Added Mass Experiments

Trevor Burgoyne 13 Nov 2022

```matlab
% Paths for data loading
ROOT_DIR = "C:/Users/Trevor/Desktop/AEM 4602W/Controls-Lab/Data/Part 3/";
PREFIX = "pjsdata_P3T";
DISP_NAME = "Added Mass";
LABEL_NAME = "Run";
N_TESTS = 2;
N_RUNS = 2;
masses = [79.3, 80.6] / 1000; % kg
[avg_hss, var_hss, avg_kt, var_kt, kphat, kdhat, kp, kd] = make_graphs(ROOT_DIR, PREFIX, DISP_NAME, LABEL_NAME, N_TESTS, N_RUNS, masses)

for test_n=1:N_TESTS
    [wn, zeta] = Low_Fidelity_Model(DISP_NAME, masses(test_n), avg_kt(test_n), kp(test_n), kd(test_n));
end
```

```
avg_hss =

   -0.1487    -0.1418


var_hss =

   1.0e-03 *

   0.1446     0.6192


avg_kt =

   0.5450     0.5636


var_kt =

   1.0e-03 *

   0.0114     0.1419


kphat =

   0.9900     0.8300


kdhat =

   0.5000     0.8000


kp =

   0.4541     0.3682


kd =

   0.2294     0.3549
```
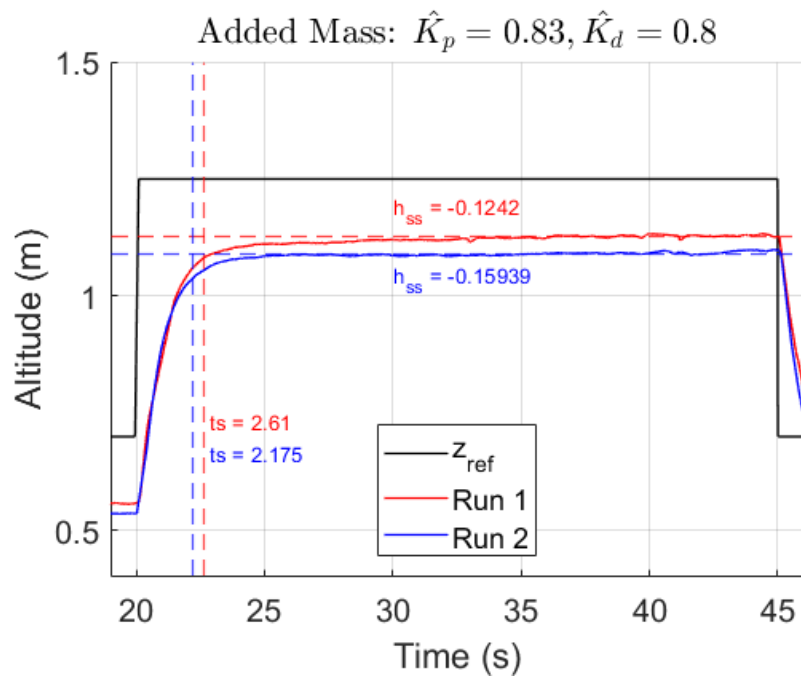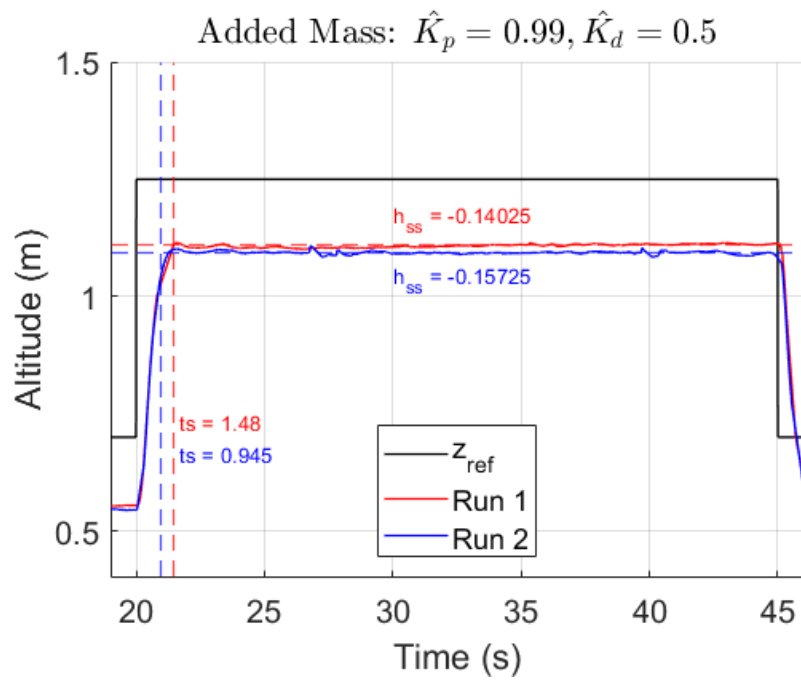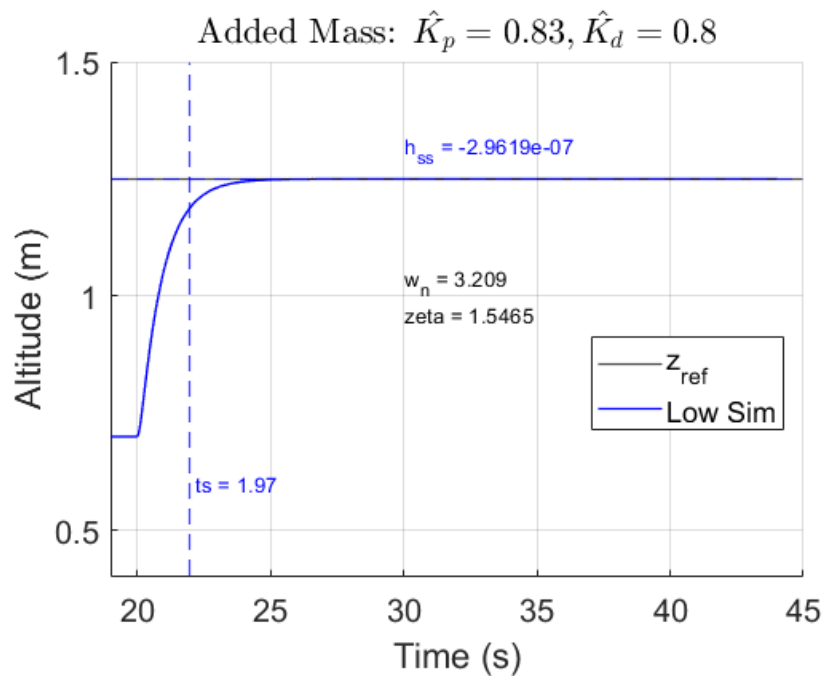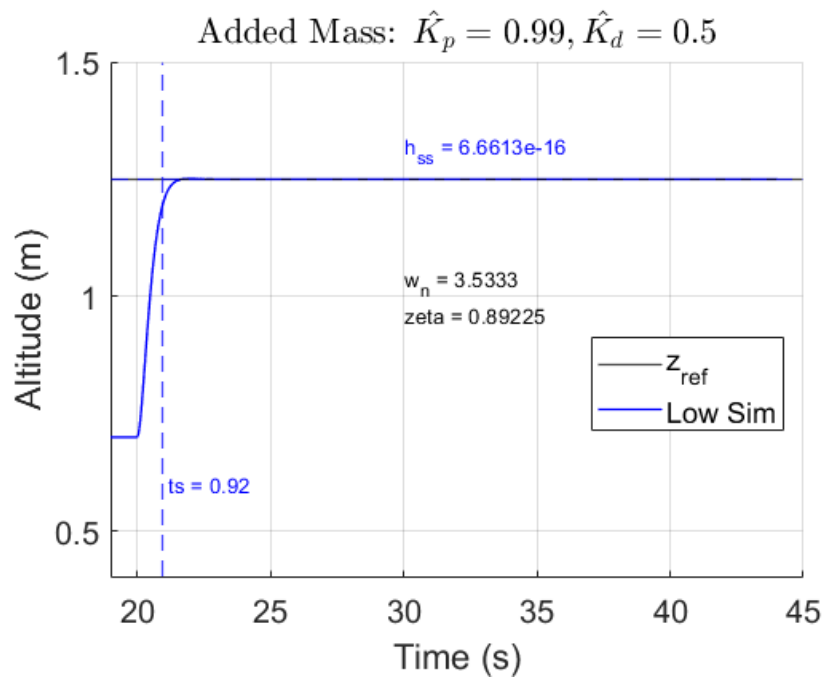
Added Mass: $\hat{K}_p = 0.99$, $\hat{K}_d = 0.5$

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$h_{ss} = 6.6613\text{e-}16$

$w_n = 3.5333$

zeta = 0.89225

z_ref

Low Sim

ts = 0.92

Added Mass: $\hat{K}_p = 0.83$, $\hat{K}_d = 0.8$

$h_{ss} = -2.9619\text{e-}07$

$w_n = 3.209$

zeta = 1.5465

z_ref

Low Sim

ts = 1.97