

$$\text{Pressure} = A \cdot (2x^3 - 3x^2 + 1) + B \cdot (x^3 - 2x^2 + x) + C \cdot (-2x^3 + 3x^2) + D \cdot (x^3 - x^2)$$

where, $x = (\text{Altitude} - E) / F$

Pressure in kPa, Altitude in meters

Eve						
Altitude Range	A	B	C	D	E	F
0.000 to 9723.525	506.625000000	-845.322132989250000	113.491800000	-145.277242320000000	0.000	9723.525
9723.525 to 20000.000	113.491800000	-153.538757680000000	29.096800000	-31.311258083325000	9723.525	10276.475
20000.000 to 45000.000	29.096800000	-76.172175000000000	0.818075800	-1.455564500000000	20000.000	25000.000
45000.000 to 80000.000	0.818075800	-2.037790300000000	0.005512151	-0.013220245500000	45000.000	35000.000
80000.000 to 90000.000	0.005512151	-0.003777213000000	0.000000000	0.000000000000000	80000.000	10000.000

Kerbin						
Altitude Range	A	B	C	D	E	F
0.000 to 1241.025	101.325000000	-18.635616117750000	84.029160000	-16.007311321500000	0.000	1241.025
1241.025 to 2439.593	84.029160000	-15.459441691680000	69.681380000	-13.278647215680000	1241.025	1198.568
2439.593 to 3597.110	69.681380000	-12.823656261030000	57.780010000	-11.014333335711000	2439.593	1157.517
3597.110 to 4714.942	57.780010000	-10.636549307216000	47.908620000	-9.135526733280000	3597.110	1117.832
4714.942 to 5794.409	47.908620000	-8.821852302805000	39.721480000	-7.576692515640000	4714.942	1079.467
5794.409 to 6836.791	39.721480000	-7.316284332566000	32.931690000	-6.283446382158000	5794.409	1042.382
6836.791 to 7843.328	32.931690000	-6.067281231949000	27.301090000	-5.210618597786000	6836.791	1006.537
7843.328 to 8815.220	27.301090000	-5.031193316399990	22.632060000	-4.320703332504000	7843.328	971.892
8815.220 to 10786.420	22.632060000	-8.763123353600000	15.368400000	-5.946179993600000	8815.220	1971.200
10786.420 to 12101.400	15.368400000	-3.966584570800000	11.873130000	-3.062947409540000	10786.420	1314.980
12101.400 to 13417.050	11.873130000	-3.064438293000000	9.172798000	-2.366320196100000	12101.400	1315.650
13417.050 to 16678.470	9.172798000	-5.865839986680000	4.842261000	-3.081564754254000	13417.050	3261.420
16678.470 to 21143.100	4.842261000	-4.218324845697000	2.050097000	-1.738569335985000	16678.470	4464.630
21143.100 to 26977.920	2.050097000	-2.272081825410000	0.690592900	-0.730849131330000	21143.100	5834.820
26977.920 to 33593.820	0.690592900	-0.828663969060000	0.220173400	-0.239950621602000	26977.920	6615.900
33593.820 to 42081.870	0.220173400	-0.307843578834000	0.057684690	-0.076928546749950	33593.820	8488.050
42081.870 to 49312.130	0.057684690	-0.065527665623500	0.017537940	-0.021903327953220	42081.870	7230.260
49312.130 to 56669.950	0.017537940	-0.022289301649700	0.004591824	-0.006494876475850	49312.130	7357.820
56669.950 to 62300.840	0.004591824	-0.004970384350644	0.001497072	-0.001732676094099	56669.950	5630.890
62300.840 to 70000.000	0.001497072	-0.002369055399396	0.000000000	0.000000000000000	62300.840	7699.160

Duna						
Altitude Range	A	B	C	D	E	F
0.000 to 12000.000	20.265000000	-26.430780000000000	3.827564000	-8.032562400000000	0.000	12000.000
12000.000 to 20000.000	3.827564000	-5.355041600000000	0.722933500	-1.012175200000000	12000.000	8000.000
20000.000 to 35000.000	0.722933500	-1.897828500000000	0.059341990	-0.115781670000000	20000.000	15000.000
35000.000 to 50000.000	0.059341990	-0.115781670000000	0.000000000	0.000000000000000	35000.000	15000.000

Jool						
Altitude Range	A	B	C	D	E	F
0.000 to 32086.940	1519.875000000	-1846.113750295600000	628.043600000	-465.021582297000000	0.000	32086.940
32086.940 to 123450.000	628.043600000	-1324.083715203000000	30.000000000	-182.132260110000000	32086.940	91363.060
123450.000 to 150000.000	30.000000000	-52.927425000000000	10.000000000	-7.212065895000000	123450.000	26550.000
150000.000 to 200000.000	10.000000000	-13.582045000000000	0.000000000	0.000000000000000	150000.000	50000.000

Laythe						
Altitude Range	A	B	C	D	E	F
0.000 to 5250.000	60.795000000	-27.386016000000000	33.408980000	-22.326732750000000	0.000	5250.000
5250.000 to 10000.000	33.408980000	-20.200377250000000	17.786050000	-11.436893250000000	5250.000	4750.000
10000.000 to 17000.000	17.786050000	-16.854369000000000	7.100577000	-7.644448000000000	10000.000	7000.000
17000.000 to 22000.000	7.100577000	-5.460320000000000	3.812421000	-2.338505500000000	17000.000	5000.000
22000.000 to 31000.000	3.812421000	-4.209309900000000	1.312482000	-1.765590300000000	22000.000	9000.000
31000.000 to 38000.000	1.312482000	-1.373236900000000	0.510405500	-0.549906560000000	31000.000	7000.000
38000.000 to 50000.000	0.510405500	-0.942696960000000	0.000000000	0.000000000000000	38000.000	12000.000