



STABILITO

Stability for rocket with fins

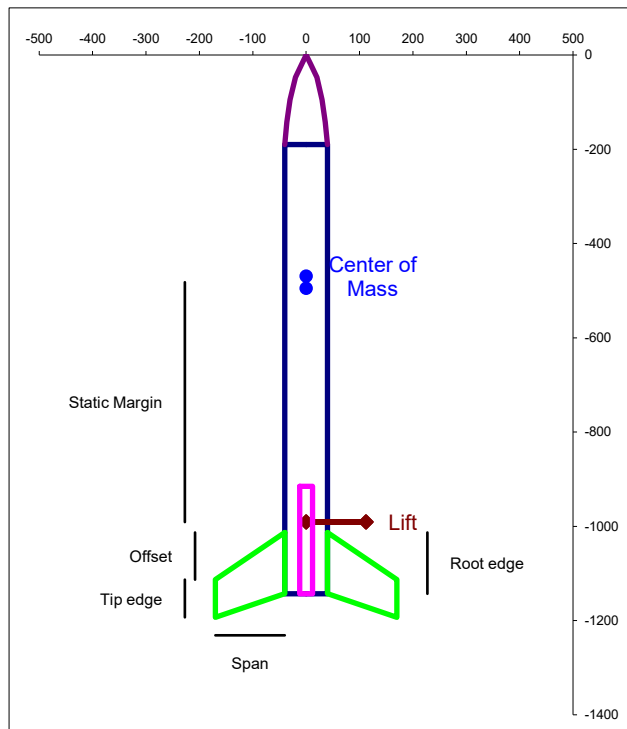
Fill-in yellow cells only

Rocket		
Name	Ma fusée	
Club	Mon club	
Matricule	MF 0	
Type	Minifusée	
Weight	1500 g	sans propu
Center of Mass	438 mm	sans propu
Total length	1143,2 mm	

Motor		
Type	Pandora (Pro24-6G BS)	
Basement	1143,2 mm	

Nose Cone		
Shape	Ogivale (pointue)	
Height	190 mm	
Diameter	80 mm	

Fins		
Mono-empennage		
Root edge 'm'	130 mm	
Tip edge 'n'	80 mm	
Offset	100 mm	
Span	130 mm	
Thickness 'ep'	5 mm	
Number of fins	4	
Basement	1143,2 mm	



19/09/2026	Min	Results		Max
Finesse	10	14,3		20
Lift	15	21,0	21,0	30
StatMargin	1,5 D	6,20 D	6,52 D	6 D
Torque	30	130,3	137,0	100
XCp		991 mm	991 mm	
MS /L		43% L	46% L	

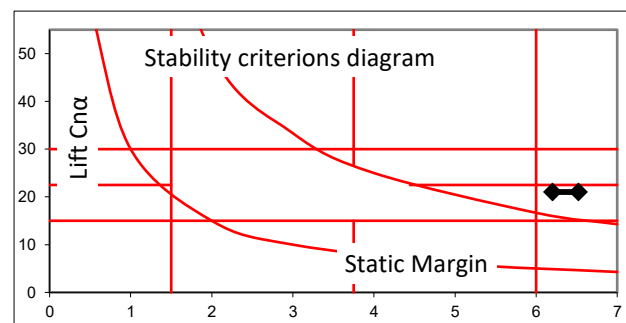
OVERSTABLE

Language/Langue English

Fusée mono-diamètre,

	Loaded Moto	Empty Motor	Without M
Motor Mass	0,16 kg	0,084 kg	-
Motor CoM	114 mm	114 mm	-
Rocket Mass	1,66 kg	1,584 kg	1,5 kg
Rocket CoM	495 mm	469 mm	438 mm

	XCp	Cna
Nose Cone	89 mm	2,0
Fins	1086 mm	19,0



Free comment:

Checksum : propu OK

v3.4.5



TRAJECTO

Rocket Trajectory

Fill-in yellow cells only

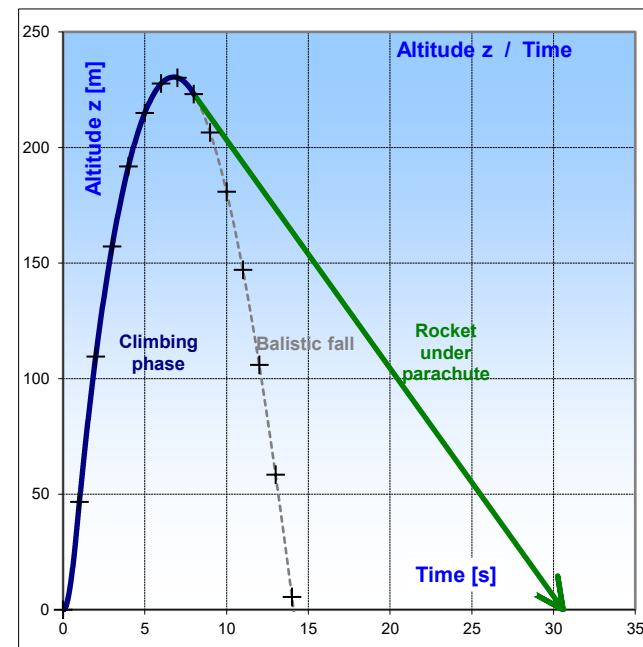
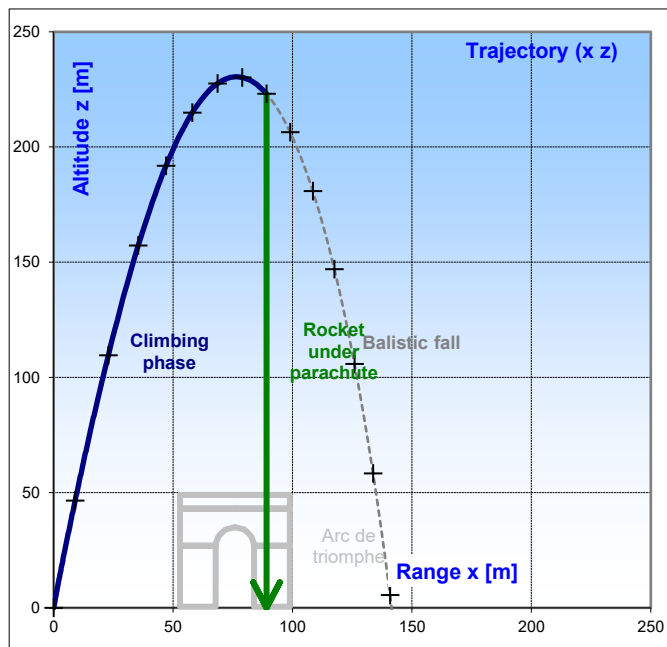
Rocket	
Name	Ma fusée
Club	Mon club
Matricule	MF0
Total Mass	1,6599 kg
Motor	Pandora (Pro24-6G BS)

Drag	
Surface Réf.	0,007627 m ²
Cx	0,6

Launch Pad	
Length	2,5 m
Angle /horizon	80 °
Altitude	0 m

Over Parachute		
	Rocket	0 satellite

Mass	1,5843 kg
Delay	N/A
Opening time	8 s
Type de para	Croix
Surface para	0,26 m ²
Cx parachute	1
Wind speed	5 m/s
Fall velocity	9,9 m/s
Fall duration	23 s
Fligth duration	31 s
Lateral shift	± 113 m

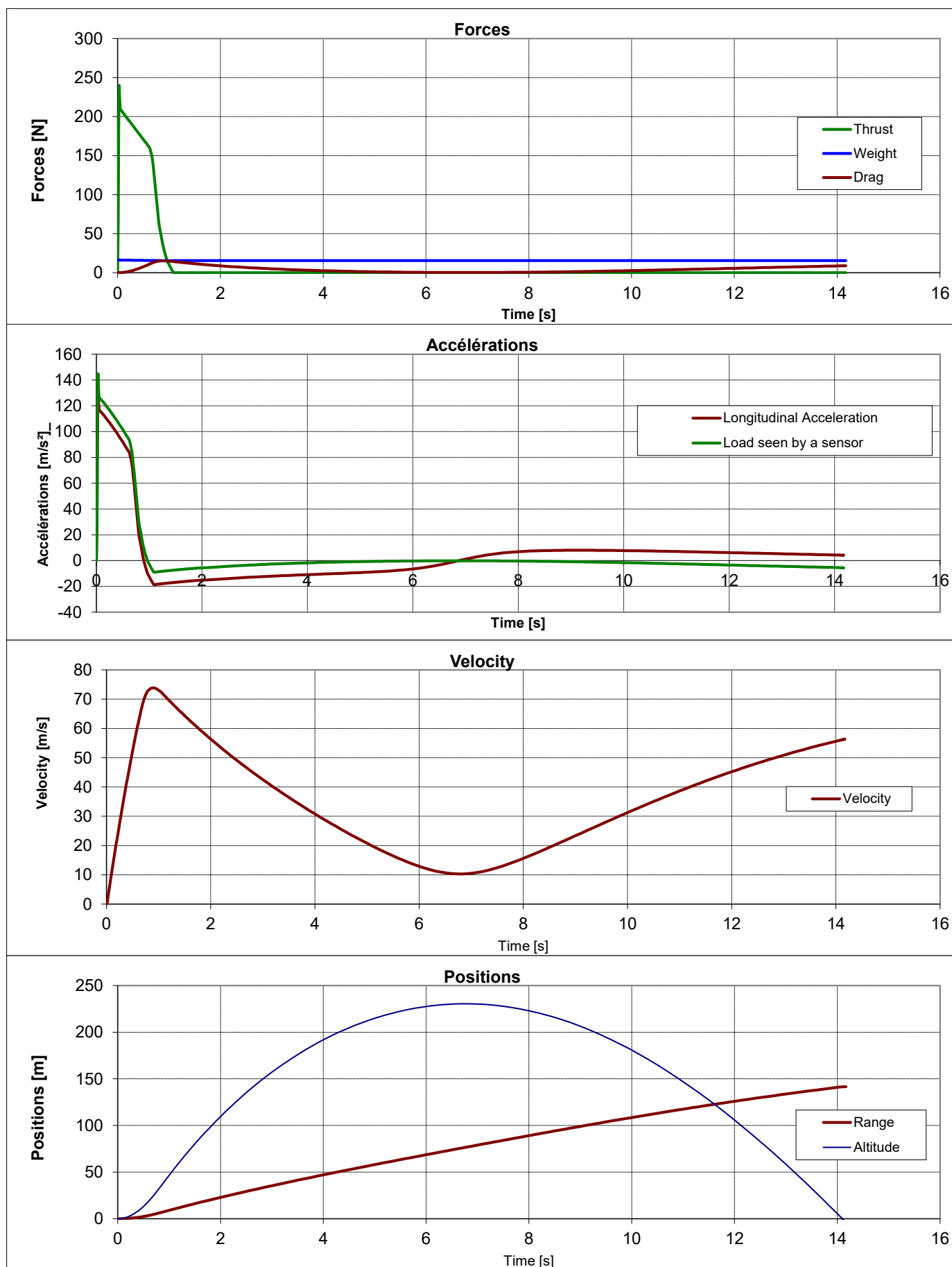


19/09/2026

	Time	Altitude z	Range x	Velocity	Accélération	Efforts
Launch-Pad Exit				23,1 m/s		
Max Velocity & Acc				74 m/s	135 m/s ²	
Culmination, Apogée	6,7 s	230 m	76 m	10 m/s		
Rocket parachute opening	8,0 s	223 m	89 m	16 m/s		38,9 N
Balistic Impact	14,1 s	~0 m	142 m	56,0 m/s		2488 J

To locate the rocket	
Body/Nose color	Brun/Orange...
Rocket parachute color	Rouge...

propu OK



Notes :

These curves show the rocket trajectory in case of ballistic fall (without parachute).

Longitudinal Gravitational Acceleration defines the motion (velocity derivative) : $Acc = (Thrust - Drag \pm Weight)/m$

"Non-Gravitational" Load seen by an acceleration sensor (mass-spring) is : $Load = (Thrust - Drag) / m$