

The following Tables provide the numerical values that were used to create Figures 4A to 4D

Pressure (atm)	Poles				Equator			
Altitude (m)	N ₂	O ₂	Ar	Total	N ₂	O ₂	Ar	Total
0	0.786239576	0.210889215	0.009358083	1.006486874	0.781337797	0.209562353	0.009298846	1.000198997
5000	0.52561962	0.133025492	0.005148315	0.663793427	0.522345419	0.132189225	0.005115754	0.659650398
10000	0.319902461	0.076010372	0.002558412	0.398471245	0.317911391	0.07553293	0.002542244	0.395986564
15000	0.183710385	0.041566704	0.001194685	0.226471774	0.182567932	0.041305829	0.001187141	0.225060903
20000	0.109794681	0.022664426	0.000567239	0.133026346	0.109112465	0.022522301	0.000563666	0.132198426
25000	0.068253805	0.012403375	0.000276956	0.080934136	0.067830061	0.01232566	0.00027521	0.080430931
30000	0.041397503	0.007131307	0.000137739	0.048666549	0.041140707	0.007086662	0.000136872	0.048364241
35000	0.024934354	0.004330868	6.99425E-05	0.029335164	0.024779811	0.004303777	6.95023E-05	0.029153091
40000	0.016888678	0.002593708	3.6483E-05	0.019518869	0.01678409	0.002577497	3.62536E-05	0.01939784
45000	0.01073455	0.001529414	2.02252E-05	0.012284189	0.010668129	0.001519863	2.00981E-05	0.01220809
50000	0.007095197	0.000971983	1.13635E-05	0.008078543	0.007051331	0.000965918	1.12921E-05	0.008028541
55000	0.004638558	0.000598255	6.16172E-06	0.005242975	0.004609904	0.000594526	6.12307E-06	0.005210552
60000	0.002822938	0.000347838	3.20443E-06	0.00317398	0.002805515	0.000345671	3.18435E-06	0.00315437
65000	0.001741601	0.000193612	1.59366E-06	0.001936807	0.00173086	0.000192407	1.58368E-06	0.001924851
70000	0.00104466	0.000106056	7.55182E-07	0.001151471	0.001038223	0.000105396	7.50456E-07	0.00114437
75000	0.00058882	5.64059E-05	3.36439E-07	0.000645563	0.000585195	5.60554E-05	3.34335E-07	0.000641585
80000	0.000318324	2.80118E-05	1.37328E-07	0.000346473	0.000316366	2.78379E-05	1.3647E-07	0.00034434
85000	0.000169282	1.37874E-05	5.92323E-08	0.000183129	0.000168242	1.37018E-05	5.88626E-08	0.000182003
90000	8.98132E-05	6.7897E-06	2.49845E-08	9.66279E-05	8.92616E-05	6.74762E-06	2.48287E-08	9.60341E-05
95000	4.94218E-05	3.42271E-06	1.0376E-08	5.28549E-05	4.91185E-05	3.40152E-06	1.03113E-08	5.25303E-05
100000	2.87945E-05	1.76598E-06	4.30065E-09	3.05647E-05	2.86179E-05	1.75505E-06	4.27387E-09	3.03772E-05

Density (kg/m ³)	Poles				Equator			
Altitude (m)	N ₂	O ₂	Ar	Total	N ₂	O ₂	Ar	Total
0	0.922337207	0.282736023	0.031365604	1.236438835	0.760859294	0.233222652	0.025871794	1.01995374
5000	0.690177499	0.199625514	0.019314627	0.90911764	0.55803513	0.161395624	0.01561512	0.735045874
10000	0.476967567	0.129519773	0.010898675	0.617386015	0.376149499	0.102136901	0.008594163	0.486880563
15000	0.289603107	0.074887106	0.005380898	0.369871111	0.225720061	0.058364525	0.004193532	0.288278118
20000	0.173081564	0.04083252	0.002554861	0.216468945	0.13490251	0.031823678	0.001991108	0.168717296
25000	0.104019858	0.021603355	0.001205958	0.126829171	0.081660627	0.016958702	0.000946645	0.099565974
30000	0.061060935	0.012021271	0.000580469	0.073662675	0.048262141	0.009500982	0.000458755	0.058221878
35000	0.03526538	0.007000311	0.000282633	0.042548324	0.028110279	0.005579674	0.000225267	0.03391522
40000	0.02294259	0.004026798	0.000141602	0.027110989	0.0184319	0.003234912	0.000113751	0.021780562
45000	0.014028305	0.002284223	7.55171E-05	0.016388045	0.011352952	0.00184849	6.11093E-05	0.013262551
50000	0.008932808	0.001398537	4.08758E-05	0.010372221	0.007278737	0.001139507	3.33037E-05	0.008451548
55000	0.006053622	0.0008923	2.29756E-05	0.006968898	0.004900413	0.000722276	1.8597E-05	0.005641287
60000	0.00392341	0.000552498	1.27246E-05	0.004488633	0.003138217	0.000441901	1.01771E-05	0.003590295
65000	0.002588672	0.000328892	6.76795E-06	0.002924332	0.002042916	0.000259538	5.34058E-06	0.002307795
70000	0.001668669	0.000193607	3.4465E-06	0.001865722	0.001296942	0.000150469	2.67847E-06	0.001450089
75000	0.001016416	0.000111277	1.65931E-06	0.001129352	0.000776344	8.49891E-05	1.26727E-06	0.000862601
80000	0.000597706	6.01105E-05	7.36731E-07	0.000658553	0.000447446	4.49965E-05	5.51467E-07	0.000492993
85000	0.000317855	2.95863E-05	3.17767E-07	0.00034776	0.000237949	2.21473E-05	2.3786E-07	0.000260335
90000	0.000168639	1.457E-05	1.34036E-07	0.000183343	0.000126245	1.09067E-05	1.00331E-07	0.000137252
95000	9.03314E-05	7.14962E-06	5.41853E-08	9.75352E-05	6.807E-05	5.38735E-06	4.08279E-08	7.34982E-05
100000	5.12671E-05	3.59341E-06	2.18774E-08	5.48824E-05	3.88763E-05	2.72476E-06	1.65882E-08	4.16176E-05

Conversion from atm (atmospheres) to other units are provided below:

Metric:					
From atm to:	N/m ²	bar	Pa	Tor	mm-Hg
Multiply by:	101325	1.01325	101325	101325	762.75610034
Imperial:					
From atm to:	psi	lbf/ft ²	ozf/in ²	Tf/ft ²	In-Hg
Multiply by:	14.6959475	2116.21644064	235.13516007	0.94473948	30.02976773