CR-2-4G (Aurelius) - Simulation results

Engine selection

[M1830-CS-None]

Simulation control parameters

* Flight resolution: 800.000000 samples/second
* Descent resolution: 1.000000 samples/second
* Method: Explicit Euler
* End the simulation when the rocket reaches the ground.

Launch conditions

* Altitude: 4078.08408 Ft.
* Relative humidity: 50.000 %
* Temperature: 86.000 Deg. F
* Pressure: 29.9139 In.
* Wind speed model: Custom speed range
  + Low wind speed: 15.0000 MPH
  + High wind speed: 18.6337 MPH
* Wind turbulence: Fairly constant speed (0.01)
  + Frequency: 0.010000 rad/second
* Wind starts at altitude: 0.00000 Ft.
* Launch guide angle: 5.000 Deg.
* Latitude: 0.000 Degrees

Launch guide data:

* Launch guide length: 36.0000 In.
* Velocity at launch guide departure: 44.3052 ft/s
* The launch guide was cleared at : 0.143 Seconds
* User specified minimum velocity for stable flight: 43.9993 ft/s
* Minimum velocity for stable flight reached at: 36.2295 In.

Max data values:

* Maximum acceleration:Vertical (y): 377.474 Ft./s/sHorizontal (x): 33.026 Ft./s/sMagnitude: 378.916 Ft./s/s
* Maximum velocity:Vertical (y): 947.4073 ft/s, Horizontal (x): 19.3576 ft/s, Magnitude: 947.4097 ft/s
* Maximum range from launch site: 197.10438 Ft.
* Maximum altitude: 11218.14039 Ft.

Recovery system data

Time data

* Time to burnout: 3.165 Sec.
* Time to apogee: 26.262 Sec.
* Optimal ejection delay: 23.097 Sec.

Landing data

Competition settings

Competition conditions are not in use for this simulation.