

Activity 2: Keeling's 1960 Data

CONCENTRATION AND ISOTOPIC ABUNDANCES OF ATMOSPHERIC CO₂ 201

Table 1. Monthly Average Concentrations of Atmospheric Carbon Dioxide at Various Stations in Parts per Million of Dry Air by Volume.

Month	Year	Continuous Recording Stations			Surface Flask Samples			Flask Samples from Aircraft ²		
		Little America	Mauna Loa	La Jolla ¹	South Pole	Arctic Ice Floes	Down-wind Cruise	Data at Lower Air temp.	Data at Higher Air temp.	Limiting Air temp. (°C.)
Sept.	1957				311.1	306.5				
Oct.							310.9 ¹			
Nov.								311.9		
Dec.	1958				312.0	313.6				
Jan.								311.6		
Feb.		310.8								
Mar.		311.0	313.4		311.9	315.5				
Apr.		311.4	314.4	314.3					314.9 ¹	-27
May		311.7	315.1	315.3						
Jun.		311.9			312.5				314.9 ¹	-21
Jul.		311.8	312.9	311.1						
Aug.		313.0	312.3	308.4						
Sept.		312.9	311.6	308.7	313.3			308.3 ¹	309.6	-18
Oct.		313.0		310.8				312.8 ¹	311.2	-27
Nov.			310.6	313.2						
Dec.		311.6	314.3							
Jan.	1959		312.5	314.9	312.8				313.2	-36
Feb.				313.5	314.4	313.4			314.1	-36
Mar.				314.0	315.4	312.7				
Apr.				314.7	315.0	314.3		316.6 ¹	316.6	-27
May				315.3	315.0	314.3			317.3	-24
Jun.				315.2	315.2	314.4		314.3	314.1	-21
Jul.				313.5	311.5	314.2				
Aug.				311.9	308.1	314.2		308.1	310.7	-18
Sept.				311.1	308.7	314.0		311.0	311.1	-27
Oct.				310.5	312.1			313.0	312.1	-27
Nov.				311.8	313.7	313.9		314.2	313.2	-36
Dec.				312.5	313.5			315.6	314.3	-36
Jan.	1960		313.4	314.7			317.6	315.6	-36	
Feb.				313.7	315.4				315.6	-36
Mar.				314.4	314.7					

¹ Data not shown in Figures 1 or 2.

² Data have been separated into two groups based upon the temperature of the air at the point of sampling. Limiting air temperature refers to the temperature separating lower air temperature from higher. It has been chosen so that, for each period of sampling, the boundary between warmer and colder air lies at approximately 50° North (see figure 3).