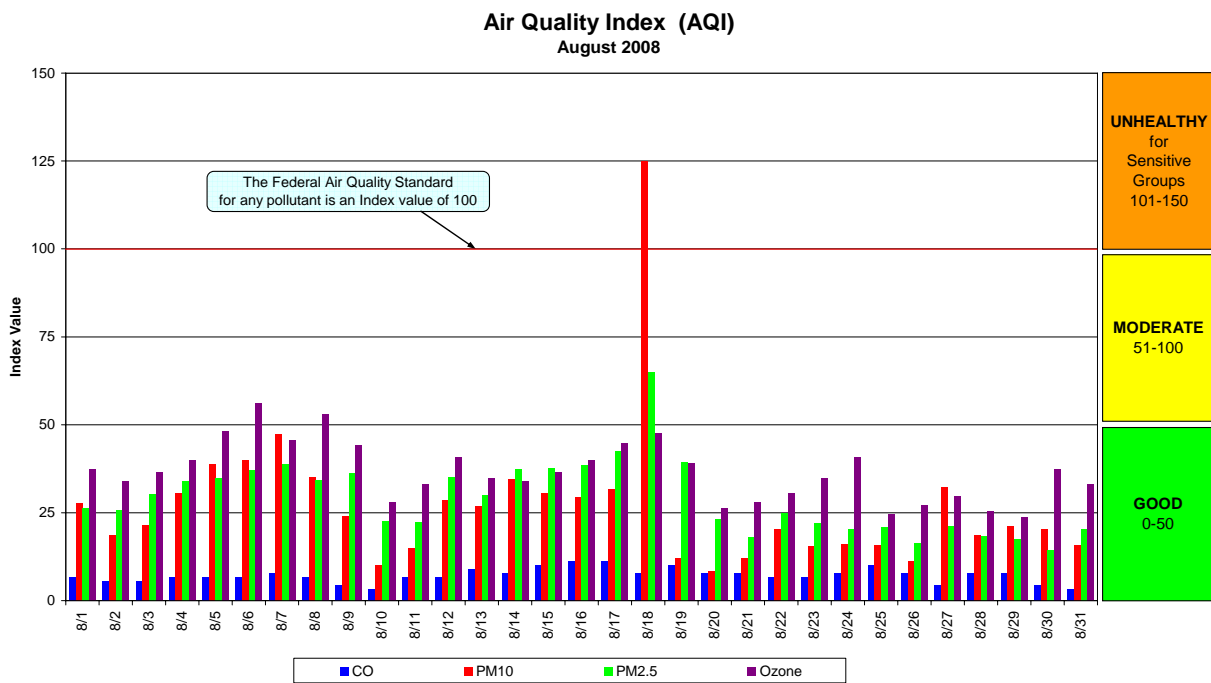


Spokane Regional Clean Air Agency Air Quality Report August 2008

The Clean Air Act requires EPA to set National Ambient Air Quality Standards (NAAQS) for six common air pollutants, carbon Monoxide (CO), particulate matter (PM₁₀ and PM_{2.5}), ground-level ozone (O₃), nitrogen dioxide (NO₂) and lead (Pb). These are known as “criteria” pollutants because EPA established permissible concentrations in ambient air using human health or environmentally based criteria. These pollutants, with the exception of nitrogen dioxide and lead, are monitored within Spokane County. Air quality information is updated hourly on the Spokane Regional Clean Air Agency (SRCAA) web page (http://www.spokanecleanair.org/air_quality.asp).

The chart below shows the daily maximum Air Quality Index (AQI) for each pollutant for August 2008. An index value above 100 indicates that the concentration of at least one criteria pollutant exceeded the limit established in the NAAQS. The AQI for August 18 was 125, based on a 24-hour average PM₁₀ concentration of 204 µg m⁻³. The federal standard for PM₁₀ is 150 µg m⁻³. This is, to date, the only measured exceedance of the NAAQS in Spokane County for 2008. A storm moved through the Spokane area in the early evening of the 18th. Sustained wind speeds up to 43 mph and gusts to 51 mph were observed, along with blowing dust, at Spokane International Airport. This wind storm was preceded a prolonged dry spell.



The following table contains the maximum AQI values for each pollutant for the current month and to date for the year. A table summarizing the daily AQIs by category follows on the next page.

Maximum AQI values and pollutant concentrations for this reporting period

Pollutant	AQI/Concentration	Location	Date
CO	11/1 ppm	3 rd & Washington	8/16 and 8/17/08
PM ₁₀	125/204 µg/m ³	Freya & Ferry	8/18/08
PM _{2.5}	65/23 µg/m ³	Freya & Ferry	8/18/08
O ₃	56/0.061 ppm	Turnbull	8/6/08

Maximum AQI values and pollutant concentrations to date

Pollutant	AQI/Concentration	Location	Date
CO	26/2.3 ppm	3 rd & Washington	2/22/08
PM ₁₀	125/204 µg/m ³	Freya & Ferry	8/18/08
PM _{2.5}	82/31.4 µg/m ³	Freya & Ferry	1/25/08
O ₃	66/0.064 ppm	Greenbluff/Turnbull	7/21/08

AQI Summary as of August 31, 2008

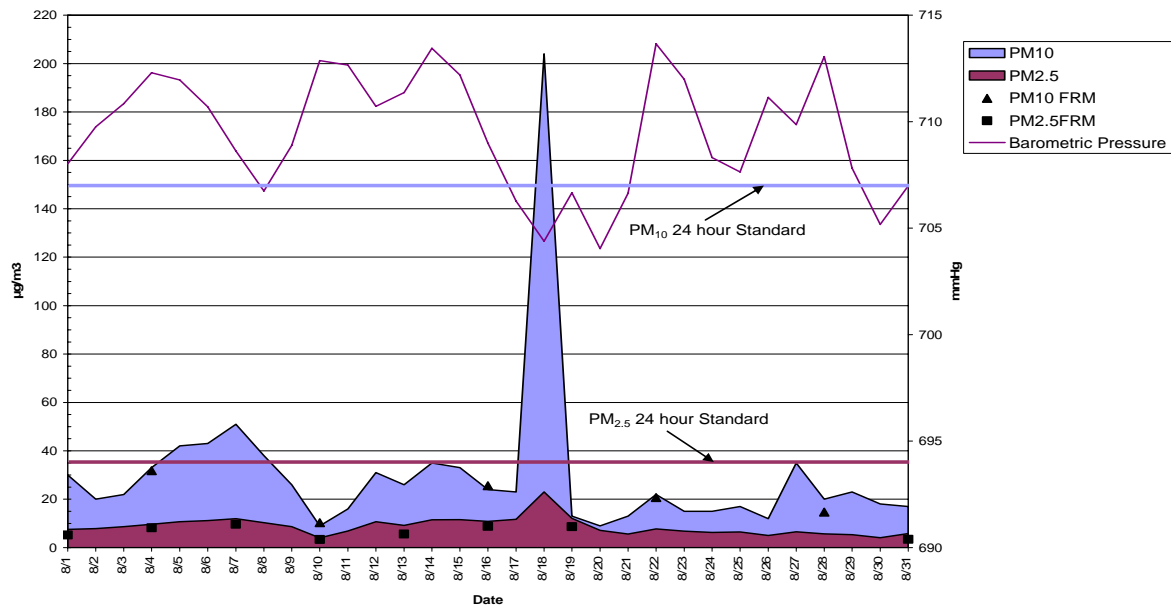
Category	Number of Days This Year (Leap Year)	Last Year to Date
Good (0-50)	217	211
Moderate (51-100)	26	32
Unhealthy for Sensitive Groups (101-150)	1	0
Unhealthy (151-200)	0	0
Very Unhealthy (201-300)	0	0
Hazardous (>300)	0	0

The next chart compares the mass concentrations of PM₁₀ and PM_{2.5} measured at the Freya & Ferry monitoring site. The site is located in a commercial/light industrial area on the eastern side of the City of Spokane. The data shown in solid colors were obtained using Tapered Element Oscillating Microbalance (TEOM) continuous analyzers. The TEOM is an automated method and provides “real time” data, which SRCAA uses in its day-to-day programs, e.g., air quality forecasting and burning curtailment. The manually-operated Federal Reference Method (FRM) is the “gold-standard” for measurement of the 24-hour average particulate matter concentration and meets the requirements for demonstrating attainment of federal air quality standards. The accuracy of the TEOM sample data can be verified by comparison with co-located FRM data. The correlation (r²) between the TEOM and FRM data for August was 0.95 for both PM₁₀ and PM_{2.5}.

See the narrative preceding the Air Quality Index chart on page 1 for an explanation of the elevated particulate matter concentrations on the 18th.

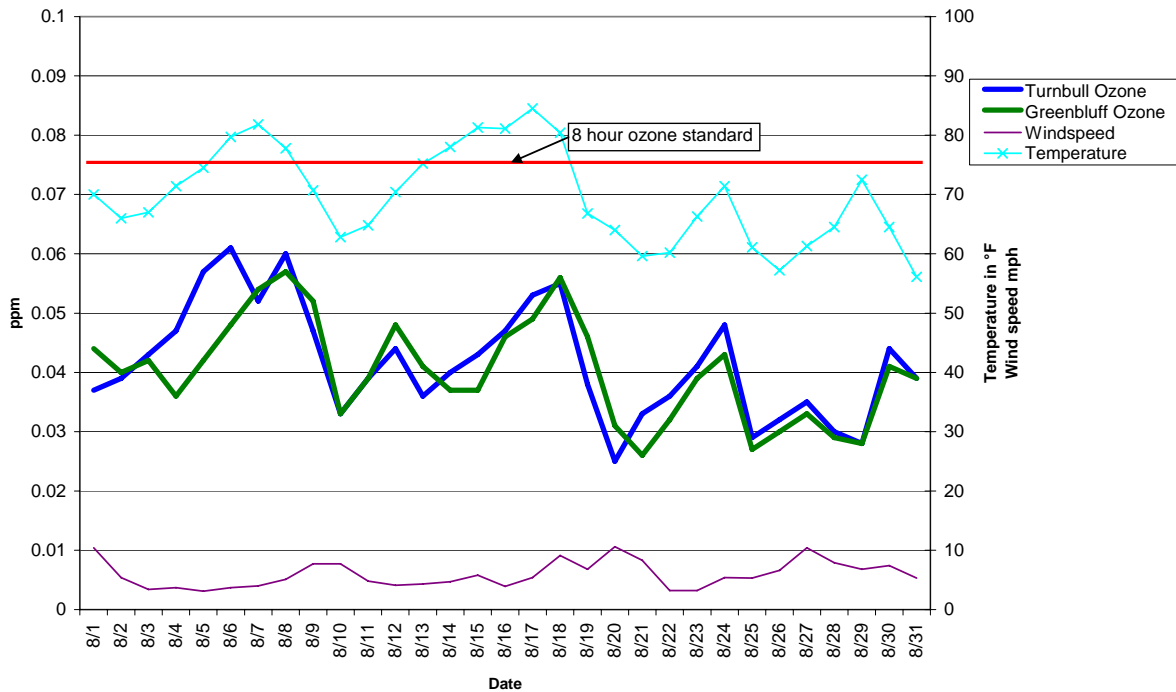
Air Quality Report August 2008

Freya & Ferry Particulate Matter Data
24hr Average Daily Maximum



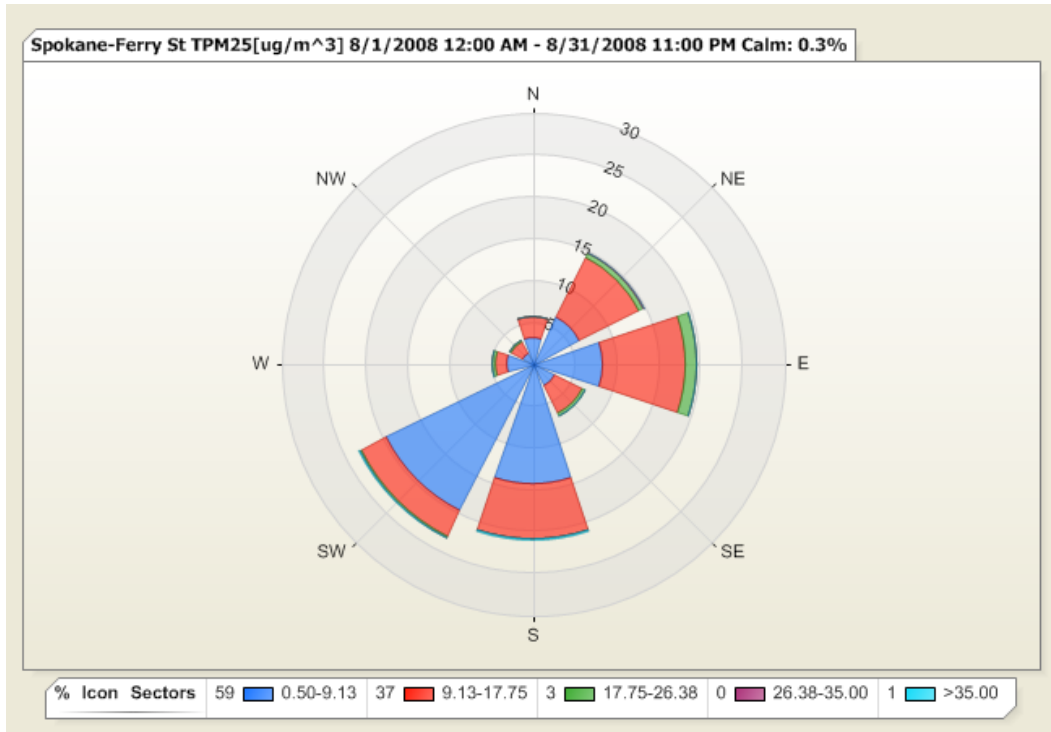
The chart below shows the ozone data for August measured at Greenbluff in the foothills of Mt. Spokane. The ozone data are plotted with the daily maximum temperature data from the Freya & Ferry site. Temperature is a good surrogate for sunlight in the photochemical reaction that forms ozone. Ozone is monitored May 1 through September 30.

Eight Hour Maximum Ozone Concentrations for Spokane
Greenbluff (with daily maximum temperature)

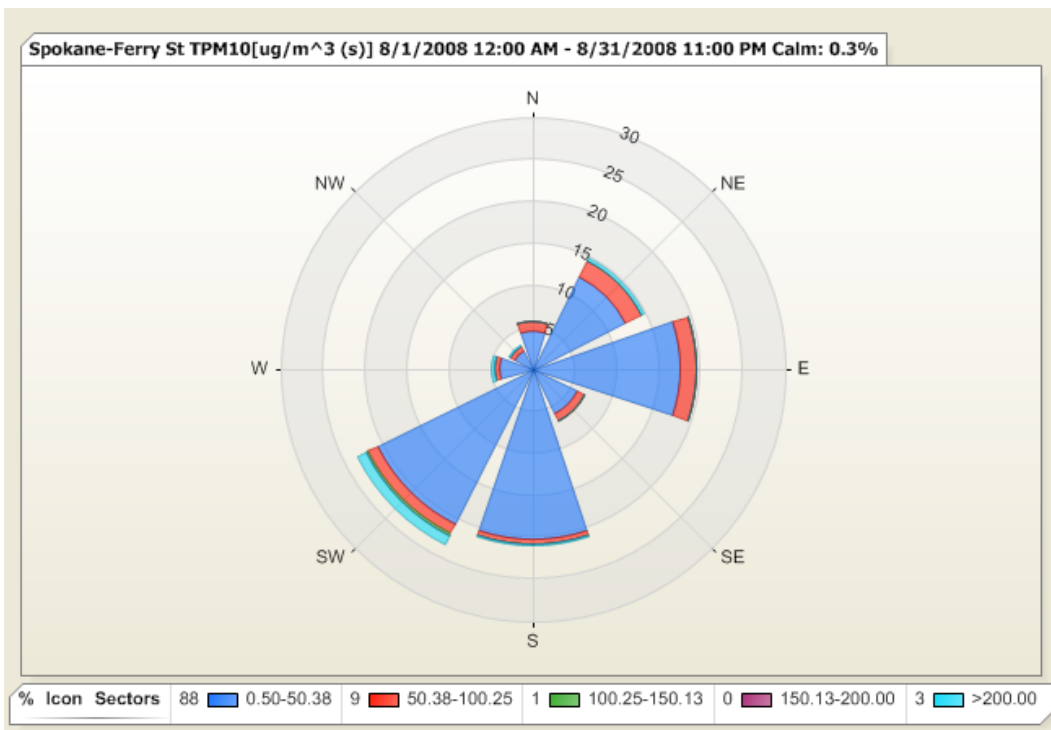


Air Quality Report August 2008

The pollution rose below summarizes hourly average PM_{2.5} concentrations (µg/m³) and hourly average wind directions (degrees) measured at the Freya and Ferry Site in August.

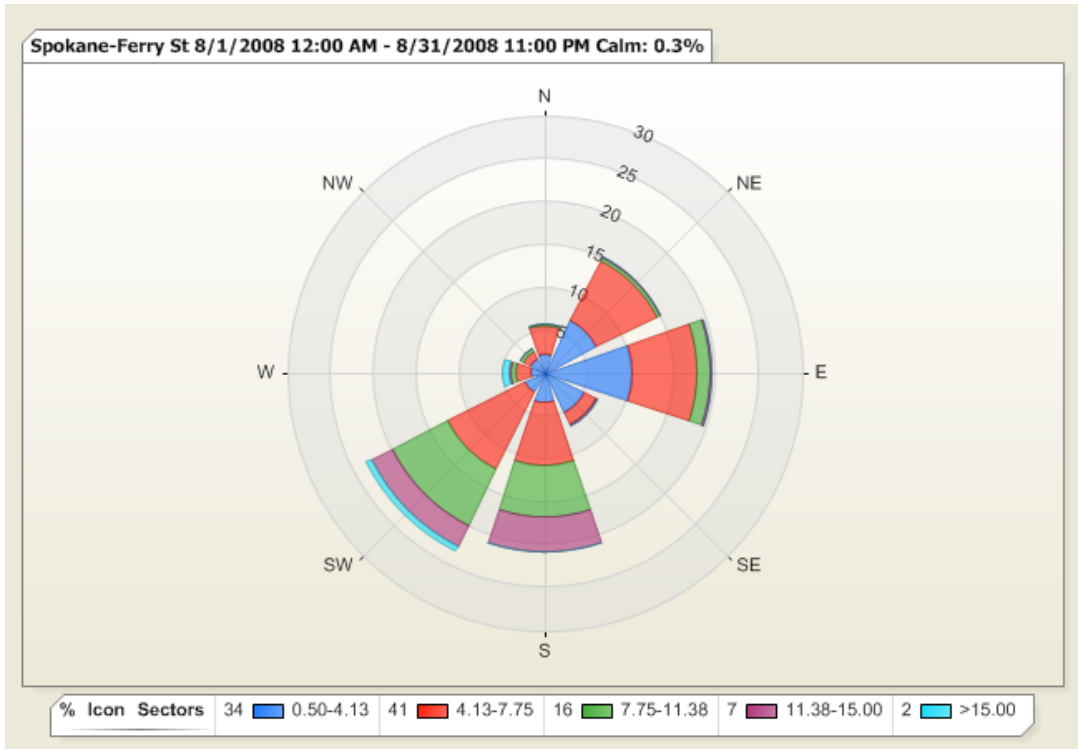


The pollution rose below summarizes hourly average PM₁₀ concentrations (µg/m³) and hourly average wind directions (degrees) measured at the Freya and Ferry Site in August.



Air Quality Report August 2008

The wind rose below summarizes the percent time during the month the wind blew from a particular direction and in what speed range. The data are hourly averages.



Air Quality Report August 2008

The table below summarizes the air quality data for August from all of the analyzers operated in Spokane County. The CO and O₃ data are 8-hour maximums in parts per million (ppm) and the PM data are 24-hour averages in micrograms per cubic meter of air (µg/m³). Some data are missing from the Freya & Ferry PM_{2.5} FRM column because samples arrived at the laboratory at a temperature above the limit of 4.0 °C. Data transmission errors associated with a cellular modem caused the loss of PM_{2.5} data from Airway Heights. No PM_{2.5} data were available for the Monroe & Wellesley site in August.

Date	CO 3rd & Washington (ppm)	PM10 Freya & Ferry TEOM (µg/m ³)	PM10 Freya & Ferry FRM (µg/m ³)	PM2.5 Freya & Ferry TEOM (µg/m ³)	PM2.5 Freya & Ferry FRM (µg/m ³)	PM10 Monroe & College TEOM (µg/m ³)	PM10 Monroe & College FRM (µg/m ³)	PM2.5 Monroe & College TEOM (µg/m ³)	PM2.5 Monroe & College FRM (µg/m ³)	PM2.5 Monroe & Wellesley Nephelometer (µg/m ³)	PM10 Turnbull Wildlife Refuge FRM (µg/m ³)	PM2.5 Turnbull Wildlife Refuge (µg/m ³)	PM10 Liberty Lake (µg/m ³)	PM10-2.5 Liberty Lake (µg/m ³)	PM2.5 Liberty Lake (µg/m ³)	PM2.5 Deer Park TEOM (µg/m ³)	PM2.5 Spokane Valley TEOM (µg/m ³)	PM2.5 Airway Heights TEOM (µg/m ³)	O3 Greenbluff (ppm)	O3 Turnbull WR (ppm)
8/1	0.6	30		7.5	5.2	25.5		8.1								6.91	6.91		0.044	0.037
8/2	0.5	20		7.9		14.4		5								11.5	4.84		0.04	0.039
8/3	0.5	22		8.6		23.3		9.3								9.19	7		0.042	0.043
8/4	0.6	33	32	9.6	8.2	30.8	28	10.5	7.7		28	6.2	17.4	12.2	5.2	8.33	8.5		0.036	0.047
8/5	0.6	42		10.7		30.3		9.4								8.91	2.83		0.042	0.057
8/6	0.6	43		11.1		35.8		11.4								12	6.16		0.048	0.061
8/7	0.7	51		12	9.6	42.6		11.7								12	10.4		0.054	0.052
8/8	0.6	38		10.3		33		10.6								0.54	9.56	9.85	0.057	0.06
8/9	0.4	26		8.6		22.2		11.2								7.74	8.31	8.68	0.052	0.047
8/10	0.3	9	10	4	3.3	9.9	11	7	2.9		9	3.2	11.8	8.4	3.4	5.47	7.59	7	0.033	0.033
8/11	0.6	16		6.9		16		6.1								8.18	4.21	4.82	0.039	0.039
8/12	0.6	31		10.7		30.7		10.8								9.44	6.87		0.048	0.044
8/13	0.8	26		9.2	5.6	29.1		8.3								8.45	8.27	7.65	0.041	0.036
8/14	0.7	35		11.5		37.2		10.4									4.08	8.4	0.037	0.04
8/15	0.9	33		11.6		32.7		9.2									7.56	7.51	0.037	0.043
8/16	1	24	26	10.8	8.8	31.6	30	11.9	9.6		26	8.0	22.5	14.8	7.8	6.84	8.39	8.58	0.046	0.047
8/17	1	23		11.7		34.4		13.1								12.5	10.4	10.9	0.049	0.053
8/18	0.7	204		23		179		22.7								17	13	13.5	0.056	0.055
8/19	0.9	13		12.1	8.6	11.5		10								18.4	19.2	0	0.046	0.038
8/20	0.7	9		7.1		4.6		5.6								6.09	5.97	3.9	0.031	0.025
8/21	0.7	13		5.6		12.7		3.1								3.18	3.94	2.22	0.026	0.033
8/22	0.6	22	21	7.7		15.1	14	6	4.3		11	2.8	13.4	10.2	3.2	4.26	5.07	4.43	0.032	0.036
8/23	0.6	15		6.8		16.8		6.6								5.07	5.91	5.34	0.039	0.041
8/24	0.7	15		6.3		17.4		5.6								6.12	6.18	5.76	0.043	0.048
8/25	0.9	17		6.4		12.1		5.6								6.04	6.06	6.27	0.027	0.029
8/26	0.7	12		5		10.8		2.5								3.83	3.87	3.28	0.03	0.032
8/27	0.4	35		6.5		32.1		6.3								5.06	5.16	2.16	0.033	0.035
8/28	0.7	20	15	5.7		17.4	13	5.6	3.1		14	2.7	16.8	13.6	3.2	5.27	5.66	4.36	0.029	0.03
8/29	0.7	23		5.4		19.7		4.7								4.46	4.94	5.47	0.028	0.028
8/30	0.4	18		4.1		21.9		4.4								3.31	3.16	4.85	0.041	0.044
8/31	0.3	17		5.8	3.4	15.8		6.3								5.56	4.92	5.58	0.039	0.039
Maximum	1	204	31.8	23	9.6	179	29.8	22.7	9.58		28.2	7.96	22.5	14.8	7.78	18.4	19.2	13.5	0.057	0.061
Average	0.65	30.2	20.6	8.72	6.59	27.9	19.1	8.35	5.53		17.5	4.57	16.4	11.8	4.56	7.64	6.4	6.11	0.04	0.042