

Estimate the Time Variable for Some Meteorological Parameters with Concentrations of Monoxide carbon for Andulas Station

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Received 16 September 2015 ; Accepted 25 November 2015

Abstract

The world that surrounds us is filled with toxic substances and there are many of them naturally entirely independent of human activity, perhaps affected humans in ancient times when air pollution from fires lit in the few caves ventilation. Ever since humans began polluting in a lot of areas on the surface of the earth. Until recently, the local environmental and secondary pollution problems due to the ground's ability to absorb and purify the trace amounts of contaminants property. Manufacturing in the community and the introduction of motor vehicles of the contributing factors to the increasing problem of air pollution. At this time it is necessary to find ways to clean the air. The main air pollutants found in most urban areas, carbon monoxide, and nitrogen oxides and sulfur oxides, hydrocarbons and particulates (both solid and liquid) spread of these pollutants in the atmosphere all over the world in high enough concentrations to cause serious health problems gradually. In addition, it may be natural or caused by human activity so that the amount accounted for in the Arab world and 40% can be classified as pollutants to the initial secondary pollutants and contaminants. Usually primary pollutants are substances that are issued directly from one of the processes such as scattered ash from a volcanic eruption or the first gas carbon dioxide emitted from car exhaust or carbon dioxide from factory chimneys. Therefore, this study will focus on the relationship between

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temperature max and mean and relative humidity with unilateral gas dioxide and the impact of contaminated behavior of CO elements of air poker by mentioned Sabaka.mn by selecting a region characterized by density increased in the large number of cars every day and private cars that run on gasoline during working period any of the 9:00am o'clock am to noon 2:00pm, and the use of measured data by the Ministry of Environment in Andalusia station during working period in 2012. Andalus area located under the line length (440 25' 29"E) and latitude (33° 18' 86" N). Through drawing it found that the relationship between temperature and the concentration of CO gas is an inverse relationship and the relationship between relative humidity and gas concentration of CO direct correlation.

Key words: Co, Average, median values, Standard deviation, standard error.

حساب التغير الزمني لبعض العناصر الانوائية مع تراكيز غاز احادي اوكسيد الكربون لمحطة الاندلس

محمد مجيد احمد

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الخلاصة

العالم الذي يحيط بنا مملوء بالمواد السامة ويوجد العديد منها بصورة طبيعية مستقلاً كليا عن نشاط الانسان ، ربما تضرر البشر في قديم الزمان من تلوث الهواء عندما اشعلوا الحرائق في الكهوف القليلة التهوية. منذ ذلك الحين بدأ البشر في تلويث الكثير من المناطق على سطح الأرض. حتى وقت قريب كانت مشاكل التلوث البيئية المحلية والثانوية بسبب قدرة الأرض على استيعاب الخاصية وتنقية كميات ضئيلة من الملوثات. التصنيع في المجتمع وإدخال المركبات الآلية من العوامل المساهمة تجاه مشكلة تلوث الهواء المتزايد. في هذا الوقت من الضروري أن نجد وسائل لتنظيف الهواء. ملوثات الهواء الرئيسية الموجودة في معظم المناطق الحضرية وأول أكسيد الكربون وأكاسيد النيتروجين وأكاسيد الكبريت والهيدروكربونات والجسيمات (سواء الصلبة والسائلة) تنتشر هذه الملوثات في جميع أنحاء الغلاف الجوي في العالم في تراكيز عالية بما يكفي ليسبب مشاكل صحية خطيرة تدريجياً. هذا بالإضافة إلى أنها قد تكون طبيعية أو ناتجة عن نشاط الإنسان بحيث تبلغ نسبته في الوطن العربي 40% ويمكن تصنيف الملوثات إلى ملوثات أولية وملوثات ثانوية. وعادة ما تكون الملوثات الأولية هي المواد التي تصدر بشكل مباشر من إحدى العمليات مثل الرماد المتناثر من ثورة أحد البراكين أو غاز أول أكسيد الكربون المنبعث من عوادم السيارات أو ثاني أكسيد الكربون المنبعث من مداخل المصانع. لذلك هذه الدراسة سوف تركز على العلاقة

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بين درجة الحرارة العظمى والصغرى والرطوبة النسبية مع غاز احادي اوكسيد الكاربون وتأثير سلوك الملوث CO بعناصر الانواء الجوية المذكورة سابقاً. من خلال اختيار منطقة تمتاز بالكثافة المتزايدة في كثرة السيارات كل يوم وخاصة السيارات التي تعمل بالبنزين خلال فترة الدوام الرسمي اي من الساعة التاسعة صباحاً الى الساعة الثانية ظهراً، واستخدام البيانات المقاسة من قبل وزارة البيئة في محطة الاندلس خلال فترة الدوام الرسمي لسنة 2012 . وتقع منطقة الاندلس تحت خط طول (E 29° 25' 44) وخط عرض (N 33° 18' 86). ومن خلال الرسم وجد ان العلاقة بين درجة الحرارة (العظمى والصغرى) وتركيز غاز CO علاقة عكسية والعلاقة بين الرطوبة النسبية وتركيز غاز CO علاقة طردية .

كلمات مفتاحية: احادي اوكسيد الكاربون ، المتوسط الحسابي ، الوسيط ، الانحراف المعياري ، الخطا المعياري.

Introduction

Air pollution is defined as any material in the air can cause damage to humans and the environment [1]. Air pollution is exposed atmosphere for materials chemical or physical particles or biological compounds cause damage and harm to humans and other living organisms, or lead to damage to the natural environment [2]. And the atmosphere on the planet .it has long been regarded as the depletion of the ozone layer in the stratosphere because of air pollution of the most dangerous things that represent a significant threat to human life and ecosystems on the planet [3]. constitute a means of transportation (land, sea and air), a major source sizeable enough in the field of air pollution either wild media that are most important in view of the magnitude of the preparation and fling remnants of fuel combustion in the inside, which leaves negative effects on humans and other living organisms [4]. Especially if we know that in the case of this source continues to increase as a result of continuing in the number of vehicles and spread around the world in big cities and small and even in rural areas to increase [5]. Omni directional dioxide produces carbon from combustion incomplete fuel containing organic materials, and qualities of the gas it does not color or taste or smell him, and dissolved in the blood plasma as much as unwinding in the water and the degree of dissolution in the water a few can be burned but it does not help the combustion [6]. The unilateral gas dioxide from the toxic gases and returns the toxic property to force his union with hemoglobin bloodstream, where it replaces the oxygen, limiting the ability of blood to transport oxygen from the lungs to the body's cells, which may cause death, and this is the gas

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of the most polluting gases to the air toxicity and the estimated amount of gas directional dioxide produced globally 300)) million tons, and is considered the industry, cars and heat homes main sources of focus unilateral dioxide in the atmosphere [7]. There are natural unpolluted air at a concentration of no more than (0.1) ppm, and when people are exposed to atmosphere contains (15) ppm of this gas, the energy circulatory system to carry less oxygen at a rate (15%) If the traffic is dense in some streets, and increased the concentration of this gas to the (20-30) ppm, the man often does not get a headache and poor vision, nausea and fatigue [8].

Study Region

Andalus Square (see figure 1) located at latitude ($33^{\circ} 18'59.86''N$) and longitude ($44^{\circ} 25'34.29'' E$) has been selected for the purpose of the diversity of the nature of the study area and considered to be of commercial and residential nature of the area (mixed). Andalus is a traffic intersection is located almost at the center of the city of Baghdad, the advantage of this intersection congestion and population being a vital connecting joints and areas of the city of Baghdad.



Figure 1: Andalus intersection

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Statistical Analysis

1. Average: is the sum of the values given on the number given by the following :

$$m = \frac{\sum x_i}{n} \dots\dots\dots (1)$$

Where Xi: data values, n: the total

2. Median values: the broker knows the viewing value, which mediates data after arranged in ascending or descending.
3. Standard deviation: the most commonly used among the statistical measures of dispersion to measure the statistical scattering, that is, it shows how extension of the areas of values within the statistical data collection and given equation the following value.

$$S = \sqrt{\frac{\sum(x_i - \bar{x})^2}{n-1}} \dots\dots\dots (2)$$

4. standard error: is a way to measure or estimate the standard deviation of the distribution of the sample accompanied by the following equation Appreciation way [9]

$$S = \frac{s}{\sqrt{n}} \dots\dots\dots (3)$$

Results and Discussion

Account temporal variation of some elements meteorological with unilateral dioxide gas concentration. Temperature greatly affect the air pollutants, as the very high surface temperature in the daylight hours, and the accompanying hot air near the surface leads to a rising air movements actively working to spread contaminants vertically to the largest extent possible. While the results from the night cooling the Earth's surface and the air of them, the control of the landing movements of air and the occurrence of air stagnation, engender about it the concentration of most of the air pollutants near the ground, and at least spread in vertical and this leads As a result, to increase the density of pollutants near the ground. This is what we observe in the city of Baghdad, where the atmosphere is relatively pure in daylight hours despite an increase in the amount of pollutants released, compared to hours or overnight until early morning hours (sunrise) where the city looks encapsulated black cover pollutants. The relative humidity effect show through lack of accumulation of pollutants in the air, working the water

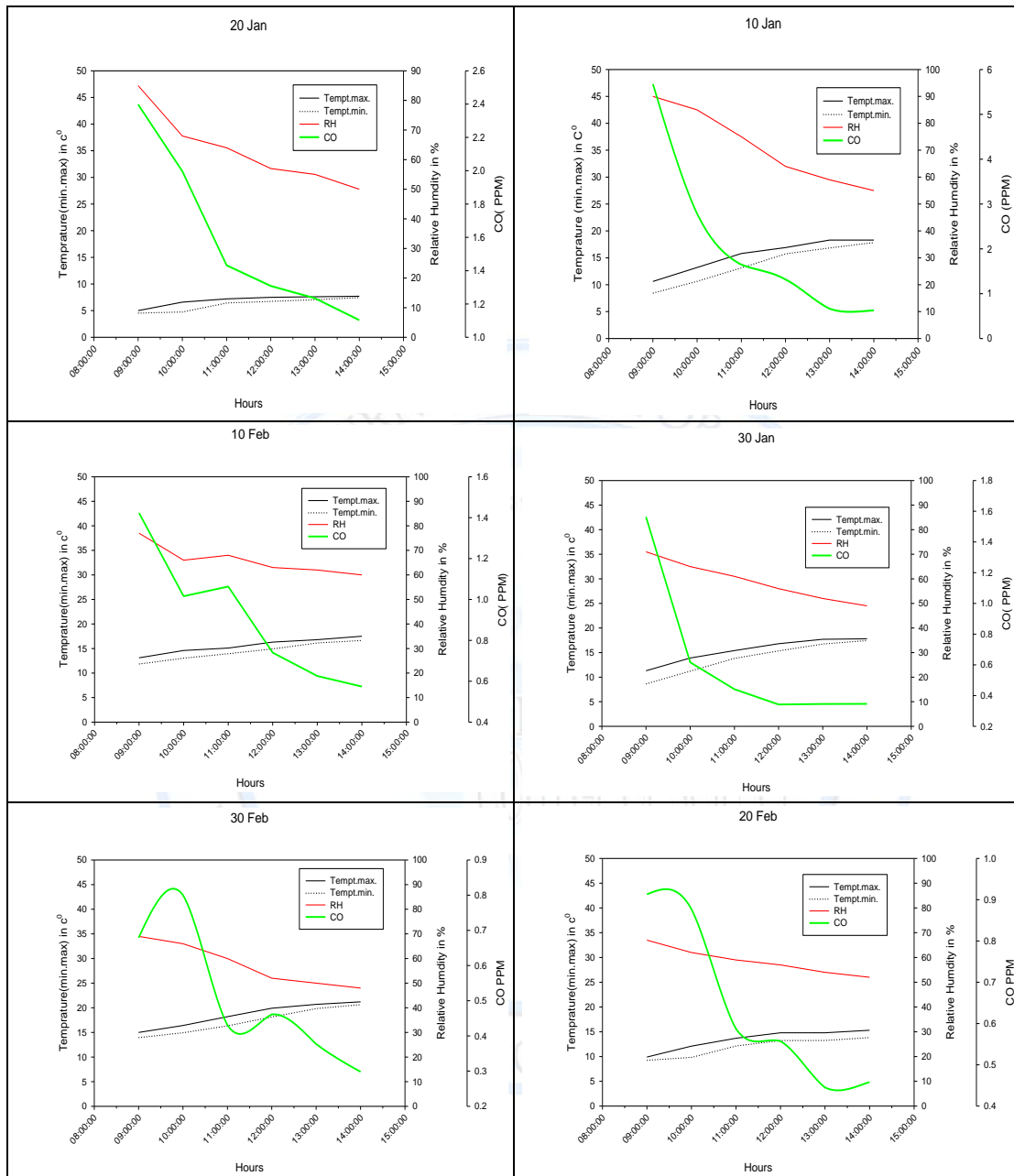
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vapor in the air on the freeing of a large proportion than commenting, so large amounts of lingering in the air minutes inversely proportional to the relative humidity, where the increase of moisture in the winter The concentrations of the outstanding minutes less, while the situation in the summer reflected where increasing concentrations of the outstanding minutes because of a decrease humidity As for the concentration of gases in the air, the reverse situation where when increasing humidity leads to water vapor with gases interaction such as (CO) and therefore acids that make consists of rainwater acidity with a clear impact on the environment. And noticed that the highest concentration values are contaminated in the winter and less concentration values for contaminated carbon monoxide CO be in the summer. And notice of Figures (2-7) that the concentrations of the values of contaminated carbon monoxide CO decreased with increasing temperature and that the highest value for the concentration of contaminated be at a temperature of 25 (C °) reaching (ppm) 1.25 and the lowest value at a temperature (°C) 35 where It amounted to 0.4 (ppm). Where the temperature has an inverse relationship concentration of carbon monoxide gas CO .it was noted that the increase in the concentrations of contaminated at nine in the morning to be much greater than the monthly value per hour at noon. The increase in the contaminated concentration in the first hours of the morning accompanied by a decrease to a lesser extent in the afternoon It is noticeable that the highest value for the concentration of this contaminated be at nine in the morning time of the month of January and noticed that the pollution of the gas values of carbon monoxide CO to 9:00 am to be 1.3) ppm) while pollution values per hour at 1:00pm to be (0.2 ppm). The high humidity in the air enhances the air pollution intensity if operating small water droplets in the air on the mixing of air pollutants in ambient air on the surface of then limit the spread as that when moist air cools to the point of increasing the concentration of water vapor at the saturation kills it to intensify water droplets faithful to consist fog condensation fog which prevents the arrival of the sun's rays into the lower regions of the atmosphere and the result enhances the thermal inversions process passages leading to the occurrence of pollution acute that contaminated carbon monoxide increases with increasing relative humidity and so the relationship is positive between the polluter and relative humidity.

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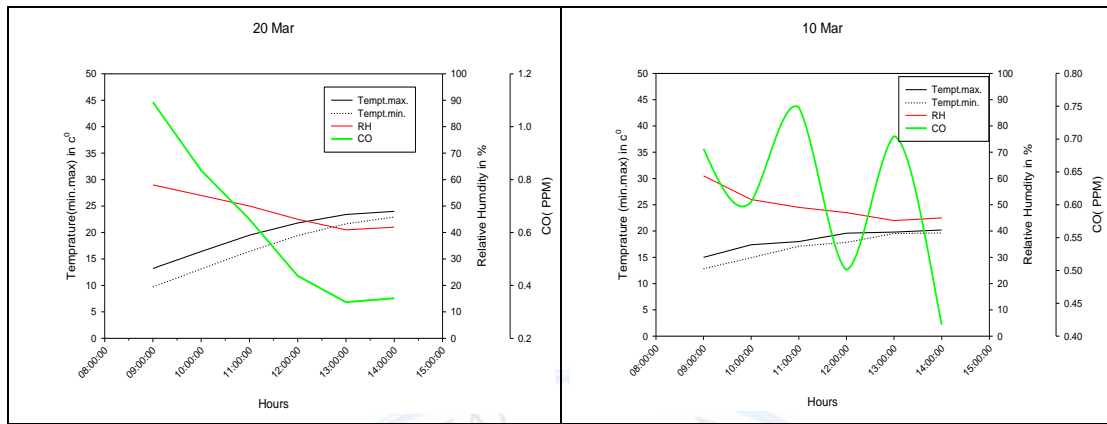
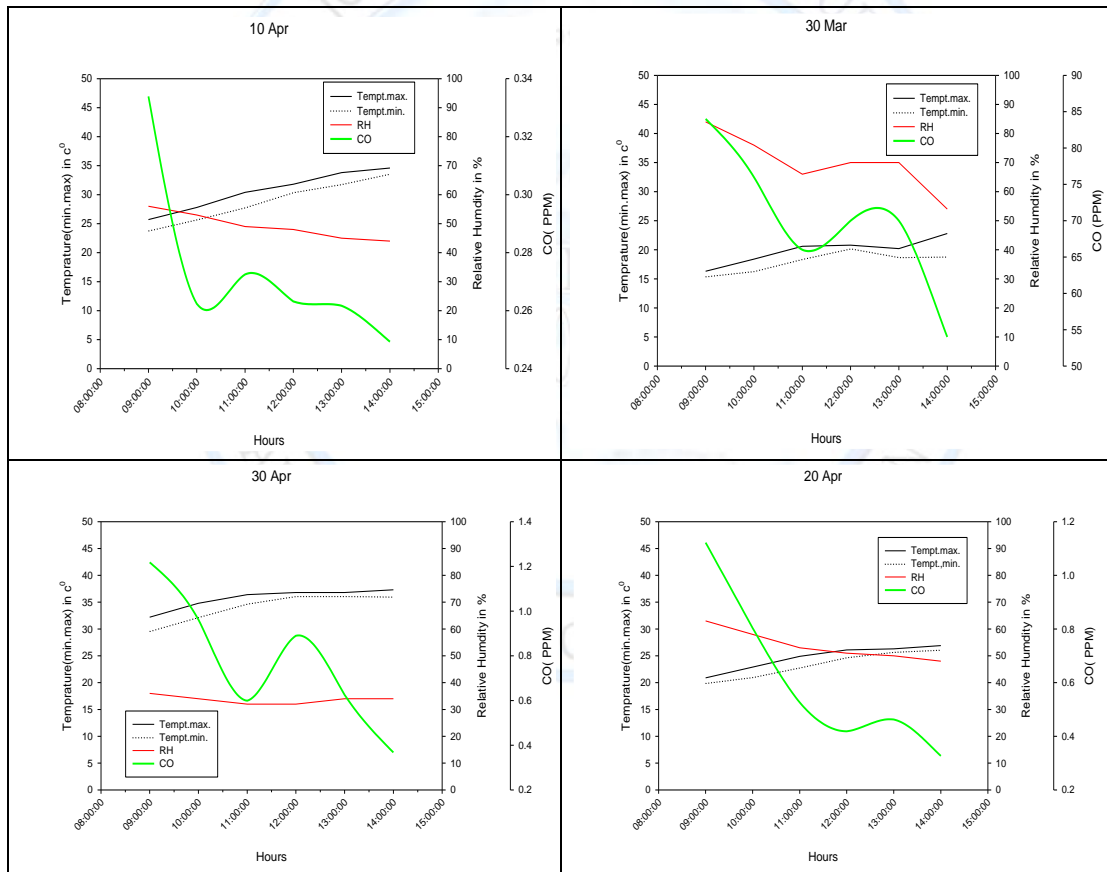
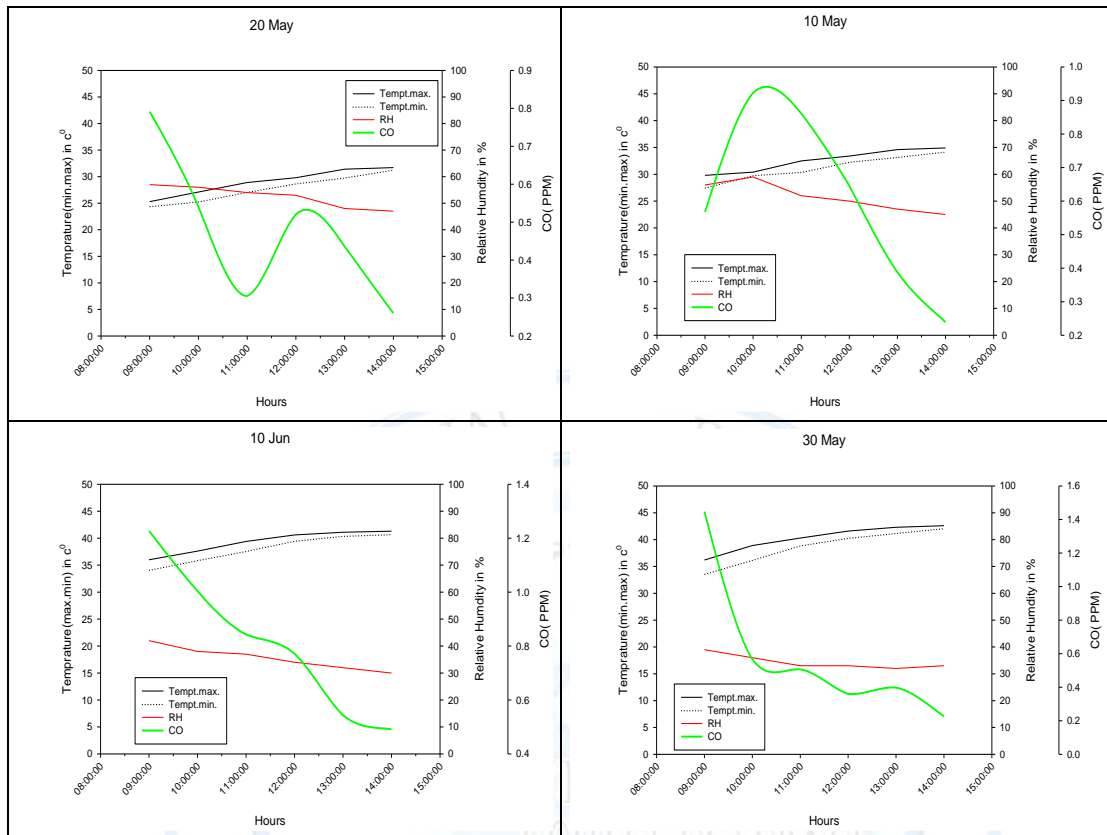


Figure 2: Courier average temperature (maximum and minimum), with relative humidity concentrations of CO-month (Jan and Feb and Mar) of the day (10, 20, 30).

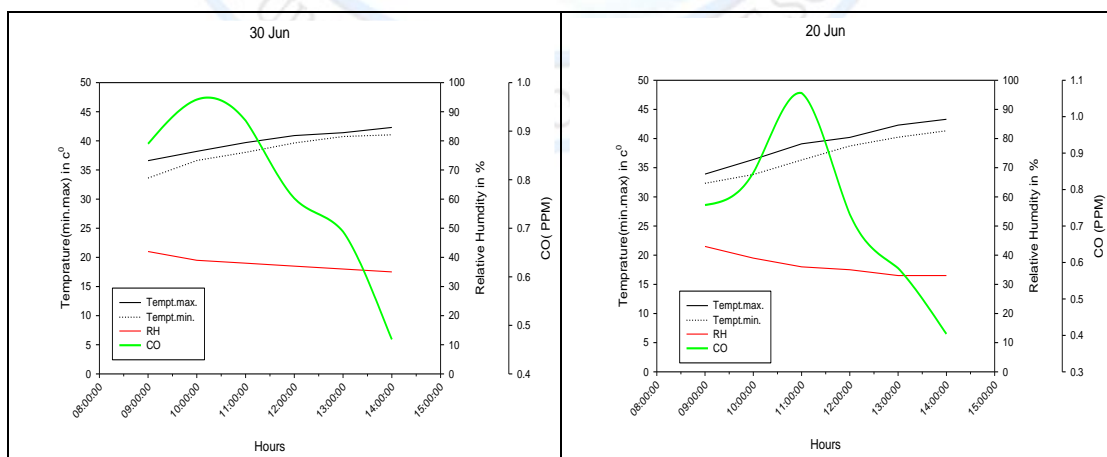


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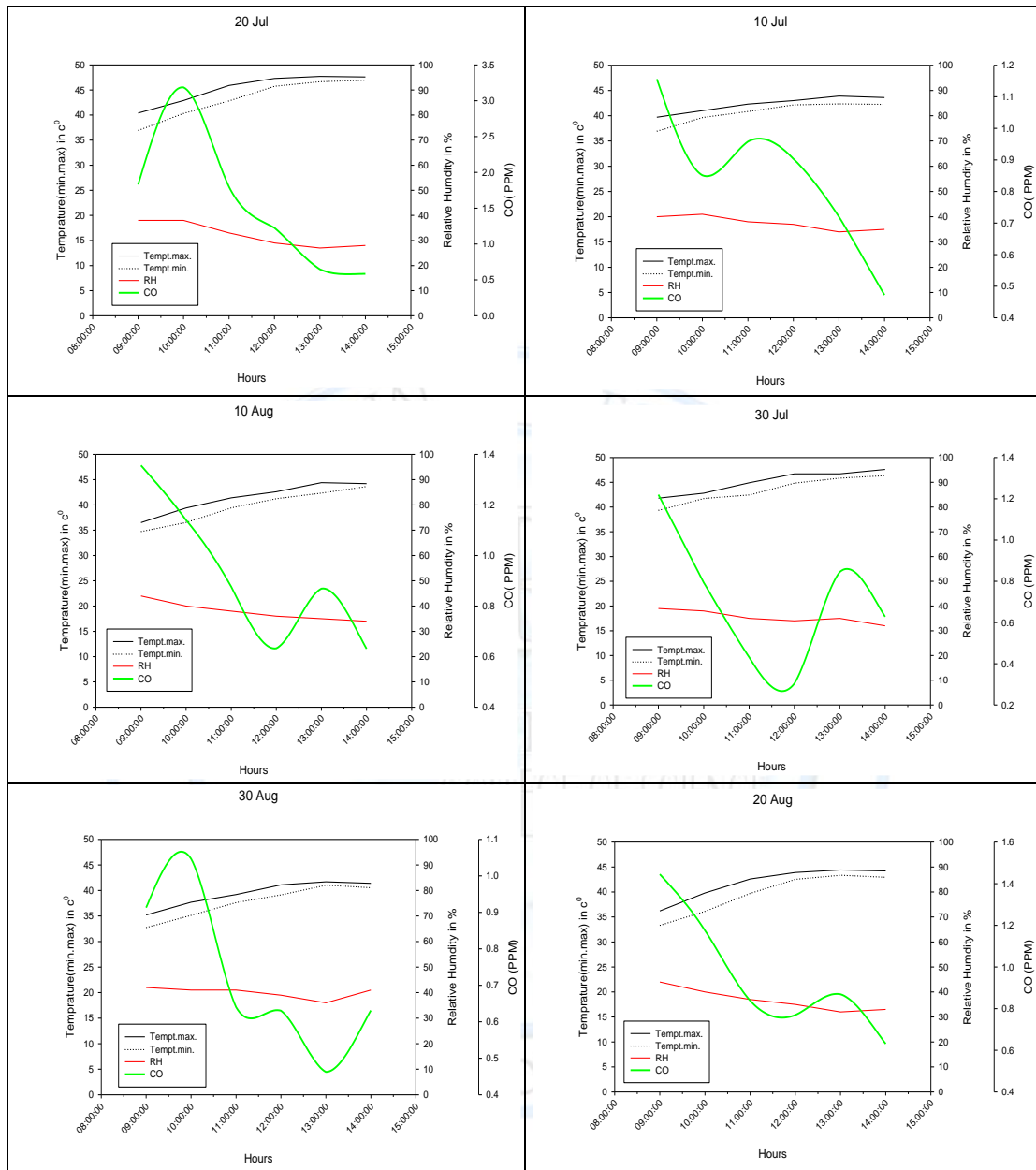


Figures 3: Courier average temperature (maximum and minimum) and relative humidity with CO concentrations of months (Mar and Apr and May and Jun) of the day (10, 20, 30).



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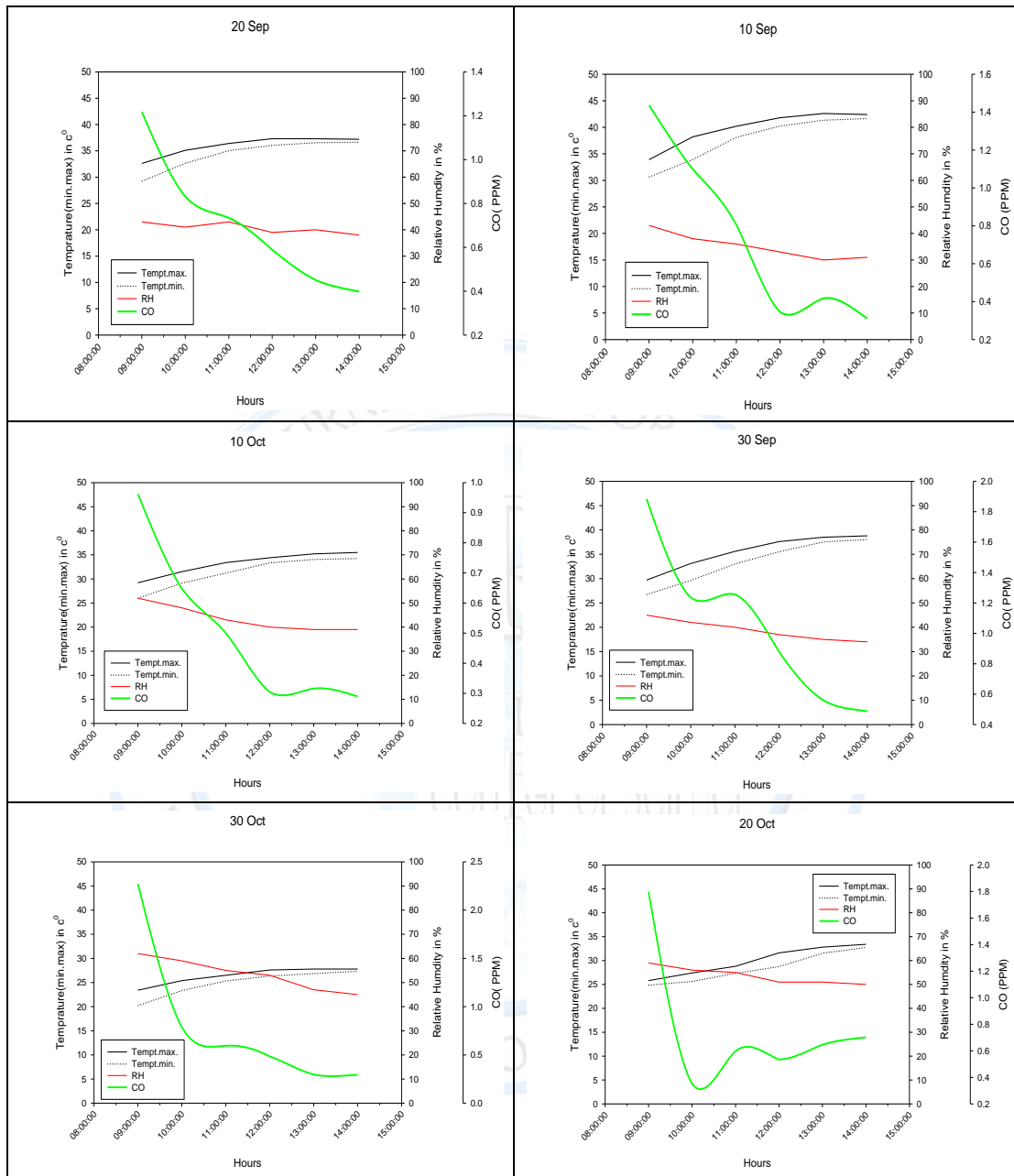
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Figures 4: Courier average temperature (maximum and minimum) and relative humidity with CO concentrations of months (Jun and Jul and Aug) of the day (10, 20, 30).

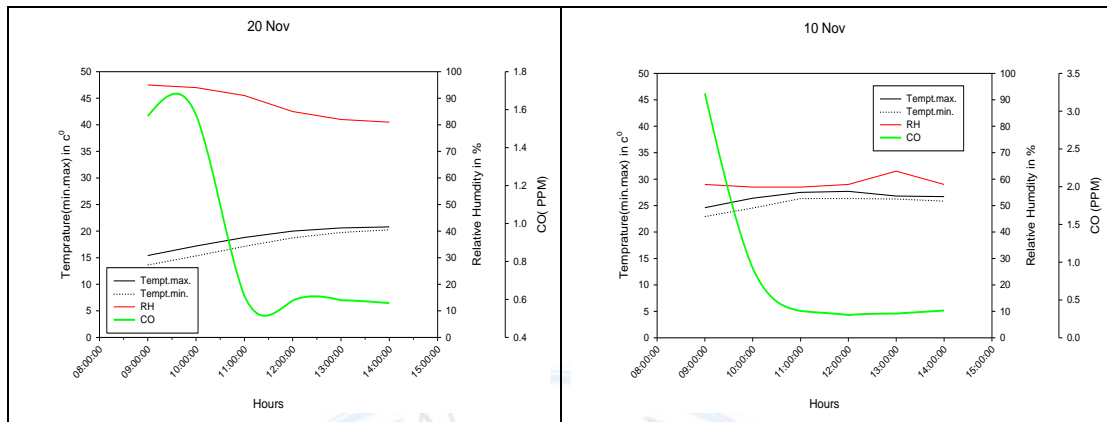
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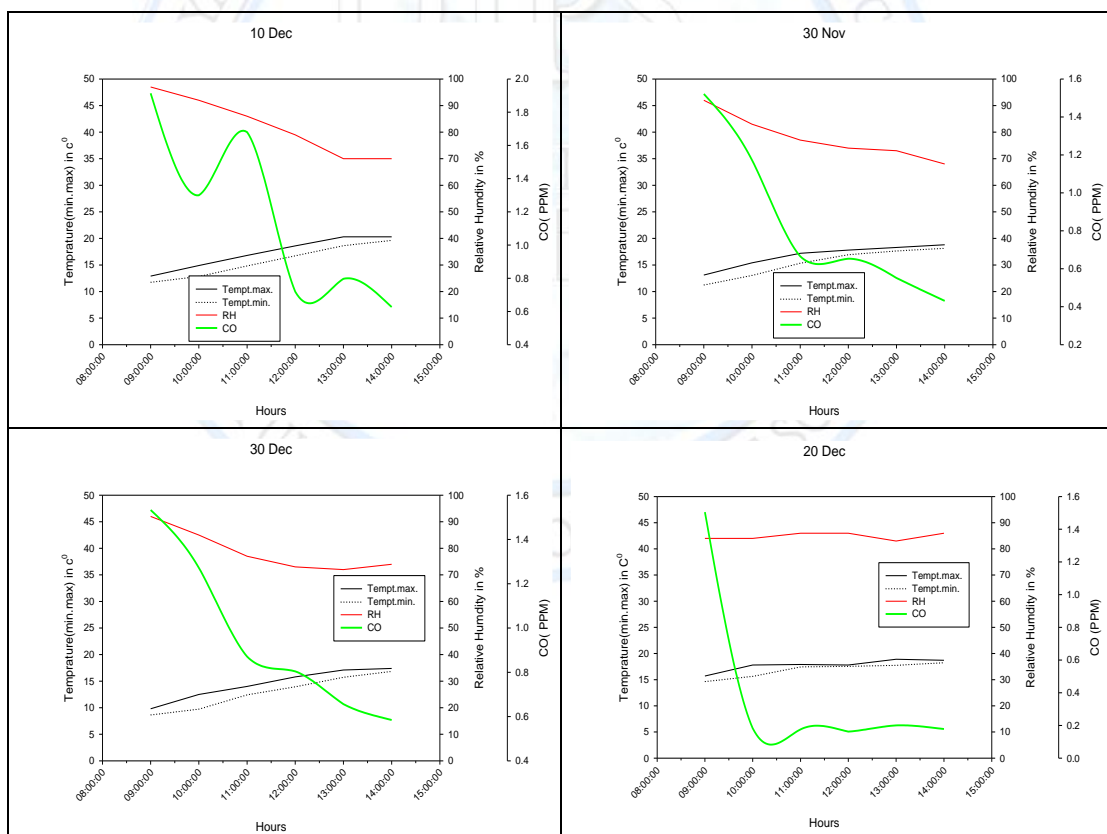


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Figures 5: Courier average temperature (maximum and minimum) and relative humidity with CO concentrations of months (Sep and Oct and Nov) of the day (10, 20, 30).



Figures 6: Courier average temperature (maximum and minimum) and relative humidity with CO concentrations of months (Nov and Dec) of the day (10, 20, 30).

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Table 1: the values of Statistics used to illustrate the strength and type of relationship for days (30, 20, 10 / 1, 30, 20, 10 / 2, 20.10 / 3)

					2012/1/10
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.957	1.2520	3.0669	16.3500	15.5167	Tmax
0.985	1.5108	3.7006	14.5000	13.8333	Tmin
0.987	5.8348	14.2922	69.5000	71.333	RH
0.892	0.7810	1.9130	1.4825	2.1193	CO
					2012/1/20
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.874	0.4193	1.0270	7.3500	6.9333	Tmax
0.949	0.4989	1.2222	6.6500	6.2167	Tmin
0.947	5.0952	12.4807	60.5000	63.1667	RH
0.937	0.2071	0.5072	1.3700	1.5787	CO
					2012/1/30
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.957	1.0333	2.5309	16.1000	15.4833	Tmax
0.978	1.3834	3.3886	14.6500	13.9333	Tmin
0.995	3.3764	8.2704	58.5000	59.0000	RH
0.781	0.1956	0.4792	0.3938	0.6091	CO
					2012/2/10
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.987	0.6591	1.6145	15.7000	15.5667	Tmax
0.996	0.7516	1.8411	14.5000	14.4833	Tmin
0.894	2.4900	6.0992	64.5000	66.0000	RH
0.951	0.1317	0.3226	0.8780	0.9069	CO
					2012/2/20
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.932	0.8476	2.0762	14.2500	13.4333	Tmax
0.947	0.7901	1.9354	12.7500	11.9833	Tmin
0.987	2.2323	5.4681	58.0000	58.5000	RH
0.936	0.0840	0.2057	0.5720	0.6395	CO
					2012/2/30
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.982	1.0135	2.4825	19.0500	18.5667	Tmax
0.995	1.0969	2.6868	17.3000	17.3667	Tmin
0.978	3.5940	8.8034	56.0000	57.5000	RH
0.876	0.0783	0.1918	0.4460	0.5077	CO
					2012/3/10
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.946	0.8028	1.9664	18.8000	18.3333	Tmax
0.970	1.0908	2.6719	17.5500	17.0500	Tmin
0.907	2.5517	6.2503	48.0000	49.6667	RH
0.935	0.0525	0.1286	0.6449	0.6101	CO
					2012/3/20
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.975	1.7298	4.2372	20.6500	19.7167	Tmax
0.989	2.0848	5.1066	18.0000	17.2833	Tmin
0.970	2.7889	6.8313	47.5000	48.3333	RH
0.958	0.1234	0.3023	0.5428	0.6168	CO

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Table 2: the values of Statistics used to illustrate the strength and type of relationship to the days (30/3, 30, 20, 10 / 4, 30, 20, 10 / 5.10 / 6)

					2012/3/30
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.911	0.9128	2.2358	20.4000	19.8500	Tmax
0.782	0.7251	1.7761	18.5500	17.9667	Tmin
0.873	4.0988	10.0399	70.0000	70.0000	RH
0.920	0.0342	0.3875	0.6783	0.7511	CO
					2012/4/10
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.990	1.4086	3.4505	31.1000	30.6833	Tmax
0.997	1.5297	3.7469	29.1000	28.8500	Tmin
0.983	1.8871	4.6224	48.5000	49.1667	RH
0.765	0.0124	0.0303	0.2628	0.2738	CO
					2012/4/20
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.951	0.9500	2.3269	25.5000	24.6667	Tmax
0.983	1.0430	2.5547	23.7500	23.3667	Tmin
0.958	2.3010	5.6362	52.0000	53.8333	RH
0.915	0.1218	0.2984	0.4943	0.6099	CO
					2012/4/30
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.886	0.7859	1.9250	36.6000	35.7267	Tmax
0.901	1.0928	2.6769	35.3500	34.1167	Tmin
0.755	0.6146	1.5055	34.0000	33.6667	RH
0.873	0.1243	0.3044	0.7575	0.7769	CO
					2012/5/10
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.980	0.8683	2.1270	32.9500	32.6000	Tmax
0.987	1.0082	2.4695	31.3500	31.2333	Tmin
0.934	2.1718	5.3198	51.0000	51.5000	RH
0.700	0.1081	0.2649	0.6064	0.6040	CO
					2012/5/20
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.983	1.0164	2.4897	29.3500	29.0333	Tmax
0.997	1.0856	2.6591	27.9000	27.7667	Tmin
0.969	1.6882	4.1352	53.5000	52.5000	RH
0.770	0.0781	0.1913	0.4784	0.4758	CO
					2012/5/30
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.953	0.9958	2.4392	40.9500	40.3167	Tmax
0.970	1.3250	3.2456	39.6000	38.7167	Tmin
0.845	1.0853	2.6583	33.0000	34.3333	RH
0.823	0.1792	0.4390	0.4521	0.5841	CO
					2012/6/10
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.958	0.8701	2.1314	40.0000	39.3333	Tmax
0.977	1.0813	2.6485	38.5500	38.0333	Tmin
0.991	1.7842	4.3704	35.5000	35.5000	RH
0.986	0.1135	0.2779	0.8074	0.8135	CO

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Table 3: the values of Statistics used to illustrate the strength and the kind of relationship the day (30.20 / 6, 30, 20, 10 / 7, 30, 20, 10 / 8)

					2012/6/20
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.988	1.4533	3.5598	39.6500	39.2000	Tmax
0.992	1.4649	3.5883	37.6000	37.2000	Tmin
0.949	1.5864	3.8859	35.5000	36.5000	RH
0.785	0.0920	0.2254	0.7449	0.7315	CO
					2012/6/30
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.983	0.8721	2.1361	40.3000	39.8500	Tmax
0.964	1.1517	2.8212	38.9000	38.3500	Tmin
0.969	1.0138	2.4833	37.5000	37.8333	RH
0.876	0.0745	0.1825	0.8178	0.7811	CO
					2012/7/10
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.952	0.6627	1.6233	42.6500	42.2500	Tmax
0.906	0.8644	2.1173	41.5500	40.7500	Tmin
0.917	1.1180	2.7386	37.5000	37.5000	RH
0.894	0.0944	0.2313	0.8775	0.8435	CO
					2012/7/20
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.921	1.2272	3.0060	46.6000	45.3000	Tmax
0.961	1.6305	3.9940	44.3500	43.3000	Tmin
0.938	2.0235	4.9565	31.0000	32.1667	RH
0.797	0.3944	0.9660	1.5115	1.5453	CO
					2012/7/30
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.967	0.9590	2.3490	45.8000	45.0833	Tmax
0.979	1.1080	2.7140	43.7000	43.4833	Tmin
0.929	1.0567	2.5884	35.0000	35.5000	RH
0.680	0.1334	0.3268	0.7109	0.7038	CO
					2012/8/10
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.961	1.2422	3.0426	42.0000	41.4167	Tmax
0.987	1.4084	3.4499	40.4000	39.7167	Tmin
0.965	1.5147	3.7103	37.0000	37.8333	RH
0.875	0.1168	0.2860	0.8726	0.9175	CO
					2012/8/20
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.905	1.3281	3.2532	43.2500	41.8500	Tmax
0.939	1.6826	4.1215	41.2000	39.7333	Tmin
0.955	1.8514	4.5350	36.0000	36.8333	RH
0.902	0.1224	0.2997	0.8535	0.9545	CO
					2012/8/30
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.938	1.0448	2.5592	40.1500	39.3833	Tmax
0.960	1.3223	3.2389	38.4500	37.7667	Tmin
0.637	0.8944	2.1909	41.0000	40.0000	RH
0.786	0.0881	0.2158	0.6356	0.7207	CO

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Table 4: the values of Statistics used to illustrate the strength and type of relationship for days (30, 20, 10 / 9, 30, 20, 10 / 10, 20.10 / 11)

					2012/9/10
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.914	1.3677	3.3501	41.0000	39.8500	Tmax
0.951	1.8201	4.4584	39.2500	37.7167	Tmin
0.954	1.9903	4.8751	34.5000	35.1667	RH
0.943	0.1880	0.4605	0.6114	0.7358	CO
					2012/9/20
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.875	0.7604	1.8627	36.8000	35.9833	Tmax
0.912	1.1890	2.9123	35.6000	34.4167	Tmin
0.828	0.8433	2.0656	40.5000	40.6667	RH
0.957	0.1228	0.3009	0.6614	0.7036	CO
					2012/9/30
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.954	1.4571	3.5692	36.6000	35.5500	Tmax
0.979	1.8427	4.5137	34.3500	33.4833	Tmin
0.991	1.7401	4.2622	38.5000	38.8333	RH
0.963	0.2127	0.5209	1.0578	1.0507	CO
					2012/10/10
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.957	0.9943	2.4356	33.9000	33.2000	Tmax
0.952	1.3246	3.2447	32.3500	31.4000	Tmin
0.941	2.2023	5.3944	41.5000	43.5000	RH
0.918	0.1083	0.2652	0.4081	0.5034	CO
					2012/10/20
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.985	1.2622	3.0917	30.2000	29.9667	Tmax
0.989	1.2935	3.1684	28.1000	28.5333	Tmin
0.961	1.4530	3.5590	53.0000	53.6667	RH
0.682	0.2107	0.5162	0.6222	0.7716	CO
					2012/10/30
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.924	0.7157	1.7532	27.0500	26.4167	Tmax
0.935	1.0975	2.6882	25.9000	24.9667	Tmin
0.992	2.7049	6.6257	54.0000	53.5000	RH
0.817	0.3062	0.7501	0.5394	0.7881	CO
					2012/11/10
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.675	0.4512	1.1053	26.7500	26.6167	Tmax
0.762	0.5613	1.3750	26.1000	25.4333	Tmin
0.650	0.9220	2.2583	58.0000	58.5000	RH
0.748	0.4737	1.1603	0.3581	0.9159	CO
					2012/11/20
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.961	0.8718	2.1354	19.4000	18.8000	Tmax
0.983	1.0607	2.5982	18.0000	17.5333	Tmin
0.976	2.5033	6.1319	88.0000	88.0000	RH
0.839	0.2049	0.5018	0.6073	0.9213	CO

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Table 5: the values of Statistics used to illustrate the strength and type of relationship to the days (30/11, 30, 20, 10 / 12)

					2012/11/30
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.941	0.8766	2.1472	17.5000	16.7667	Tmax
0.970	1.1221	2.7486	16.2000	15.4500	Tmin
0.960	3.4777	8.5186	75.5000	77.8333	RH
0.928	0.1723	0.4220	0.6593	0.8325	CO
					2012/12/10
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.979	1.2256	3.0020	17.7000	17.3000	Tmax
0.995	1.2889	3.1572	15.8500	15.8000	Tmin
0.985	4.6092	11.2901	82.5000	82.3333	RH
0.879	0.2212	0.5418	1.0485	1.1729	CO
					2012/12/20
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.857	0.4633	1.1349	17.8500	17.8000	Tmax
0.927	0.5743	1.4067	17.5500	16.9333	Tmin
0.582	0.5426	1.3292	85.0000	84.8333	RH
0.651	0.2209	0.5411	0.1804	0.4007	CO
					2012/12/30
R	STD. ERR.	STD. DEV.	MEDIAN	MEAN	
0.975	1.1996	2.9385	14.9000	14.4333	Tmax
0.993	1.3293	3.2562	13.2500	12.9500	Tmin
0.890	3.2600	7.9854	75.5000	78.8333	RH
0.957	0.1518	0.3717	0.8375	0.9534	CO

Conclusions

1. there is a clear effect of temperature on a unilateral concentration of carbon dioxide, with correlation coefficients showed an inverse relationship between temperature with unilateral dioxide concentrations for all school hours morning and all-day study of the most famous in 2012 for the station Andalus.
2. There is a clear effect of relative humidity on the unilateral dioxide concentrations, where the correlation coefficients showed a positive relationship between relative humidity and carbon dioxide concentrations unilaterally to study all hours of the morning and all-day study of the most famous in 2012 for the station Andalus.
3. In the summer, less than the proportion of unilateral dioxide concentrations due to high temperature.
4. In the winter, increasing the proportion of unilateral dioxide concentrations due to low temperature.

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References

1. Dirks, K. N., Nanni, A., Dirks, V.I., Modelling and Predicting Urban Atmospheric Pollutants in the Aosta Valley Region of Italy using a Site –Optimized Model ,Submitted to Atmospheric Science Letters ,April 2005.
2. Dirks, K. N., M. D. Johns, J.D. Hay, A. P. Sturman, 2002: A semi-empirical model for predicting missing carbon monoxide concentrations. Atmospheric Environment, 36, 39-40, 5953- 5959.
3. Meteorology Today (10th Edition) by C. Donald Ahrens Hardcover, Published 2012 by Brooks Cole, 10th Edition.
4. An Introduction to Weather, Climate, and the Environment, By Ahrens, 9th Edition (9th Edition) by Ahrens, C. Donald Hardcover, 624 Pages, Published 2008 by Brooks Cole, 9th Edition.
5. Comrie, A.C. and Diem, J.E., 1999: Climatology and forecast modeling of ambient carbon monoxide in Phoenix, Arizona. Atmospheric Environment 33, 5023-5036.
6. Suleiman Aqili, Bashir tractor, air pollution, the Arab Bureau of Education for the Gulf States, Riyadh, 1990, p. 3.(in Arabic).
7. Mostafa Kamal Tolba, save our planet, challenges and hopes, in the case of the environment) 1972 - 1992 (, the Center for Arab Unity Studies , Beirut, 1992, p. 175.(in Arabic).
8. Hatog Alia Buran, Mohammed Abu Daya, Ecology, 1994, pp. 228-229.(in Arabic).
9. Griffith,D.and C.Amrhein.1991.Statistical Problem Solving Geography.Englewood Cliffs,NJ:Prentice –Hall .