

# CO<sub>2</sub> 1800-1960 raw monthly averages and reconstructed annual MBL averages

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## Remarks:

main sources of data:

1.	292 papers	E. Letts and R. Blake, The carbonic anhydride of the atmosphere; Roy. Dublin Soc. Sc.Proc., N. S., Vol.9, 1899-1902; Scientific Proceedings of the Royal Dublin 19th century
2.	231 papers	Stepanova, Nina A. (1952). "A Selective Annotated Bibliography of Carbon Dioxide in the Atmosphere." <i>Meteorological Abstracts</i> 3: 137-170
	101 papers	19th+20th century
3.		20th century
4.		Benedict, Francis, The Composition of the atmosphere with special reference to its oxygen content ; Washington, D. C. : Carnegie institution of Washington, 19
5.	15 papers	John S. Billings, Ventilation and Heating, 1893, Engineering Record (New York)
total	409 sources	additional sources 19th+20th century

years 1800-1959	160	
months 1800-1959	1920	
months with data	1172	( several months with different stations/authors)
monthly data on oceans	98	
yearly data on oceans	38	(44% coastal, sea or upper troposphere since 1870)
authors data used	81	
sampling stations	>114	Wattenberg >320 stations Atlantic ocean
samples used	103039	Buch ship over the atlantic
estimated total data available	>200 000	others by ship
continuous sampling (URAS) by Egle and Huber 1949+1951		double to quadruple sampling
vertical profiles (balloon, areoplane)	4	(Andréé 1893, Wigand 1911, Kauko 1936, Bischof 1959)

- \*only data used with known methods
- \*erroneous data from series omitted
- \*data sampled in cities only used if quantification of local influences was possible
- \*data without sampling date within a year are used as june data
- \*data at the poles low because of cold water-strong absorption or high because of upwelling
- \* data since 1826 (de Saussure) usable
- \* data since ~1870 within +-3% methodical error
- \* coastal data selected for winds from the sea

abbreviations: av= average; SEAS= seasonal cycle; MBL= marine boundary layer, sm= summer minimum; CWBA= CO2- wind speed background approximation; CPBA= CO2-precipitation background approx  
reference: Beck, Ernst-Georg, Reconstruction of Atmospheric CO2 Background Levels since 1826, to be published october 2009

month	average	latitude	longitude	author	#authors	reconstructed MBL	calculation remarks
	CO2 ppm					annual average	
jan.-01	1800,0000						
feb	1800,0834						
march	1800,1666						
april	1800,2500						
may	1800,3334						
june	1800,4166						
july	1800,5000						
aug	1800,5834						
sept	1800,6667						
oct	1800,7500						
nov	1800,8334						
dec	1800,9166						
2	1801,0000						
	1801,0834						
	1801,1666						
	1801,2500						
	1801,3334						
	1801,4166						
	1801,5000						
	1801,5834						
	1801,6667						
	1801,7500						
	1801,8334						
	1801,9166						
3	1802,0000						
	1802,0834						
	1802,1666						
	1802,2500						
	1802,3334						
	1802,4166	683,0	51,00	0,07 Dalton	1		
	1802,5000						
	1802,5834						
	1802,6667						
	1802,7500						
	1802,8334						
	1802,9166						
4	1803,0000						
	1803,0834						
	1803,1666						
	1803,2500						
	1803,3334						
	1803,4166						
	1803,5000						
	1803,5834						
	1803,6667						
	1803,7500						
	1803,8334						
	1803,9166						
5	1804,0000						
	1804,0834						
	1804,1666						
	1804,2500						
	1804,3334						
	1804,4166						
	1804,5000						
	1804,5834						
	1804,6667						

	1804,7500								
	1804,8334								
	1804,9166								
6	1805,0000								
	1805,0834								
	1805,1666								
	1805,2500								
	1805,3334								
	1805,4166								
	1805,5000								
	1805,5834								
	1805,6667								
	1805,7500								
	1805,8334								
	1805,9166								
	1806,0000								
	1806,0834								
	1806,1666								
	1806,2500								
	1806,3334								
	1806,4166								
	1806,5000								
	1806,5834								
	1806,6667								
	1806,7500								
	1806,8334								
	1806,9166								
	1807,0000								
	1807,0834								
	1807,1666								
	1807,2500								
	1807,3334								
	1807,4166								
	1807,5000								
	1807,5834								
	1807,6667								
	1807,7500								
	1807,8334								
	1807,9166								
	1808,0000								
	1808,0834								
	1808,1666								
	1808,2500								
	1808,3334								
	1808,4166								
	1808,5000								
	1808,5834								
	1808,6667								
	1808,7500								
	1808,8334								
	1808,9166								
	1809,0000								
	1809,0834								
	1809,1666								
	1809,2500								
	1809,3334								
	1809,4166	457,0	46,20	6,80	Saussure		2		
	1809,5000								
	1809,5834	709,0	46,20	6,80	Saussure				
	1809,6667								
	1809,7500								
	1809,8334								
	1809,9166								
	1810,0000								
	1810,0834								
	1810,1666								
	1810,2500								
	1810,3334								
	1810,4166								
	1810,5000								
	1810,5834								
	1810,6667								
	1810,7500								
	1810,8334	425	46,20	6,80	Saussure				
	1810,9166								
	1811,0000							547	
	1811,0834	466,0	46,20	6,80	Saussure				
	1811,1666								
	1811,2500								
	1811,3334								
	1811,4166								
	1811,5000	547,0	46,20	6,80	Saussure				
	1811,5834								
	1811,6667								
	1811,7500								
	1811,8334								
	1811,9166								
	1812,0000	514,0	46,20	6,80	Saussure				
	1812,0834								
	1812,1666								
	1812,2500								
	1812,3334								
	1812,4166	385,0	48,50	2,19	Thenard		3	385	
	1812,5000								
	1812,5834								
	1812,6667								
	1812,7500								
	1812,8334								
	1812,9166								
	1813,0000								
	1813,0834								
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1813,2500								
1813,3334								
1813,4166								
1813,5000								
1813,5834								
1813,6667								
1813,7500								
1813,8334								
1813,9166								
1814,0000								
1814,0834								
1814,1666								
1814,2500								
1814,3334								
1814,4166								
1814,5000								
1814,5834								
1814,6667								
1814,7500								
1814,8334								
1814,9166								
1815,0000						713		
1815,0834								
1815,1666								
1815,2500								
1815,3334								
1815,4166								
1815,5000	713,0	46,20	6,80	Saussure				
1815,5834								
1815,6667								
1815,7500								
1815,8334								
1815,9166								
1816,0000						620		
1816,0834								
1816,1666								
1816,2500								
1816,3334								
1816,4166	620,0	46,20	6,80	Saussure				
1816,5000								
1816,5834								
1816,6667								
1816,7500								
1816,8334								
1816,9166								
1817,0000						580		
1817,0834								
1817,1666								
1817,2500								
1817,3334								
1817,4166	580,0	46,20	6,80	Saussure				
1817,5000								
1817,5834								
1817,6667								
1817,7500								
1817,8334								
1817,9166								
1818,0000						550		
1818,0834								
1818,1666								
1818,2500								
1818,3334								
1818,4166	550,0	46,20	6,80	Saussure				
1818,5000								
1818,5834								
1818,6667								
1818,7500								
1818,8334								
1818,9166								
1819,0000						520		
1819,0834								
1819,1666								
1819,2500								
1819,3334								
1819,4166	520,0	46,20	6,80	Saussure				
1819,5000								
1819,5834								
1819,6667								
1819,7500								
1819,8334								
1819,9166								
1820,0000						490		
1820,0834								
1820,1666								
1820,2500								
1820,3334								
1820,4166	490,0	46,60	6,80	Saussure				
1820,5000								
1820,5834								
1820,6667								
1820,7500								
1820,8334								
1820,9166								
1821,0000						470		
1821,0834								
1821,1666								
1821,2500								
1821,3334								
1821,4166	470,0	46,60	6,80	Saussure				
1821,5000								
1821,5834								
1821,6667								

1821,7500									
1821,8334									
1821,9166									
1822,0000						450			
1822,0834									
1822,1666									
1822,2500									
1822,3334									
1822,4166	450,0	46,60	6,80	Saussure					
1822,5000									
1822,5834									
1822,6667									
1822,7500									
1822,8334									
1822,9166									
1823,0000						430			
1823,0834									
1823,1666									
1823,2500									
1823,3334									
1823,4166	430,0	46,00	6,80	Saussure					
1823,5000									
1823,5834									
1823,6667									
1823,7500									
1823,8334									
1823,9166									
1824,0000						410			
1824,0834									
1824,1666									
1824,2500									
1824,3334									
1824,4166	410,0	46,60	6,80	Saussure					
1824,5000									
1824,5834									
1824,6667									
1824,7500									
1824,8334									
1824,9166									
1825,0000						370			
1825,0834									
1825,1666									
1825,2500									
1825,3334									
1825,4166	370,0	46,60	6,80	Saussure					
1825,5000									
1825,5834									
1825,6667									
1825,7500									
1825,8334									
1825,9166							interpol40		
1826,0000						364,5			
1826,0834									
1826,1666									
1826,2500									
1826,3334									
1826,4166									
1826,5000									
1826,5834									
1826,6667									
1826,7500									
1826,8334									
1826,9166							febmin6		
1827,0000						359			
1827,0834	365,0	46,60	6,80	Saussure					
1827,1666									
1827,2500									
1827,3334									
1827,4166									
1827,5000									
1827,5834									
1827,6667									
1827,7500									
1827,8334									
1827,9166							may MBL		
1828,0000						354	strong wind		
1828,0834									
1828,1666									
1828,2500									
1828,3334	354,0	46,60	6,80	Saussure					
1828,4166									
1828,5000									
1828,5834									
1828,6667									
1828,7500	358,0	46,60	6,80	Saussure					
1828,8334									
1828,9166							sm+6		
1829,0000						339	aug		
1829,0834							nov strong wind	339,0	
1829,1666									
1829,2500									
1829,3334									
1829,4166									
1829,5000									
1829,5834	344,0	46,60	6,80	Saussure					
1829,6667	357,0	46,60	6,80	Saussure					
1829,7500									
1829,8334	340,0	46,60	6,80	Saussure					
1829,9166	372,0	46,60	6,80	Saussure			interpol39		
1830,0000	371,0	46,60	6,80	Saussure		339,9			
1830,0834									
1830,1666									

1830,2500										
1830,3334										
1830,4166										
1830,5000										
1830,5834										
1830,6667										
1830,7500										
1830,8334										
1830,9166						interpol38				
1831,0000					340,8					
1831,0834										
1831,1666										
1831,2500										
1831,3334										
1831,4166										
1831,5000										
1831,5834										
1831,6667										
1831,7500										
1831,8334										
1831,9166						interpol37				
1832,0000					341,7					
1832,0834										
1832,1666										
1832,2500										
1832,3334										
1832,4166										
1832,5000										
1832,5834										
1832,6667										
1832,7500										
1832,8334										
1832,9166						interpol36				
1833,0000					342,6					
1833,0834										
1833,1666										
1833,2500										
1833,3334										
1833,4166										
1833,5000										
1833,5834										
1833,6667										
1833,7500										
1833,8334										
1833,9166						interpol35				
1834,0000					343,5					
1834,0834										
1834,1666										
1834,2500										
1834,3334										
1834,4166										
1834,5000										
1834,5834										
1834,6667										
1834,7500										
1834,8334										
1834,9166						interpol34				
1835,0000					344,4					
1835,0834										
1835,1666										
1835,2500										
1835,3334										
1835,4166										
1835,5000										
1835,5834										
1835,6667										
1835,7500										
1835,8334										
1835,9166						interpol33				
1836,0000					345,3					
1836,0834										
1836,1666										
1836,2500										
1836,3334										
1836,4166										
1836,5000										
1836,5834										
1836,6667										
1836,7500										
1836,8334										
1836,9166						interpol32				
1837,0000					346,2					
1837,0834										
1837,1666										
1837,2500										
1837,3334										
1837,4166										
1837,5000										
1837,5834										
1837,6667										
1837,7500										
1837,8334										
1837,9166						interpol31				
1838,0000					347,1					
1838,0834										
1838,1666										
1838,2500										
1838,3334										
1838,4166										
1838,5000										
1838,5834										
1838,6667										

1838,7500									
1838,8334									
1838,9166							october MBL		
1839,0000						348			
1839,0834									
1839,1666									
1839,2500									
1839,3334									
1839,4166									
1839,5000									
1839,5834									
1839,6667									
1839,7500	348,0	48,00	7,30	Bossingault		4			
1839,8334	348,0	48,00	7,30	Bossingault					
1839,9166	257,0	48,00	7,30	Bossingault			october data a	347,0	
1840,0000	350,0	48,00	7,30	Bossingault		347	without outliers		
1840,0834	322,0	48,00	7,30	Bossingault					
1840,1666	380,0	48,00	7,30	Bossingault					
1840,2500									
1840,3334									
1840,4166									
1840,5000	378,0	48,00	2,19	Bossingault					
1840,5834	380,0	48,00	2,19	Bossingault					
1840,6667	400,0	48,00	2,19	Bossingault					
1840,7500	380,0	48,00	2,19	Bossingault					
1840,8334	370,0	48,00	2,19	Bossingault					
1840,9166	380,0	48,00	2,19	Bossingault			interpol30		
1841,0000						341,5			
1841,0834	440,0	48,00	2,19	Bossingault					
1841,1666	420,0	48,00	2,19	Bossingault					
1841,2500									
1841,3334	430,0	48,00	2,19	Bossingault					
1841,4166									
1841,5000	430,0	48,00	2,19	Bossingault					
1841,5834									
1841,6667									
1841,7500									
1841,8334									
1841,9166							interpol29		
1842,0000						336			
1842,0834									
1842,1666									
1842,2500									
1842,3334									
1842,4166									
1842,5000									
1842,5834									
1842,6667									
1842,7500									
1842,8334									
1842,9166							sm+5=325	320,0	
1843,0000						325			
1843,0834									
1843,1666									
1843,2500									
1843,3334									
1843,4166	343,0	48,00	2,19	Boussingault					
1843,5000									
1843,5834									
1843,6667	297,0	48,00	2,19	Boussingault					
1843,7500	327,2	48,00	2,19	Boussingault					
1843,8334	358,0	48,00	2,19	Boussingault					
1843,9166							interpol 28		
1844,0000						328,5			
1844,0834									
1844,1666									
1844,2500									
1844,3334									
1844,4166									
1844,5000									
1844,5834									
1844,6667									
1844,7500									
1844,8334									
1844,9166							interpol27		
1845,0000						332,1			
1845,0834									
1845,1666									
1845,2500									
1845,3334									
1845,4166									
1845,5000									
1845,5834									
1845,6667									
1845,7500									
1845,8334									
1845,9166							interpolation26		
1846,0000						335,6			
1846,0834									
1846,1666									
1846,2500									
1846,3334									
1846,4166									
1846,5000									
1846,5834									
1846,6667									
1846,7500									
1846,8334									
1846,9166							343,5	-4,0	
1847,0000						339,2	lewy av-4		
1847,0834							Coast, marine, mountain MBL	38,0	
1847,1666									

1847,2500									
1847,3334									
1847,4166	340,0	49,00	0,10						
1847,5000									
1847,5834									
1847,6667									
1847,7500									
1847,8334	358,8	49,00	0,10	lewy leHavre	5				
1847,9166	328,2	49,00	0,10	lewy leHavre					
1847,9166	336,7	0,00	-45,00	atl. Ocean mid samerica/afrika					
1847,9166	376,7	12,00	-68,90	Santa Maria Nied. Antillen					
1848,0000							av half Y	319,9	
1848,0834	320,3	-19,00	-70,19	Rio Magdalena		319,9	without Bogota		
1848,1666	322,6	-1,00	-69,60	Honda					
1848,1666	386,4	4,00	-74,00	Bogota					
1848,2500	306,8	5,70	-74,50	Guaduas					
1848,2500	366,4	-4,00	-74,00	Bogota					
1848,3334									
1848,4166	330,0	51,00	11,90	Marchand	6				
1848,5000									
1848,5834									
1848,6667									
1848,7500									
1848,8334									
1848,9166									
1849,0000							330		
1849,0834									
1849,1666									
1849,2500									
1849,3334									
1849,4166	330,0	51,00	11,90	Marchand					
1849,5000									
1849,5834									
1849,6667									
1849,7500									
1849,8334									
1849,9166									
1850,0000							330		
1850,0834									
1850,1666									
1850,2500									
1850,3334									
1850,4166	330,0	51,00	11,90	Marchand					
1850,5000									
1850,5834									
1850,6667									
1850,7500									
1850,8334									
1850,9166									
1851,0000							323,6		
1851,0834									
1851,1666									
1851,2500									
1851,3334									
1851,4166									
1851,5000									
1851,5834	323,6	48,00	2,19	Mene sonstige	7				
1851,5834	480,0	45,00	7,51	Schlagintweit Lysthal, Piemont 8					
1851,6667	497,0	45,00	7,51	Schlagintweit Lysthal, Piemont					
1851,7500									
1851,8334									
1851,9166							interpolation25		
1852,0000							325,3		
1852,0834									
1852,1666									
1852,2500									
1852,3334									
1852,4166									
1852,5000									
1852,5834									
1852,6667									
1852,7500									
1852,8334									
1852,9166							interpolation24		
1853,0000							328,3		
1853,0834									
1853,1666									
1853,2500									
1853,3334									
1853,4166									
1853,5000									
1853,5834									
1853,6667									
1853,7500									
1853,8334									
1853,9166							345min35city	310,0	
1854,0000							331,6	plus 21,6 MBL	331,6
1854,0834									
1854,1666									
1854,2500									
1854,3334									
1854,4166									
1854,5000									
1854,5834	345,0	47,00	11,35	vogel munich	9				
1854,6667									
1854,7500									
1854,8334									
1854,9166							interpolation23		
1855,0000							333,5		
1855,0834									
1855,1666									
1855,2500									

1855,3334										
1855,4166										
1855,5000										
1855,5834										
1855,6667										
1855,7500										
1855,8334										
1855,9166							interpolation22			
1856,0000						335,2				
1856,0834										
1856,1666										
1856,2500										
1856,3334										
1856,4166										
1856,5000										
1856,5834										
1856,6667										
1856,7500										
1856,8334	408,0	47,00	11,39	von Gilm	10					
1856,9166	431,5	47,00	11,39	von Gilm			CWPA shirocc	385,0		
1857,0000	419,6	47,00	11,39	von Gilm		337	23th march			
1857,0834	414,8	47,00	11,39	von Gilm			cat3 SEAS 40 ppm			
1857,1666	382,0	47,00	11,39	von Gilm			city reduction -	350,0		
1857,2500							minus 13	337,0		
1857,3334										
1857,4166										
1857,5000										
1857,5834										
1857,6667										
1857,7500										
1857,8334										
1857,9166							interpolation 22			
1858,0000						333,5				
1858,0834										
1858,1666										
1858,2500										
1858,3334										
1858,4166										
1858,5000										
1858,5834										
1858,6667										
1858,7500										
1858,8334										
1858,9166							interpolation20			
1859,0000						335				
1859,0834										
1859,1666										
1859,2500										
1859,3334										
1859,4166										
1859,5000										
1859,5834										
1859,6667										
1859,7500										
1859,8334										
1859,9166							interpolation19			
1860,0000						333				
1860,0834										
1860,1666										
1860,2500										
1860,3334										
1860,4166										
1860,5000										
1860,5834										
1860,6667										
1860,7500										
1860,8334										
1860,9166							interpolation18			
1861,0000						331				
1861,0834										
1861,1666										
1861,2500										
1861,3334										
1861,4166										
1861,5000										
1861,5834										
1861,6667										
1861,7500										
1861,8334										
1861,9166							interpolation17			
1862,0000						329				
1862,0834										
1862,1666										
1862,2500										
1862,3334										
1862,4166										
1862,5000										
1862,5834										
1862,6667										
1862,7500										
1862,8334										
1862,9166							interpolation16			
1863,0000						327				
1863,0834										
1863,1666										
1863,2500										
1863,3334										
1863,4166										
1863,5000										
1863,5834										
1863,6667										
1863,7500	365,0	54,00	12,06	Schulze	11					



1863,8334	355,1	54,00	12,06	Schulze					
1863,9166	345,9	54,00	12,06	Schulze			av	361,2	
1864,0000	350,6	54,00	12,06	Schulze		325	sm+6=355	349,3	
1864,0834	363,2	54,00	12,06	Schulze			CPBA	340,4	
1864,1666	354,8	54,00	12,06	Schulze			CWPA winds NW		
1864,2500	348,3	54,00	12,06	Schulze			from the sea sr	330,0	
1864,3334	344,6	54,00	12,06	Schulze			wind NW+rain	319,0	
1864,4166	333,5	54,00	12,06	Schulze			min6=325		
1864,5000	338,7	54,00	12,06	Schulze			Coast, marine, mountain MBL		37,0
1864,5834	375,6	54,00	12,06	Schulze					
1864,6667	374,8	54,00	12,06	Schulze					
1864,7500	381,3	54,00	12,06	Schulze					
1864,8334	382,4	54,00	12,06	Schulze					
1864,9166	386,1	54,00	12,06	Schulze			sm june-Sept	316,1	
1865,0000						310	sm june Aug	310,0	
1865,0834							thorpe rain sea	311,0	
1865,1666							aug		
1865,2500							Coast, marine, mountain MBL		36,0
1865,3334									
1865,4166	308,0	53,00	-10,00	thorpe	12				
1865,5000	300,0	53,00	-10,00	thorpe					
1865,5834	332,0	56,30	-3,22	smith	13				
1865,5834	300,0	53,00	-10,00	Thorpe					
1865,6667	340,5	56,30	-3,22	smith					
1865,7500									
1865,8334									
1865,9166									
1866,0000						301,2	av	301,2	
1866,0834	296,0	53,00	-10,00	Thorpe					
1866,1666	296,0	53,00	-10,00	Thorpe					
1866,2500									
1866,3334									
1866,4166	311,5	53,00	-10,00	thorpe					
1866,5000									
1866,5834									
1866,6667									
1866,7500									
1866,8334									
1866,9166							interpolation15		
1867,0000						300			
1867,0834									
1867,1666									
1867,2500									
1867,3334									
1867,4166									
1867,5000									
1867,5834									
1867,6667									
1867,7500									
1867,8334									
1867,9166							Schulze oct+nov MBL av		
1868,0000						298	306+290,4/2=298		
1868,0834							Coast, marine, mountain MBL		35,0
1868,1666									
1868,2500									
1868,3334									
1868,4166									
1868,5000									
1868,5834									
1868,6667									
1868,7500	306	54,00	12,06	Schulze					
1868,8334	290,4	54,00	12,06	Schulze					
1868,9166	271,9	54,00	12,06	Schulze			av	286,7	
1869,0000	272,9	54,00	12,06	Schulze		290	sm+4=289,3	285,3	
1869,0834	292,14	54,00	12,06	Schulze			Coast, marine, mountain MBL		34,0
1869,1666	304,87	54,00	12,06	Schulze					
1869,2500	309,73	54,00	12,06	Schulze					
1869,3334	284,8	54,00	12,06	Schulze					
1869,4166	289,6	54,00	12,06	Schulze					
1869,5000	280,87	54,00	12,06	Schulze					
1869,5834	285,5	54,00	12,06	Schulze					
1869,6667	283,47	54,00	12,06	Schulze					
1869,7500	279,64	54,00	12,06	Schulze					
1869,8334	276,53	54,00	12,06	Schulze					
1869,9166	280,08	54,00	12,06	Schulze			av	290,5	
1870,0000	298,66	54,00	12,06	Schulze		291	sm+4=295,9	290,9	
1870,0834	276,21	54,00	12,06	Schulze			Coast, marine, mountain MBL		33,0
1870,1666	284,13	54,00	12,06	Schulze					
1870,2500	282,47	54,00	12,06	Schulze					
1870,3334	285,95	54,00	12,06	Schulze					
1870,4166	289,1	54,00	12,06	Schulze					
1870,5000	293,68	54,00	12,06	Schulze					
1870,5834	289,85	54,00	12,06	Schulze					
1870,6667	297,2	54,00	12,06	Schulze					
1870,7500	298,35	54,00	12,06	Schulze					
1870,8334	290,96	54,00	12,06	Schulze					
1870,9166	299,76	54,00	12,06	Schulze			av	301,3	
1871,0000	297,27	54,00	12,06	Schulze		300	sm+4=299,7	295,7	
1871,0834	301,35	54,00	12,06	Schulze			Coast, marine, mountain MBL		32,0
1871,1666	308,88	54,00	12,06	Schulze					
1871,2500	298,13	54,00	12,06	Schulze					
1871,3334	311,91	54,00	12,06	Schulze					
1871,4166	297,77	54,00	12,06	Schulze					
1871,5000	293,61	54,00	12,06	Schulze					
1871,5834									
1871,6667									
1871,7500									
1871,8334									
1871,9166							av	307,4	
1872,0000						313,9	sm	309,9	
1872,0834									
1872,1666									



1878,5834	368,5	48,00	2,33	Montsouris+18,5					
1878,6667	365,5	48,00	2,33	Montsouris+18,5					
1878,7500	371,5	48,00	2,33	Montsouris+18,5					
1878,8334	372,5	48,00	2,33	Montsouris+18,5					
1878,9166	373,5	48,00	2,33	Montsouris+18,5					
1879,0000	375,5	48,00	2,33	Montsouris+18,5	309,9	total av 1879	334,5		
1879,0834	375,5	48,00	2,33	Montsouris+18,5		Montsouris av	347,9		
1879,1666	377,5	48,00	2,33	Montsouris+18,5		Reiset sm+5=3	312,9		
1879,2500	376,5	48,00	2,33	Montsouris+18,5		Armstrong sm+	306,9		
1879,3334	374,5	48,00	2,33	Montsouris+18,5		july/aug/sept			
1879,4166	374,5	48,00	2,33	Montsouris+18,5		Armstrong CPE	300,5		
1879,4166	310,7	49,00	1,07	Reiset+20		317,9+311,5+300,5=309,0			
1879,4166	330,0	38,00	13,22	Macagno	24				
1879,5000	364,5	48,00	2,33	Montsouris+18,5					
1879,5000	314,4	49,00	1,07	Reiset+21					
1879,5000	300,3	54,00	-3,00	Armstrong	25				
1879,5000	327,0	47,30	-4,50	Legendre Bretagne					
1879,5000	390,0	38,00	13,22	Macagno					
1879,5834	313,6	49,00	1,07	Reiset+20					
1879,5834	296,7	54,00	-3,00	Armstrong					
1879,5834	327,0	47,30	-4,50	Legendre Bretagne	26				
1879,5834	323,0	38,00	13,22	Macagno					
1879,6667	348,5	48,00	2,30	Montsouris+18,5					
1879,6667	325,1	49,00	1,07	Reiset+20					
1879,7500	322,5	48,00	2,30	Montsouris+18,5					
1879,7500	320,2	49,00	1,07	Reiset+20					
1879,8334	273,5	48,00	2,30	Montsouris+18,5					
1879,8334	324,1	49,00	1,07	Reiset+20					Reiset sm
1879,9166	263,5	48,00	2,33	Montsouris+18,5		sm Reiset	295,9		
1880,0000	283,5	48,00	2,33	Montsouris+18,5	300	sm Montsouris	292,5		
1880,0834	295,5	48,00	2,33	Montsouris+18,5		av Montsouris	290,0		
1880,1666	297,5	48,00	2,33	Montsouris+18,5		av 1880	291,7		
1880,2500	261,5	48,00	2,33	Montsouris+18,5		295,9+4=299,9			
1880,3334	272,5	48,00	2,33	Montsouris+18,5					
1880,4166	302,5	48,00	2,33	Montsouris+18,5					
1880,4166	303,7	49,00	1,07	Reiset+20					
1880,4166	310,0	70,00	-52,00	Nansen Greenland	27				
1880,5000	295,5	48,00	2,30	Montsouris+18,5					
1880,5000	299,6	49,00	1,07	Reiset+20					
1880,5834	279,5	48,00	2,30	Montsouris+18,5					
1880,5834	284,6	49,00	1,07	Reiset+20					
1880,6667	279,5	48,00	2,30	Montsouris+18,5					
1880,7500	289,5	48,00	2,30	Montsouris+18,5					
1880,8334	301,5	48,00	2,30	Montsouris+18,5					
1880,9166	310,5	48,00	2,30	Montsouris+18,5		av	303,2		
1881,0000	315,5	48,00	2,30	Montsouris+18,5	309	sm Montsouris	294,8		
1881,0834	333,5	48,00	2,14	Muentz+20	28	Müntz Pic midi	306,1		
1881,0834	294,5	48,00	2,30	Montsouris+18,5		2877m MBL			
1881,1666	317,3	48,00	2,14	Muentz+20		Müntz sm +4=	304,0		
1881,1666	285,5	48,00	2,30	Montsouris+18,5		306,1+4=310,1+308/2=309			
1881,2500	306,3	50,00	2,14	Muentz+20		Coast, marine, mountain MBL	30,0		
1881,2500	301,5	48,00	2,30	Montsouris+18,5					
1881,3334	305,6	48,00	2,14	Muentz+20					
1881,3334	287,5	48,00	2,30	Montsouris+18,5					
1881,4166	301,6	48,00	2,14	Muentz+20					
1881,4166	294,5	48,00	2,30	Montsouris+18,5					
1881,5000	301,9	48,00	2,14	Muentz+20					
1881,5000	287,5	48,00	2,30	Montsouris+18,5					
1881,5834	308,7	48,00	2,14	Muentz+20					
1881,5834	302,5	48,00	2,30	Montsouris+18,5					
1881,5834	306,1	42,80	-12,30	Muentz Pic Midi+20					
1881,6667	294,5	48,00	2,30	Montsouris+18,5					
1881,7500	307,1	48,00	2,14	Muentz+20					
1881,7500	289,5	48,00	2,30	Montsouris+18,5					
1881,8334	284,5	48,00	2,30	Montsouris+18,5					
1881,9166	325,0	48,00	2,14	Muentz+20					
1881,9166	319,5	48,00	2,30	Montsouris+18,5		av	312,8		
1882,0000	304,5	48,00	2,30	Montsouris+18,5	312	sm Montsouris	306,8		
1882,0834	308,5	48,00	2,30	Montsouris+18,5					
1882,1666	318,5	48,00	2,30	Montsouris+18,5					
1882,2500	329,5	48,00	2,30	Montsouris+18,5					
1882,3334	303,5	48,00	2,30	Montsouris+18,5					
1882,4166	313,5	48,00	2,30	Montsouris+18,5					
1882,5000	305,5	48,00	2,30	Montsouris+18,5					
1882,5834	301,5	48,00	2,30	Montsouris+18,5					
1882,6667	311,5	48,00	2,30	Montsouris+18,5					
1882,7500	284,5	48,00	2,30	Montsouris+18,5					
1882,7500	307,0	-49,00	-69,00	venus expedition Patagonien +20					
1882,8334	276,5	48,00	2,30	Montsouris+18,5					
1882,8334	341,5	18,00	-72,00	venus expedition Haiti+20					
1882,8334	336,0	29,00	-80,00	venus expedition Florida+20					
1882,8334	325,0	14,00	-61,00	venus expedition Martinique+20					
1882,8334	323,0	19,00	-117,00	venus expedition Mexiko+20					
1882,8334	352,0	-43,00	-69,00	venus expedition Patagonien+20					
1882,8334	301,0	-49,00	-69,00	venus expedition Patagonien+20					
1882,9166	292,5	48,00	2,30	Montsouris+18,5					
1882,9166	309,6	-33,00	2,30	venus expedition Chile+20					
1882,9166	329,0	-43,00	-69,00	venus expedition Patagonien+20					
1882,9166	301,0	-49,00	-69,00	venus expedition Patagonien+20					
1882,9166	292,0	19,00	-117,00	venus expedition Mexiko+20					
1882,9166	326,0	14,00	-61,00	venus expedition Martinique+20					
1882,9166	326,0	29,00	-80,00	venus expedition Florida+20					
1882,9166	314,0	18,00	-72,00	venus expedition Haiti+20		Andree MBL			
1883,0000	345,5	48,00	2,30	Montsouris+18,5	312	see analysis			
1883,0834	295,5	48,00	2,30	Montsouris+18,5					
1883,0834	346,5	50,00	5,50	Spring	29	Coast, marine, mountain MBL	29,0		
1883,1666	294,5	48,00	2,30	Montsouris+18,5					
1883,1666	331	50,00	5,50	Spring					
1883,2500	291,5	48,00	2,30	Montsouris+18,5					
1883,2500	333,1	50,00	5,50	Spring					
1883,3334	295,5	48,00	2,30	Montsouris+18,5					
1883,3334	345,6	50,00	5,50	Spring					

1883,4166	305,5	48,00	2,30	Montsouris+18,5					
1883,4166	328,8	50,00	5,50	Spring					
1883,5000	313,5	48,00	2,30	Montsouris+18,5					
1883,5000	343,2	50,00	5,50	Spring					
1883,5000	310,0	59,17	18,30	Andréé	30				
1883,5834	304,5	48,00	2,30	Montsouris+18,5					
1883,5834	304,7	50,00	5,50	Spring					
1883,6667	307,5	48,00	2,30	Montsouris+18,5					
1883,6667	310,0	50,00	5,50	Spring					
1883,7500	327,5	48,00	2,30	Montsouris+18,5					
1883,7500	326,1	50,00	5,50	Spring					
1883,8334	319,5	48,00	2,30	Montsouris+18,5					
1883,8334	350,6	50,00	5,50	Spring					
1883,8334	318,0	47,80	12,50	Ebermayer	31				
1883,9166	374,2	50,00	5,50	Spring					
1883,9166	317,5	48,00	2,30	Montsouris+18,5					
1884,0000	355,9	50,00	5,50	Spring		Montsouris av		314,2	
1884,0000	330,5	48,00	2,30	Montsouris+18,5		312 sm		320,8	
1884,0834	314,5	48,00	2,30	Montsouris+18,5		Ebermayer aug	309,5 +4=313,5	313,5	
1884,1666	330,5	48,00	2,30	Montsouris+18,5					
1884,2500	320,5	48,00	2,30	Montsouris+18,5					
1884,3334	327,5	48,00	2,30	Montsouris+18,5					
1884,4166	320,5	48,00	2,30	Montsouris+18,5					
1884,5000	317,5	48,00	2,30	Montsouris+18,5					
1884,5834	324,5	48,00	2,30	Montsouris+18,5					
1884,5834	309,5	47,50	12,50	Ebermayer					
1884,6667	319,5	48,00	2,30	Montsouris+18,5					
1884,6667	307,5	47,70	12,50	Ebermayer					
1884,7500	296,5	48,00	2,30	Montsouris+18,5					
1884,7500	323,7	47,70	12,50	Ebermayer					
1884,8334	290,5	48,00	2,30	Montsouris+18,5					
1884,8334	426,5	51,00	13,70	Hempel	32				
1884,9166	277,5	48,00	2,30	Montsouris+18,5					
1884,9166	388,0	51,00	13,70	Hempel		Montsouris av		312,3	
1885,0000	299,5	48,00	2,30	Montsouris+18,5		303,5 sm=		308,2	
1885,0834	308,5	48,00	2,30	Montsouris+18,5		sm july/ aug		303,5	
1885,0834	341,9	51,00	13,70	Hempel					
1885,1666	307,5	48,00	2,30	Montsouris+18,5					
1885,2500	324,5	48,00	2,30	Montsouris+18,5					
1885,3334	320,5	48,00	2,30	Montsouris+18,5					
1885,4166	316,5	48,00	2,30	Montsouris+18,5					
1885,5000	303,5	48,00	2,30	Montsouris+18,5					
1885,5834	304,5	48,00	2,30	Montsouris+18,5					
1885,5834	353,0	46,00	1,00	Marcet	33				
1885,6667	312,5	48,00	2,30	Montsouris+18,5					
1885,6667	338,0	46,00	1,00	Marcet					
1885,7500	305,5	48,00	2,30	Montsouris+18,5					
1885,8334	318,5	48,00	2,30	Montsouris+18,5					
1885,9166	326,5	48,00	2,30	Montsouris+18,5		Monstsouris av		296,4	
1886,0000	309,5	48,00	2,30	Montsouris+18,5		299 sm=284,2+4=289		285,0	
1886,0834	296,5	48,00	2,30	Montsouris+18,5		Roster 1886 may av=309		309,0	
1886,1666	302,5	48,00	2,30	Montsouris+18,5		309+289			
1886,2500	292,5	48,00	2,30	Montsouris+18,5					
1886,2500	281,6	39,10	-86,50	VanNuys	34				
1886,3334	291,5	48,00	2,30	Montsouris+18,5					
1886,3334	309,0	43,00	11,15	Roster Florence	35				
1886,4166	280,5	48,00	2,30	Montsouris+18,5					
1886,5000	289,5	48,00	2,30	Montsouris+18,5					
1886,5834	368,5	46,00	1,00	Marcet					
1886,6667									
1886,7500	354	54,00	12,00	Uffelmann	36				
1886,8334	363	54,00	12,00	Uffelmann					
1886,9166	315,5	48,00	2,30	Montsouris+18,5					
1886,9166	367	54,00	12,00	Uffelmann		Montsouris av		302,0	
1887,0000	321,5	48,00	2,30	Montsouris+18,5		302,8 sm=294,2+4=298,2		294,2	
1887,0000	365	54,00	12,00	Uffelmann		Uffelmann outside city av 318			
1887,0834	318,5	48,00	2,30	Montsouris+18,5		Feldt corrected may (MBL)		297,0	
1887,0834	368	54,00	12,00	Uffelmann		Roster 1886 may av=309		309,0	
1887,0834	321	55,00	26,70	Feldt, Dorpat+40	37				
1887,1666	318,5	48,00	2,30	Montsouris+18,5					
1887,1666	319,0	55,00	26,70	Feldt, Dorpat+40					
1887,1666	361	54,00	12,00	Uffelmann					
1887,2500	312,5	48,00	2,30	Montsouris+18,5					
1887,2500	290,0	54,00	26,70	Feldt, Dorpat+40					
1887,2500	350,0	54,00	12,00	Uffelmann					
1887,3334	303,5	48,00	2,30	Montsouris+18,5					
1887,3334	351,0	54,00	12,00	Uffelmann					
1887,3334	297,0	55,00	26,70	Feldt, Dorpat+40					
1887,4166	299,5	48,00	2,30	Montsouris+18,5					
1887,4166	342,0	54,00	12,00	Uffelmann					
1887,5000	290,5	48,00	2,30	Montsouris+18,5					
1887,5000	330,0	54,00	12,00	Uffelmann					
1887,5834	292,5	48,00	2,30	Montsouris+18,5					
1887,5834	328,0	54,00	2,30	Uffelmann					
1887,6667	293,5	48,00	2,30	Montsouris+18,5					
1887,6667	334,0	54,00	12,00	Uffelmann					
1887,7500	295,5	48,00	2,30	Montsouris+18,5					
1887,7500	395	59,00	18,30	Selander	38				
1887,8334	294,5	48,00	2,30	Montsouris+18,5					
1887,8334	345,0	59,00	18,30	Selander					
1887,9166	283,5	48,00	2,30	Montsouris+18,5					
1887,9166	284,0	59,00	18,30	Selander		Montsouris av		294,0	
1888,0000	279,5	48,00	2,30	Montsouris+18,5		300 Selander sm June+4 300		296,0	
1888,0000	270,0	59,00	18,30	Selander					
1888,0834	289,5	48,00	2,30	Montsouris+18,5		Coast, marine, mountain MBL		28,0	
1888,0834	290,0	59,00	18,30	Selander					
1888,1666	294,5	48,00	2,30	Montsouris+18,5					
1888,1666	276,0	59,00	18,30	Selander					
1888,2500	298,5	48,00	2,30	Montsouris+18,5					
1888,2500	291,0	59,00	18,30	Selander					
1888,3334	296,5	48,00	2,30	Montsouris+18,5					
1888,3334	281,0	59,00	18,30	Selander					

1888,4166	294,5	48,00	2,30	Montsouris+18,5					
1888,4166	296,0	59,00	18,30	Selander					
1888,4166	280,0	55,00	26,70	Heimann+30	39				
1888,5000	296,5	48,00	2,30	Montsouris+18,5					
1888,5000	291,0	55,00	26,70	Heimann+30					
1888,5834	299,5	48,00	2,30	Montsouris+18,5					
1888,5834	313,0	55,00	26,70	Heimann+30					
1888,6667	301,5	48,00	2,30	Montsouris+18,5					
1888,6667	297,0	55,00	26,70	Heimann+30					
1888,7500	291,5	48,00	2,30	Montsouris+18,5					
1888,7500	286,0	55,00	26,70	Frey+30	40				
1888,8334	292,5	48,00	2,30	Montsouris+18,5					
1888,8334	302,0	55,00	26,70	Frey+30					
1888,9166	280,0	55,00	26,70	Frey+30			montsouris av		300,8
1889,0000	299,0	55,00	26,70	Frey+30		300,8	Petermann av		303,5
1889,0000	307,5	48,00	2,30	Montsouris+18,5			montsouris sm+4=298,8		294,8
1889,0834	296,5	48,00	2,30	Montsouris+18,5			Petermann sm=297+4=301		297,0
1889,1666	299,5	48,00	2,30	Montsouris+18,5			Palmqvist sm July/ aug+4=302,5		298,5
1889,2500	301,5	48,00	2,30	Montsouris+18,5			298,8+301+302,5/3=300,76		
1889,3334	307	50,50	4,41	Petermann+20	41		Coast, marine, mountain MBL		27,0
1889,3334	299,5	48,00	2,30	Montsouris+18,5					
1889,4166	298	50,50	4,41	Petermann+20					
1889,4166	299,5	48,00	2,30	Montsouris+18,5					
1889,5000	299	50,50	4,41	Petermann+20					
1889,5000	293,5	48,00	2,30	Montsouris+18,5					
1889,5000	289	59,17	18,30	Palmqvist Stockholm	42				
1889,5834	294	50,50	4,41	Petermann+20					
1889,5834	291,5	48,00	2,30	Montsouris+20					
1889,5834	308	59,17	18,30	Palmqvist Stockholm					
1889,6667	311	50,50	4,41	Petermann+20					
1889,6667	287,5	48,00	2,30	Montsouris+20					
1889,6667	335	59,17	18,30	Palmqvist Stockholm					
1889,7500	294	50,50	4,41	Petermann+20					
1889,7500	296,5	48,00	2,30	Montsouris+20					
1889,8334	322	50,50	4,41	Petermann+20					
1889,8334	324,5	48,00	2,30	Montsouris+20					
1889,8334	335	59,17	18,30	Palmqvist Stockholm					
1889,9166	303	50,50	4,41	Petermann+20					
1889,9166	312,5	48,00	2,30	Montsouris+20					
1889,9166	314,5	59,17	18,30	Palmqvist Stockholm					
1890,0000	319	50,50	4,41	Petermann+20			Maseskär MBL at sea breeze in Feb av		
1890,0000	293,5	48,00	2,30	Montsouris+20		302,4	306,5-4=302,5		
1890,0000	317	59,17	18,30	Palmqvist Stockholm			see analysis		
1890,0834	315	50,50	4,41	Petermann+20			Coast, marine, mountain MBL		26,0
1890,0834	301,5	48,00	2,30	Montsouris+18,5					
1890,0834	323	59,17	18,30	Palmqvist Stockholm					
1890,0834	306,5	58,50	11,05	Palmqvist Maseskär					
1890,1666	317	50,50	4,41	Petermann+20					
1890,1666	302,5	48,00	2,30	Montsouris+18,5					
1890,1666	304	46,00	30,40	Lebedinzeff	43				
1890,1666	329	59,17	18,30	Palmqvist Stockholm					
1890,2500	325	50,50	4,41	Petermann+20					
1890,2500	300,5	46,00	2,30	Montsouris+18,5					
1890,2500	304	46,00	30,40	Lebedinzeff					
1890,2500	336	59,17	18,30	Palmqvist Stockholm					
1890,3334	320	50,50	4,41	Petermann+20					
1890,3334	299,5	46,00	2,30	Montsouris+18,5					
1890,3334	308	59,17	18,30	Palmqvist Stockholm					
1890,4166	317,4	50,50	4,41	Petermann+20					
1890,4166	304,5	46,00	2,30	Montsouris+18,5					
1890,4166	317	59,17	18,00	Palmqvist kristineberg					
1890,5000	317	50,50	4,41	Petermann+20					
1890,5000	321,5	46,00	2,30	Montsouris+18,5					
1890,5000	314	59,17	18,00	Palmqvist kristineberg					
1890,5834	322,6	50,50	4,41	Petermann+20					
1890,5834	308	46,00	2,30	Montsouris method change from here					
1890,5834	309	59,17	18,00	Palmqvist kristineberg					
1890,6667	327	50,50	4,41	Petermann+20					
1890,6667	322	46,00	2,30	Montsouris					
1890,7500	301	50,50	4,41	Petermann+20					
1890,7500	328	46,00	2,30	Montsouris					
1890,8334	324	50,50	4,41	Petermann+20					
1890,8334	316	46,00	2,30	Montsouris					
1890,9166	335	50,50	4,41	Petermann+20					
1890,9166	344	46,00	2,30	Montsouris					
1891,0000	387	50,50	4,41	Petermann+20			Montsouris av		312,6
1891,0000	334	46,00	2,30	Montsouris		308,1	sm=303,7+4=307,7		303,7
1891,0834	392	50,50	4,41	Petermann+20			Petermann jan-apr=		340,8
1891,0834	328,0	46,00	2,30	Montsouris			312,6+303,7/2		
1891,1666	325,0	50,50	4,41	Petermann+20					
1891,1666	328,0	46,00	2,30	Petermann+20					
1891,2500	323,0	50,50	4,41	Petermann+20					
1891,2500	313,0	46,00	2,30	Montsouris					
1891,3334	304,0	46,00	2,30	Montsouris					
1891,4166	304,0	46,00	2,30	Montsouris					
1891,5000	307,0	46,00	2,30	Montsouris					
1891,5834	300,0	46,00	2,30	Montsouris					
1891,6667	307,0	46,00	2,30	Montsouris					
1891,7500	315,0	46,00	2,30	Montsouris					
1891,8334	317,0	46,00	2,30	Montsouris					
1891,9166	310,0	46,00	2,30	Montsouris			Montsouris av		311,8
1892,0000	311,0	46,00	2,30	Montsouris		311,3	sm=307,3 +4=		307,3
1892,0834	307,0	46,00	2,30	Montsouris					
1892,1666	319,0	46,00	2,30	Montsouris					
1892,2500	324,0	46,00	2,30	Montsouris					
1892,3334	311,0	46,00	2,30	Montsouris					
1892,4166	314,0	46,00	2,30	Montsouris					
1892,5000	297,0	46,00	2,30	Montsouris					
1892,6667	311,0	46,00	2,30	Montsouris					
1892,7500	305,0	46,00	2,30	Montsouris					
1892,8334	306,0	46,00	2,30	Montsouris					
1892,9166	325,0	46,00	2,30	Montsouris					

1893,0000	309,0	46,00	2,30	Montsouris			Andree balloon		
1893,0834	302,0	46,00	2,30	Montsouris		310	Montsouris av	311,9	
1893,1666	326,0	46,00	2,30	Montsouris			Montsouris sm	307,7	
1893,2500	323,0	46,00	2,30	Montsouris			sm 307,7+4=311,7		
1893,3334	312,0	46,00	2,30	Montsouris			Coast, marine, mountain MBL	25,0	
1893,4166	310,0	46,00	2,30	Montsouris					
1893,5000	303,0	46,00	2,30	Montsouris					
1893,5000	310,0	59,17	18,30	Andree balloon background					
1893,5834	310,0	46,00	2,30	Montsouris					
1893,6667	305,0	46,00	2,30	Montsouris					
1893,7500	310,0	46,00	2,30	Montsouris					
1893,8334	315,0	46,00	2,30	Montsouris					
1893,9166	318,0	46,00	2,30	Montsouris					
1894,0000	313,0	46,00	2,30	Montsouris					
1894,0834	318,0	46,00	2,30	Montsouris					
1894,1666	316,0	46,00	2,30	Montsouris			Montsouris av	316,7	
1894,2500	320,0	46,00	2,30	Montsouris		317	sm=	313,3	
1894,3334	320,0	46,00	2,30	Montsouris					
1894,4166	322,0	46,00	2,30	Montsouris					
1894,5000	310,0	46,00	2,30	Montsouris					
1894,5834	308,0	46,00	2,30	Montsouris					
1894,6667	312,0	46,00	2,30	Montsouris					
1894,7500	320,0	46,00	2,30	Montsouris					
1894,8334	319,0	46,00	2,30	Montsouris					
1894,9166	322,0	46,00	2,30	Montsouris					
1895,0000	313,0	46,00	2,30	Montsouris					
1895,0834	325,0	46,00	2,30	Montsouris					
1895,1666	310,0	46,00	2,30	Montsouris			Montsouris av	309,1	
1895,2500	314,0	46,00	2,30	Montsouris		305	Montsouris sm	301,0	
1895,3334	303,0	46,00	2,30	Montsouris					
1895,4166	301,0	46,00	2,30	Montsouris					
1895,5000	296,0	46,00	2,30	Montsouris					
1895,5834	306,0	46,00	2,30	Montsouris					
1895,6667	319,0	46,00	2,30	Montsouris					
1895,7500	310,0	46,00	2,30	Montsouris					
1895,8334	305,0	46,00	2,30	Montsouris					
1895,9166	307,0	46,00	2,30	Montsouris					
1896,0000	313,0	46,00	2,30	Montsouris					
1896,0834	315,0	46,00	2,30	Montsouris					
1896,1666	313,0	46,00	2,30	Montsouris			Montsouris av	314,7	
1896,2500	309,0	46,00	2,30	Montsouris		313,8	sept rain av carlton	312,0	
1896,3334	310,0	46,00	2,30	Montsouris			Montsouris sm	311,7	
1896,4166	315,0	46,00	2,30	Montsouris			311,7+4=315,7+312/2=		
1896,5000	310,0	46,00	2,30	Montsouris					
1896,5834	310,0	46,00	2,30	Montsouris					
1896,6667	311,0	46,00	2,30	Montsouris					
1896,6667	312,0	53,40	-1,50	Carleton williams, re	44				
1896,7500	320,0	46,00	2,30	Montsouris					
1896,8334	330,0	46,00	2,30	Montsouris					
1896,9166	320,0	46,00	2,30	Montsouris					
1897,0000	324,0	46,00	2,30	Montsouris					
1897,0834	308,0	46,00	2,30	Montsouris					
1897,1666	304,0	46,00	2,30	Montsouris			sm 308+4=312		
1897,1666	291,4	54,30	-5,56	Lets&Blake	45	312	7th July showers	308,8	
1897,2500	305,0	46,00	2,30	Montsouris					
1897,2500	265,4	54,30	-5,56	Lets&Blake					
1897,3334	308,0	46,00	2,30	Montsouris					
1897,3334	275,02	54,30	-5,56	Lets&Blake					
1897,4166	305,0	46,00	2,30	Montsouris					
1897,4166	307,925	54,30	-5,56	Letts&Blake					
1897,5000	302,0	46,00	2,30	Montsouris					
1897,5000	308,8	54,30	-5,56	Letts&Blake					
1897,5834	308,0	46,00	2,30	Montsouris					
1897,6667	307,0	46,00	2,30	Montsouris					
1897,7500	325,0	46,00	2,30	Montsouris					
1897,8334	326,0	46,00	2,30	Montsouris					
1897,9166	316,0	46,00	2,30	Montsouris					
1898,0000	333,0	46,00	2,30	Montsouris					
1898,0834	308,0	46,00	2,30	Montsouris					
1898,1666	327,0	46,00	2,30	Montsouris			Montsouris av	317,3	
1898,2500	312,0	46,00	2,30	Montsouris		317,3	Brown av july-dec	303,5	
1898,3334	308,0	46,00	2,30	Montsouris			sm montsouris	312,3	
1898,4166	312,0	46,00	2,30	Montsouris					
1898,5000	311,0	46,00	2,30	Montsouris					
1898,5000	293,0	51,40	-0,29	Brown&Escombe lo	46				
1898,5834	314,0	46,00	2,30	Montsouris					
1898,5834	273,5	51,50	-0,29	Brown&Escombe lon -0,29+10					
1898,6667	319,0	46,00	2,30	Montsouris					
1898,7500	319,0	46,00	2,30	Montsouris					
1898,8334	331,0	46,00	2,30	Montsouris					
1898,8334	328,0	51,50	-0,29	Brown&Escombe lon -0,29+10					
1898,9166	314,0	46,00	2,30	Montsouris					
1898,9166	319,5	51,50	-0,29	Brown&Escombe lon -0,29+10					
1899,0000	313,0	46,00	2,30	Montsouris					
1899,0000	314,3	51,50	-0,29	Brown&Escombe lon -0,29+10					
1899,0834	326,0	46,00	2,30	Montsouris			Montsouris av	325,9	
1899,1666	332,0	46,00	2,30	Montsouris		313,6	Brown av -July	313,6	
1899,1666	337,0	51,50	-0,29	Brown&Escombe lon -0,29+10			sm Montsouris	321,0	
1899,2500	320,0	46,00	2,30	Montsouris			sm Brown 301,4+4=305,4	301,4	
1899,2500	326,0	51,50	-0,29	Brown&Escombe lon -0,29+10					
1899,3334	332,0	46,00	2,30	Montsouris					
1899,4166	314,0	46,00	2,30	Montsouris					
1899,4166	312,0	51,50	-0,29	Brown&Escombe lon -0,29+10					
1899,5000	321,0	46,00	2,30	Montsouris					
1899,5000	298,3	51,50	-0,29	Brown&Escombe lon -0,29+10					
1899,5834	328,0	46,00	2,30	Montsouris					
1899,5834	294,0	51,50	-0,29	Brown&Escombe lon -0,29+10					
1899,6667	322,0	46,00	2,30	Montsouris					
1899,7500	326,0	46,00	2,30	Montsouris					
1899,8334	336,0	46,00	2,30	Montsouris					
1899,9166	341,0	46,00	2,30	Montsouris					
1900,0000	314,0	46,00	2,30	Montsouris					

1900,0834	321,0	46,00	2,30	Montsouris			
1900,1666	314,0	46,00	2,30	Montsouris		Montsouris av=313,75	313,8
1900,2500	309,0	46,00	2,30	Montsouris		307,5 Montsouris sm=313+3=316	316,0
1900,3334	309,0	46,00	2,30	Montsouris		B&Escombe av=291,97	302,0
1900,3334	313,0	51,50	-0,29	Brown&Escombe lon	-0,29+20	B&Escombe sm=310,65	301,6
1900,4166	310,0	46,00	2,30	Montsouris			
1900,4166	303,0	51,50	-0,29	Brown&Escombe lon	-0,29+20		
1900,5000	310,0	46,00	2,30	Montsouris			
1900,5000	305,0	51,50	-0,29	Brown&Escombe lon	-0,29+20		
1900,5834	319,0	46,00	2,30	Montsouris			
1900,5834	296,8	51,50	-0,29	Brown&Escombe lon	-0,29+20		
1900,6667	323,0	46,00	2,30	Montsouris			
1900,6667	304,0	51,50	-0,29	Brown&Escombe lon	-0,29+20		
1900,7500	311,0	46,00	2,30	Montsouris			
1900,8334	316,0	46,00	2,30	Montsouris			
1900,8334	297,0	51,50	-0,29	Brown&Escombe lon	-0,29+20		
1900,9166	309,0	46,00	2,30	Montsouris			
1900,9166	295,0	51,50	-0,29	Brown&Escombe lon	-0,29+20		
1901,0000	316,0	46,00	2,30	Montsouris			
1901,0000	304,7	51,50	-0,29	Brown&Escombe lon	-0,29	Montsouris av=315	315,0
1901,0834	323,0	46,00	2,30	Montsouris		311,5 Montsouris sm=312,3+3=315,3	312,3
1901,0834	328,5	51,50	-0,29	Brown&Escombe lon	-0,29	B&Escombe av	313,3
1901,1666	322,0	46,00	2,30	Montsouris		B&Escombe sm=310,65	310,7
1901,2500	311,0	46,00	2,30	Montsouris			
1901,2500	308,2	51,50	-0,29	Brown&Escombe lon	-0,29		
1901,3334	322,0	46,00	2,30	Montsouris			
1901,3334	323,3	51,50	-0,29	Brown&Escombe lon	-0,29		
1901,4166	339,0	46,00	2,30	Montsouris			
1901,4166	304,0	51,50	-0,29	Brown&Escombe lon	-0,29		
1901,5000	296,0	46,00	2,30	Montsouris			
1901,5000	311,3	51,50	-0,29	Brown&Escombe lon	-0,29		
1901,5834	302,0	46,00	2,30	Montsouris			
1901,6667	322,0	46,00	2,30	Montsouris			
1901,7500	303,0	46,00	2,30	Montsouris			
1901,8334	319,0	46,00	2,30	Montsouris			
1901,9166	305,0	46,00	2,30	Montsouris			
1902,0000	304,0	46,00	2,30	Montsouris			
1902,0834	316,0	46,00	2,30	Montsouris			
1902,1666	305,0	46,00	2,30	Montsouris		Montsouris av=308,5	308,5
1902,2500	304,0	46,00	2,30	Montsouris		305,9 Montsouris sm=303,4	
1902,3334	303,0	46,00	2,30	Montsouris			
1902,4166	306,0	46,00	2,30	Montsouris			
1902,5000	291,0	46,00	2,30	Montsouris			
1902,5000	610,0	69,50	-52,00	Krogh			
1902,5834	301,0	46,00	2,30	Montsouris			
1902,6667	305,0	46,00	2,30	Montsouris			
1902,7500	315,0	46,00	2,30	Montsouris			
1902,8334	341,0	46,00	2,30	Montsouris			
1902,9166	311,0	46,00	2,30	Montsouris			
1903,0000	320,0	46,00	2,30	Montsouris			
1903,0834	296,0	46,00	2,30	Montsouris			
1903,1666	310,0	46,00	2,30	Montsouris		Montsouris av=305,25	306,0
1903,2500	305,0	46,00	2,30	Montsouris		306,5 Montsouris sm=304+3	307,0
1903,3334	316,0	46,00	2,30	Montsouris			
1903,4166	308,0	46,00	2,30	Montsouris			
1903,5000	308,0	46,00	2,30	Montsouris			
1903,5834	296,0	46,00	2,30	Montsouris			
1903,6667	307,0	46,00	2,30	Montsouris			
1903,7500	301,0	46,00	2,30	Montsouris			
1903,8334	301,0	46,00	2,30	Montsouris			
1903,9166	304,0	46,00	2,30	Montsouris			
1904,0000	304,0	46,00	2,30	Montsouris			
1904,0834	294,0	46,00	2,30	Montsouris			
1904,1666	316,0	46,00	2,30	Montsouris		Montsouris av=305,25	305,3
1904,2500	292,0	46,00	2,30	Montsouris		305,5 Montsouris may MBL=306	
1904,3334	306,0	46,00	2,30	Montsouris			
1904,4166	298,0	46,00	2,30	Montsouris			
1904,5000	296,0	46,00	2,30	Montsouris			
1904,5834	302,0	46,00	2,30	Montsouris			
1904,6667	309,0	46,00	2,30	Montsouris			
1904,7500	320,0	46,00	2,30	Montsouris			
1904,8334	314,0	46,00	2,30	Montsouris			
1904,9166	312,0	46,00	2,30	Montsouris			
1905,0000	313,0	46,00	2,30	Montsouris			
1905,0834	310,0	46,00	2,30	Montsouris			
1905,1666	303,0	46,00	2,30	Montsouris		Montsouris av=307,5	307,5
1905,2500	309,0	46,00	2,30	Montsouris		307 Montsouris oct MBL=306	
1905,3334	310,0	46,00	2,30	Montsouris			
1905,4166	314,0	46,00	2,30	Montsouris			
1905,5000	310,0	46,00	2,30	Montsouris			
1905,5834	305,0	46,00	2,30	Montsouris			
1905,6667	296,0	46,00	2,30	Montsouris			
1905,7500	306,0	46,00	2,30	Montsouris			
1905,8334	313,0	46,00	2,30	Montsouris			
1905,9166	301,0	46,00	2,30	Montsouris			
1906,0000	292,0	46,00	2,30	Montsouris			
1906,0834	292,0	46,00	2,30	Montsouris			
1906,1666	299,0	46,00	2,30	Montsouris		Montsouris ave=300,1	300,1
1906,2500	298,0	46,00	2,30	Montsouris		306 Montsouris May MBL	292,0
1906,3334	292,0	46,00	2,30	Montsouris		Montsouris oct MBL	308,0
1906,4166	295,0	46,00	2,30	Montsouris		Legendre June/July av MBL Coast=3	306,0
1906,5000	305,0	46,00	2,30	Montsouris		Coast, marine, mountain MBL	24,0
1906,5000	303,6	47,80	-3,85	Concarneau/Legendre			
1906,5834	295,0	46,00	2,30	Montsouris			
1906,5834	303,5	47,50	-3,85	Concarneau/Legendre			
1906,6667	306,0	46,00	2,30	Montsouris			
1906,7500	308,0	46,00	2,30	Montsouris			
1906,8334	304,0	46,00	2,30	Montsouris			
1906,9166	315,0	46,00	2,30	Montsouris			
1907,0000	314,0	46,00	2,30	Montsouris			
1907,0834	310,0	46,00	2,30	Montsouris			
1907,1666	313,0	46,00	2,30	Montsouris		Montsouris ave=307,8	307,8

1907,2500	305,0	46,00	2,30	Montsouris		307,1	Montsouris May/June MBL=	308,5
1907,3334	314,0	46,00	2,30	Montsouris			Montsouris oct MBL=	305,0
1907,4166	303,0	46,00	2,30	Montsouris				
1907,5000	297,0	46,00	2,30	Montsouris				
1907,5834	303,0	46,00	2,30	Montsouris				
1907,6667	303,0	46,00	2,30	Montsouris				
1907,7500	305,0	46,00	2,30	Montsouris				
1907,8334	311,0	46,00	2,30	Montsouris				
1907,9166	316,0	46,00	2,30	Montsouris				
1908,0000	328,0	46,00	2,30	Montsouris				
1908,0834	311,0	46,00	2,30	Montsouris				
1908,1666	313,0	46,00	2,30	Montsouris			montsouris av=305,3	305,3
1908,2500	300,0	46,00	2,30	Montsouris		306,5	Montsouris mayMBL=308	308,0
1908,3334	308,0	46,00	2,30	Montsouris				
1908,4166	312,0	46,00	2,30	Montsouris				
1908,5000	309,0	46,00	2,30	Montsouris				
1908,5834	300,0	46,00	2,30	Montsouris				
1908,6667	316,0	46,00	2,30	Montsouris				
1908,7500	336,0	46,00	2,30	Montsouris				
1908,8334	308,0	46,00	2,30	Montsouris				
1908,9166	325,0	46,00	2,30	Montsouris				
1908,9166	203,2	-64,50	-65,50	2. Charcot Antarctica+20				
1909,0000	326,0	46,00	2,30	Montsouris				
1909,0000	249,0	-68,20	-72,00	2. Charcot Antarctica+20				
1909,0000	241,0	-68,30	-72,30	2. Charcot Antarctica+20				
1909,0834	321,0	46,00	2,30	Montsouris				
1909,1666	308,0	46,00	2,30	Montsouris			Montsouris av=309,9	309,9
1909,1666	211,0	-65,10	-72,30	2. Charcot Antarctica+20		303,3	Benedict av=	304,5
1909,2500	312,0	46,00	2,30	Montsouris			Benedict CWPA average=302,6	302,6
1909,2500	289	42,30	-71,00	Benedict	47		Benedict MBL oct=303	303,0
1909,3334	316,0	46,00	2,30	Montsouris			Benedict may MBLCWPA=310	310,0
1909,3334	299,0	42,30	-71,00	Benedict			Benedict May CPBA=290	290,0
1909,4166	302,0	46,00	2,30	Montsouris			sum	303,3
1909,4166	289,0	42,30	-71,00	Benedict				
1909,4166	239,0	-65,10	2,30	2. Charcot Antarctica+20				
1909,5000	312,0	46,00	2,30	Montsouris				
1909,5834	307,0	46,00	2,30	Montsouris				
1909,5834	228,0	-65,10	-72,30	2. Charcot Antarctica+20				
1909,6667	310,0	46,00	2,30	Montsouris				
1909,7500	294,0	46,00	2,30	Montsouris				
1909,7500	303	42,30	-71,00	Benedict				
1909,7500	250	-65,10	-72,30	2. Charcot Antarctica+20				
1909,8334	324,0	46,00	2,30	Montsouris				
1909,8334	330	42,30	-71,00	Benedict				
1909,9166	308,0	46,00	2,30	Montsouris				
1909,9166	317	42,30	-71,00	Benedict				
1910,0000	307,0	46,00	2,30	Montsouris				
1910,0000	323	42,30	-71,00	Benedict				
1910,0000	164	-69,30	-87,20	2. Charcot Antarctica+20				
1910,0000	190	-70,00	-121,20	2. Charcot Antarctica+20				
1910,0000	275	-66,00	-121,40	2. Charcot Antarctica+20				
1910,0834	312,0	46,00	2,30	Montsouris				
1910,0834	303	42,30	-71,00	Benedict			Montsouris av=304,4	304,4
1910,1666	316,0	46,00	2,30	Montsouris		307,8	Benedict av=302,7	302,7
1910,2500	302,0	46,00	2,30	Montsouris			June CPBM=308,6+2,5=311	301,1
1910,2500	295	42,30	-71,00	Benedict			304,4+311,1=307,8	
1910,3334	301,0	46,00	2,30	Montsouris				
1910,3334	307	42,30	-71,00	Benedict				
1910,4166	299,0	46,00	2,30	Montsouris				
1910,4166	303	42,30	-71,00	Benedict				
1910,4166	239	-65,10	-121,00	2. Charcot Antarctica+20				
1910,5000	308,0	46,00	2,30	Montsouris				
1910,5000	300	42,30	-71,00	Benedict				
1910,5834	299,0	46,00	2,30	Montsouris				
1910,5834	300	42,30	2,30	Benedict				
1910,6667	300,0	46,00	2,30	Montsouris				
1910,6667	300	42,30	2,30	Benedict				
1910,7500	302,0	46,00	2,30	Montsouris				
1910,7500	300	42,30	2,30	Benedict				
1910,8334	299,0	46,00	2,30	Montsouris				
1910,8334	300	42,30	2,30	Benedict				
1910,9166	308,0	46,00	2,30	Montsouris				
1910,9166	299	42,30	-71,00	Benedict				
1911,0000	303	42,30	-71,00	Benedict				
1911,0834	317	42,30	-71,00	Benedict				
1911,1666	303	42,30	-71,00	Benedict			wigand +benedict MBL +5= 299	
1911,1666	369	55,60	-3,17	Kendall	48	308,02	303 CPBA average june-nov Boston laboratory	299
1911,2500	308	42,30	-71,00	Benedict			june average 298,5+3 from SEAS=	301,5
1911,3334	296	42,30	-71,00	Benedict			october MBL CPBA 313,3+1,5=314,5	301,5
1911,4166	294	42,30	-71,00	Benedict			sea average atlantic, June	314,7
1911,4166	294	51,60	12,30	Wigand backgr. Bal	49		Pikes Peak 18 samples Aug average	311,14+5=315,5
1911,5000							(301,5+303+299+314,8+314,7+315,5)/6=304,6	315,5
1911,5834							Coast, marine, maountain MBL	23,0
1911,6667	315	42,30	-71,00	Benedict				308,0
1911,6667	284	50,90	13,90	Wigand backgr. Balloon				
1911,7500	301	42,30	-71,00	Benedict				
1911,8334	282	42,30	-71,00	Benedict				
1911,9166	301	42,30	-71,00	Benedict		44		
1912,0000	304	42,30	-71,00	Benedict				
1912,0834								
1912,1666							interpolation11	
1912,2500						318,5		
1912,3334								
1912,4166								
1912,5000								
1912,5834								
1912,6667	277,0	50,80	12,80	Wigand backgr. Balloon				
1912,7500								
1912,8334								
1912,9166								
1913,0000	365,0	59,56	30,18	Kendall				
1913,0834								



1913,1666							best estimate from data		
1913,2500						329			
1913,3334									
1913,4166	329,0	59,20	18,30	Kendall					
1913,5000	339,0	40,30	-73,90	Kendall					
1913,5834									
1913,6667									
1913,7500									
1913,8334									
1913,9166									
1914,0000									
1914,0834									
1914,1666							interpolation10		
1914,2500						327,15			
1914,3334									
1914,4166									
1914,5000									
1914,5834									
1914,6667									
1914,7500									
1914,8334									
1914,9166									
1915,0000									
1915,0834									
1915,1666							interpolation9		
1915,2500						325,3			
1915,3334									
1915,4166									
1915,5000									
1915,5834									
1915,6667									
1915,7500									
1915,8334									
1915,9166									
1916,0000									
1916,0834									
1916,1666							interpolation8		
1916,2500						323,4			
1916,3334									
1916,4166									
1916,5000									
1916,5834									
1916,6667									
1916,7500									
1916,8334									
1916,9166									
1917,0000									
1917,0834									
1917,1666							Krogh annual average in May		
1917,2500						321,6	Coast, marine MBL	22,0	
1917,3334	321,6	55,70	12,50	Krogh Copenhagen					
1917,4166									
1917,5000									
1917,5834									
1917,6667									
1917,7500									
1917,8334									
1917,9166									
1918,0000									
1918,0834	334,5	55,70	12,50	Krogh Copenhagen					
1918,1666									
1918,2500									
1918,3334									
1918,4166	312,5	55,70	12,50	Krogh Copenhagen					
1918,5000									
1918,5834							312,5+4,2=317		
1918,6667						317	Coast, marine MBL	21,0	
1918,7500									
1918,8334									
1918,9166									
1919,0000									
1919,0834									
1919,1666							interpolation7		
1919,2500						320,2			
1919,3334									
1919,4166									
1919,5000									
1919,5834									
1919,6667									
1919,7500									
1919,8334									
1919,9166									
1920,0000									
1920,0834									
1920,1666							Lundegardh sm		
1920,2500						323,4	Coast, marine MBL	20,0	
1920,3334									
1920,4166	352,4	56,20	12,55	Lundegardh	50				
1920,5000	346,7	56,20	12,55	Lundegardh					
1920,5834	321,3	56,20	12,55	Lundegardh					
1920,6667	384,5	56,20	12,55	Lundegardh					
1920,7500									
1920,8334									
1920,9166									
1921,0000									
1921,0834									
1921,1666							Lundegardh/Schultz sm		
1921,2500						305,8	Coast, marine MBL	19,0	
1921,3334									
1921,4166	254,4	56,20	12,55	Lundegardh					
1921,5000	280,4	56,20	12,55	Lundegardh					
1921,5000	297,0	55,00	12,40	Schulz baltic sea	51				

1921,5000	290,0	56,50	12,00	Schulz north sea					
1921,5834	338,0	56,20	12,55	Lundegardh					
1921,6667	327,9	56,20	12,55	Lundegardh					
1921,7500									
1921,8334									
1921,9166									
1922,0000									
1922,0834									
1922,1666									
1922,2500							Lundegardh sm		
1922,3334						289,4	Coast, marine MBL	18,0	
1922,4166	288,9	56,20	12,55	Lundegardh					
1922,5000	303,0	56,20	12,55	Lundegardh					
1922,5834	277,6	56,20	12,55	Lundegardh					
1922,6667	303,0	56,20	12,55	Lundegardh					
1922,7500	297,0	56,20	12,55	Lundegardh					
1922,8334									
1922,9166									
1923,0000									
1923,0834									
1923,1666									
1923,2500							Lundegardh sm		
1923,3334	289,1	56,20	12,55	Lundegardh		305,1	Coast, marine MBL	17,0	
1923,4166	283,6	56,20	12,55	Lundegardh					
1923,5000	287,6	56,20	12,55	Lundegardh					
1923,5834	314,0	56,20	12,55	Lundegardh					
1923,5834	293,6	46,80	9,70	Rheinau	52				
1923,6667	331,7	56,20	12,55	Lundegardh					
1923,7500									
1923,8334									
1923,9166									
1924,0000									
1924,0834									
1924,1666									
1924,2500							Lundegardh sm		
1924,3334						330	Coast, marine MBL	16,0	
1924,4166	325,0	56,20	12,55	Lundegardh					
1924,4166	320,0	52,80	13,70	Meinecke Eberswal	53				320
1924,5000	332,9	56,20	12,55	Lundegardh					
1924,5834	332,9	56,20	12,55	Lundegardh					
1924,6667	342,5	52,80	13,70	Meinecke Eberswald latitude					
1924,7500	337	52,80	13,70	Meinecke Eberswald latitude					
1924,8334									
1924,9166									
1925,0000	330,0	-22,00	-15,00	Wattenberg	54				
1925,0834									
1925,1666									
1925,2500							Lundegardh summer minimum		
1925,3334						321,3	Coast, marine MBL	15,0	
1925,4166	341,1	56,20	12,55	Lundegardh					
1925,4166	268,3	-41,00	-30,00	Wattenberg					
1925,5000	351,0	56,20	12,55	Lundegardh					
1925,5000	281,3	-41,00	5,00	Wattenberg					
1925,5000	243,3	-28,00	12,00	Wattenberg					
1925,5834	317,7	56,20	12,55	Lundegardh					
1925,5834	252,3	-28,00	-10,00	Wattenberg					
1925,5834	252,3	-28,00	-20,00	Wattenberg					
1925,5834	252,3	-28,00	-30,00	Wattenberg					
1925,5834	252,3	-28,00	-40,00	Wattenberg					
1925,6667	345,0	-48,00	-60,00	Wattenberg					
1925,7500	313,1	-48,00	-55,00	Wattenberg					
1925,7500	313,1	-48,00	-45,00	Wattenberg					
1925,7500	313,1	-48,00	-35,00	Wattenberg					
1925,7500	313,1	-48,00	-25,00	Wattenberg					
1925,7500	287,0	-40,00	-10,00	Wattenberg					
1925,7500	287,0	-40,00	10,00	Wattenberg					
1925,8334	273,6	-33,00	15,00	Wattenberg					
1925,8334	273,6	-33,00	0,00	Wattenberg					
1925,8334	273,6	-33,00	-15,00	Wattenberg					
1925,8334	273,6	-33,00	-25,00	Wattenberg					
1925,9166	305,7	-32,00	-30,00	Wattenberg					
1925,9166	310,0	-36,00	-45,00	Wattenberg					
1926,0000	281,4	-45,00	-60,00	Wattenberg					
1926,0000	335,0	-55,00	-55,00	Wattenberg					
1926,0834	279,2	-54,00	-65,00	Wattenberg					
1926,0834	320,0	-58,00	-55,00	Wattenberg					
1926,1666	311,0	-52,00	20,00	Wattenberg					
1926,1666	311,0	-45,00	20,00	Wattenberg					
1926,1666	311,0	-35,00	20,00	Wattenberg					
1926,2500									
1926,3334	321,8	-15,00	5,00	Wattenberg					
1926,3334	321,8	-15,00	0,00	Wattenberg					
1926,3334	321,8	-15,00	-16,00	Wattenberg					
1926,3334	321,8	-15,00	-35,00	Wattenberg					
1926,4166	320,0	56,20	12,55	Lundegardh summer average					
1926,4166	283,3	-18,00	-40,00	Wattenberg					
1926,5000	320,0	56,20	12,55	Lundegardh summer average					
1926,5000	287,0	-21,00	-40,00	Wattenberg					
1926,5000	287,0	-21,00	-20,00						
1926,5000	287,0	-21,00	0,00						
1926,5000	287,0	-21,00	15,00						
1926,5000	310,3	55,70	12,58	Krogh Copenhagen					
1926,5000	328,0	69,50	-40,00	Krogh(Odum) Greenland					
1926,5834	320,0	56,20	12,55	Lundegardh summer average					
1926,5834	390,0	-22,00	-15,00	Wattenberg					
1926,5834	363,3	-8,00	-5,00	Wattenberg					
1926,6667	323,2	-9,00	-15,00	Wattenberg					
1926,6667	282,5	-12,00	-30,00	Wattenberg					
1926,7500	326,0	-3,00	-25,00	Wattenberg					
1926,7500	281,1	4,50	-10,00	Wattenberg					
1926,8334	236,2	2,00	-5,00	Wattenberg					
1926,9166	340,0	48,00	2,19	Florentin Paris	55				

1926,9166	352,0	0,00	-5,00	Wattenberg					
1927,0000	316,0	-2,00	-10,00	Wattenberg					
1927,0834	358,0	0,00	-30,00	Wattenberg					
1927,1666	284,0	9,00	-40,00	Wattenberg					
1927,2500	284,3	18,00	-35,00	Wattenberg	327	Coast, marine MBL		13,0	
1927,3334	258,3	12,00	-45,00	Wattenberg					
1927,4166									
1927,5000									
1927,5834									
1927,6667									
1927,7500	326,0	47,37	8,53	Gut zuerich forest	56				
1927,8334									
1927,9166									
1928,0000	321,0	47,37	8,53	Gut zuerich forest					
1928,0834									
1928,1666	309,3	47,37	8,53	Gut zuerich forest		annual average			
1928,2500	305,4	47,37	8,53	Gut zuerich forest	327				
1928,3334									
1928,4166	333,0	47,37	8,53	Gut zuerich forest					
1928,5000	270,0	64,10	-51,35	Müller Greenland	57				
1928,5834									
1928,6667									
1928,7500									
1928,8334									
1928,9166									
1929,0000									
1929,0834									
1929,1666						interpolation6			
1929,2500					328				
1929,3334									
1929,4166									
1929,5000									
1929,5834									
1929,6667									
1929,7500									
1929,8334									
1929,9166									
1930,0000									
1930,0834									
1930,1666						because of basin in 1280m enhanced CO2			
1930,2500					328	June 12:00: 343; graphical analysis= 30th June: 350			
1930,3334						interpolation5			
1930,4166	343,0	47,80	15,00	Lehmann Lunz	58				
1930,5000									
1930,5834									
1930,6667									
1930,7500									
1930,8334									
1930,9166									
1931,0000	343,0	40,30	-45,10	van Slyke	59				
1931,0834									
1931,1666						Jan value about 13,75 above annual average (cat 3: 40 ppm SEAS)			
1931,2500					329,25				
1931,3334									
1931,4166									
1931,5000									
1931,5834									
1931,6667									
1931,7500									
1931,8334									
1931,9166									
1932,0000									
1932,0834									
1932,1666						sm 320,4+6 326,4			
1932,2500					326,4				
1932,3334									
1932,4166	326,3	57,00	15,00	buch baltic sea	60				
1932,5000	321,5	65,50	-15,00	buch iceland					
1932,5834	313,3	66,00	-17,00	buch iceland					
1932,6667	310,0	60,00	-18,00	buch					
1932,7500									
1932,8334									
1932,9166									
1933,0000	323,3	40,00	-111,00	ThomasMoyer Salt	61				
1933,0834	324,7	40,00	-111,00	ThomasMoyer Salt lake city					
1933,1666						November 330-2=328 near yearly average			
1933,2500					328				
1933,3334									
1933,4166									
1933,5000									
1933,5834									
1933,6667									
1933,7500	330,0	63,00	31,20	Buch					
1933,8334									
1933,9166									
1934,0000	327,5	69,40	31,20	Buch petsamo					
1934,0834	316,0	69,40	31,20	Buch petsamo					
1934,1666	318,5	69,40	31,20	Buch petsamo		annual average 320,3; sm: 325,8+6=331,8			
1934,2500	319,0	69,40	31,20	Buch petsamo	331	CWBA= 314,6; no forested area			
1934,3334	323,7	69,40	31,20	Buch petsamo		maritime air: regression: 331			
1934,4166	312,8	69,40	31,20	Buch petsamo		Coast, marine MBL		12,0	
1934,5000	337,7	69,40	31,20	Buch petsamo					
1934,5834	327,0	69,40	31,20	Buch petsamo					
1934,6667	322,8	69,40	31,20	Buch petsamo					
1934,7500	315,3	69,40	31,20	Buch petsamo					
1934,8334	312,8	69,40	31,20	Buch petsamo					
1934,8334	312,0	42,70	-76,50	Waugh	62				
1934,9166	319,3	69,40	31,20	Buch petsamo					
1935,0000	319,0	69,40	31,20	Buch petsamo					
1935,0834	338,0	69,40	31,20	Buch petsamo					
1935,0834	360,0	60,00	28,00	kauko Helsinki	63	Helsinki MBL 361- 4 ppm = 357 ppm+-1,2 ppm			
1935,1666	330,0	69,40	31,20	Buch petsamo	357	Coast, marine MBL		11,0	

1935,2500	271,0	69,40	31,20	Buch petsamo					
1935,3334	285,0	69,40	31,20	Buch petsamo					
1935,4166	316,5	55,50	-20,00	buch skagen NY					
1935,4166	326,8	47,50	-35,00	buch skagen NY					
1935,4166	324,3	45,00	-44,00	buch skagen NY					
1935,5000	325,7	39,00	-70,00	buch atlantis					
1935,5000	317,3	41,30	-70,00	buch woods hole					
1935,5834	324,0	56,50	-3,40	Haldane Cloan	64				
1935,5834	370,0	55,20	-4,50	Haldane coast					
1935,6667	320,7	43,50	-44,00	buch nY kop					
1935,6667	370,0	55,20	-4,50	Haldane coast					
1935,6667	303,3	53,50	-35,00	buch back					
1935,6667	315,5	58,00	-20,00	buch back					
1935,7500									
1935,8334									
1935,9166	361,0	60,00	28,00	kauko Helsinki					
1935,9166	309,5	60,00	28,00	kauko Helsinki					
1936,0000									
1936,0834									
1936,1666	358,0	46,60	7,26	Duerst Bern	65				Duerst june/july 346+337,1/2+8=349,5
1936,2500	358,0	46,60	7,26	Duerst Bern		349,5			
1936,3334	358,0	46,60	7,26	Duerst Bern					
1936,4166	346,0	46,60	7,26	Duerst Bern					
1936,5000	346,0	46,60	7,26	Duerst Bern					
1936,5834	337,1	72,50	-12,00	buch to spitsbergen					
1936,5834	346,0	46,60	7,26	Duerst Bern					
1936,5834	241,8	78,00	-13,00	buch to spitsbergen					
1936,6667									
1936,7500									
1936,8334									
1936,9166	367,0	46,60	7,26	Duerst Bern					
1937,0000	367,0	46,60	7,26	Duerst Bern					
1937,0834	367,0	46,60	7,26	Duerst Bern					
1937,1666	358,0	46,60	7,26	Duerst Bern					Duerst
1937,2500	358,0	46,60	7,26	Duerst Bern		354			
1937,3334	358,0	46,60	7,26	Duerst Bern					
1937,4166	346,0	46,60	7,26	Duerst Bern					
1937,5000	346,0	46,60	7,26	Duerst Bern					
1937,5834	346,0	46,60	7,26	Duerst Bern					
1937,6667									
1937,7500									
1937,8334									
1937,9166	367,0	46,60	7,26	Duerst Bern					
1938,0000	367,0	46,60	7,26	Duerst Bern					
1938,0834	367,0	46,60	7,26	Duerst Bern					
1938,1666	358,0	46,60	7,26	Duerst Bern					sm 346+8= 354 ppm
1938,2500	358,0	46,60	7,26	Duerst Bern		354			
1938,3334	358,0	46,60	7,26	Duerst Bern					
1938,4166	346,0	46,60	7,26	Duerst Bern					
1938,5000	346,0	46,60	7,26	Duerst Bern					
1938,5834	346,0	46,60	7,26	Duerst Bern					
1938,6667									
1938,7500									
1938,8334									
1938,9166	367,0	46,60	7,26	Duerst Bern					
1939,0000	367,0	46,60	7,26	Duerst Bern					
1939,0834									
1939,1666									october average Kreutz: 386
1939,2500						382,4			CWBA=390; CPBA=389,7
1939,3334									(389,7+390)/2= 389,8 +386/2=387,9+377/2= 382,4+ - 2,5%.
1939,4166									
1939,5000									
1939,5834	338,5	50,60	8,67	Kreutz	66				
1939,6667	357,3	50,60	8,67	Kreutz					
1939,7500	386,4	50,60	8,67	Kreutz					
1939,8334	401,0	50,60	8,67	Kreutz					
1939,9166	411,4	50,60	8,67	Kreutz					
1940,0000	450,4	50,60	8,67	Kreutz					
1940,0834	444,9	50,60	8,67	Kreutz					
1940,1666	406,1	50,60	8,67	Kreutz					Sm westbase: 350,; Kreutz June 387: 350+387=368,5+8=376,5
1940,2500	397,6	50,60	8,67	Kreutz		376,5			Coast, marine M 10,0
1940,3334	400,6	50,60	8,67	Kreutz					
1940,4166	387,1	50,60	8,67	Kreutz					
1940,4166	393,0	40,00	-75,15	Bazett					67
1940,5000	441,6	50,60	8,67	Kreutz					
1940,5000	583,3	-78,30	163,30	Lockhart west base					68
1940,5834	350,0	-78,30	163,30	Lockhart west base					
1940,6667									
1940,7500									
1940,8334									
1940,9166	900,0	-78,30	163,30	Lockhart west base					
1941,0000	764,3	-78,30	163,30	Lockhart west base					
1941,0834									
1941,1666									sm 361+375= 368+8=376 ppm
1941,2500						376			
1941,3334									
1941,4166	361,0	40,60	-88,14	Fuller					69
1941,5000	375,0	40,60	-88,14	Fuller					
1941,5834									
1941,6667									
1941,7500									
1941,8334									
1941,9166									
1942,0000									
1942,0834									
1942,1666									interploation4
1942,2500						379,5			
1942,3334									
1942,4166									
1942,5000									
1942,5834									
1942,6667									

1942,7500	596,5	18,50	73,50	misra poona	70				
1942,8334	592,3	18,50	73,50	misra poona					
1942,9166	582,5	18,50	73,50	misra poona					
1943,0000	570,3	18,50	73,50	misra poona					
1943,0834	520,0	18,50	73,50	misra poona					
1943,1666	440,0	18,50	73,50	misra poona					
1943,2500	441,3	18,50	73,50	misra poona					
1943,3334	386,0	18,50	73,50	misra poona	383				
1943,4166	395,0	18,50	73,50	misra poona					
1943,4166	333,0	51,00	-0,28	Glückauf london ke	71				
1943,4166	250,0	51,00	-0,28	Glückauf london balloon 4-8km					
1943,5000	352,5	18,50	73,50	misra poona					
1943,5834	390,0	18,50	73,50	misra poona					
1943,6667	412,0	18,50	73,50	misra poona					
1943,7500	411,5	18,50	73,50	misra poona					
1943,8334	449,3	18,50	73,50	misra poona					
1943,9166									
1944,0000									
1944,0834									
1944,1666					367,3		interpolation3		
1944,2500									
1944,3334									
1944,4166									
1944,5000									
1944,5834									
1944,6667									
1944,7500									
1944,8334									
1944,9166									
1945,0000									
1945,0834									
1945,1666									
1945,2500					352		interpolation2		
1945,3334									
1945,4166									
1945,5000									
1945,5834									
1945,6667									
1945,7500									
1945,8334									
1945,9166									
1946,0000									
1946,0834									
1946,1666									
1946,2500					336		Scholander error at least +14 %. Low air volume		
1946,3334							June value 330 +6= 336		
1946,4166	330,0	39,90	-75,30	Scholander	72		Coast, marine MBL	9,0	
1946,5000									
1946,5834									
1946,6667									
1946,7500									
1946,8334									
1946,9166									
1947,0000									
1947,0834									
1947,1666									
1947,2500									
1947,3334									
1947,4166									
1947,5000									
1947,5834									
1947,6667									
1947,7500	407,9	71,00	-156,80	Scholander p. Barrow					
1947,8334	420,6	71,00	-156,80	Scholander p. Barrow					
1947,9166	412,1	71,00	-156,80	Scholander p. Barrow					
1948,0000	385,7	71,00	-156,80	Scholander p. Barrow	67				
1948,0834	424,4	71,00	-156,80	Scholander p. Barrow					
1948,1666	452,3	71,00	-156,80	Scholander p. Barrow					
1948,2500	448,3	71,00	-156,80	Scholander p. Barrow	328,4		Scholander error at least +14 %, low air volume		
1948,3334	429,3	71,00	-156,80	Scholander p. Barrow			sm selection (outliers ignored)= 323,45+5=328,4		
1948,4166	394,3	71,00	-156,80	Scholander p. Barrow			Coast, marine MBL	7,0	
1948,5000	386,7	71,00	-156,80	Scholander p. Barrow					
1948,5834	398,3	71,00	-156,80	Scholander p. Barrow					
1948,6667	414,5	71,00	-156,80	Scholander p. Barrow					
1948,7500									
1948,8334									
1948,9166	500,0	71,00	-156,80	Scholander p. Barrow					
1949,0000									
1949,0834									
1949,1666									
1949,2500					316		sm Nebraska: 309,5+6,5= 316		
1949,3334									
1949,4166	309,7	52,10	-96,00	chapman Nebraska	73				
1949,5000	309,7	52,10	-96,00	chapman Nebraska					300,4
1949,5834	309,7	52,10	-96,00	chapman Nebraska					
1949,6667									
1949,7500									
1949,8334									
1949,9166									
1950,0000									
1950,0834									
1950,1666	300,0	40,80	-83,80	Selm	74		sm Nebraska=301,2 + 6,5= 307,7		
1950,2500	300,0	40,80	-83,80	Selm	308,85		URAS city 315 near annual average - 5 ppm=310		
1950,3334	310,0	40,80	-83,80	Selm			307,7+310=308,85		
1950,3334	315,0	50,00	8,41	Egle URAS Frankfu	75				
1950,4166	301,6	40,49	-96,00	chapman Nebraska	76				
1950,4166	300,0	40,80	-83,80	Selm					
1950,5000	301,6	40,49	-96,00	chapman Nebraska					
1950,5834	301,6	40,49	-96,00	chapman Nebraska					
1950,6667									
1950,7500									
1950,8334									



1956,9166	318,0	56,70	35,75	Fonselius Plönninge						
1956,9166	295,0	59,80	23,20	Fonselius Tvärminne						
1957,0000	341	48,25	16,36	Steinhauser	80					
1957,0000	310,0	59,80	23,20	Fonselius Tvärminne						
1957,0000	330,0	56,70	35,75	Fonselius Plönninge						
1957,0834	314	48,25	16,36	Steinhauser		321,7	sm Vienna 311+3=314, CWPM= 324			
1957,0834	322,0	56,70	35,75	Fonselius Plönninge			sm scand=318+4,5=322,5. average=314+324+322,5/3=321,7+-3%			
1957,0834	320,0	59,80	23,20	Fonselius Tvärminne			Coast, marine MBL		3,0	
1957,0834	320,0	56,70	35,75	Fonselius Plönninge						
1957,1666	315	48,25	16,36	Steinhauser						
1957,1666	325,0	59,80	23,20	Fonselius Tvärminne						
1957,1666	320,0	56,70	35,75	Fonselius Plönninge						
1957,2500	302	48,25	16,36	Steinhauser						
1957,2500	330,0	59,80	23,20	Fonselius Tvärminne						
1957,2500	325,0	56,70	35,75	Fonselius Plönninge						
1957,3334	318	48,25	16,36	Steinhauser						
1957,3334	325,0	59,80	23,20	Fonselius Tvärminne						
1957,3334	325,0	56,70	35,75	Fonselius Plönninge						
1957,4166	305	48,25	16,36	Steinhauser						
1957,4166	320,0	59,80	23,20	Fonselius Tvärminne						
1957,4166	345,0	56,70	35,75	Fonselius Plönninge						
1957,5000	311	48,25	16,36	Steinhauser						
1957,5000	317,0	59,80	23,20	Fonselius Tvärminne						
1957,5000	340,0	56,70	35,75	Fonselius Plönninge						
1957,5834	317	48,25	16,36	Steinhauser						
1957,5834	317,0	59,80	23,20	Fonselius Tvärminne						
1957,5834	320,0	56,70	35,75	Fonselius Plönninge						
1957,6667	316	48,25	16,36	Steinhauser						
1957,6667	319,0	59,80	23,20	Fonselius Tvärminne						
1957,6667	318,0	56,70	35,75	Fonselius Plönninge						
1957,7500	324	48,25	16,36	Steinhauser						
1957,7500	324,0	59,80	23,20	Fonselius Tvärminne						
1957,7500	325,0	56,70	35,75	Fonselius Plönninge						
1957,8334	335	48,25	16,36	Steinhauser						
1957,8334	337,0	59,80	23,20	Fonselius Tvärminne						
1957,8334	322,0	56,70	35,75	Fonselius Plönninge						
1957,9166	346	48,25	16,36	Steinhauser						
1957,9166	345,0	59,80	23,20	Fonselius Tvärminne						
1957,9166	310,0	56,70	35,75	Fonselius Plönninge						
1958,0000	346	48,25	16,36	Steinhauser						
1958,0000	350,0	59,80	23,20	Fonselius Tvärminne			av scand	av vienna		
1958,0000	330,0	56,70	35,75	Fonselius Plönninge			320,9	336,0	average 320,9+319,9+324= 321,6	
1958,0834	335	48,25	16,36	Steinhauser		318,4	sm scand=313,8 +4,5=318,4, CWBM Vienna 1957/58=324			
1958,0834	350,0	59,80	23,20	Fonselius Tvärminne			Coast, marine MBL		2,0	
1958,0834	310,0	56,70	35,75	Fonselius Plönninge						
1958,1666	339	48,25	16,36	Steinhauser						
1958,1666	345,0	59,80	23,20	Fonselius Tvärminne						
1958,1666	310,0	56,70	35,75	Fonselius Plönninge						
1958,2500	340	48,25	16,36	Steinhauser						
1958,2500	330,0	59,80	23,20	Fonselius Tvärminne						
1958,2500	295,0	56,70	35,75	Fonselius Plönninge						
1958,3334	326	48,25	16,36	Steinhauser						
1958,3334	330,0	59,80	23,20	Fonselius Tvärminne						
1958,3334	290,0	56,70	35,75	Fonselius Plönninge			313,8			
1958,4166	330	48,25	16,36	Steinhauser						
1958,4166	330,0	59,80	23,20	Fonselius Tvärminne						
1958,4166	300,0	56,70	35,75	Fonselius Plönninge						
1958,5000	320,0	59,80	23,20	Fonselius Tvärminne						
1958,5834	305,0	56,70	35,75	Fonselius Plönninge						
1958,5834	330,0	59,80	23,20	Fonselius Tvärminne						
1958,6667	305,0	56,70	35,75	Fonselius Plönninge						
1958,6667	325,0	59,80	23,20	Fonselius Tvärminne						
1958,7500	315,0	56,70	35,75	Fonselius Plönninge						
1958,7500	320,0	59,80	23,20	Fonselius Tvärminne						
1958,8334	315,0	56,70	35,75	Fonselius Plönninge						
1958,8334	345,0	59,80	23,20	Fonselius Tvärminne						
1958,9166	310,0	56,70	35,75	Fonselius Plönninge						
1958,9166	320,0	59,80	23,20	Fonselius Tvärminne						
1959,0000	340,0	59,80	23,20	Fonselius Tvärminne						
1959,0834	362,0	59,80	23,20	Fonselius Tvärminne						
1959,1666	335,0	59,80	23,20	Fonselius Tvärminne						
1959,2500	340,0	59,80	23,20	Fonselius Tvärminne						
1959,3334	330,0	59,80	23,20	Fonselius Tvärminne			317,8	MBL SEAS: 13 ppm, average July/Aug(sept( 310+315+315)/3+4,5=317,8 +- 3 %pp		
1959,4166	330,0	59,80	23,20	Fonselius Tvärminne				Coast, marine MBL	1,0	
1959,5000	310,0	59,20	18,30	Bischof golf	81					
1959,5000	345,0	59,80	23,20	Fonselius Tvärminne						
1959,5834	315,0	59,20	18,30	Bischof island						
1959,5834	335,0	59,80	23,20	Fonselius Tvärminne						
1959,6667	315,0	59,20	18,30	Bischof golf						
1959,6667	342,0	59,80	23,20	Fonselius Tvärminne						
1959,7500	314,0	59,17	18,30	Bischof background flight						
1959,7500	330,0	59,80	23,20	Fonselius Tvärminne						
1959,8334	335,0	59,80	23,20	Fonselius Tvärminne						
1959,9166	350,0	59,80	23,20	Fonselius Tvärminne						
1960,0000										