1.c.1.A1 Take-off All engines CAT A

Test Procedure

On the IOS select ’Maintenance’ page then ’QTG-Test’. The test can be run either in automatic or manual mode.

Automatic testing: Write the name of the test into the brackets of the function (, ‘auto’). Click RUN or press F5.

The generic flight controls will be internally controlled according to the following table:

Flight Controls	Status
Longitudinal	MATH PILOT
Lateral	MATH PILOT
Collective	MATH PILOT
Pedals	MATH PILOT

Manual testing: follow the Manual Procedure steps indicated in the next page.

Manual Procedure

1. Write the name of the test into the brackets of the function(, ‘manu’).Click RUN or press F5.
2. Hover in 6ft AGL
3. On the IOS keyboard press ‘Enter’ to start recording.
4. After 4s start to take-off. Noch zu schreieben...

Initial Conditions

* Snapshot Tests: Reference initial conditions are computed as mean values over data time histories

Test	1.d	**SubCase**	A1	**FLT**	30	**TOP**	47	**SW V.**	4.2.1	**Mode**	Automatic
Title	Light GW, Aft CG - 3 ft AGL							**Date**	09.02.2024	**Time**	14:06:50

Test Results

Parameter [U oM]	**Reference**	**Min****	**FSTD**	**Max****
Snapshot Data				
Engine 1 Torque [%]	1	2	3	4

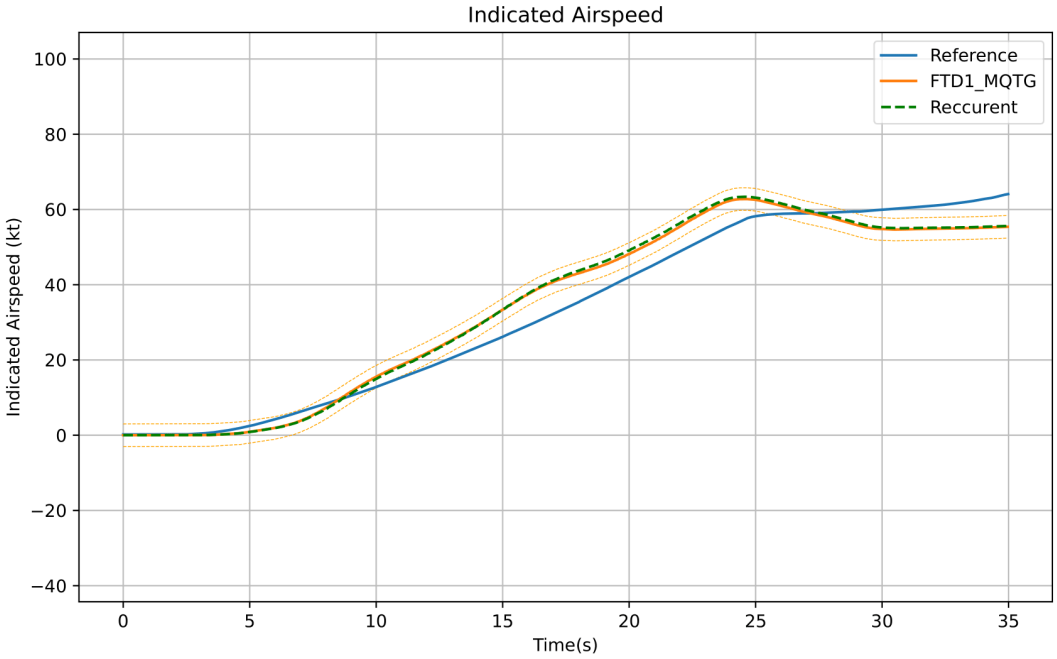
** The Min value is computed as the Reference value minus the specific tolerance value.
The Max value is computed as the Reference value plus the specific tolerance value

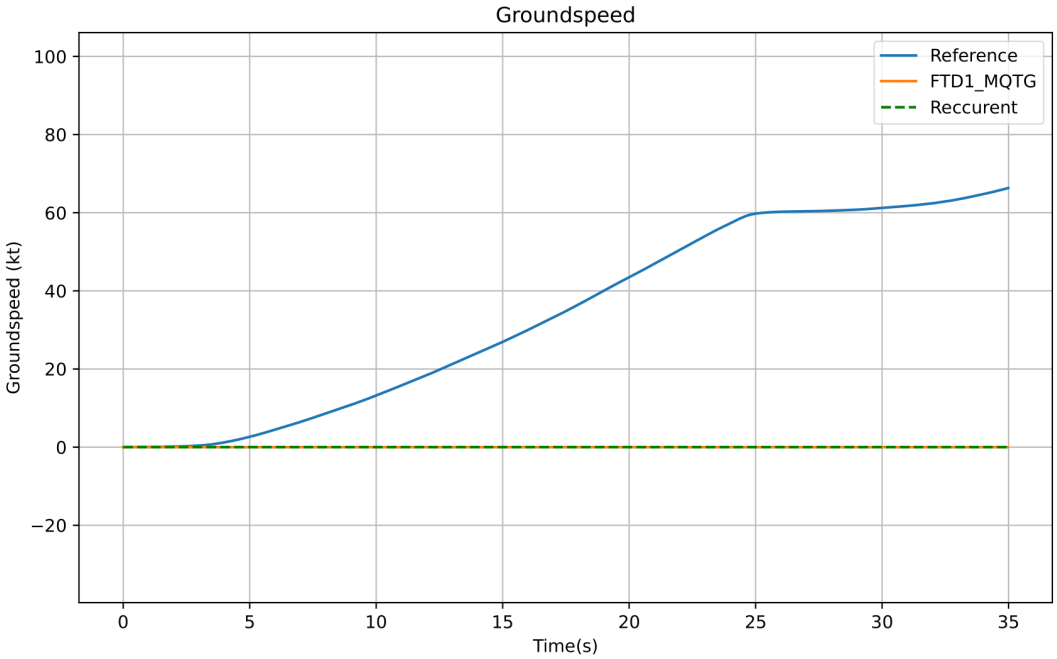
Notes and Rationales

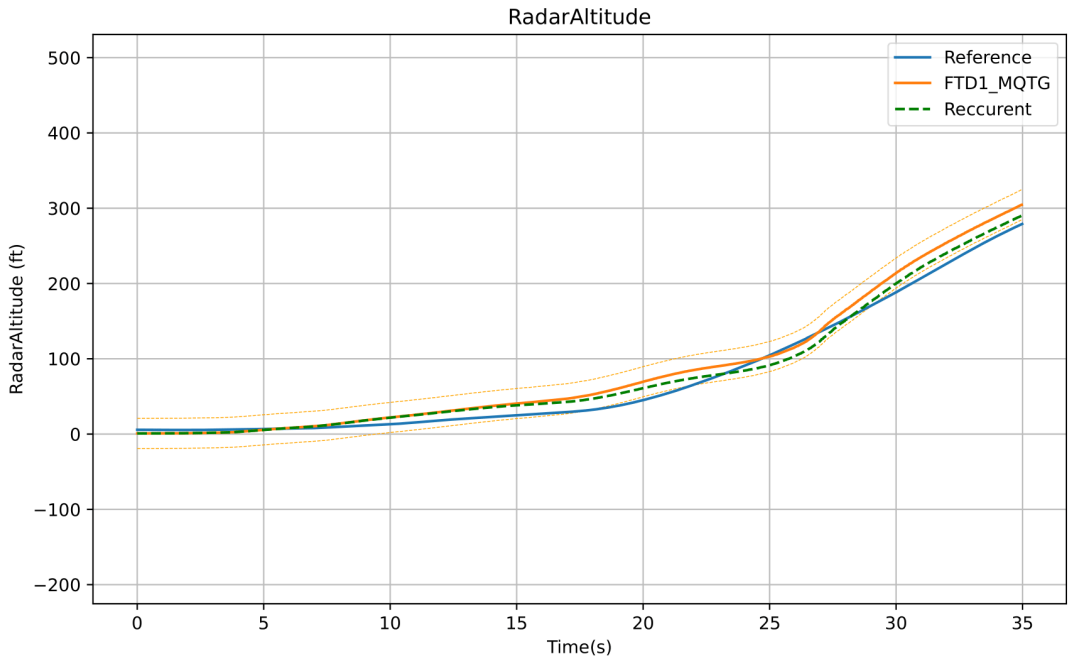
Notes
No Notes related to the Test are present

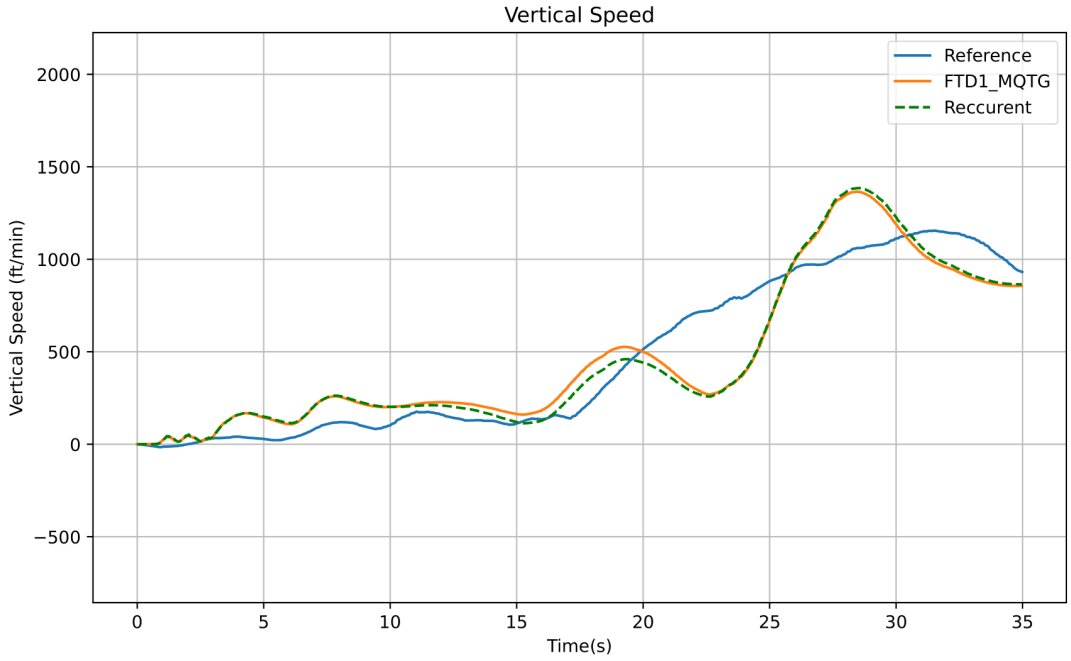
Rationales (Validation Data)
No Rationales related to the Test are present

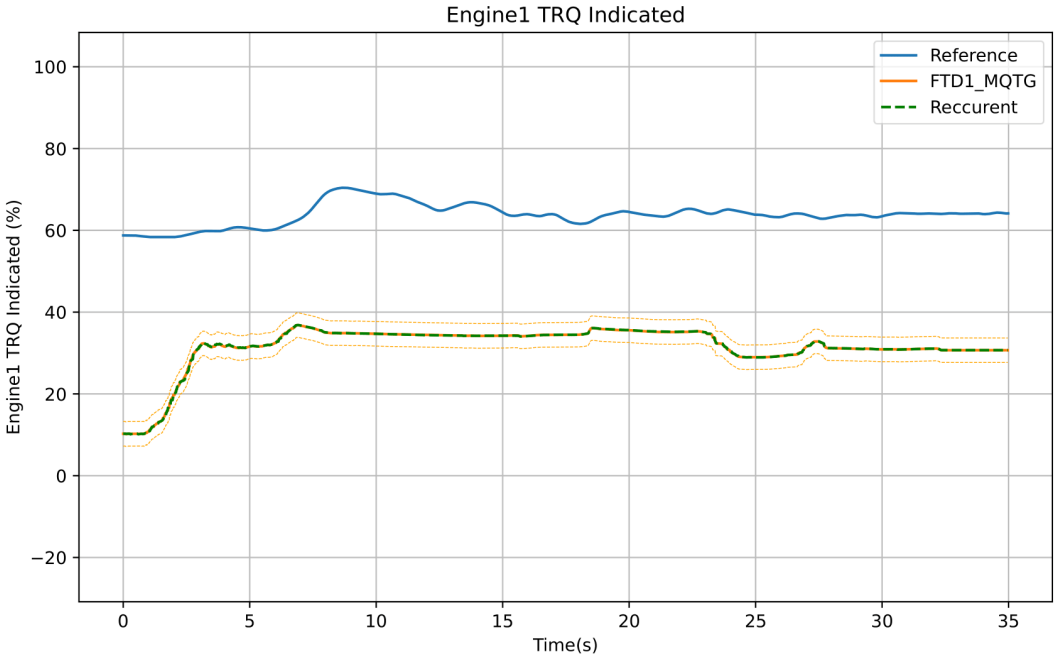
Rationales (Results)
No Rationales related to the Test are present

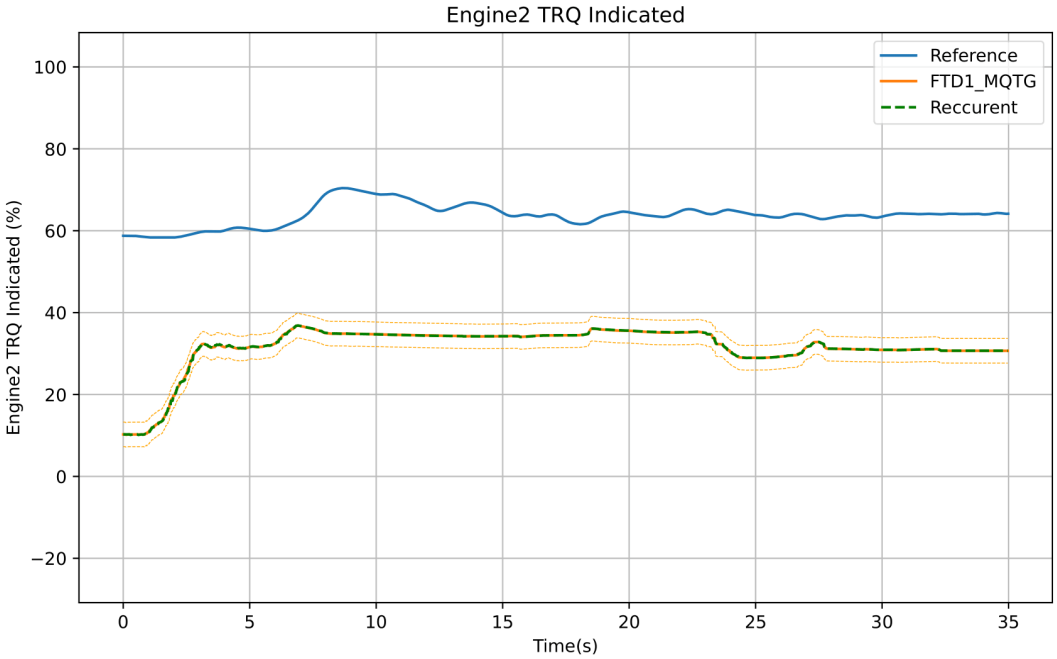

Indicated Airspeed
Reference
FTD1_MQTG
Reccurent
Indicated Airspeed (kt)
100
80
60
40
20
0
−20
−40
0
5
10
15
20
25
30
35
Time(s)

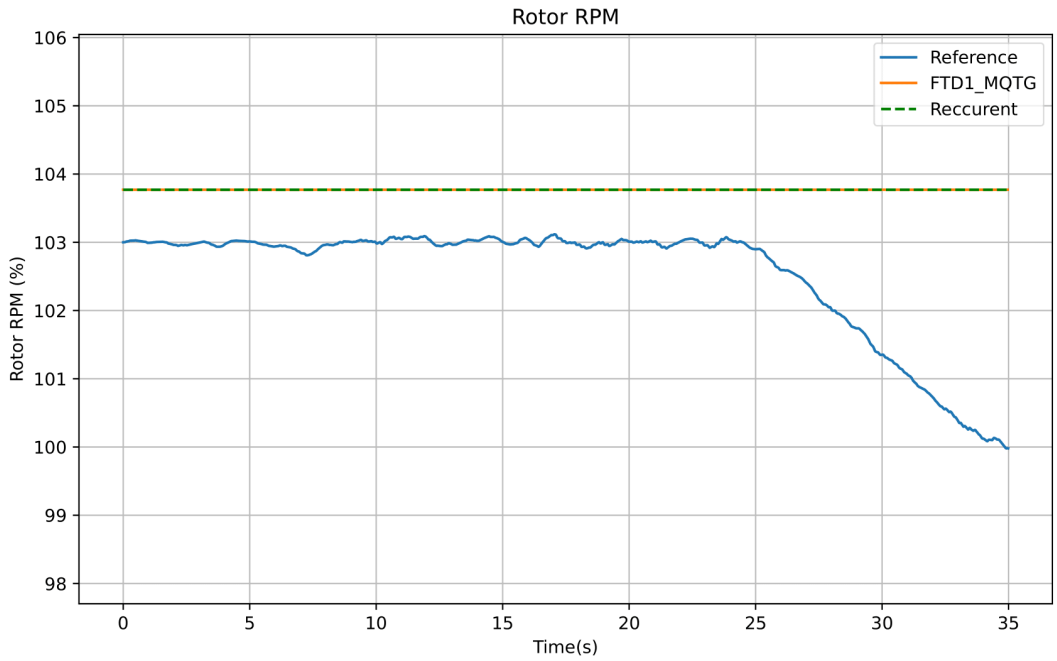

Groundspeed
Reference
FTD1_MQTG
Reccurent
Groundspeed (kt)
100
80
60
40
20
0
−20
0
5
10
15
20
25
30
35
Time(s)

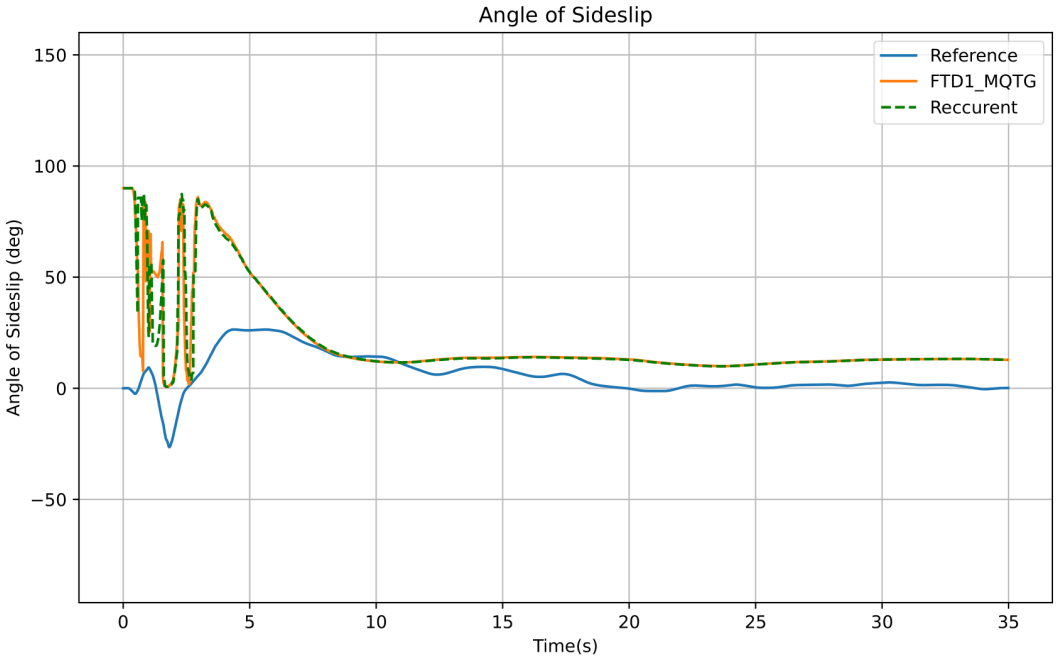

RadarAltitude
Reference
FTD1_MQTG
Reccurent
RadarAltitude (ft)
500
400
300
200
100
0
−100
−200
0
5
10
15
20
25
30
35
Time(s)

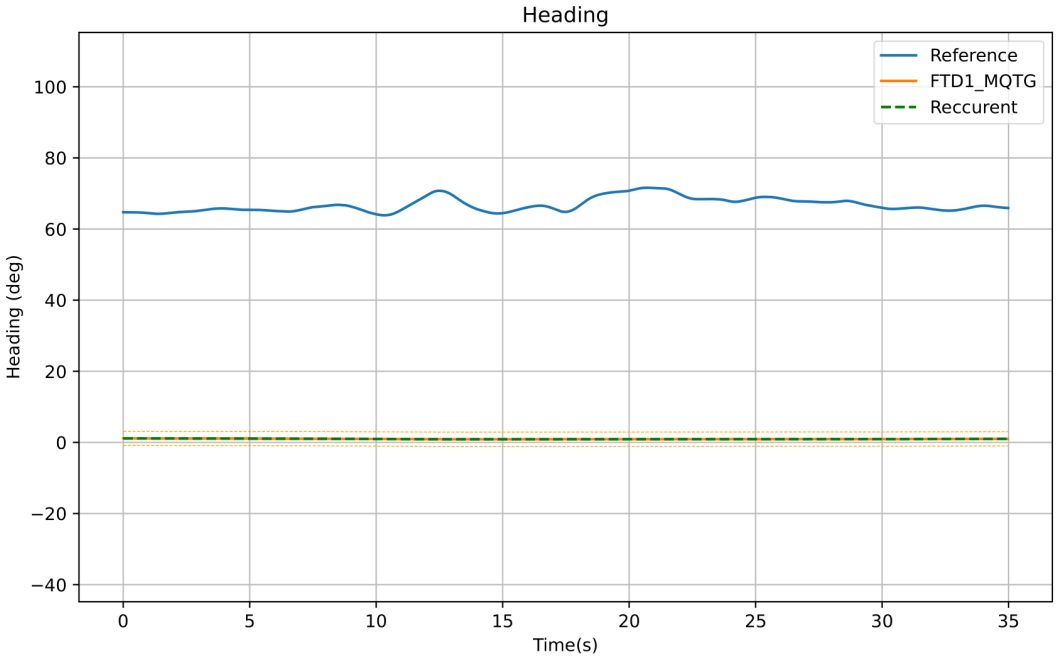

Vertical Speed
Reference
FTD1_MQTG
Reccurent
Vertical Speed (ft/min)
2000
1500
1000
500
0
−500
0
5
10
15
20
25
30
35
Time(s)

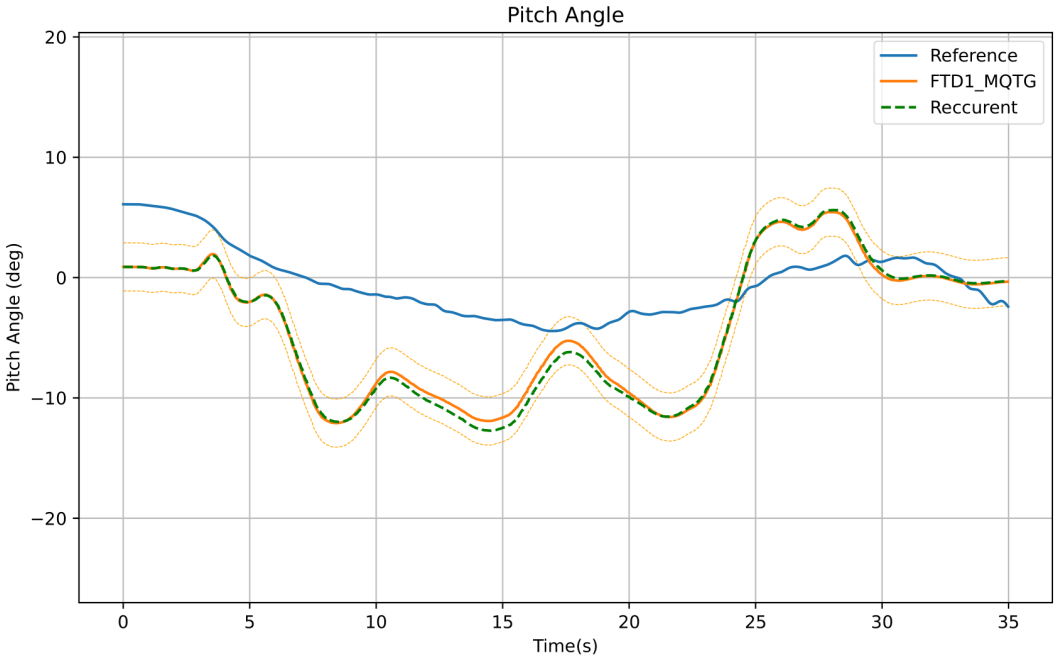

Engine1 TRQ Indicated
Reference
FTD1_MQTG
Reccurent
Engine1 TRQ Indicated (%)
Time(s)
100
80
60
40
20
0
−20
0
5
10
15
20
25
30
35

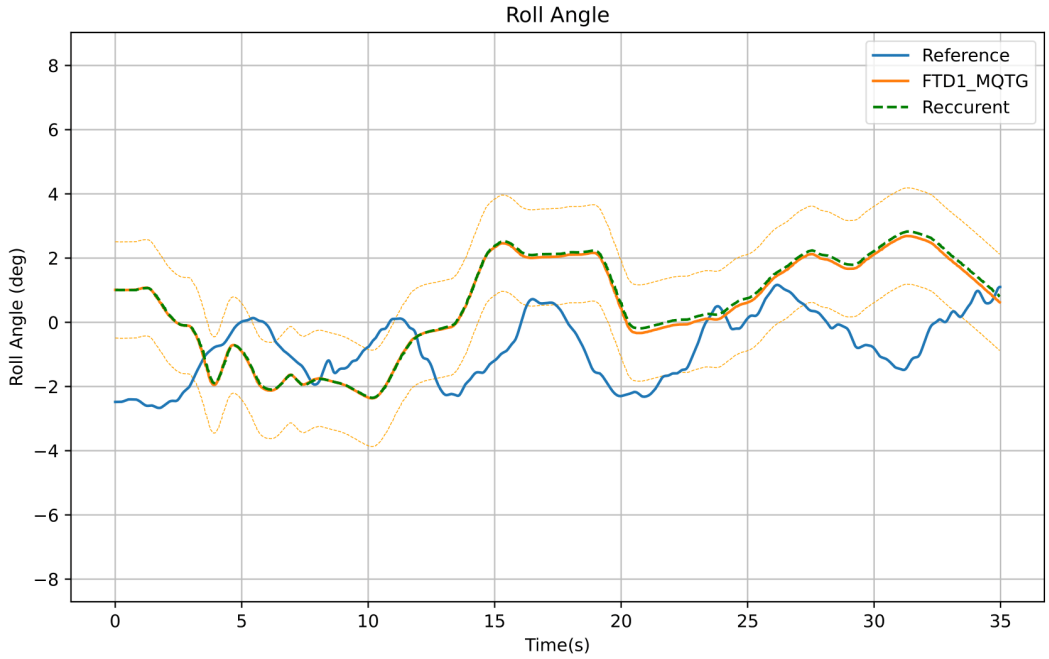

Engine2 TRQ Indicated
Reference
FTD1_MQTG
Reccurent
Engine2 TRQ Indicated (%)
Time(s)
100
80
60
40
20
0
−20
0
5
10
15
20
25
30
35

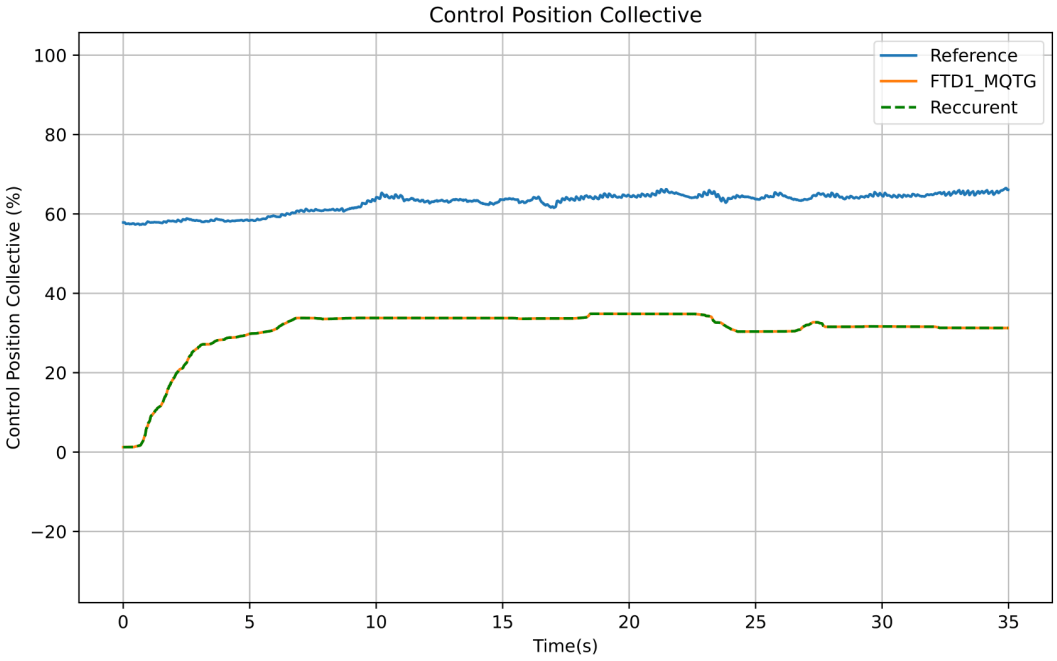

Rotor RPM
Reference
FTD1_MQTG
Reccurent
Rotor RPM (%)
106
105
104
103
102
101
100
99
98
0
5
10
15
20
25
30
35
Time(s)

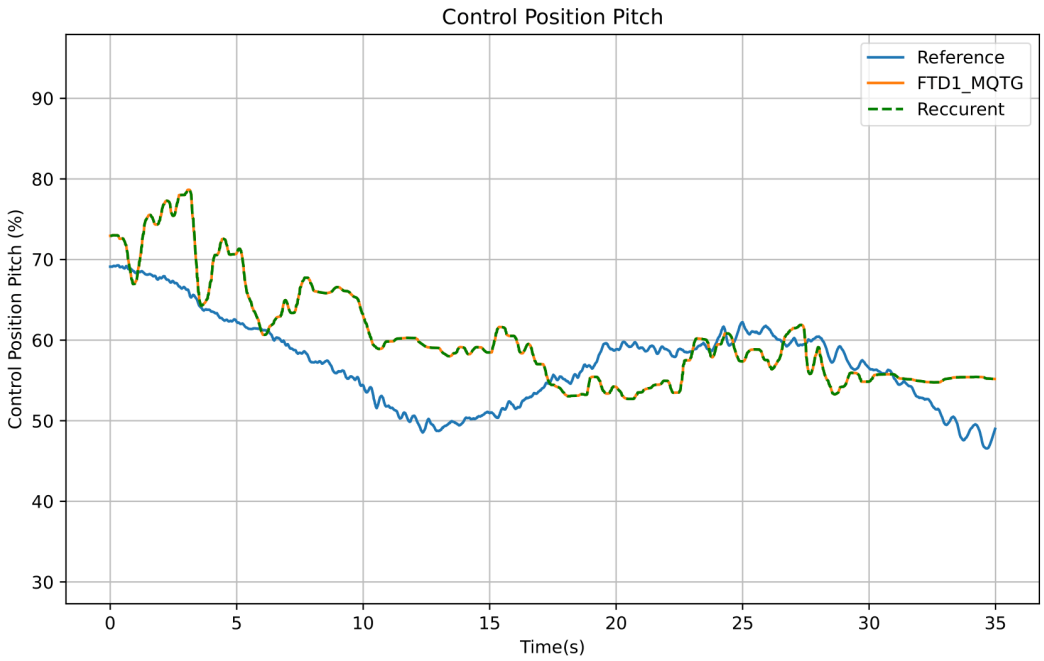

Angle of Sideslip
Reference
FTD1_MQTG
Reccurent
Angle of Sideslip (deg)
150
100
50
0
−50
0
5
10
15
20
25
30
35
Time(s)

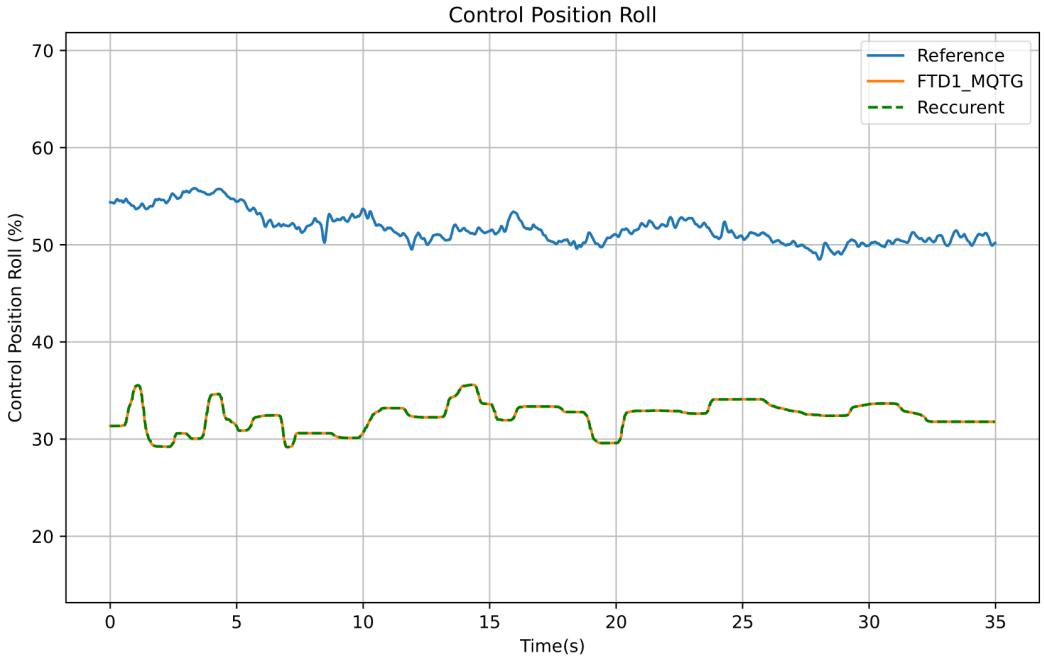

Heading
Reference
FTD1_MQTG
Reccurent
Heading (deg)
100
80
60
40
20
0
−20
−40
0
5
10
15
20
25
30
35
Time(s)

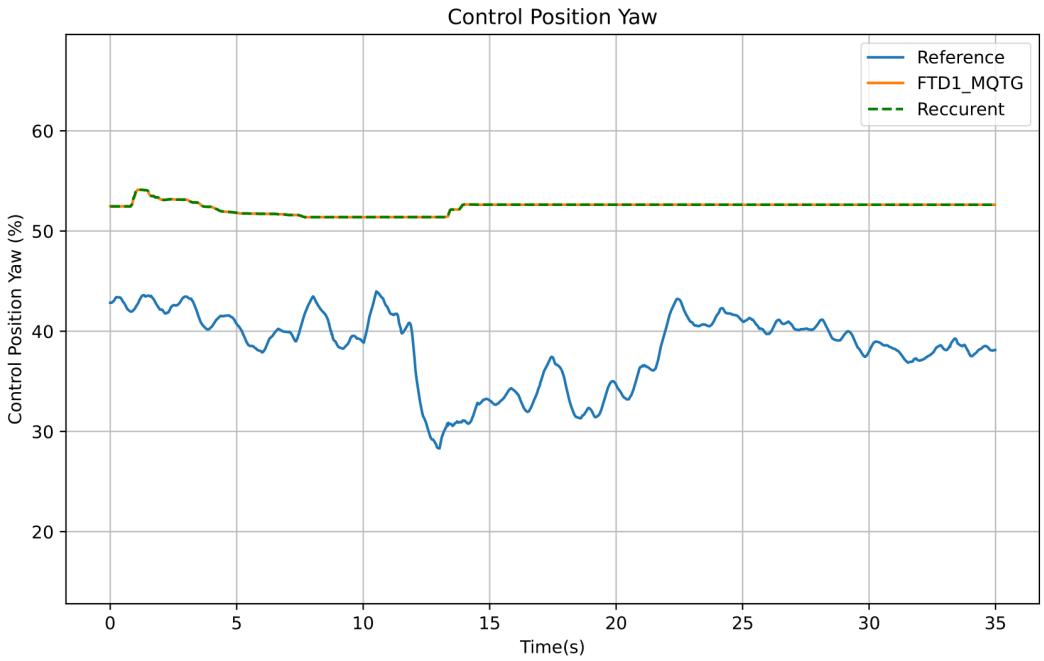

Pitch Angle
Reference
FTD1_MQTG
Reccurent
Pitch Angle (deg)
20
10
0
−10
−20
0
5
10
15
20
25
30
35
Time(s)


Roll Angle
Reference
FTD1_MQTG
Reccurent
Roll Angle (deg)
Time(s)
8
6
4
2
0
−2
−4
−6
−8
0
5
10
15
20
25
30
35


Control Position Collective
Reference
FTD1_MQTG
Reccurent
Control Position Collective (%)
Time(s)
100
80
60
40
20
0
−20
0
5
10
15
20
25
30
35


Control Position Pitch
Reference
FTD1_MQTG
Reccurent
Control Position Pitch (%)
90
80
70
60
50
40
30
0
5
10
15
20
25
30
35
Time(s)


Control Position Roll
Reference
FTD1_MQTG
Reccurent
Control Position Roll (%)
70
60
50
40
30
20
0
5
10
15
20
25
30
35
Time(s)


Control Position Yaw
Reference
FTD1_MQTG
Reccurent
Control Position Yaw (%)
60
50
40
30
20
0
5
10
15
20
25
30
35
Time(s)