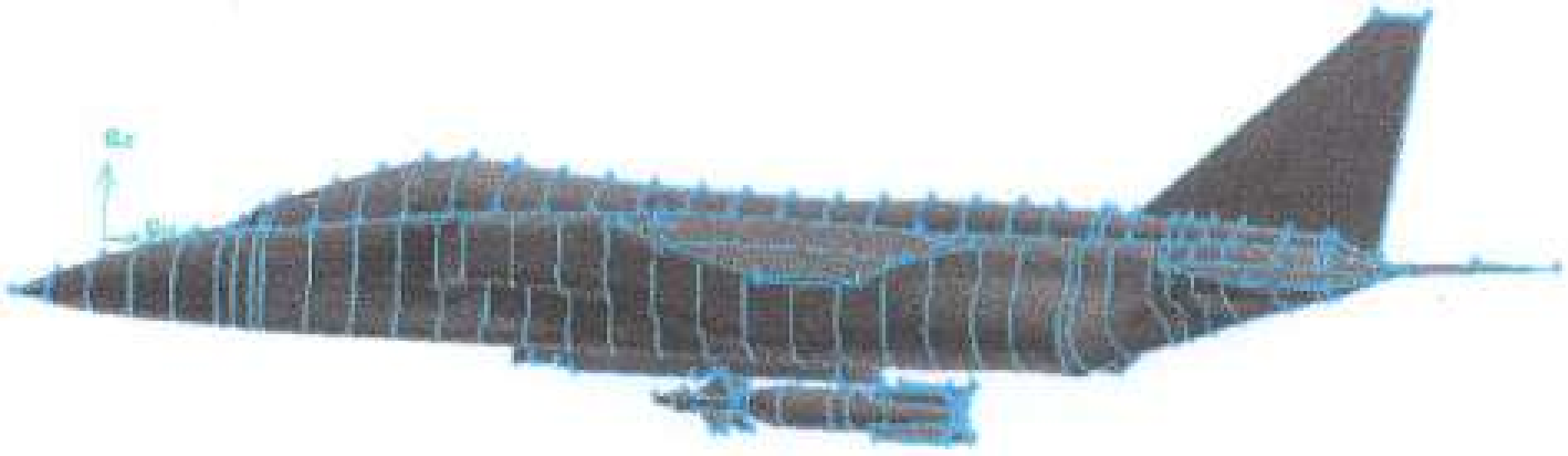
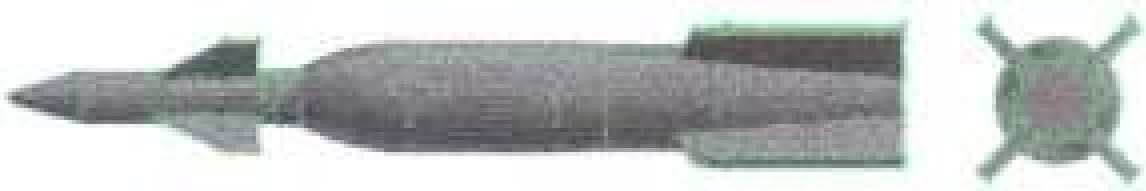




(At release, t=0)

Flip Out Fin 0 %

Flip Out Fin 25 %

Flip Out Fin 50 %

Flip Out Fin 75 %

Flip Out Fin 100 %

T = 0 sec

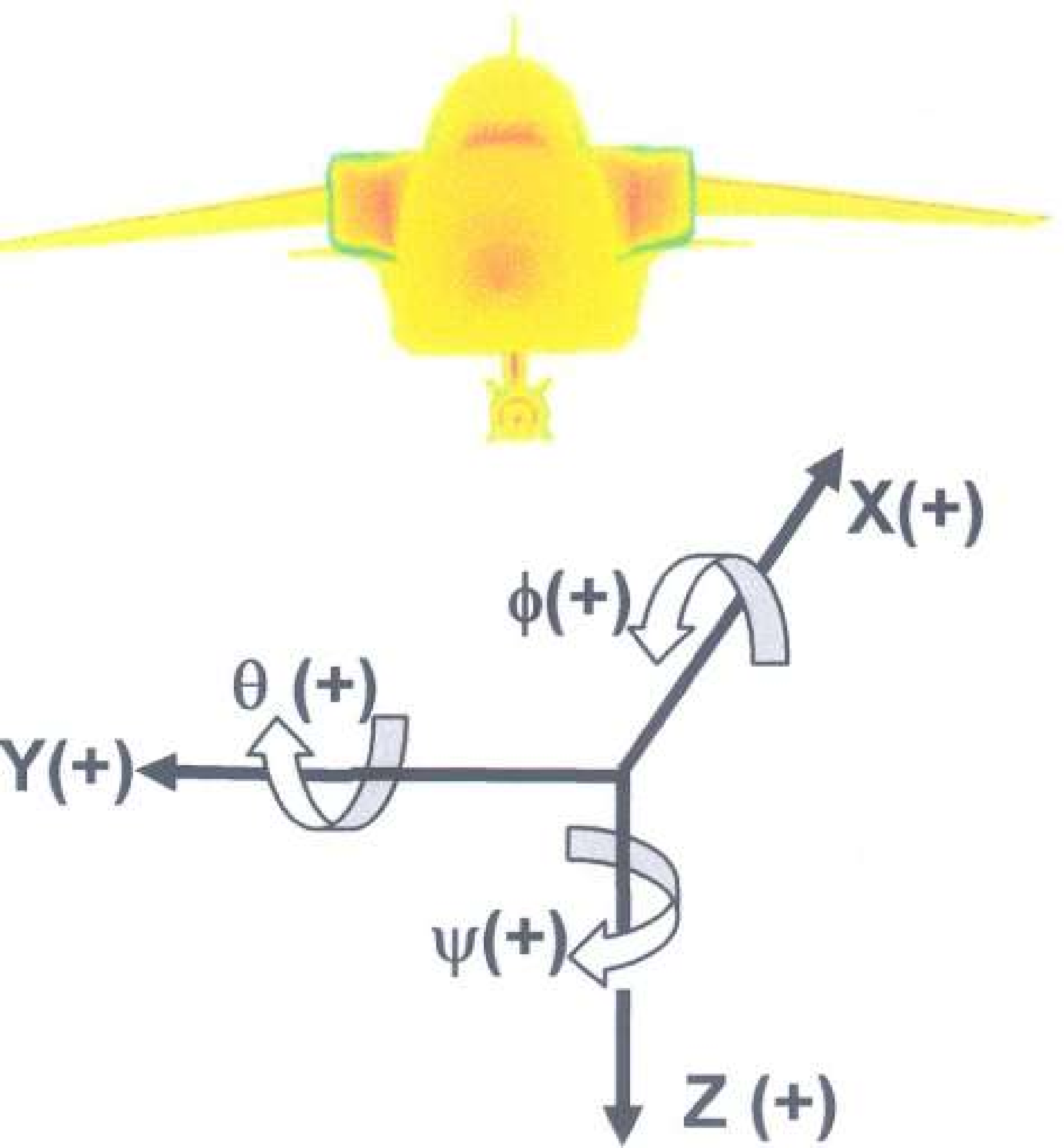
T = 0.08 sec

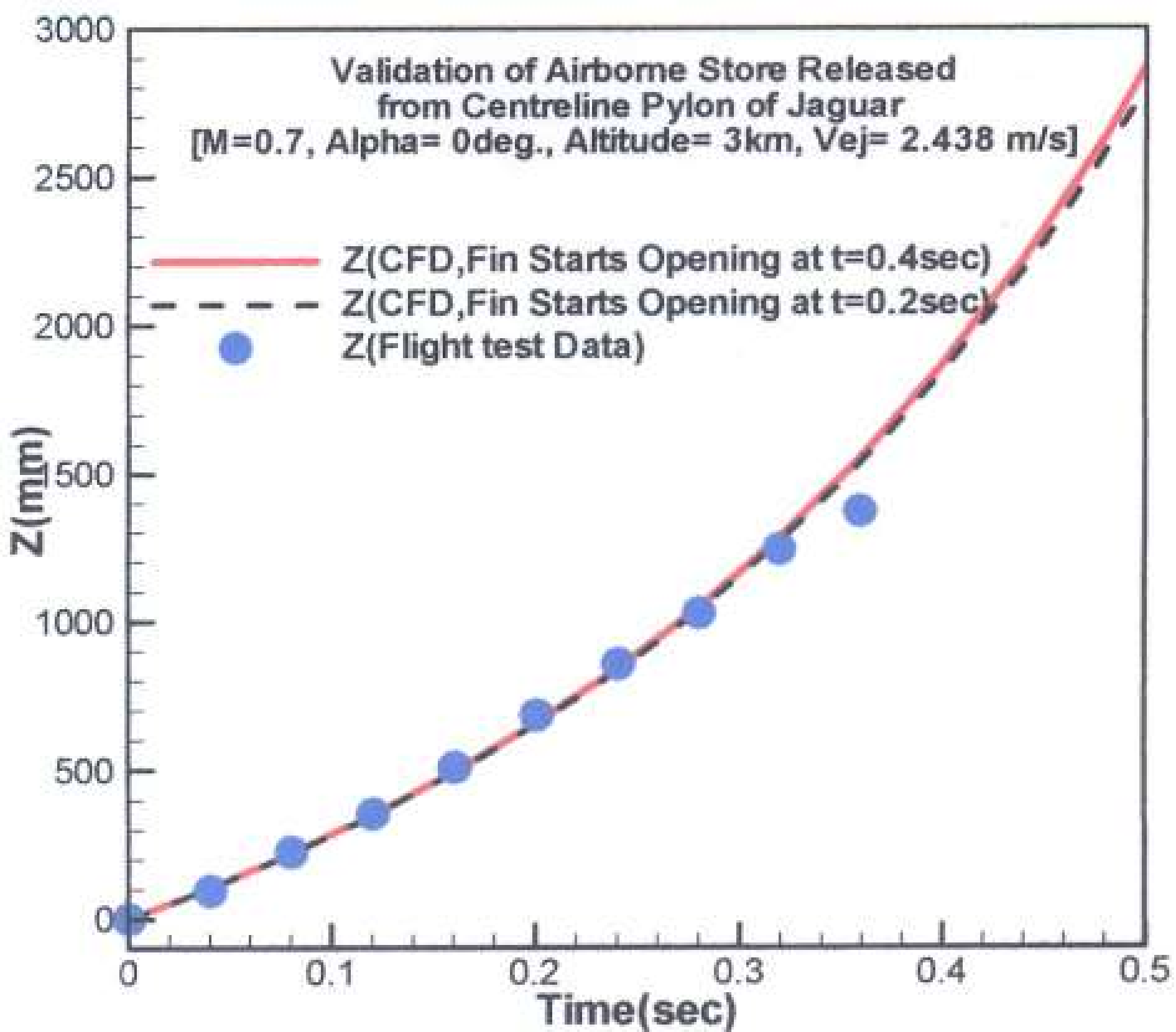
T = 0.21 sec

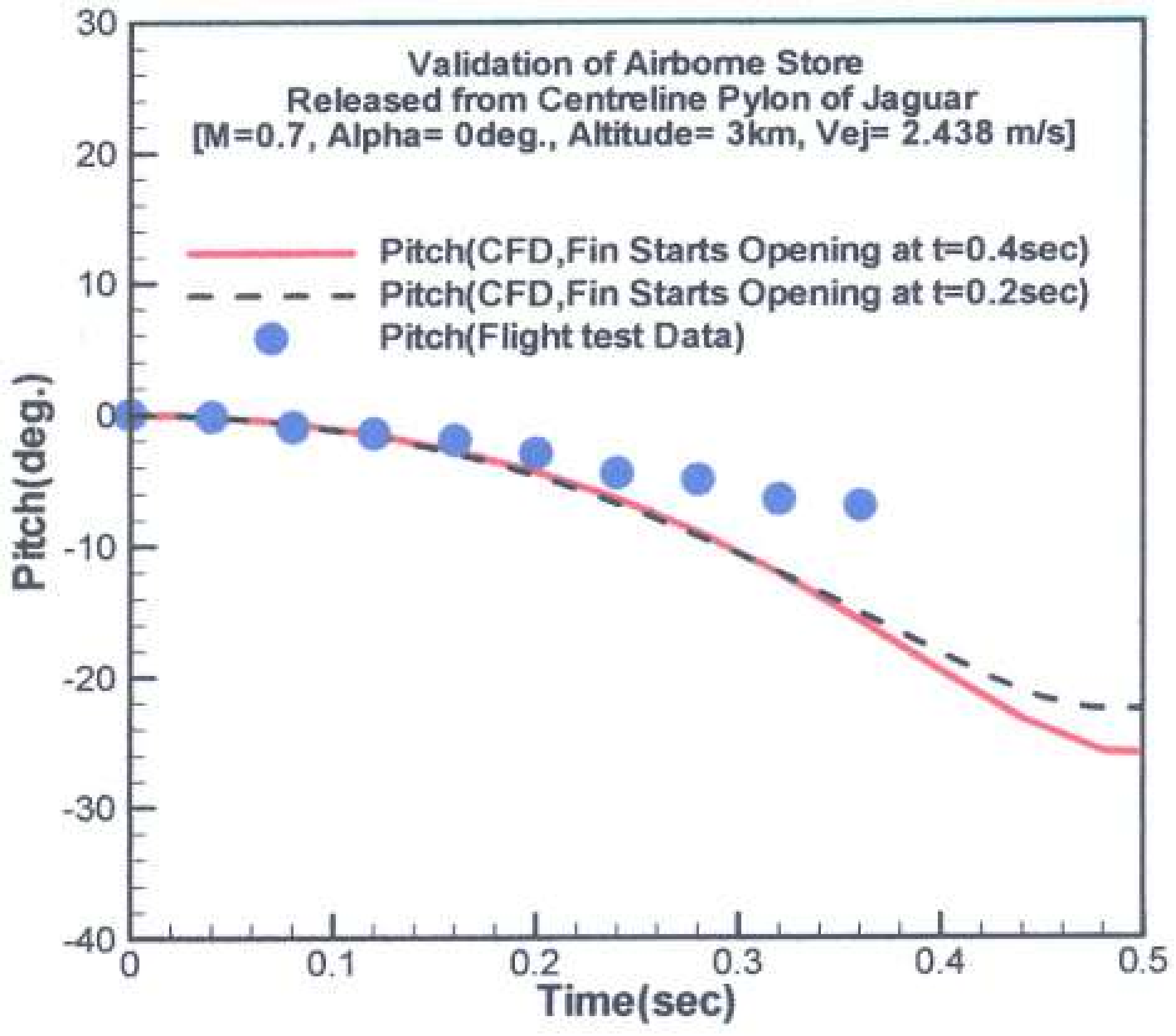
T = 0.25 sec

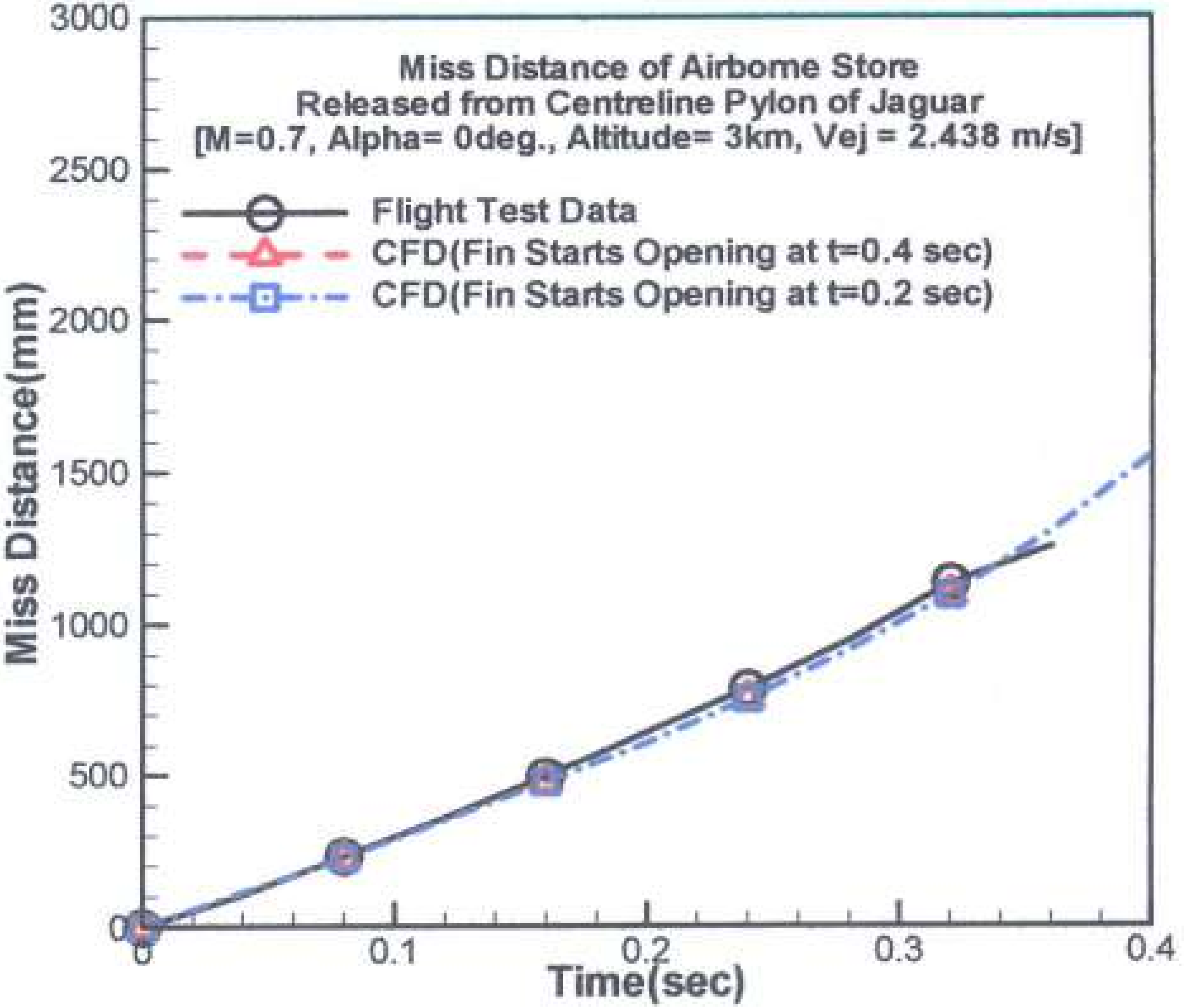
T = 0.33 sec

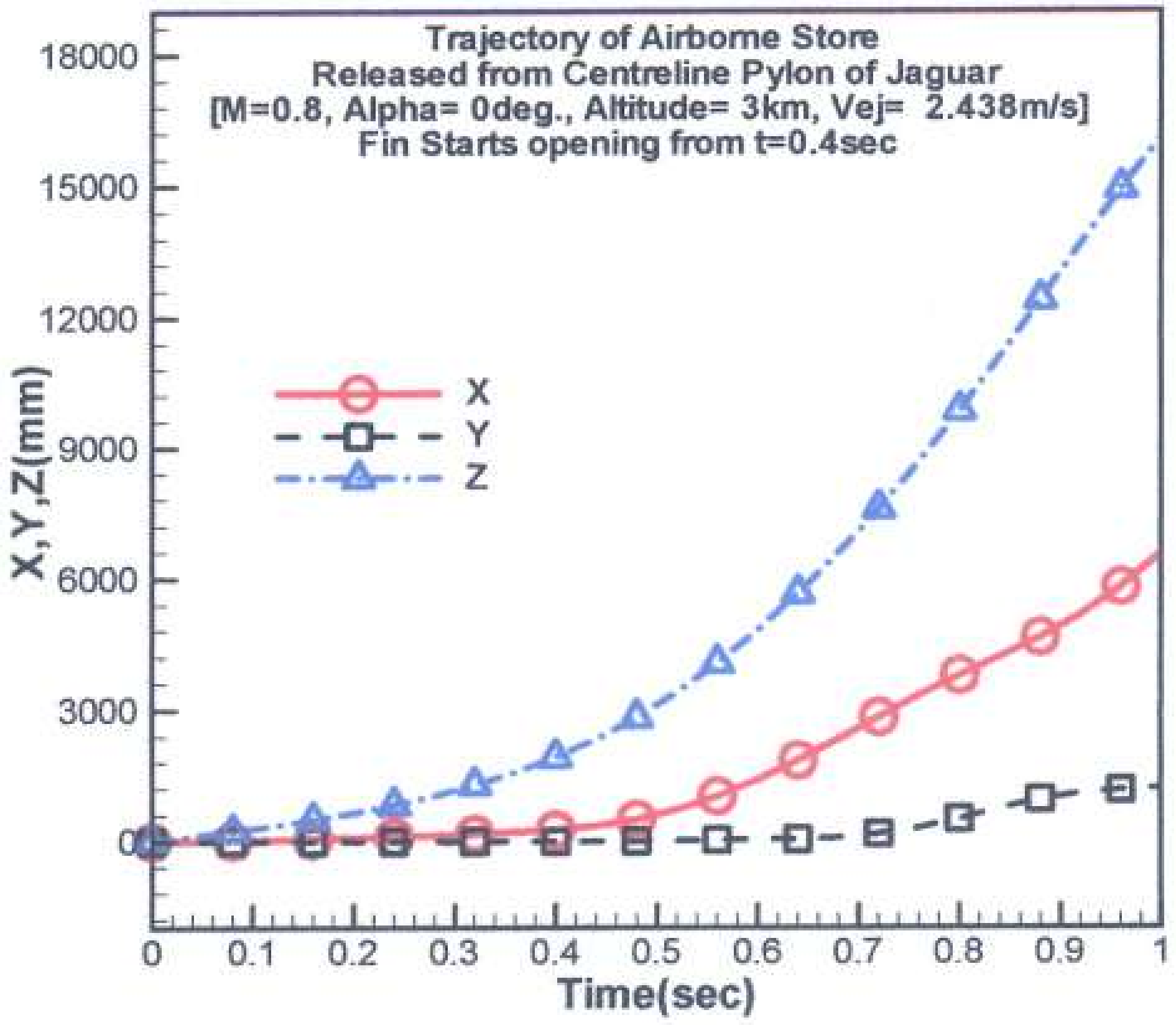
T = 0.40 sec

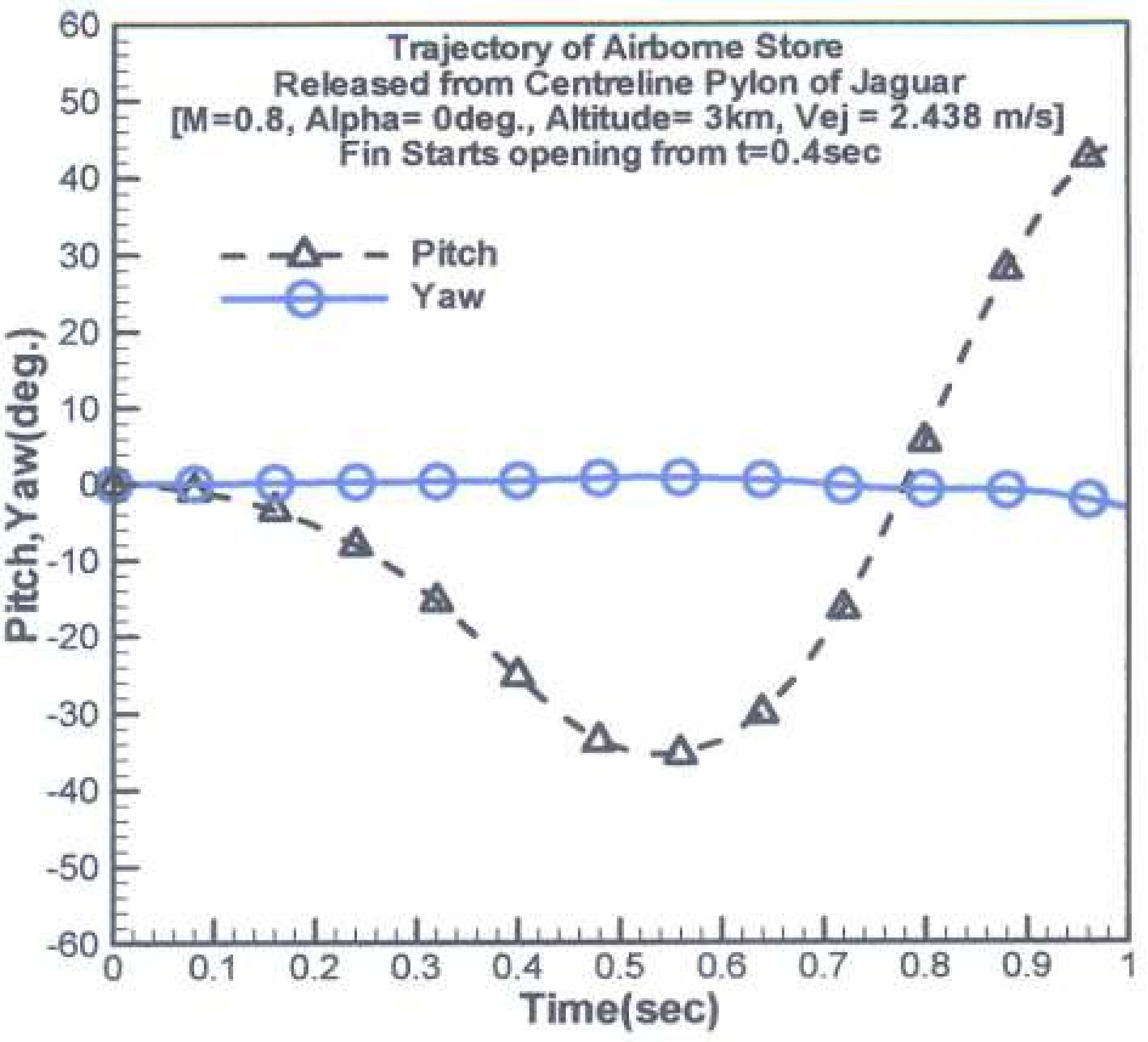

X(+)
ϕ(+)
θ (+)
Y(+)
ψ(+)
Z (+)

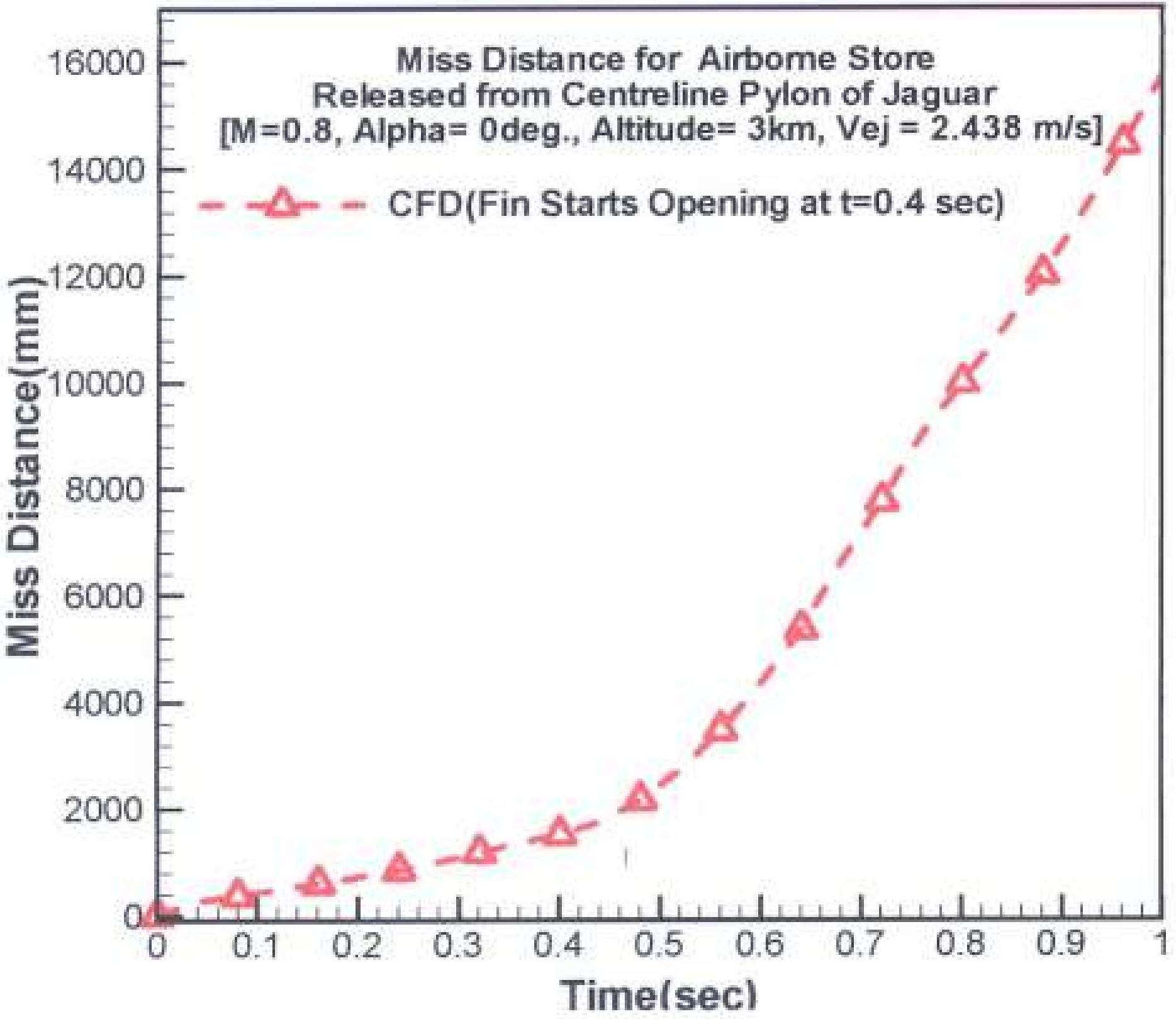

Validation of Airborne Store Released
from Centreline Pylon of Jaguar
[M=0.7, Alpha= 0deg., Altitude= 3km, Vej= 2.438 m/s]
Z(CFD,Fin Starts Opening at t=0.4sec)
Z(CFD,Fin Starts Opening at t=0.2sec)
Z(Flight test Data)
Z(mm)
Time(sec)
3000
2500
2000
1500
1000
500
0
0
0.1
0.2
0.3
0.4
0.5

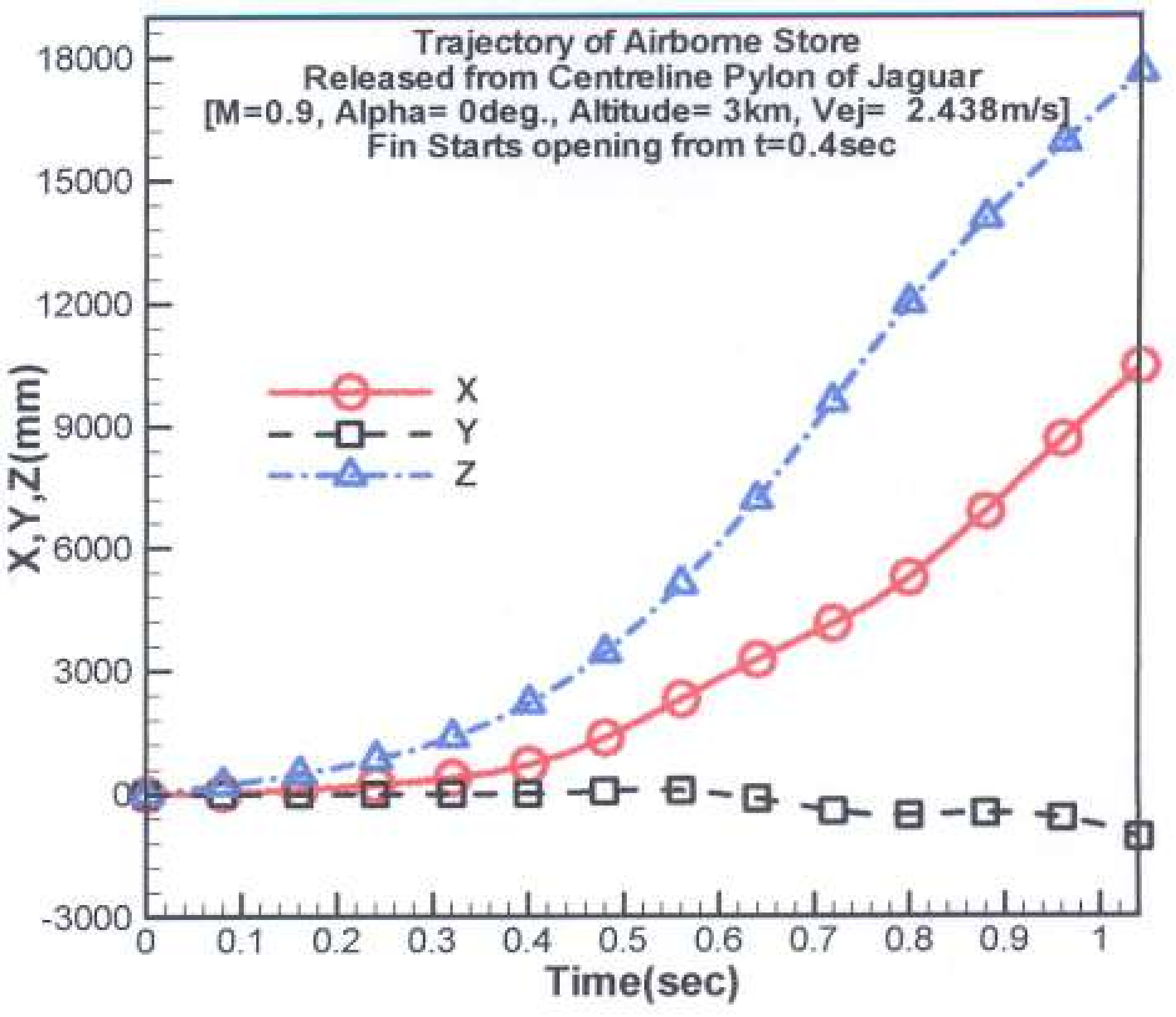

Validation of Airborne Store
Released from Centreline Pylon of Jaguar
[M=0.7, Alpha= 0deg., Altitude= 3km, Vej= 2.438 m/s]
Pitch(CFD,Fin Starts Opening at t=0.4sec)
Pitch(CFD,Fin Starts Opening at t=0.2sec)
Pitch(Flight test Data)
Pitch(deg.)
Time(sec)
30
20
10
0
-10
-20
-30
-40
0
0.1
0.2
0.3
0.4
0.5

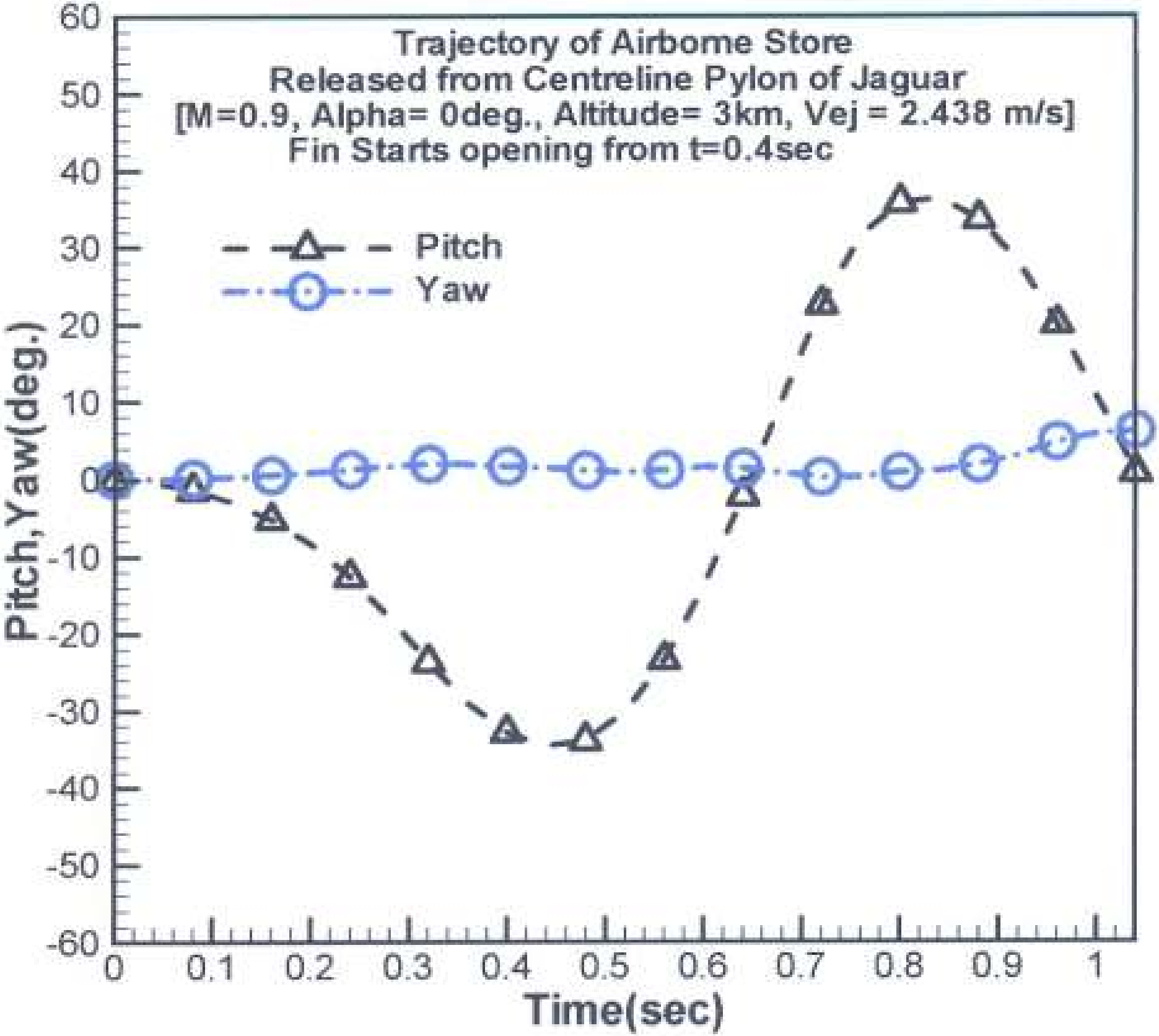

Miss Distance of Airborne Store
Released from Centreline Pylon of Jaguar
[M=0.7, Alpha= 0deg., Altitude= 3km, Vej = 2.438 m/s]
Flight Test Data
CFD(Fin Starts Opening at t=0.4 sec)
CFD(Fin Starts Opening at t=0.2 sec)
Miss Distance(mm)
Time(sec)
3000
2500
2000
1500
1000
500
0
0
0.1
0.2
0.3
0.4

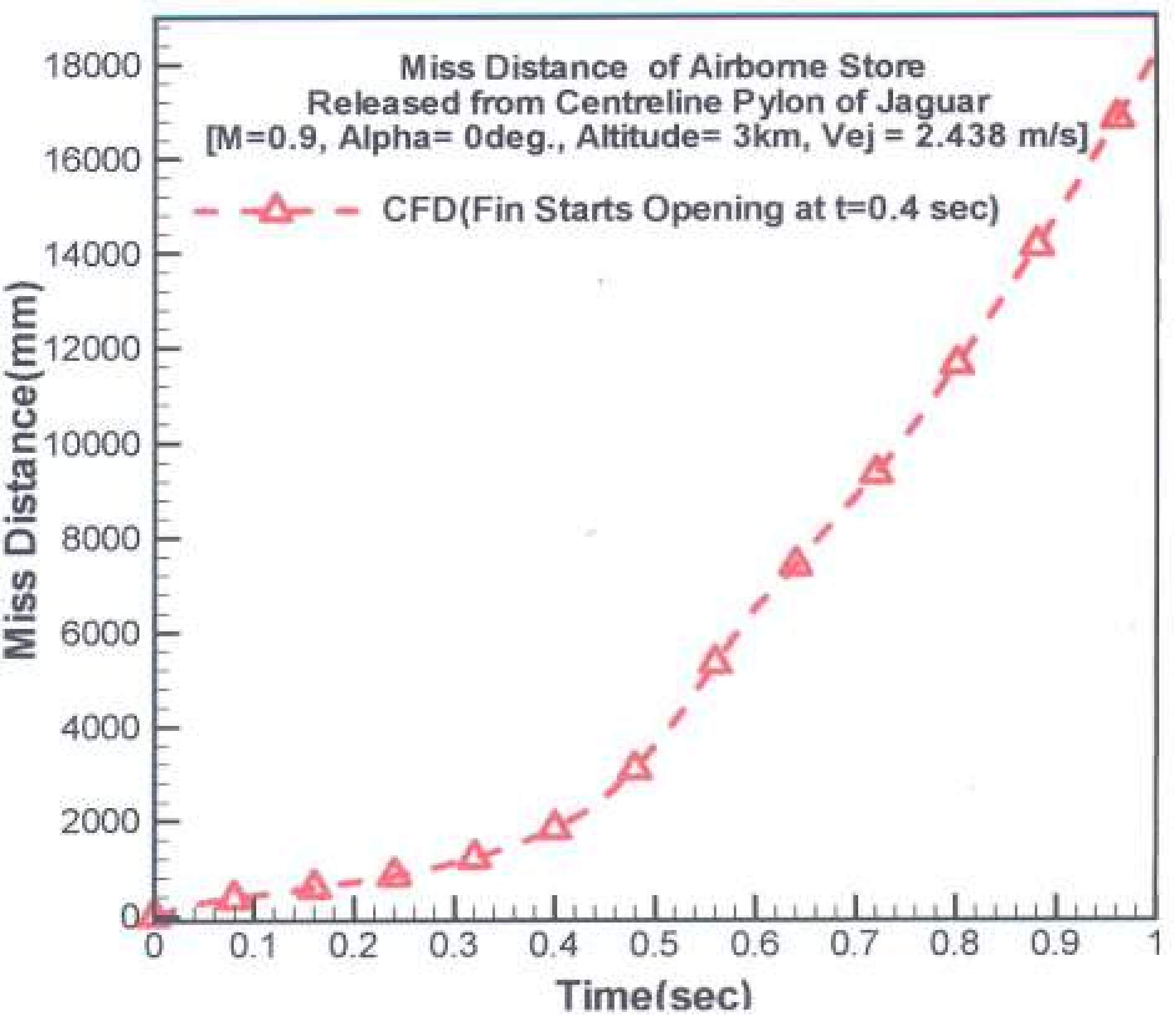

Trajectory of Airborne Store
Released from Centreline Pylon of Jaguar
[M=0.8, Alpha= 0deg., Altitude= 3km, Vej= 2.438m/s]
Fin Starts opening from t=0.4sec
X
Y
Z
X,Y,Z(mm)
Time(sec)
18000
15000
12000
9000
6000
3000
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1


Trajectory of Airborne Store
Released from Centreline Pylon of Jaguar
[M=0.8, Alpha= 0deg., Altitude= 3km, Vej = 2.438 m/s]
Fin Starts opening from t=0.4sec
Pitch
Yaw
Pitch,Yaw(deg.)
Time(sec)
60
50
40
30
20
10
0
-10
-20
-30
-40
-50
-60
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1


Miss Distance for Airborne Store
Released from Centreline Pylon of Jaguar
[M=0.8, Alpha= 0deg., Altitude= 3km, Vej = 2.438 m/s]
CFD(Fin Starts Opening at t=0.4 sec)
Miss Distance(mm)
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
Time(sec)


Trajectory of Airborne Store
Released from Centreline Pylon of Jaguar
[M=0.9, Alpha= 0deg., Altitude= 3km, Vej= 2.438m/s]
Fin Starts opening from t=0.4sec
X
Y
Z
X,Y,Z(mm)
18000
15000
12000
9000
6000
3000
0
-3000
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
Time(sec)


Trajectory of Airborne Store
Released from Centreline Pylon of Jaguar
[M=0.9, Alpha= 0deg., Altitude= 3km, Vej = 2.438 m/s]
Fin Starts opening from t=0.4sec
Pitch
Yaw
Pitch,Yaw(deg.)
Time(sec)
60
50
40
30
20
10
0
-10
-20
-30
-40
-50
-60
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1


Miss Distance of Airborne Store
Released from Centreline Pylon of Jaguar
[M=0.9, Alpha= 0deg., Altitude= 3km, Vej = 2.438 m/s]
CFD(Fin Starts Opening at t=0.4 sec)
Miss Distance(mm)
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
Time(sec)