

# North Polar Saturated Atmosphere Profile

The following figures and tables are based on a CO<sub>2</sub> saturated atmosphere over the winter polar cap. The model atmosphere is based on the Clausius-Clapeyron relation:  $\ln P = 23.3494 - 3182.48/T$  (MARS p 959.9), and a mean atomic weight of 43.3463.

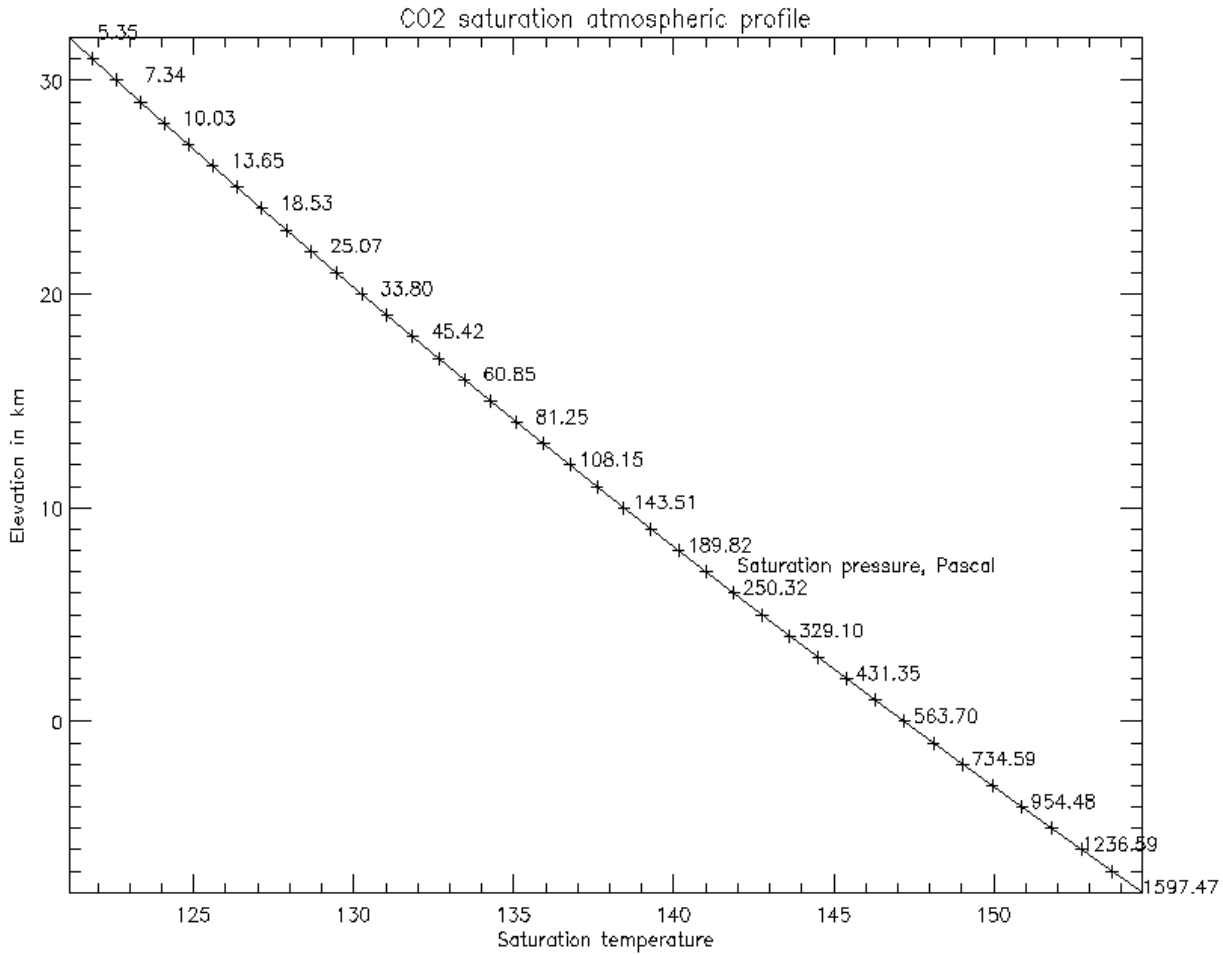


Figure 1: Elevation vs. temperature for a standard saturated polar atmosphere.

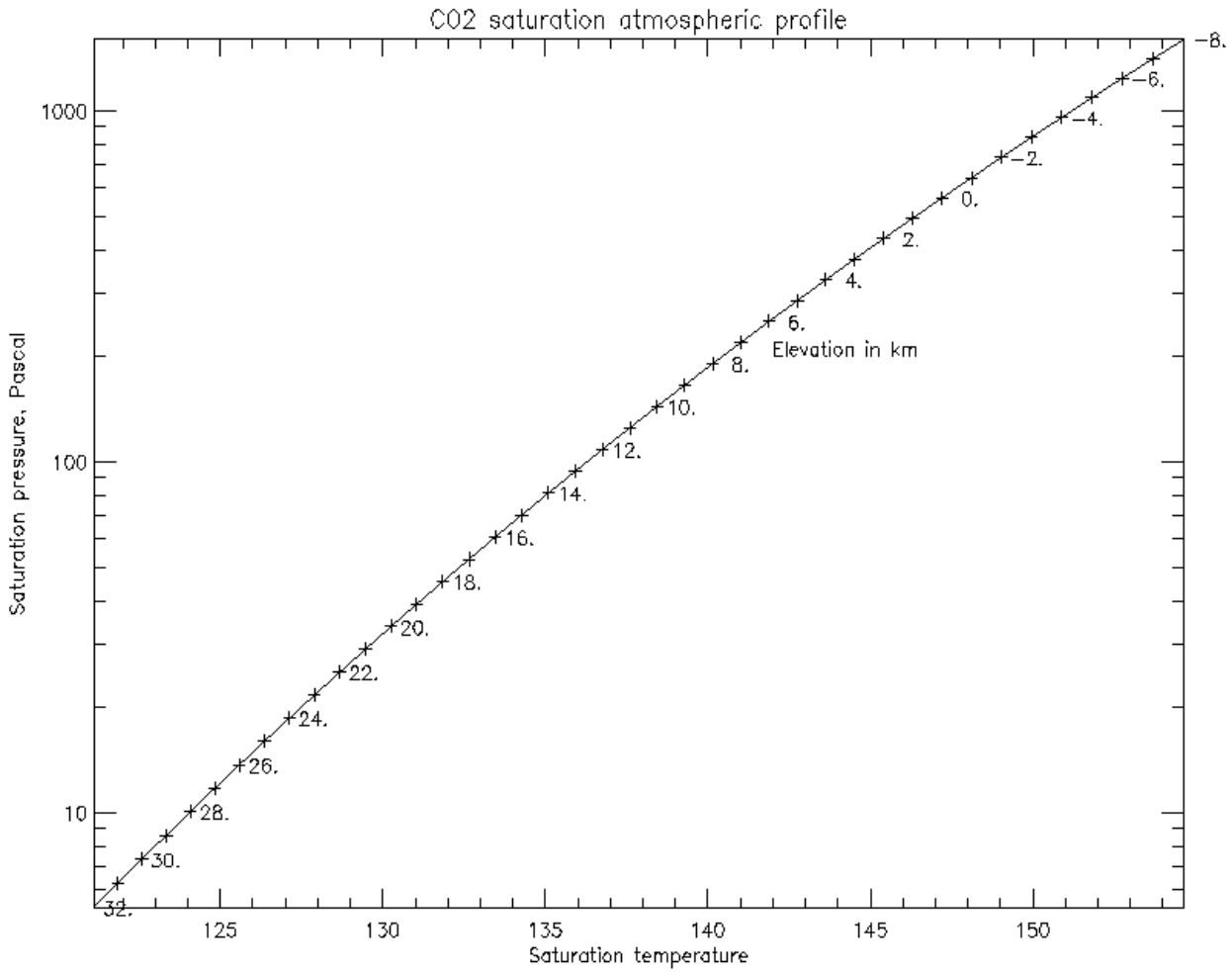


Figure 2: Pressure vs. temperature for a standard saturated polar atmosphere.

Raw data from Figures 1 and 2:

Elev [km]	Pres [Pa]	Temp [K]
12.	108.15	136.76
13.	93.78	135.93
14.	81.25	135.10
15.	70.34	134.28
16.	60.85	133.46
17.	52.60	132.65
18.	45.42	131.85
19.	39.20	131.05
20.	33.80	130.25
21.	29.12	129.46
22.	25.07	128.68
23.	21.56	127.90
24.	18.53	127.12
25.	15.91	126.35
26.	13.65	125.59
27.	11.70	124.83
28.	10.03	124.08
29.	8.58	123.33
30.	7.34	122.59
31.	6.27	121.85
32.	5.35	121.11