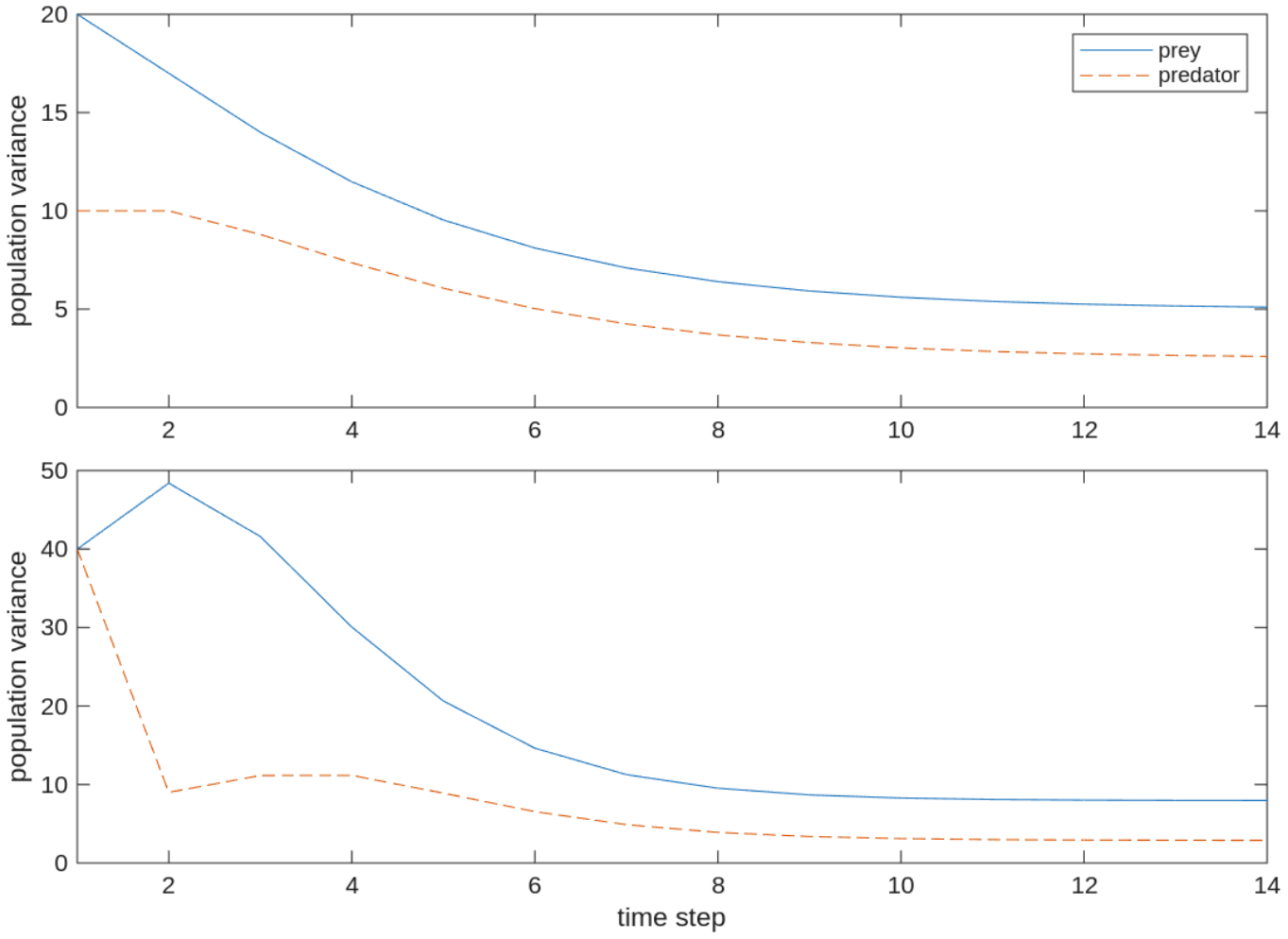
```
[Practice 1]
r0: 179.956468, v0: -9.982674, a0: -9.810157
r0_error: 0.043532, v0_error: 0.017326, a0_error: 0.003507
```

2.2

> find the r0, v0, and a0 using given data through recursive least square estimation.



Practice 3. Propagation of state and covariance



Reference