# Managing Data Frames with dplyr - Basic Tools

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# 1 Managing Data Frames with dplyr - Basic Tools

# 1.1 Load the dplyr package

```
This step is important!
```

```
library(dplyr)
##
## Attaching package: 'dplyr'
## The following objects are masked from 'package:stats':
##
##
       filter, lag
## The following objects are masked from 'package:base':
##
##
       intersect, setdiff, setequal, union
1.2 select
chicago <- readRDS("data/chicago.rds")</pre>
dim(chicago)
## [1] 6940
               8
head(select(chicago, 1:5))
```

city	$\operatorname{tmpd}$	dptp	date	pm25tmean2
chic	31.5	31.500	1987-01-01	NA
chic	33.0	29.875	1987-01-02	NA
chic	33.0	27.375	1987-01-03	NA
$\operatorname{chic}$	29.0	28.625	1987-01-04	NA
$\operatorname{chic}$	32.0	28.875	1987 - 01 - 05	NA

city	tmpd	dptp	date	pm25tmean2
chic	40.0	35.125	1987-01-06	NA

```
names(chicago)[1:3]
```

```
## [1] "city" "tmpd" "dptp"
```

head(select(chicago, city:dptp))

city	$\operatorname{tmpd}$	dptp
chic	31.5	31.500
chic	33.0	29.875
chic	33.0	27.375
chic	29.0	28.625
chic	32.0	28.875
chic	40.0	35.125

### In dplyr you can do

head(select(chicago, -(city:dptp)))

date	$\mathrm{pm}25\mathrm{tmean}2$	pm10tmean2	o3tmean2	no2tmean2
1987-01-01	NA	34.00000	4.250000	19.98810
1987-01-02	NA	NA	3.304348	23.19099
1987-01-03	NA	34.16667	3.333333	23.81548
1987-01-04	NA	47.00000	4.375000	30.43452
1987-01-05	NA	NA	4.750000	30.33333
1987-01-06	NA	48.00000	5.833333	25.77233

# Equivalent base R

```
i <- match("city", names(chicago))
j <- match("dptp", names(chicago))
head(chicago[, -(i:j)])</pre>
```

date	pm25tmean2	pm10tmean2	o3tmean2	no2tmean2
1987-01-01	NA	34.00000	4.250000	19.98810
1987-01-02	NA	NA	3.304348	23.19099
1987-01-03	NA	34.16667	3.333333	23.81548
1987-01-04	NA	47.00000	4.375000	30.43452
1987-01-05	NA	NA	4.750000	30.33333
1987-01-06	NA	48.00000	5.833333	25.77233

# 1.3 filter

```
chic.f <- filter(chicago, pm25tmean2 > 30)
head(select(chic.f, 1:3, pm25tmean2), 10)
```

city	$\operatorname{tmpd}$	dptp	pm25tmean2
chic	23	21.9	38.10
chic	28	25.8	33.95
chic	55	51.3	39.40
chic	59	53.7	35.40
chic	57	52.0	33.30
chic	57	56.0	32.10
chic	75	65.8	56.50
chic	61	59.0	33.80
chic	73	60.3	30.30
chic	78	67.1	41.40

```
chic.f %>%
  select(1:3) %>%
  head(.,10)
```

city	$\operatorname{tmpd}$	dptp
chic	23	21.9
chic	28	25.8
chic	55	51.3
chic	59	53.7
chic	57	52.0
chic	57	56.0
chic	75	65.8
chic	61	59.0
chic	73	60.3
chic	78	67.1

```
chic.f %>%
  select(1:3,pm25tmean2) %>%
  head(.,10)
```

city	tmpd	dptp	pm25tmean2
chic	23	21.9	38.10
chic	28	25.8	33.95
chic	55	51.3	39.40
chic	59	53.7	35.40
chic	57	52.0	33.30
chic	57	56.0	32.10
chic	75	65.8	56.50
chic	61	59.0	33.80
chic	73	60.3	30.30
chic	78	67.1	41.40

```
chic.f2 <- chicago %>%
  filter(pm25tmean2 > 30 & tmpd > 80)

chic.f2 %>%
  select(1:3,pm25tmean2,tmpd) %>%
  head(10)
```

city	$\operatorname{tmpd}$	dptp	pm25tmean2
chic	81	71.2	39.6000
chic	81	70.4	31.5000
chic	82	72.2	32.3000
chic	84	72.9	43.7000
chic	85	72.6	38.8375
chic	84	72.6	38.2000
chic	82	67.4	33.0000
chic	82	63.5	42.5000
chic	81	70.4	33.1000
chic	82	66.2	38.8500

### 1.4 arrange

Reordering rows of a data frame (while preserving corresponding order of other columns) is normally a pain to do in  ${\bf R}$ 

```
library(dplyr)

chicago <- readRDS("data/chicago.rds")
dim(chicago)

## [1] 6940 8
chicago <- arrange(chicago, date)
head(select(chicago, date, pm25tmean2), 3)</pre>
```

date	pm25tmean2
1987-01-01	NA
1987-01-02	NA
1987-01-03	NA

```
chicago %>%
  select(date, pm25tmean2) %>%
  head(.,3)
```

date	pm25tmean2
1987-01-01	NA
1987-01-02	NA
1987-01-03	NA

```
tail(select(chicago, date, pm25tmean2), 3)
```

	date	pm25tmean2
6938	2005-12-29	7.45000
6939	2005 - 12 - 30	15.05714
6940	2005 - 12 - 31	15.00000

```
chicago %>%
select(date, pm25tmean2) %>%
tail(.,3)
```

	date	pm25tmean2
6938	2005-12-29	7.45000
6939	2005 - 12 - 30	15.05714
6940	2005 - 12 - 31	15.00000

Columns can be arranged in descending order too.

```
chicago <- arrange(chicago, desc(date))
head(select(chicago, date, pm25tmean2), 3)</pre>
```

date	pm25tmean2
2005-12-31	15.00000
2005 - 12 - 30	15.05714
2005-12-29	7.45000

```
chicago %>%
  arrange(desc(date)) %>%
  select(date, pm25tmean2) %>%
  head()
```

date	pm25tmean2
2005-12-31	15.00000
2005 - 12 - 30	15.05714
2005 - 12 - 29	7.45000
2005 - 12 - 28	17.75000
2005 - 12 - 27	23.56000
2005-12-26	8.40000

```
tail(select(chicago, date, pm25tmean2), 3)
```

	date	pm25tmean2
6938	1987-01-03	NA
6939	1987-01-02	NA
6940	1987-01-01	NA

### 1.5 rename

Renaming a variable in a data frame in R is surprising hard to do!

```
head(chicago[,1:5],3)
```

city	$\operatorname{tmpd}$	dptp	date	pm25tmean2
chic	35	30.1	2005-12-31	15.00000

city	tmpd	dptp	date	pm25tmean2
chic	36		2005-12-30	15.05714
chic	35	29.4	2005-12-29	7.45000

```
chicago <- rename(chicago, dewpoint = dptp, pm25 = pm25tmean2)
head(chicago[,1:5],3)</pre>
```

city	tmpd	dewpoint	date	pm25
chic	35	30.1	2005-12-31	15.00000
chic	36	31.0	2005 - 12 - 30	15.05714
chic	35	29.4	2005 - 12 - 29	7.45000

```
chicago <- chicago %>%
  rename(dewptp = dewpoint)
```

head(chicago[,1:5])

city	$\operatorname{tmpd}$	dewptp	date	pm25
chic	35	30.1	2005-12-31	15.00000
chic	36	31.0	2005 - 12 - 30	15.05714
chic	35	29.4	2005 - 12 - 29	7.45000
chic	37	34.5	2005-12-28	17.75000
chic	40	33.6	2005 - 12 - 27	23.56000
chic	35	29.6	2005-12-26	8.40000

#### 1.6 mutate

```
chicago <- chicago %>%
  mutate(pm25detrend = pm25 - mean(pm25, na.rm = TRUE))

chicago %>%
  select(pm25,pm25detrend) %>%
  head(.)
```

pm25	pm25detrend
15.00000	-1.230957
15.05714	-1.173815
7.45000	-8.780957
17.75000	1.519043
23.56000	7.329042
8.40000	-7.830958

# 1.7 group\_by

Generating summary statistics by stratum

```
chicago <- chicago %>%
  mutate(tempcat = factor(1 * (tmpd >80), labels = c("cold", "hot")))
```

```
hotcold <- chicago %>%
group_by(tempcat)
```

```
summarise(hotcold, pm25 = mean(pm25, na.rm = TRUE), o3 = max(o3tmean2), no2 = median(no2tmean2))
```

tempcat	pm25	о3	no2
cold	15.97807 26.48118	66.587500 62.969656	24.54924 24.93870
NA	47.73750	9.416667	37.44444

Generating summary statistics by stratum

```
chicago <- mutate(chicago, year = as.POSIXlt(date)$year + 1900)
years <- group_by(chicago, year)</pre>
```

### years

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	35.0	30.10000	2005-12- 31	15.000000	23.500000	2.5312500	13.250000	1.2309575	cold	2005
chic	36.0	31.00000	2005-12- 30	15.057143	19.200000	3.0344203	22.805556	1.1738147	cold	2005
chic	35.0	29.40000	2005-12- 29	7.450000	23.500000	6.7948370	19.972222	8.7809575	cold	2005
chic	37.0	34.50000	2005-12- 28	17.750000	27.500000	3.2604167	19.285628	1.5190425	cold	2005
chic	40.0	33.60000	2005-12- 27	23.560000	27.000000	4.4687500	23.500000	7.3290425	cold	2005
chic	35.0	29.60000	2005-12- 26	8.400000	8.500000	14.0416667	16.819444	7.8309575	cold	2005
chic	35.0	32.10000	2005-12- 25	6.700000	8.000000	14.3541667	13.791667	9.5309575	cold	2005
chic	37.0	35.20000	2005-12- 24	30.771429	25.200000	1.7708333	31.986111	14.5404710	cold	2005
chic	41.0	32.60000	2005-12- 23	32.900000	34.500000	6.9062500	29.083333	16.6690425	cold	2005
chic	22.0	23.30000	2005-12- 22	36.650000	42.500000	5.3854167	33.730263	20.4190425	cold	2005
chic	12.0	7.70000	2005-12- 21	37.928571	59.500000	3.6639493	34.861111	21.6976139	cold	2005
chic	13.0	7.70000	2005-12- 20	25.750000	32.000000	3.8491848	32.897727	9.5190425	cold	2005
chic	5.0	0.30000	2005-12- 19	21.150000	21.000000	8.0588768	31.791667	4.9190425	cold	2005
chic	10.0	1.90000	2005-12- 18	12.200000	17.500000	13.5520833	19.111111	4.0309575	cold	2005
chic	16.0	7.30000	2005-12- 17	13.800000	20.000000	8.5937500	20.736111	2.4309575	cold	2005
chic	21.0	14.70000	2005-12- 16	11.000000	22.000000	11.1666667	16.875000	5.2309575	cold	2005
chic	30.0	27.90000	2005-12- 15	14.400000	16.500000	4.8958333	25.430556	1.8309575	cold	2005

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	32.0	27.40000	2005-12- 14	26.900000	16.000000	3.8020833	30.633838	10.6690425	cold	2005
chic	26.0	19.80000	2005-12- 13	26.500000	21.000000	6.6286232	29.569444	10.2690425	cold	2005
chic	19.0	11.60000	2005-12- 12	19.225000	28.750000	5.0312500	39.746212	2.9940425	cold	2005
chic	20.0	17.20000	2005-12- 11	10.600000	14.000000	11.3333333	22.55556	- 5.6309575	cold	2005
chic	22.0	16.20000	2005-12- 10	18.200000	30.000000	9.1354167	28.708333		cold	2005
chic	20.0	10.90000	2005-12- 09	25.450000	22.000000	5.9583333	31.416667	9.2190425	cold	2005
chic	16.0	15.60000	2005-12- 08	24.300000	31.000000	5.9952652	34.222222	8.0690425	cold	2005
chic	8.0	1.80000	2005-12- 07	37.800000	39.000000	3.9162138	34.309524	21.5690425	cold	2005
chic	11.0	3.20000	2005-12- 06	24.616667	33.000000	4.7015399	29.083333	8.3857091	cold	2005
chic	11.0	2.80000	2005-12- 05	NA	30.000000	6.4479167	28.388889	NA	cold	2005
chic	20.0	15.80000	2005-12- 04	15.300000	15.500000	13.1770833	21.708333	0.9309575	cold	2005
chic	25.0	19.00000	2005-12- 03	13.342857	20.000000	10.3333333	25.194444	2.8881004	cold	2005
chic	19.0	8.50000	2005-12- 02	NA	19.500000	9.1562500	23.291667	NA	cold	2005
chic	25.0	18.00000	2005-12- 01	18.400000	18.500000	7.0312500	24.44444	2.1690425	cold	2005
chic	24.0	17.20000	2005-11- 30	12.614286	17.800000	9.1902174	21.888889	3.6166718	cold	2005
chic	33.0	22.90000	2005-11- 29	7.900000	14.000000	11.5910326	13.094203	8.3309575	cold	2005
chic	50.0	44.70000	2005-11- 28	12.400000	18.500000	15.2364130	16.075092	3.8309575	cold	2005
chic	48.0	46.00000	2005-11- 27	19.166667	16.000000	11.6666667	20.958333		cold	2005
chic	32.0	20.40000	2005-11- 26	17.900000	21.000000	6.6805556	27.104167	1.6690425	cold	2005
chic	20.0	5.30000	2005-11- 25	5.500000	16.000000	11.5416667	22.687500	10.7309575	cold	2005
chic	29.0	0.60000	2005-11- 24	3.275000	12.500000	26.6944444	8.833333	12.9559575	cold	2005
chic	37.0	29.60000	2005-11-	NA	13.500000	6.8121981	21.854167	NA	cold	2005
chic	32.0	19.30000	23 2005-11-	NA	19.000000	12.9873188	26.166667	NA	cold	2005
chic	42.0	31.50000	22 2005-11-	12.850000	21.000000	11.7083333	14.860870		cold	2005
chic	39.0	33.00000	21 2005-11-	19.100000	17.000000	9.8194444	19.041667	3.3809575 $2.8690425$	cold	2005
chic	43.0	28.10000	20 2005-11- 19	15.800000	25.500000	11.3888889	26.729167	0.4309575	cold	2005

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n <b>2</b> 3tmean2	no2tmean	2pm25detren	dempcat	year
chic	30.0	21.10000	2005-11- 18	11.714286	22.400000	4.5277778	24.958333	4.5166718	cold	2005
chic	22.0	7.80000	2005-11- 17	8.800000	20.500000	12.8229167	20.638889	- 7.4309575	cold	2005
chic	29.0	19.20000	2005-11- 16	4.700000	27.500000	16.9687500	10.347222	- 11.5309575	cold	2005
chic	46.0	42.50000	2005-11- 15	9.300000	10.500000	8.4510870	16.597222	6.9309575	cold	2005
chic	39.0	33.60000	2005-11- 14	8.300000	17.000000	10.4687500	24.719807	7.9309575	cold	2005
chic	49.0	35.70000	2005-11- 13	5.700000	17.500000	24.9270833	9.763889	10.5309575	cold	2005
chic	54.0	38.70000	2005-11- 12	13.842857	27.500000	20.5520833	22.527778	2.3881004	cold	2005
chic	47.0	30.50000	2005-11- 11	14.800000	41.500000	8.1979167	33.944444		cold	2005
chic	39.0	25.60000	2005-11- 10	NA	24.000000	9.5625000	23.805556	NA	cold	2005
chic	54.0	37.80000	2005-11- 09	8.437500	25.000000	17.8958333	11.916667	- 7.7934575	cold	2005
chic	55.0	49.80000	2005-11- 08	40.000000	36.500000	4.1005435	27.22222	23.7690425	cold	2005
chic	49.0	43.20000	2005-11- 07	17.400000	31.000000	7.3707428	25.064182	1.1690425	cold	2005
chic	51.0	42.00000	2005-11-	5.987500	10.400000	15.1250000	13.986111		cold	2005
chic	54.0	50.60000	06 2005-11-	27.200000	32.000000	11.4722222	18.208333	10.2434575 10.9690425	cold	2005
chic	60.0	38.00000	05 2005-11-	14.800000	47.500000	18.9062500	24.791667		cold	2005
chic	62.0	40.70000	04 2005-11-	9.675000	34.500000	24.8771739	22.569444	1.4309575	cold	2005
chic	52.0	35.40000	03 2005-11-	8.500000	28.500000	11.8916667	23.010266	6.5559575	cold	2005
chic	48.0	37.50000	02 2005-11-	16.000000	27.000000	6.9360507	22.728535	7.7309575	cold	2005
chic	54.0	49.40000	01 2005-10-	31.925000	39.200000	11.4257952	21.577899	$0.2309575 \\ 15.6940425$	cold	2005
chic	54.0	37.00000	31 2005-10-	20.700000	25.000000	26.1607143	18.041667	4.4690425	cold	2005
chic	45.0	34.30000	30 2005-10-	22.600000	37.000000	11.4910714	27.875000	6.3690425	cold	2005
chic	44.0	35.10000	29 2005-10-	16.925000	25.500000	10.2067805	33.180556	0.6940425	cold	2005
chic	44.0	35.90000	28 2005-10-	10.800000	19.000000	10.0357143	27.666667	_	cold	2005
chic	44.0	33.50000	27 2005-10-	7.600000	14.000000	10.0982143	25.128968	5.4309575	cold	2005
chic	45.0	37.70000	26 2005-10-	4.487500	8.250000	14.6273292	18.137077	8.6309575	cold	2005
chic	46.0	37.90000	25 2005-10-	5.000000	7.000000	11.7351190	15.404589	11.7434575	cold	2005
			24					11.2309575		

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	40.0	36.70000	2005-10- 23	8.500000	10.000000	11.6428571	18.083333	- 7.7309575	cold	2005
chic	46.0	39.90000	2005-10- 22	13.337500	18.000000	8.2708333	23.500000	2.8934575	cold	2005
chic	53.0	41.30000	2005-10- 21	9.600000	12.500000	22.2452307	19.839286	6.6309575	cold	2005
chic	51.0	40.30000	2005-10- 20	6.800000	17.000000	18.7500000	17.146135	9.4309575	cold	2005
chic	56.0	41.30000	2005-10- 19	5.612500	16.400000	23.3097591	17.518759	10.6184575	cold	2005
chic	58.0	42.10000	2005-10-	11.200000	36.000000	12.8161232	31.493357	-	cold	2005
chic	58.0	44.80000	18 2005-10-	11.650000	29.500000	14.6687371	28.013889	5.0309575	cold	2005
chic	52.0	39.50000	17 2005-10-	7.900000	12.500000	16.9464286	20.055556	4.5809575	cold	2005
chic	58.0	34.90000	16 2005-10-	5.400000	20.500000	23.7529762	23.22222	8.3309575	cold	2005
chic	62.0	48.20000	15 2005-10-	16.100000	38.500000	15.1458333	28.152778	10.8309575	cold	2005
chic	61.0	53.20000	14 2005-10-	29.800000	48.200000	8.9943064	29.387077	$0.1309575 \\ 13.5690425$	cold	2005
chic	59.0	54.40000	13 2005-10-	18.700000	24.500000	3.0437371	20.986111	2.4690425	cold	2005
chic	58.0	52.00000	12 2005-10-	7.600000	13.500000	11.9583333	15.555556	-	cold	2005
chic	54.0	47.20000	11 2005-10-	7.871429	12.500000	18.5476190	17.375000	8.6309575	cold	2005
chic	53.0	43.10000	10 2005-10-	4.400000	7.500000	27.7738095	10.736111	8.3595290	cold	2005
chic	48.0	38.90000	09 2005-10-	4.500000	6.500000	26.0000000	11.486111	11.8309575	cold	2005
chic	49.0	37.60000	08 2005-10-	4.271429	10.750000	15.1458333	14.42222	11.7309575	cold	2005
chic	58.0	38.80000	07 2005-10-	6.300000	16.500000	13.3207816	11.680556	11.9595290	cold	2005
chic	77.0	63.20000	06 2005-10-	NA		30.5253623		9.9309575 NA	cold	2005
chic	79.0	66.30000	05 2005-10-			27.5251035			cold	2005
chic	78.0	67.30000	04 2005-10-			25.2397774			cold	2005
chic	69.0	62.00000	03 2005-10-			29.4523810			cold	2005
chic	65.0		02 2005-10-			25.9523810			cold	
		48.40000	01					0.1090420		2005
chic	58.0	38.00000	2005-09-	7.900000		15.5639234		8.3309575	cold	2005
chic	53.0	34.90000	2005-09- 29	5.300000		12.3236284		10.9309575	cold	2005
chic	62.0	53.20000	2005-09- 28	9.916667	28.500000	18.4133023	24.750000	6.3142909	cold	2005

city	tmpd	dewptp	date	pm25	pm10tmean	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	61.0	51.20000	2005-09- 27	14.900000	32.500000	13.3602955	30.055556	1.3309575	cold	2005
chic	60.0	58.60000	2005-09- 26	7.600000	14.500000	12.5278209	19.916667	8.6309575	cold	2005
chic	71.0	67.40000	2005-09- 25	21.428571	26.000000	13.5267857	18.347222		cold	2005
chic	67.0	59.20000	2005-09- 24	18.400000	25.500000	14.2261905	22.736111	2.1690425	cold	2005
chic	65.0	52.90000	2005-09- 23	4.800000	9.500000	25.5205628	11.125000	- 11.4309575	cold	2005
chic	75.0	64.50000	2005-09- 22	22.542857	42.500000	34.2026915	18.883929		cold	2005
chic	70.0	54.70000	2005-09-	18.200000	49.000000	29.0465839	33.177083	1.9690425	cold	2005
chic	69.0	55.90000	21 2005-09- 20	13.200000	32.500000	20.1879529	35.925272		cold	2005
chic	75.0	64.70000	2005-09-	19.685714	29.600000	25.5674819	19.968750	3.0309575 $3.4547567$	cold	2005
chic	68.0	55.80000	19 2005-09-	15.000000	22.000000	25.2031250	24.380208	1 0200575	cold	2005
chic	65.0	54.40000	18 2005-09-	9.700000	21.500000	20.1093750	22.572917	1.2309575	cold	2005
chic	62.0	55.40000	17 2005-09-	7.428571	12.000000	23.9739583	16.250000	6.5309575	cold	2005
chic	62.0	52.90000	16 2005-09-	6.600000	12.000000	23.1953125	14.093750	8.8023861	cold	2005
chic	67.0	57.90000	15 2005-09-	8.500000	18.000000	23.8689236	14.678504	9.6309575	cold	2005
chic	83.0	59.80000	14 2005-09-	28.675000	59.000000	39.3420105	25.748106	7.7309575 12.4440425	hot	2005
chic	79.0	57.70000	13 2005-09-	44.300000	78.500000	44.5423460	28.048363	28.0690425	cold	2005
chic	80.0	61.80000	12 2005-09-	56.500000	65.000000	51.7395833	18.875000	40.2690425	cold	2005
chic	80.0	62.90000	11 2005-09-	37.887500	55.000000	47.5781250	19.385417	21.6565425	cold	2005
chic	74.0	62.80000	10 2005-09-	20.100000	39.000000	36.5815217	21.598958	3.8690425	cold	2005
chic	72.0	64.70000	09 2005-09-	17.100000	23.000000	41.0919178	16.609375	0.8690425	cold	2005
chic	78.0	60.30000	08 2005-09-	32.371429	53.800000	39.4282156	34.723214	16.1404710	cold	2005
chic	74.0	56.80000	07 2005-09-	28.900000	50.000000	41.5176630	27.641304	12.6690425	cold	2005
chic	73.0	57.60000	06 2005-09-	17.400000	25.000000	39.2343750	17.921875	1.1690425	cold	2005
chic	70.0	55.80000	05 2005-09-	12.285714	24.000000	25.5625000	18.166667	-	cold	2005
chic	69.0	54.60000	04 2005-09-	10.250000	17.500000	21.4479167	19.250000	3.9452433	cold	2005
chic	72.0	46.10000	03 2005-09-	8.600000	37.500000	22.6129982	26.791667	5.9809575	cold	2005
			02					7.6309575		

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	76.0	51.40000	2005-09- 01	9.800000	33.000000	21.3223505	28.192613	- 6.4309575	cold	2005
chic	71.0	58.90000	2005-08- 31	8.100000	18.500000	17.5076993	19.365057	8.1309575	cold	2005
chic	71.0	61.30000	2005-08-	15.900000	22.000000	32.3285779	19.275815	-	cold	2005
chic	74.0	59.00000	30 2005-08-	13.357143	26.500000	33.4200634	23.711277	0.3309575	cold	2005
chic	75.0	57.60000	29 2005-08-	12.000000	19.000000	35.0052083	16.755208	2.8738147	cold	2005
chic	76.0	59.60000	28 2005-08-	18.600000	30.000000	31.6562500	19.656250	$4.2309575 \\ 2.3690425$	cold	2005
chic	75.0	64.30000	27 2005-08-	31.300000	49.400000	37.4564394	30.952178	15.0690425	cold	2005
chic	72.0	58.50000	26 2005-08-	18.500000	46.500000	35.5610119	22.131629	2.2690425	cold	2005
chic	67.0	56.00000	25 2005-08-	NA	28.500000	28.0146060	15.166667	NA	cold	2005
chic	66.0	52.70000	24 2005-08-	5.085714	9.000000	27.1679121	12.967618	-	cold	2005
chic	67.0	52.70000	23 2005-08-	4.000000	8.000000	22.7417346	10.161458	11.1452433	cold	2005
chic	74.0	54.40000	22 2005-08-	7.900000	12.000000	24.3802083	13.834239	12.2309575	cold	2005
chic	78.0	67.70000	21 2005-08-	9.885714	18.600000	27.2734375	15.791667	8.3309575	cold	2005
chic	79.0	66.90000	20 2005-08-	14.500000	28.000000	35.8140625	17.685974	6.3452433	cold	2005
chic	77.0	68.90000	19 2005-08-	NA	41.000000	26.4531250		1.7309575 NA	cold	2005
chic	71.0	60.80000	18 2005-08-			39.4198370			cold	2005
			17							
chic	74.0	62.00000	2005-08- 16			34.1218297			cold	2005
chic	71.0	62.40000	2005-08- 15			27.3875679			cold	2005
chic	69.0	57.50000	2005-08- 14	7.600000	15.000000	22.7447917	15.861111	- 8.6309575	cold	2005
chic	72.0	61.00000	2005-08- 13	10.100000	14.000000	27.4088542	15.125000	6.1309575	cold	2005
chic	79.0	68.90000	2005-08- 12	NA	27.000000	30.7906476	23.987500	NA	cold	2005
chic	72.0	67.00000	2005-08- 11	14.785714	24.000000	21.5434783	31.854167	- 1.4452433	cold	2005
chic	79.0	65.90000	2005-08- 10	16.000000	33.500000	42.8753059	19.588636	0.2309575	cold	2005
chic	80.0	63.50000	2005-08- 09	33.000000	65.500000	43.2863451	28.884511	16.7690425	cold	2005
chic	78.0	57.80000	2005-08-	31.662500	55.400000	39.6128850	38.869730	15.4315425	cold	2005
chic	74.0	57.80000	08 2005-08-	25.900000	40.000000	44.9947917	28.375000	9.6690425	cold	2005
			07							

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	72.0	55.90000	2005-08- 06	11.000000	20.500000	33.3958333	19.552083	5.2309575	cold	2005
chic	73.0	56.50000	2005-08- 05	7.428571	27.500000	28.0364583	17.817708	- 8.8023861	cold	2005
chic	82.0	66.10000	2005-08- 04	21.600000	45.500000	37.2974411	18.677083		hot	2005
chic	84.0	69.00000	2005-08- 03	37.900000	64.000000	39.3211051	23.619318	21.6690425	hot	2005
chic	79.0	66.10000	2005-08- 02	44.487500	60.000000	40.6713089	29.280344	28.2565425	cold	2005
chic	81.0	65.00000	2005-08- 01	28.700000	56.500000	41.9490489	26.831101	12.4690425	hot	2005
chic	79.0	64.60000	2005-07- 31	20.800000	29.500000	40.8489583	20.166667	4.5690425	cold	2005
chic	73.0	59.70000	2005-07- 30	12.837500	22.000000	32.4348958	18.911458	3.3934575	cold	2005
chic	72.0	58.20000	2005-07- 29	NA	32.500000	26.4765625	22.359375		cold	2005
chic	66.0	52.10000	2005-07-	14.800000	29.000000	23.0859375	25.852808		cold	2005
chic	65.0	53.30000	28 2005-07-	7.675000	15.400000	21.3832654	14.501637	1.4309575	cold	2005
chic	75.0	66.80000	27 2005-07-	NA	23.000000	29.2653061	15.864583	8.5559575 NA	cold	2005
chic	81.0	71.40000	26 2005-07-	NA	32.500000	30.8409194	27.977679	NA	hot	2005
chic	90.0	70.90000	25 2005-07-	22.050000	44.000000	47.6041667	11.963542	5.8190425	hot	2005
chic	74.0	68.30000	24 2005-07-	NA	26.000000	28.3958333	19.750000	NA	cold	2005
chic	75.0	65.30000	23 2005-07- 22	10.000000	14.500000	36.3177083	16.033482		cold	2005
chic	79.0	68.90000	2005-07-	12.375000	23.800000	35.3736413	22.459541	6.2309575	cold	2005
chic	78.0	67.80000	21 2005-07-	15.600000	37.500000	26.1204298	27.680871	3.8559575	cold	2005
chic	79.0	57.60000	20 2005-07-	10.900000	35.000000	36.9130111	19.398809	0.6309575	cold	2005
chic	83.0	64.60000	19 2005-07-	12.837500	37.500000	36.4478034	13.018957	5.3309575	hot	2005
chic	84.0	67.00000	18 2005-07-	32.700000	42.500000	44.6432292	16.270833	3.3934575 16.4690425	hot	2005
chic	81.0	63.80000	17 2005-07-	19.600000	29.000000	38.0885417	16.593750	3.3690425	hot	2005
chic	79.0	65.60000	16 2005-07-	15.757143	28.400000	27.3966259	16.098958	_	cold	2005
chic	79.0	67.00000	15 2005-07-	19.600000	31.500000	34.5258152	12.506114	0.4738147 $3.3690425$	cold	2005
chic	80.0	66.00000	14 2005-07-	19.100000	25.000000	39.3333333	10.162202	2.8690425	cold	2005
chic	79.0	65.50000	13 2005-07-	26.187500	35.000000	58.8412591	14.816220	9.9565425	cold	2005
			12							

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	76.0	58.80000	2005-07- 11	19.100000	38.000000	57.6451540	19.708333	2.8690425	cold	2005
chic	76.0	53.20000	2005-07- 10	15.400000	28.000000	57.9062500	23.958333	0.8309575	cold	2005
chic	72.0	52.50000	2005-07- 09	16.350000	37.500000	42.1927083	21.729167		cold	2005
chic	73.0	54.10000	2005-07- 08	9.300000	18.000000	37.2552083	18.062274	6.9309575	cold	2005
chic	73.0	58.00000	2005-07- 07	9.900000	21.500000	36.0953471	11.253623	6.3309575	cold	2005
chic	72.0	61.90000	2005-07- 06	12.685714	16.000000	33.8668067	10.326389	3.5452433	cold	2005
chic	75.0	61.60000	2005-07- 05	NA	22.500000	30.2861187	13.370652	NA	cold	2005
chic	77.0	64.40000	2005-07- 04	23.200000	32.500000	36.6041667	12.968750	6.9690425	cold	2005
chic	70.0	55.80000	2005-07- 03	16.112500	26.800000	38.4010417	15.659873	0.1184575	cold	2005
chic	65.0	50.20000	2005-07- 02	4.200000	13.000000	30.7916667	9.277778	12.0309575	cold	2005
chic	69.0	51.60000	2005-07- 01	6.300000	16.000000	30.0364583	9.322917	9.9309575	cold	2005
chic	82.0	63.40000	2005-06- 30	15.885714	38.000000	45.1177536	19.437500	0.3452433	hot	2005
chic	82.0	67.50000	2005-06- 29	22.200000	47.000000	43.0280797	25.859400		hot	2005
chic	85.0	64.10000	2005-06- 28	31.200000	57.500000	50.2914402	26.553977	14.9690425	hot	2005
chic	82.0	64.60000	2005-06- 27	51.537500	79.000000	55.2358572	28.549366	35.3065425	hot	2005
chic	82.0	66.10000	2005-06- 26	23.000000	42.500000	55.2202381	17.197917	6.7690425	hot	2005
chic	80.0	66.00000	2005-06- 25	28.100000	48.000000	46.3988095	22.791667	11.8690425	cold	2005
chic	86.0	63.40000	2005-06- 24	31.857143	74.000000	50.9664855	23.750000	15.6261853	hot	2005
chic	77.0	60.80000	2005-06- 23	23.300000	62.500000	44.3263134	26.838542	7.0690425	cold	2005
chic	72.0	44.60000	2005-06- 22	11.300000	19.000000	31.8234107	20.155838	4.9309575	cold	2005
chic	75.0	58.00000	2005-06- 21	16.471429	41.000000	40.0652174	25.500000		cold	2005
chic	69.0	54.50000	2005-06-	16.600000	42.500000	34.6831975	33.992789	0.3690425	cold	2005
chic	65.0	53.50000	20 2005-06-	7.000000	19.000000	26.5885417	14.027778	0.2200575	cold	2005
chic	62.0	50.70000	19 2005-06-	4.200000	8.500000	19.0364583	13.859375	9.2309575	cold	2005
chic	61.0	49.00000	18 2005-06-	5.600000	9.500000	20.9997736	13.807292	12.0309575	cold	2005
chic	66.0	46.80000	17 2005-06- 16	6.800000	19.500000	26.0099432	19.927083	10.6309575 - 9.4309575	cold	2005

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	64.0	57.30000	2005-06- 15	6.187500	17.400000	18.7296196	14.727273	- 10.0434575	cold	2005
chic	74.0	60.10000	2005-06- 14	6.800000	30.000000	35.2216115	14.392437	9.4309575	cold	2005
chic	78.0	64.20000	2005-06- 13	19.400000	31.000000	37.5447958	19.735863		cold	2005
chic	75.0	66.50000	2005-06- 12	13.185714	18.000000	26.9322917	13.510417	3.0452433	cold	2005
chic	80.0	67.50000	2005-06- 11	14.500000	27.000000	33.7109375	14.291667	1.7309575	cold	2005
chic	78.0	68.10000	2005-06-	20.100000	38.000000	32.7043705	25.255208		cold	2005
chic	77.0	63.40000	10 2005-06-	13.771429	29.600000	25.1966712	33.192708	-	cold	2005
chic	78.0	65.10000	09 2005-06-	19.200000	37.000000	33.4615036	30.131794	2.4595290 2.9690425	cold	2005
chic	77.0	62.40000	08 2005-06-	16.800000	39.500000	39.2944973	27.984828	0.5690425	cold	2005
chic	78.0	57.60000	07 2005-06-	7.228571	33.000000	35.6354167	19.890399		cold	2005
chic	78.0	62.40000	06 2005-06-	16.000000	23.500000	44.1796875	11.968750	9.0023861	cold	2005
chic	72.0	63.50000	05 2005-06-	21.400000	35.500000	36.0989583	21.994792	$0.2309575 \\ 5.1690425$	cold	2005
chic	67.0	60.90000	04 2005-06-	27.112500	39.000000	29.1041667	19.209177	10.8815425	cold	2005
chic	66.0	54.40000	03 2005-06-	19.000000	35.500000	34.7954031	23.166667	2.7690425	cold	2005
chic	65.0	49.80000	02 2005-06-	15.400000	27.500000	37.2199852	21.838542	-	cold	2005
chic	59.0	49.00000	01 2005-05-	8.328571	14.000000	22.8907867	20.819067	0.8309575	cold	2005
chic	60.0	45.90000	31 2005-05-	NA	19.500000	32.2500000	21.713542	7.9023861 NA	cold	2005
chic	57.0	44.40000	30 2005-05-	NA	17.500000	23.1309524	24.260417	NA	cold	2005
chic	58.0	44.80000	29 2005-05-	7.214286	16.400000	21.1845238	21.645833		cold	2005
chic	59.0	44.00000	28 2005-05-	8.700000	37.500000	22.6885352	22.392663		cold	2005
chic	66.0	43.90000	27 2005-05-	10.800000	39.500000	22.0000000	29.894928	7.5309575	cold	2005
chic	58.0	44.70000	26 2005-05-	7.050000	19.000000	25.4633799	20.021307	5.4309575	cold	2005
chic	57.0	45.50000	25 2005-05-	8.700000	13.000000	27.0428313	16.393116		cold	2005
chic	61.0	48.30000	24 2005-05-	9.800000	18.500000	32.4136905	13.956975	7.5309575	cold	2005
chic	69.0	47.80000	23 2005-05-	11.050000	28.000000	34.1250000	22.437500		cold	2005
chic	58.0	44.00000	22 2005-05-	13.800000	42.000000	32.7410714	31.776042	5.1809575	cold	2005
			21					2.4309575		

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	58.0	44.90000	2005-05- 20	13.950000	24.500000	37.5744048	17.197917	- 2.2809575	cold	2005
chic	62.0	56.70000	2005-05- 19	31.528571	43.500000	21.0605590	27.229167	15.2976139	cold	2005
chic	66.0	46.30000	2005-05- 18	16.800000	48.000000	42.0059524	22.502841	0.5690425	cold	2005
chic	60.0	42.80000	2005-05- 17	13.350000	37.000000	32.8034420	24.450893	2.8809575	cold	2005
chic	52.0	35.10000	2005-05- 16	4.828571	20.750000	24.1470567	17.042120		cold	2005
chic	48.0	37.50000	2005-05-	2.400000	10.000000	19.6934524	11.750000	-	cold	2005
chic	56.0	43.60000	15 2005-05-	6.900000	14.000000	28.8601190	11.166667	13.8309575	cold	2005
chic	61.0	49.80000	14 2005-05-	17.000000	36.000000	18.1696429	25.385417	$9.3309575 \\ 0.7690425$	cold	2005
chic	49.0	36.70000	13 2005-05-	5.100000	17.000000	24.4017857	12.135417	-	cold	2005
chic	54.0	44.40000	12 2005-05-	NA	17.000000	26.6130952	11.953125	11.1309575 NA	cold	2005
chic	71.0	51.70000	11 2005-05-	7.662500	33.250000	31.1218944	22.877264		cold	2005
chic	70.0	56.10000	10 2005-05-	16.400000	62.500000	31.9255952	23.296875	8.5684575 0.1690425	cold	2005
chic	64.0	47.30000	09 2005-05-	17.100000	42.000000	43.6130952	23.390625	0.8690425	cold	2005
chic	53.0	44.00000	08 2005-05-	14.050000	25.500000	34.2083333	22.020833	-	cold	2005
chic	63.0	43.10000	07 2005-05-	19.800000	65.500000	34.5589356	36.904762	$2.1809575 \\ 3.5690425$	cold	2005
chic	54.0	29.20000	06 2005-05-	20.300000	61.500000	34.8928571	34.344882	4.0690425	cold	2005
chic	48.0	24.00000	05 2005-05-	15.900000	44.800000	26.3588509	32.659564		cold	2005
chic	43.0	24.10000	04 2005-05-	10.600000	25.500000	22.4749646	22.623868	0.3309575	cold	2005
chic	40.0	25.10000	03 2005-05-	8.000000	24.000000	17.0119048	15.359649		cold	2005
chic	42.0	26.60000	02 2005-05-	6.185714	25.500000	20.6726190	14.843750		cold	2005
chic	46.0	26.10000	01 2005-04-	13.300000	31.500000	26.7619048	25.010417		cold	2005
chic	46.0	25.70000	30 2005-04-	8.700000	24.500000	31.0238095	19.807292	2.9309575	cold	2005
chic	48.0	29.70000	29 2005-04-	10.312500	28.800000	27.4316770	19.990327		cold	2005
chic	48.0	29.80000	28 2005-04-	6.350000	37.500000	27.2850303	15.958333		cold	2005
chic	50.0	35.30000	27 2005-04-	5.800000	28.500000	25.3174172	15.274521	9.8809575	cold	2005
chic	53.0	29.40000	26 2005-04-	4.842857	40.000000	32.4101967	18.989583	10.4309575	cold	2005
			25					11.3881004		

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	44.0	24.10000	2005-04- 24	1.700000	14.0000000	37.4404762	10.864583	- 14.5309575	cold	2005
chic	39.0	26.00000	2005-04- 23	3.500000	11.000000	37.9523810	10.739583	12.7309575	cold	2005
chic	42.0	38.40000	2005-04-	7.512500	14.200000	29.8476967	18.593750	-	cold	2005
chic	50.0	30.60000	22 2005-04-	3.700000	19.500000	31.1130952	16.072917	8.7184575	cold	2005
chic	57.0	46.80000	21 2005-04-	9.400000	22.500000	27.4782609	12.957386	12.5309575	cold	2005
chic	71.0	48.00000	20 2005-04-	19.085714	69.000000	38.1790890	24.727581	6.8309575 2.8547567	cold	2005
chic	64.0	44.90000	19 2005-04-	25.800000	76.500000	34.6884058	47.922554	9.5690425	cold	2005
chic	62.0	44.50000	18 2005-04-					13.3690425	cold	2005
			17							
chic	56.0	34.40000	2005-04- 16			26.8988095		2.3190425	cold	2005
chic	48.0	28.00000	2005-04- 15	7.300000	32.500000	27.3555195	35.395833	8.9309575	cold	2005
chic	47.0	23.40000	2005-04- 14	6.600000	17.500000	35.6881470	23.557292	9.6309575	cold	2005
chic	47.0	24.90000	2005-04- 13	5.150000	16.000000	36.8510611	14.748958	- 11.0809575	cold	2005
chic	48.0	34.60000	2005-04- 12	8.100000	21.000000	28.4838839	22.328869	8.1309575	cold	2005
chic	65.0	32.60000	2005-04-	13.300000	67.000000	45.9948240	17.824728	-	cold	2005
chic	62.0	42.30000	11 2005-04-	22.385714	46.500000	41.0327381	22.729167	$2.9309575 \\ 6.1547567$	cold	2005
chic	52.0	32.50000	10 2005-04-	12.400000	26.500000	30.5952381	25.838542	-	cold	2005
chic	49.0	31.10000	09 2005-04-	5.400000	17.500000	33.9821429	26.531250	3.8309575	cold	2005
chic	48.0	35.50000	08 2005-04-	5.871429	11.500000	40.7797619	13.401042	10.8309575	cold	2005
	63.0		07 2005-04-			25.3867754		10.3595290 NA		2005
chic		50.30000	06						cold	
chic	62.0	48.80000	2005-04- 05			36.1071429			cold	2005
chic	52.0	33.70000	2005-04- 04	18.100000	47.500000	25.7428830	38.083333	1.8690425	cold	2005
chic	48.0	27.30000	2005-04- 03	7.500000	24.000000	22.4404762	31.261473	- 8.7309575	cold	2005
chic	43.0	30.90000	2005-04- 02	6.050000	15.000000	32.2916667	18.125000	10.1809575	cold	2005
chic	45.0	35.50000	2005-04-	10.800000	24.000000	18.5600414	32.443182	-	cold	2005
chic	49.0	38.10000	01 2005-03-	5.400000	20.500000	24.3125000	21.22222	5.4309575	cold	2005
chic	66.0	44.30000	31 2005-03-	13.850000	56.500000	32.8922101	23.069444		cold	2005
			30					2.3809575		

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2	2pm25detren	dempcat	year
chic	52.0	31.00000	2005-03- 29	18.557143	36.800000	22.3772645	39.629227	2.3261853	cold	2005
chic	44.0	27.20000	2005-03- 28	NA	37.500000	22.6884058	41.097826	NA	cold	2005
chic	38.0	28.10000	2005-03- 27	NA	34.000000	16.2500000	37.069444	NA	cold	2005
chic	37.0	30.80000	2005-03- 26	17.685714	22.500000	24.2812500	25.500000	1.4547567	cold	2005
chic	36.0	31.00000	2005-03-	16.100000	14.000000	29.6770833	23.152778	- 0.1200575	cold	2005
chic	36.0	25.60000	25 2005-03-	21.400000	45.000000	12.1562500	45.944444	$0.1309575 \\ 5.1690425$	cold	2005
chic	34.0	26.20000	24 2005-03-	6.385714	12.000000	32.4062500	19.861111	-	cold	2005
chic	37.0	26.80000	23 2005-03-	NA	19.500000	33.7391304	18.411836	9.8452433 NA	cold	2005
chic	32.0	26.50000	22 2005-03-	16.700000	19.000000	23.1245471	27.134058	0.4690425	cold	2005
chic	34.0	25.00000	21 2005-03-	12.900000	15.500000	32.5208333	17.486111	-	cold	2005
chic	42.0	36.10000	20 2005-03-	26.950000	27.500000	19.1458333	18.458333	$3.3309575 \\ 10.7190425$	cold	2005
chic	39.0	30.90000	19 2005-03-	28.700000	43.500000	21.0000000	26.506148	12.4690425	cold	2005
chic	32.0	26.80000	18 2005-03-	13.062500	22.400000	26.1041667	25.958333	9.1004555	cold	2005
chic	37.0	21.10000	17 2005-03-	19.700000	53.500000	16.8201993	30.944444	3.1684575 $3.4690425$	cold	2005
chic	31.0	17.40000	16 2005-03-	20.800000	49.000000	15.5457428	30.777174	4.5690425	cold	2005
chic	29.0	19.60000	15 2005-03-	19.612500	51.000000	9.9343297	39.874569	3.3815425	cold	2005
chic	23.0	7.60000	14 2005-03-	8.600000	20.500000	23.9479167	26.319444	- 7.6200575	cold	2005
chic	26.0	10.70000	13 2005-03-	5.500000	24.500000	30.3020833	18.180556	7.6309575	cold	2005
chic	30.0	22.70000	12 2005-03-	11.985714	20.500000	23.0937500	19.944444		cold	2005
chic	29.0	22.40000	11 2005-03-	16.600000	32.000000	9.2187500	33.347222	4.2452433 0.3690425	cold	2005
chic	24.0	3.90000	10 2005-03-	9.700000	24.500000	19.5625000	30.791667	- 6 E200E7E	cold	2005
chic	24.0	7.00000	09 2005-03-	7.325000	25.000000	25.7038043	22.078502	6.5309575	cold	2005
chic	42.0	29.30000	08 2005-03-	9.600000	20.500000	26.7187500	18.561508	8.9059575	cold	2005
chic	50.0	33.60000	07 2005-03-	14.700000	26.000000	29.5625000	16.194444	6.6309575	cold	2005
chic	38.0	30.50000	06 2005-03-	28.225000	34.200000	17.8125000	24.194444	1.5309575 11.9940425	cold	2005
chic	32.0	26.60000	05 2005-03- 04	36.900000	54.500000	5.3958333	46.569444	20.6690425	cold	2005
			U4							

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	24.0	12.70000	2005-03- 03	18.000000	38.500000	12.4479167	42.187198	1.7690425	cold	2005
chic	20.0	5.90000	2005-03- 02	6.362500	20.500000	24.0321970	25.666667	9.8684575	cold	2005
chic	23.0	12.50000	2005-03- 01	7.600000	23.000000	27.9814312	22.055556	8.6309575	cold	2005
chic	31.0	27.40000	2005-02- 28	24.200000	21.000000	11.9809783	27.554831		cold	2005
chic	33.0	23.90000	2005-02- 27	20.285714	24.200000	14.9687500	23.930556	4.0547567	cold	2005
chic	29.0	20.80000	2005-02- 26	12.000000	15.500000	30.4791667	19.583333	4.2309575	cold	2005
chic	34.0	26.00000	2005-02- 25	28.600000	40.000000	13.9270833	26.125000		cold	2005
chic	32.0	24.10000	2005-02- 24	27.350000	35.500000	10.8691123	40.518939	11.1190425	cold	2005
chic	28.0	19.60000	2005-02- 23	23.900000	45.500000	10.8066123	43.166667	7.6690425	cold	2005
chic	29.0	23.10000	2005-02- 22	22.800000	28.000000	11.6354167	32.110939	6.5690425	cold	2005
chic	35.0	28.70000	2005-02- 21	17.471429	21.600000	8.7083333	22.291667	1.2404710	cold	2005
chic	34.0	32.60000	2005-02- 20	14.600000	15.000000	11.8854167	24.791667	1.6309575	cold	2005
chic	32.0	18.00000	2005-02- 19	12.000000	23.000000	14.9479167	23.263889	-	cold	2005
chic	19.0	2.80000	2005-02-	7.825000	24.500000	17.9895833	24.933575	4.2309575	cold	2005
chic	22.0	8.40000	18 2005-02-	10.150000	29.500000	24.0932971	18.655303	8.4059575	cold	2005
chic	30.0	18.20000	17 2005-02-	12.800000	27.500000	19.0625000	19.937500	6.0809575	cold	2005
chic	38.0	34.00000	16 2005-02-	20.587500	25.000000	5.0697464	32.763889	3.4309575 $4.3565425$	cold	2005
chic	43.0	37.50000	15 2005-02-	NA	17.000000	11.2083333	19.458333	NA	cold	2005
chic	38.0	34.70000	14 2005-02-	23.400000	28.000000	13.4583333	21.208333	7.1690425	cold	2005
chic	42.0	28.60000	13 2005-02-	20.914286	29.000000	13.6770833	27.486111	4.6833282	cold	2005
chic	33.0	23.50000	12 2005-02-	21.800000	33.500000	14.7187500	23.541667	5.5690425	cold	2005
chic	27.0	16.30000	11 2005-02-	22.100000	28.500000	19.1875000	24.347222	5.8690425	cold	2005
chic	28.0	20.00000	10 2005-02-	12.014286	17.800000	12.6979167	28.722222	-	cold	2005
chic	29.0	23.00000	09 2005-02-	12.900000	5.000000	19.2323370	18.000000	4.2166718	cold	2005
chic	39.0	39.30000	08 2005-02-	19.700000	18.000000	8.9791667	26.331349	3.3309575 $3.4690425$	cold	2005
chic	43.0	35.40000	07 2005-02- 06	26.342857	27.000000	6.9375000	28.555556	10.1118996	cold	2005

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmean	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	46.0	35.50000	2005-02- 05	39.500000	40.500000	8.9062500	29.055556	23.2690425	cold	2005
chic	36.0	32.10000	2005-02- 04	61.500000	57.500000	4.8125000	41.527778	45.2690425	cold	2005
chic	30.0	25.00000	2005-02- 03	47.450000	53.600000	7.2690217	48.597222	31.2190425	cold	2005
chic	26.0	20.00000	2005-02- 02	52.000000	50.500000	6.2414773	46.361111	35.7690425	cold	2005
chic	28.0	23.80000	2005-02- 01	26.650000	28.500000	12.8002717	35.041667	10.4190425	cold	2005
chic	28.0	22.00000	2005-01- 31	45.528571	54.000000	7.0833333	43.585318	29.2976139	cold	2005
chic	30.0	26.20000	2005-01- 30	NA	23.000000	12.4062500	23.388889	NA	cold	2005
chic	28.0	17.20000	2005-01- 29	32.700000	37.500000	3.7604167	39.000000	16.4690425	cold	2005
chic	15.0	5.10000	2005-01- 28	24.500000	35.600000	7.5384964	40.425000	8.2690425	cold	2005
chic	13.0	9.30000	2005-01- 27	10.800000	22.000000	20.7083333	27.344697	- 5.4309575	cold	2005
chic	26.0	19.40000	2005-01- 26	12.500000	20.000000	19.2812500	26.568182	3.7309575	cold	2005
chic	33.0	27.10000	2005-01- 25	32.771429	38.500000	5.7042572	36.403985	16.5404710	cold	2005
chic	26.0	17.30000	2005-01- 24	18.600000	26.500000	12.2798913	29.763505	2.3690425	cold	2005
chic	16.0	7.20000	2005-01- 23	10.500000	18.500000	19.0729167	31.472222	- 5.7309575	cold	2005
chic	17.0	12.20000	2005-01- 22	11.285714	19.600000	19.3333333	23.944444	4.9452433	cold	2005
chic	21.0	13.50000	2005-01- 21	16.800000	25.000000	19.2042572	25.194444		cold	2005
chic	26.0	20.90000	2005-01- 20	22.000000	27.500000	13.7708333	26.949495	5.7690425	cold	2005
chic	29.0	22.30000	2005-01- 19	15.042857	25.500000	13.1145833	26.924242	1.1881004	cold	2005
chic	12.0	1.70000	2005-01- 18	19.300000	44.000000	11.4279891	33.094203		cold	2005
chic	7.0	7.80000	2005-01- 17	10.100000	16.000000	16.3333333	28.180556	6.1309575	cold	2005
chic	9.0	5.60000	2005-01- 16	8.966667	13.400000	23.8645833	18.375000		cold	2005
chic	10.0	6.40000	2005-01- 15	8.800000	14.000000	18.2708333	25.583333	7.4309575	cold	2005
chic	10.0	3.40000	2005-01- 14	10.500000	20.500000	17.2062500	26.555556	5.7309575	cold	2005
chic	31.0	25.50000	2005-01- 13	10.100000	9.500000	9.2305254	22.939010		cold	2005
chic	48.0	45.60000	2005-01- 12	9.800000	27.500000	8.1875000	24.899155	6.4309575	cold	2005
chic	33.0	33.40000	2005-01- 11	16.200000	20.500000	4.1277174	21.704106		cold	2005
			11					0.0000010		

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmean	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	32.0	26.10000	2005-01- 10	16.471429	21.000000	8.1761364	25.319444	0.2404710	cold	2005
chic	30.0	27.60000	2005-01-	19.100000	17.000000	11.4270833	19.027778	2.8690425	cold	2005
chic	26.0	21.40000	09 2005-01- 08	26.700000	24.500000	5.2291667	26.319444	10.4690425	cold	2005
chic	18.0	16.70000	2005-01- 07	15.566667	19.500000	8.3600543	31.041667	0.6642909	cold	2005
chic	20.0	18.60000	2005-01- 06	21.400000	14.000000	15.4583333	28.305556		cold	2005
chic	29.0	25.50000	2005-01- 05	3.300000	9.000000	27.7604167	13.753788	12.9309575	cold	2005
chic	33.0	29.00000	2005-01- 04	8.837500	11.600000	17.5484601	19.315217	7.3934575	cold	2005
chic	34.0	31.50000	2005-01- 03	17.500000	11.500000	12.6875000	18.625845		cold	2005
chic	44.0	39.60000	2005-01- 02	NA	16.000000	6.4479167	16.069444	NA	cold	2005
chic	33.0	24.80000	2005-01- 01	10.525000	16.500000	9.2083333	14.152778	5.7059575	cold	2005
chic	43.0	36.10000	2004-12- 31	11.300000	14.000000	16.8437500	15.333333	4.9309575	cold	2004
chic	44.0	41.20000	2004-12- 30	35.500000	28.000000	7.0520833	24.847222	19.2690425	cold	2004
chic	33.0	29.10000	2004-12- 29	41.322222	51.750000	3.3333333	27.550505	25.0912647	cold	2004
chic	33.0	22.70000	2004-12- 28	25.500000	41.000000	4.1363225	29.609903	9.2690425	cold	2004
chic	17.0	12.00000	2004-12- 27	37.100000	34.500000	6.5317029	36.505556	20.8690425	cold	2004
chic	18.0	12.10000	2004-12- 26	21.850000	27.500000	8.4895833	24.416667	5.6190425	cold	2004
chic	15.0	6.70000	2004-12- 25	19.000000	27.500000	10.4791667	21.597222	2.7690425	cold	2004
chic	5.0	7.40000	2004-12- 24	11.400000	15.000000	16.5937500	23.250000	4.8309575	cold	2004
chic	12.0	0.10000	2004-12- 23	7.675000	26.500000	17.0416667	21.625000		cold	2004
chic	11.0	0.50000	2004-12- 22	12.800000	23.000000	12.2187500	23.486111		cold	2004
chic	25.0	13.80000	2004-12- 21	17.100000	44.500000	10.4990942	17.045290		cold	2004
chic	20.0	3.80000	2004-12- 20	7.728571	50.000000	10.7794384	25.609783	8.5023861	cold	2004
chic	11.0	4 50000	2004-12-	5.000000	47.000000	21.3854167	17.013889	-	cold	2004
chic	28.0	$4.50000 \\ 24.50000$	19 2004-12-	16.400000	30.500000	8.9166667	18.319444	11.2309575 0.1690425	cold	2004
chic	26.0	16.10000	18 2004-12-	14.242857	24.333333	6.1041667	32.402778		cold	2004
chic	36.0	20.40000	17 2004-12- 16	10.500000	32.500000	9.8958333	21.525253	1.9881004 5.7309575	cold	2004

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	28.0	15.10000	2004-12- 15	19.400000	47.000000	6.9008152	24.457729	3.1690425	cold	2004
chic	22.0	9.40000	2004-12- 14	7.912500	17.000000	10.6961051	23.875000	- 8.3184575	cold	2004
chic	25.0	13.00000	2004-12- 13	10.000000	20.000000	18.6354167	15.743358	-	cold	2004
chic	37.0	27.30000	2004-12-	8.750000	15.500000	18.6439394	10.361111	6.2309575	cold	2004
chic	35.0	26.60000	12 2004-12-	5.850000	8.600000	18.1666667	15.291667	7.4809575	cold	2004
chic	41.0	39.50000	11 2004-12-	23.100000	25.000000	5.0833333	20.125000	10.3809575 6.8690425	cold	2004
chic	44.0	40.20000	10 2004-12-	21.900000	25.500000	3.5000000	26.375000	5.6690425	cold	2004
chic	39.0	34.20000	09 2004-12-	13.942857	27.000000	7.5144928	22.034420		cold	2004
chic	46.0	43.40000	08 2004-12-	11.800000	12.000000	4.4293478	20.458333	2.2881004	cold	2004
chic	45.0	43.90000	07 2004-12-	21.900000	23.000000	4.0208333	23.650362	4.4309575 5.6690425	cold	2004
chic	37.0	34.90000	06 2004-12-	23.575000	28.200000	5.6458333	20.152778	7.3440425	cold	2004
chic	36.0	30.40000	05 2004-12-	14.400000	28.000000	7.5729167	22.750000	-	cold	2004
chic	30.0	21.80000	04 2004-12-	21.000000	28.000000	6.9166667	27.263889	$1.8309575 \\ 4.7690425$	cold	2004
chic	31.0	25.00000	03 2004-12-	21.525000	31.500000	4.1496212	28.890873	5.2940425	cold	2004
chic	29.0	23.90000	02 2004-12-	20.100000	20.500000	7.9461051	21.958333	3.8690425	cold	2004
chic	36.0	33.40000	01 2004-11-	17.400000	17.500000	5.3750000	25.095411	1.1690425	cold	2004
chic	35.0	32.80000	30 2004-11-	15.512500	17.200000	3.7577341	33.988248	-	cold	2004
chic	39.0	24.90000	29 2004-11-	7.100000	14.000000	13.9166667	18.854167	0.7184575	cold	2004
chic	42.0	39.70000	28 2004-11-			14.6527778		9.1309575	cold	2004
chic	37.0	33.00000	27 2004-11-			4.9583333		9.9809575	cold	2004
chic	27.0	21.10000	26 2004-11-			12.9166667		4.5738147	cold	2004
chic	37.0	30.70000	25 2004-11-		8.000000	25.2291667		4.6309575	cold	2004
chic	45.0	38.60000	24 2004-11-			7.6562500		4.2309575	cold	2004
			23							
chic	42.0	33.20000	2004-11-			3.5081522			cold	2004
chic	38.0	29.00000	2004-11- 21			11.2395833		4.6309575	cold	2004
chic	49.0	42.80000	2004-11- 20	10.525000	11.500000	11.1666667	14.277778	5.7059575	cold	2004

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	52.0	51.00000	2004-11- 19	21.400000	20.500000	8.6961051	23.472222	5.1690425	cold	2004
chic	55.0	54.30000	2004-11-	28.000000	28.000000	4.1041667	20.347222	11.7690425	cold	2004
chic	59.0	55.80000	18 2004-11- 17	28.166667	35.000000	2.7306548	20.152778	11.9357091	cold	2004
chic	51.0	47.80000	2004-11- 16	29.600000	42.000000	2.7463768	25.602657	13.3690425	cold	2004
chic	40.0	33.10000	2004-11- 15	NA	46.500000	2.1965580	34.597222	NA	cold	2004
chic	38.0	26.40000	2004-11- 14	16.887500	27.000000	7.8333333	31.625000	0.6565425	cold	2004
chic	36.0	26.90000	2004-11- 13	8.950000	23.000000	17.8437500	24.375000	7.2809575	cold	2004
chic	39.0	26.90000	2004-11- 12	8.600000	6.000000	25.0312500	17.277174	7.6309575	cold	2004
chic	44.0	30.80000	2004-11- 11	5.650000	11.500000	25.1145833	13.208333	10.5809575	cold	2004
chic	55.0	38.30000	2004-11- 10	22.500000	60.500000	10.6612319	32.045290		cold	2004
chic	45.0	24.30000	2004-11- 09	13.200000	38.500000	7.6911232	29.916667	3.0309575	cold	2004
chic	39.0	18.90000	2004-11- 08	7.000000	25.500000	9.5842391	33.062500	9.2309575	cold	2004
chic	47.0	27.90000	2004-11- 07	6.500000	15.000000	20.0833333	16.208333	9.7309575	cold	2004
chic	54.0	36.70000	2004-11- 06	10.300000	26.500000	12.5833333	22.500000	5.9309575	cold	2004
chic	45.0	27.50000	2004-11- 05	6.975000	16.000000	15.9895833	24.583333	9.2559575	cold	2004
chic	46.0	38.80000	2004-11- 04	11.900000	14.000000	12.2404891	25.417863	4.3309575	cold	2004
chic	49.0	38.10000	2004-11- 03	8.400000	16.500000	16.4393116	21.950397	7.8309575	cold	2004
chic	47.0	41.60000	2004-11- 02	4.850000	9.500000	9.9479167	23.388889	11.3809575	cold	2004
chic	50.0	46.10000	2004-11- 01	10.100000	15.000000	10.1145833	19.172222	6.1309575	cold	2004
chic	51.0	41.20000	2004-10- 31	5.900000	14.000000	14.3671875	12.305556	10.3309575	cold	2004
chic	61.0	44.20000	2004-10-	6.000000	18.600000	17.6744792	10.138889	-	cold	2004
chic	69.0	65.90000	30 2004-10-	18.100000	36.500000	10.0980525	19.333333	10.2309575 1.8690425	cold	2004
chic	54.0	52.30000	29 2004-10-	43.600000	41.500000	6.2078804	26.347222	27.3690425	cold	2004
chic	58.0	52.10000	28 2004-10- 27	31.612500	28.000000	14.4720262	26.301768	15.3815425	cold	2004
chic	57.0	52.10000	2004-10- 26	27.300000	31.000000	12.5618530	26.680211	11.0690425	cold	2004
chic	57.0	44.90000	2004-10- 25	18.600000	42.000000	13.5813923	36.084541	2.3690425	cold	2004

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	55.0	43.40000	2004-10- 24	8.233333	14.200000	14.4375000	21.569444	7.9976242	cold	2004
chic	66.0	54.80000	2004-10- 23	13.800000	21.000000	13.4761905	15.055556	2.4309575	cold	2004
chic	54.0	49.30000	2004-10- 22	25.600000	34.000000	10.1962992	24.833333		cold	2004
chic	53.0	46.10000	2004-10- 21	11.687500	19.500000	14.9702381	20.388889	4.5434575	cold	2004
chic	52.0	48.00000	2004-10- 20	14.750000	12.500000	14.2859731	18.794591	1.4809575	cold	2004
chic	51.0	46.50000	2004-10- 19	13.100000	17.000000	11.6206004	17.584541	3.1309575	cold	2004
chic	45.0	39.30000	2004-10- 18	12.387500	18.000000	13.3469085	22.140097	-	cold	2004
chic	43.0	28.90000	2004-10-	8.300000	14.000000	14.8422619	19.319444	3.8434575	cold	2004
chic	43.0	29.50000	17 2004-10-	4.200000	17.000000	17.6488095	8.250000	7.9309575	cold	2004
chic	49.0	41.10000	16 2004-10-	8.600000	11.500000	9.2735507	17.283213	12.0309575	cold	2004
chic	52.0	46.60000	15 2004-10-	12.350000	17.000000	11.2648810	23.138889	7.6309575	cold	2004
chic	58.0	47.80000	14 2004-10-	24.800000	29.000000	13.8779762	28.666667	3.8809575 8.5690425	cold	2004
chic	51.0	44.40000	13 2004-10-	13.200000	29.200000	16.0815217	23.393720		cold	2004
chic	53.0	43.60000	12 2004-10-	13.100000	19.000000	20.7440476	23.472222	3.0309575	cold	2004
chic	52.0	42.90000	11 2004-10-	9.900000	14.500000	18.8095238	19.44444	3.1309575	cold	2004
chic	57.0	41.00000	10 2004-10-	10.350000	18.500000	16.2916667	26.55556	6.3309575	cold	2004
chic	64.0	61.20000	09 2004-10-	24.550000	34.000000	16.5148810	22.55556	5.8809575 8.3190425	cold	2004
chic	60.0	41.70000	08 2004-10-	18.800000	46.500000	20.4133023	38.617754	2.5690425	cold	2004
chic	61.0	35.90000		11.437500	41.000000	9.5587121	36.541667		cold	2004
chic	46.0	29.00000	06 2004-10-	11.900000	37.500000	7.8039596	32.114734		cold	2004
chic	47.0	30.30000	05 2004-10-	9.300000	14.000000	16.5468074	19.777778	4.3309575	cold	2004
chic	53.0	32.50000	04 2004-10-	7.737500	21.500000	18.9880952	21.44444		cold	2004
chic	48.0	30.90000	03 2004-10-	7.800000	11.500000	17.2500000	17.041667	8.4934575	cold	2004
chic	62.0	49.20000	02 2004-10-	NA	51.500000	25.0676407	31.44444	8.4309575 NA	cold	2004
chic	54.0	41.20000	01 2004-09-	17.811111	41.600000	12.9523810	35.821429	1.5801536	cold	2004
chic	54.0	44.90000	30 2004-09-	9.600000	12.500000	19.3408385	24.945707		cold	2004
			29					6.6309575		

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	59.0	47.10000	2004-09- 28	NA	15.500000	22.4704969	15.342708	NA	cold	2004
chic	61.0	48.20000	2004-09- 27	18.471429	42.500000	15.6788302	40.854167	2.2404710	cold	2004
chic	59.0	47.60000	2004-09- 26	NA	18.000000	19.1428571	20.406250	NA	cold	2004
chic	62.0	49.90000	2004-09- 25	9.800000	15.500000	20.7678571	19.000000	6.4309575	cold	2004
chic	69.0	50.70000	2004-09- 24	12.911111	35.000000	23.2172619	31.166667	3.3198464	cold	2004
chic	70.0	53.30000	2004-09- 23	27.900000	60.500000	33.0178571	39.614583	11.6690425	cold	2004
chic	66.0	52.40000	2004-09- 22	26.000000	71.500000	30.6868530	39.449405	9.7690425	cold	2004
chic	67.0	50.50000	2004-09- 21	17.487500	61.000000	30.2075569	38.338315	1.2565425	cold	2004
chic	64.0	47.50000	2004-09- 20	NA	31.000000	26.5124224	28.529665	NA	cold	2004
chic	68.0	49.30000	2004-09- 19	10.700000	16.500000	28.2678571	18.854167	- 5.5309575	cold	2004
chic	64.0	52.20000	2004-09- 18	10.212500	24.200000	24.6309524	23.057292	-	cold	2004
chic	62.0	49.10000	2004-09- 17	7.300000	13.500000	26.6287879	17.966856	6.0184575 - 8.9309575	cold	2004
chic	66.0	53.60000	2004-09- 16	9.000000	18.000000	23.8258282	19.984375	7.2309575	cold	2004
chic	77.0	65.90000	2004-09- 15	16.957143	59.000000	25.9983016	19.359375		cold	2004
chic	75.0	64.70000	2004-09- 14	22.750000	46.500000	31.7319252	20.566576	6.5190425	cold	2004
chic	71.0	60.70000	2004-09- 13	NA	48.500000	32.2578228	30.426760	NA	cold	2004
chic	71.0	57.90000	2004-09- 12	28.528571	42.750000	40.9010417	27.973958	12.2976139	cold	2004
chic	70.0	57.00000	2004-09- 11	19.300000	37.000000	31.7031250	34.473958	3.0690425	cold	2004
chic	66.0	54.40000	2004-09-	17.800000	54.000000	19.0677083	30.213542	1.5690425	cold	2004
chic	64.0	54.50000	10 2004-09- 09	7.171429	17.000000	17.3255208	16.787879		cold	2004
chic	65.0	53.90000	2004-09- 08	5.600000	10.000000	23.7921196	9.661458	9.0595290 - 10.6309575	cold	2004
chic	66.0	51.30000	2004-09-	14.700000	16.000000	21.2864583	15.635417	-	cold	2004
chic	68.0	63.20000	07 2004-09-	20.762500	30.200000	29.9114583	13.052083	$1.5309575 \\ 4.5315425$	cold	2004
chic	76.0	66.50000	06 2004-09-	41.500000	45.000000	34.2447917	22.406250	25.2690425	cold	2004
chic	73.0	63.20000	05 2004-09-	38.800000	50.500000	29.4609375	31.145833	22.5690425	cold	2004
chic	73.0	64.30000	04 2004-09- 03	37.285714	51.500000	26.0494792	33.260417	21.0547567	cold	2004

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	73.0	62.00000	2004-09- 02	NA	42.000000	33.8437500	30.298557	NA	cold	2004
chic	70.0	60.30000	2004-09- 01	NA	47.500000	25.5115489	31.686298	NA	cold	2004
chic	67.0	58.30000	2004-08-	15.342857	32.400000	19.2197896	27.467172		cold	2004
chic	64.0	57.20000	31 2004-08- 30	16.400000	32.000000	14.6392663	24.213294	0.8881004 0.1690425	cold	2004
chic	61.0	53.90000	2004-08- 29	5.900000	5.000000	19.6577381	8.993056	10.3309575	cold	2004
chic	68.0	61.90000	2004-08- 28	6.012500	6.000000	22.5468750	10.625000	-	cold	2004
chic	78.0	69.50000	2004-08- 27	16.500000	36.500000	22.6573822	22.550423	10.2184575 0.2690425	cold	2004
chic	75.0	70.20000	2004-08- 26	16.100000	31.500000	21.2835145	19.215278	0.1309575	cold	2004
chic	72.0	66.50000	2004-08- 25	7.400000	15.000000	12.4052310	20.527778	8.8309575	cold	2004
chic	73.0	67.40000	2004-08- 24	10.000000	30.000000	15.4572237	23.750000	6.2309575	cold	2004
chic	72.0	63.70000	2004-08- 23	17.400000	45.500000	27.4678442	18.958333		cold	2004
chic	65.0	56.20000	2004-08- 22	16.175000	36.000000	30.6875000	20.916667	0.0559575	cold	2004
chic	63.0	51.20000	2004-08- 21	9.800000	22.500000	24.0260417	19.229167	6.4309575	cold	2004
chic	66.0	50.70000	2004-08- 20	11.800000	42.500000	10.9270833	28.000000	4.4309575	cold	2004
chic	64.0	50.90000	2004-08-	7.111111	17.800000	20.4440670	14.424517	-	cold	2004
chic	70.0	64.40000	19 2004-08- 18	20.000000	35.500000	20.1664402	25.572917	9.1198464 3.7690425	cold	2004
chic	72.0	62.30000	2004-08- 17	19.400000	48.000000	33.6066782	25.429924	3.1690425	cold	2004
chic	63.0	51.30000	2004-08- 16	15.887500	52.500000	26.7139946		0.3434575	cold	2004
chic	62.0	49.00000	2004-08-	17.700000	19.500000	23.7812500			cold	2004
chic	60.0	48.40000	15 2004-08-	8.500000	14.500000	19.0833333	15.197917		cold	2004
chic	61.0	50.30000	14 2004-08-	7.533333	20.200000	16.8072917	19.661685	7.7309575	cold	2004
chic	56.0	48.20000	13 2004-08-	6.700000	17.500000	13.0201231	15.928339	8.6976242	cold	2004
chic	58.0	49.00000	12 2004-08-	5.700000	29.500000	11.7786458	10.807292	9.5309575	cold	2004
chic	64.0	54.70000	11 2004-08-	6.237500	31.500000	12.1788949	9.912364	10.5309575	cold	2004
chic	75.0	61.30000	10 2004-08-	8.300000	55.500000	31.4802989	17.765625	9.9934575	cold	2004
chic	70.0	57.00000	09 2004-08- 08	19.500000	28.500000	31.4401042	19.890625	7.9309575 3.2690425	cold	2004

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	65.0	52.20000	2004-08- 07	12.077778	25.000000	26.6093750	21.651042	- 4.1531798	cold	2004
chic	65.0	49.20000	2004-08- 06	11.400000	20.000000	19.6564764	16.786458	4.8309575	cold	2004
chic	65.0	51.00000	2004-08- 05	8.500000	9.500000	28.5740489	8.208333	7.7309575	cold	2004
chic	70.0	61.40000	2004-08-	6.887500	10.000000	27.2918931	11.709336	-	cold	2004
chic	78.0	67.70000	04 2004-08-	7.700000	36.000000	40.1978446	26.883852	9.3434575	cold	2004
chic	78.0	67.70000	03 2004-08-	15.300000	51.500000	34.9270833	26.135417	8.5309575	cold	2004
chic	77.0	62.50000	02 2004-08-	17.244444	26.000000	30.1718750	26.359375	$0.9309575 \\ 1.0134869$	cold	2004
chic	74.0	60.20000	01 2004-07-	17.200000	29.500000	28.9765625	22.218750	0.9690425	cold	2004
chic	68.0	62.70000	31 2004-07-	25.350000	51.500000	22.4595788	33.963542	9.1190425	cold	2004
chic	72.0	60.20000	30 2004-07-	23.742857	42.500000	33.5643116	27.454937	7.5118996	cold	2004
chic	70.0	56.10000	29 2004-07-	25.900000	62.000000	28.0887681	38.317708	9.6690425	cold	2004
chic	70.0	52.80000	28 2004-07-		30.500000	29.4624094			cold	2004
chic	67.0	53.60000	27 2004-07-	9.750000	20.400000	29.4442935		_	cold	2004
chic	67.0	53.20000	26 2004-07-		11.500000	35.9010417		6.4809575	cold	2004
			25					4.5309575		
chic	63.0	51.00000	2004-07- 24	6.800000	17.500000	28.1666667		9.4309575	cold	2004
chic	65.0	50.80000	2004-07- 23	4.112500	9.000000	26.9984149		- 12.1184575	cold	2004
chic	79.0	68.40000	2004-07- 22	4.800000	35.500000	25.1123188	18.865132	- 11.4309575	cold	2004
chic	79.0	72.80000	2004-07- 21	20.000000	54.500000	27.0320955	26.237216	3.7690425	cold	2004
chic	80.0	67.60000	2004-07- 20	25.375000	40.200000	35.6300951	25.843750	9.1440425	cold	2004
chic	71.0	60.00000	2004-07- 19	24.200000	59.500000	26.7366395	23.958333	7.9690425	cold	2004
chic	71.0	59.00000	2004-07- 18	17.300000	20.000000	24.9150095	11.734375	1.0690425	cold	2004
chic	70.0	60.70000	2004-07- 17	15.000000	17.000000	32.4062500	7.880208	1.2309575	cold	2004
chic	73.0	62.80000	2004-07-	13.100000	52.500000	28.7057292	22.958333	-	cold	2004
chic	72.0	56.30000	16 2004-07-	15.550000	37.000000	25.0067935	24.601255	3.1309575	cold	2004
chic	72.0	58.20000	15 2004-07-	9.111111	28.750000	32.2190897	18.125000	0.6809575	cold	2004
chic	78.0	67.10000	14 2004-07-	6.400000	44.000000	26.2547554	23.698864		cold	2004
			13					9.8309575		

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	78.0	67.40000	2004-07- 12	15.800000	30.000000	33.0895298	18.640625	0.4309575	cold	2004
chic	74.0	67.30000	2004-07- 11	17.357143	29.500000	38.7797619	14.489583		cold	2004
chic	73.0	62.70000	2004-07- 10	17.400000	24.000000	35.7053571	13.031250	1.1690425	cold	2004
chic	68.0	58.20000	2004-07- 09	13.700000	33.500000	26.4721201	14.822917	- 2.5309575	cold	2004
chic	65.0	52.00000	2004-07- 08	6.857143	18.000000	28.4744318	15.697443	9.3738147	cold	2004
chic	64.0	57.60000	2004-07- 07	8.000000	21.000000	14.9710145	13.536458	8.2309575	cold	2004
chic	73.0	64.90000	2004-07- 06	4.900000	32.000000	30.9131567	19.381826	-	cold	2004
chic	68.0	60.70000	2004-07-	9.137500	15.500000	31.6354167	7.604167	11.3309575	cold	2004
chic	76.0	66.60000	05 2004-07-	7.300000	25.000000	31.1953125	11.045139	7.0934575	cold	2004
chic	73.0	67.20000	04 2004-07-	18.200000	38.000000	31.7864583	17.406250	8.9309575 1.9690425	cold	2004
chic	71.0	58.50000	03 2004-07-	14.977778	41.400000	40.9322917	18.505208	1 0501500	cold	2004
chic	71.0	57.00000	02 2004-07-	14.700000	54.500000	37.7632576	27.879623	1.2531798	cold	2004
chic	73.0	56.20000	01 2004-06-	15.900000	58.500000	26.4171196	33.661458	1.5309575	cold	2004
chic	69.0	52.10000	30 2004-06-	11.285714	47.500000	22.6679121	26.729167	0.3309575	cold	2004
chic	65.0	52.80000	29 2004-06-	14.500000	22.500000	23.1046196	23.664855	4.9452433	cold	2004
chic	67.0	51.30000	28 2004-06-	12.000000	26.500000	26.0546875	23.229167	1.7309575	cold	2004
chic	64.0	47.80000	27 2004-06-	7.887500	23.200000	23.1354167	21.583333	4.2309575	cold	2004
chic	61.0	44.20000	26 2004-06-	8.500000	22.500000	19.3359375	26.375000	8.3434575	cold	2004
chic	62.0	47.50000		5.700000	14.000000	21.8847373	22.839900	7.7309575	cold	2004
chic	70.0	54.00000	24 2004-06-	8.612500	56.000000	28.4839530	23.562500	10.5309575	cold	2004
chic	65.0	49.70000	23 2004-06-	7.200000	26.500000	20.8706975	21.418561	7.6184575	cold	2004
chic	63.0	57.30000	22 2004-06-	14.100000	28.000000	13.2036911	31.862500	9.0309575	cold	2004
chic	61.0	45.10000	21 2004-06-	10.944444	19.800000	26.6041667	22.458333	2.1309575	cold	2004
chic	56.0	39.70000	20 2004-06-	3.800000	9.000000	26.7682292	12.281250	5.2865131	cold	2004
chic	71.0	58.10000	19 2004-06-	13.866667	36.500000	25.6432292	26.708333	12.4309575	cold	2004
chic	72.0	60.40000	18 2004-06-	16.028571	32.500000	26.6804801	22.415761	2.3642909	cold	2004
			17					0.2023861		

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	72.0	65.40000	2004-06- 16	16.900000	30.000000	21.8121603	26.362092	0.6690425	cold	2004
chic	71.0	57.40000	2004-06- 15	11.700000	27.000000	30.5982790	25.656061	4.5309575	cold	2004
chic	75.0	64.10000	2004-06-	9.028571	18.200000	31.1039299	20.972222	-	cold	2004
chic	72.0	64.50000	14 2004-06-	10.600000	19.000000	35.9322917	13.472222	7.2023861	cold	2004
chic	71.0	64.70000	13 2004-06-	10.000000	20.000000	31.0598958	16.702083	5.6309575	cold	2004
chic	73.0	67.20000	12 2004-06-	14.814286	32.500000	14.9852190	19.046402	6.2309575	cold	2004
chic	64.0	60.50000	11 2004-06-	6.600000	21.000000	10.6363225	17.571970	1.4166718	cold	2004
chic	73.0	67.00000	10 2004-06-			20.7479620		9.6309575	cold	2004
			09					5.4309575		
chic	83.0	69.00000	2004-06- 08			30.2193161			hot	2004
chic	74.0	64.60000	2004-06- 07	19.800000	68.000000	39.7838542	22.979167	3.5690425	cold	2004
chic	72.0	58.80000	2004-06- 06	22.200000	38.000000	40.7812500	24.156250	5.9690425	cold	2004
chic	61.0	47.60000	2004-06- 05	19.412500	43.000000	38.9479167	29.614583	3.1815425	cold	2004
chic	58.0	43.70000	2004-06- 04	9.500000	23.500000	29.3635643	29.869048	- 6.7309575	cold	2004
chic	59.0	40.70000	2004-06-	4.500000	14.500000	28.8520154	18.412202	-	cold	2004
chic	59.0	50.70000	03 2004-06-	6.633333	15.800000	21.7192029	18.796875	11.7309575	cold	2004
chic	65.0	50.40000	02 2004-06-	4.300000	33.000000	26.9616168	18.375000	9.5976242	cold	2004
chic	62.0	NA	01 2004-05-	5.500000	12.500000	27.0286458	16.609375	11.9309575	cold	2004
chic	66.0	61.00000	31 2004-05-	15.787500	25,000000	30.5208333	18.380208	10.7309575	cold	2004
chic	57.0		30			25.7473958		0.4434575		2004
			29					7.5309575		
chic	53.0	39.40000	28			25.6718750			cold	2004
chic	64.0	55.20000	2004-05- 27	12.955556	31.250000	23.2566803	25.471241	3.2754020	cold	2004
chic	57.0	46.20000	2004-05- 26	8.400000	23.500000	17.0275136	23.411458	- 7.8309575	cold	2004
chic	59.0	53.60000	2004-05- 25	11.300000	29.500000	23.0067832	23.028450	4.9309575	cold	2004
chic	56.0	47.50000	2004-05- 24	5.028571	14.000000	26.7687953	12.229167	11.2023861	cold	2004
chic	68.0	61.70000	2004-05-	9.600000	31.500000	28.4635417	13.989583	-	cold	2004
chic	65.0	61.60000	23 2004-05-	11.750000	25.000000	25.4921875	18.250000	6.6309575	cold	2004
			22					4.4809575		

chic         63.0         58.1000         2004-05-         11.96667 33.60000         28.0937500 22.401042         cold         24.26429095         cold           chic         74.0         71.10000         2004-05-         17.800000         35.000000         23.7651515 22.504735         1.5690425         cold           chic         55.0         47.20000         2004-05-         12.800000         19.00000         23.9432745 26.520833         cold           chic         57.0         47.20000         2004-05-         18.00000         29.00000         29.595779 22.353070         2.1690425         cold           chic         70.0         62.6000         2004-05-         18.40000         29.00000         29.595779 22.353070         2.1690425         cold           chic         71.0         45.8000         2004-05-         13.00000         20.00000         25.59579 22.3533070         2.1690425         cold           chic         74.0         45.8000         2004-05-         13.00000         20.0505924 12.364833         -         cold           chic         75.0         54.1000         2004-05-         13.00000         13.00000         17.9727355 241256598         -         cold           chic         76.0         65.40000	city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmean	n@3tmean2	no2tmean	2pm25detren	$\overline{\operatorname{dempcat}}$	year
chic         74.0         71.10000         2004-05-2004-05-2004-05-2004-05-12.80000         17.800000         23.7651515 22.504735         1.5600425         cold           chic         58.0         55.6000         2004-05-2004-05-10.00000         12.80000         23.9432745 26.520833         -         cold           chic         57.0         47.20000         2004-05-18.40000         29.000000         34.0166440 20.200181         -         cold           chic         70.0         45.80000         2004-05-18.40000         29.000000         29.5905797 22.353070         21690425         cold           chic         54.0         45.80000         2004-05-18.00000         20.000000         24.6636905 23.932292         -         cold           chic         47.0         38.90000         20.000000         20.5059524 12.364583         -         cold           chic         47.0         34.10000         2004-05-18.00000         13.00000         11.324048 19.505208         -         cold           chic         75.0         47.30000         2004-05-12.00000         13.00000         17.9727355 24.12569         -         cold           chic         76.0         67.30000         2004-05-14.50000         13.00000         29.955733 23.125690         - <t< td=""><td>chic</td><td>63.0</td><td>58.10000</td><td></td><td>11.966667</td><td>33.600000</td><td>28.0937500</td><td>22.401042</td><td></td><td>cold</td><td>2004</td></t<>	chic	63.0	58.10000		11.966667	33.600000	28.0937500	22.401042		cold	2004
chic         58.0         55.60000         204-05-19         12.80000         19.000000         23.9432745 26.520833         -         chid         3.4309575         chid         -         chid         7.0         47.20000         2004-05-18         18.00000         29.5905797 22.353070         2.1690425         cold           chic         7.0         62.60000         2004-05-18.40000         29.000000         29.5905797 22.353070         2.1690425         cold           chic         54.0         45.80000         20040000         20.000000         20.6636905 23.932292         -         cold           chic         47.0         38.90000         20.00000         20.0559524 12.364583         -         cold           chic         47.0         38.90000         20.00000         11.3244048 19.505208         -         cold           chic         59.0         54.10000         2004-05-12.70000         13.00000         17.9727355 24.125659         -         cold           chic         70.0         67.3000         2004-05-12.70000         13.00000         17.9727355 24.125659         20.00000         -         cold           chic         70.0         61.30000         2004-05-19.100000         14.500000         33.9370471 24.990489         2	chic	74.0	71.10000	2004-05-	17.800000	35.000000	23.7651515	22.504735		cold	2004
chic         57.0         47.2000         204-05         6.728571         10.00000         34.0166440 20.200181         5023361           chic         70.0         62.60000         2004-05         18.40000         29.000000         29.5905797 22.353070         2.1690425         cold           chic         54.0         45.80000         2004-05         13.000000         20.00000         24.6636905 23.932292         —         cold           chic         47.0         38.90000         2004-05         3.262500         9.00000         20.5059524 12.364583         —         cold           chic         59.0         54.1000         2004-05         8.000000         8.000000         11.3244048 19.052088         —         cold           chic         72.0         67.30000         2004-05         12.700000         13.00000         17.9727355 24.125659         —         cold           chic         76.0         65.40000         2004-05         14.500000         39.50000         28.9651783 22.052083         —         cold           chic         76.0         61.60000         2004-05         16.150000         25.50000         29.3055933 23.50000         —         cold           chic         70.0         61.30000         2	chic	58.0	55.60000	2004-05-	12.800000	19.000000	23.9432745	26.520833		cold	2004
chic         7.0.         62.60000         204-05         18.400000         29.000000         29.5905797 22.353070         2.1690425         cold           chic         54.0         45.8000         2004-05         13.000000         20.000000         24.6636905 23.932229         -         cold           chic         47.0         38.90000         2004-05         3.262500         9.00000         13.3244048 19.505208         -         cold           chic         72.0         67.30000         2004-05         12.700000         13.000000         17.9727355 24.125659         -         cold           chic         72.0         67.30000         2004-05         12.700000         13.000000         17.9727355 24.125659         -         cold           chic         72.0         67.30000         2004-05         14.500000         39.50000         28.9651783 22.052083         -         cold           chic         70.0         61.30000         2004-05         14.500000         39.50000         29.3055933 23.500000         -         cold           chic         70.0         61.60000         2004-05         15.14444         34.25000         29.3055933 23.500000         -         cold           chic         70.0         60.0	chic	57.0	47.20000	2004-05-	6.728571	10.000000	34.0166440	20.200181	-	cold	2004
chic         54.0         45.80000         2004-05-16         13.000000         20.000000         24.6636905 23.932292         —         cold           chic         47.0         38.90000         2004-05-15         3.262500         9.000000         20.5059524 12.364583         —         cold           chic         59.0         54.10000         2004-05-14         8.00000         8.00000         11.3244048 19.505208         —         cold           chic         72.0         67.3000         2004-05-12.700000         13.000000         17.9727355 24.125659         cold           chic         76.0         65.40000         2004-05-12.700000         14.500000         39.500000         28.9651783 22.052083         —         cold           chic         76.0         65.40000         2004-05-19.100000         14.500000         39.500000         33.9370471 24.990489         2.8690425         cold           chic         70.0         61.60000         2004-05-19.100000         52.500000         39.3055933 23.500000         —         cold           chic         70.0         60.30000         2004-05-17.800000         30.000000         34.1276042 20.83333         —         cold           chic         51.0         36.40000         2004-05-17.450000<	chic	70.0	62.60000	2004-05-	18.400000	29.000000	29.5905797	22.353070		cold	2004
chic         47.0         38.9000         204-05         3.262500         9.00000         20.5059524 12.364583         -         cold           chic         59.0         54.10000         2004-05         8.000000         8.000000         11.3244048 19.50528         -         cold           chic         72.0         67.30000         2004-05         12.700000         13.00000         17.9727355 24.125659         -         cold           chic         76.0         65.40000         2004-05         14.500000         39.500000         28.9651783 22.052083         -         cold           chic         68.0         61.30000         2004-05         19.100000         41.50000         33.9370471 24.990489         2.8690425         cold           chic         70.0         61.60000         2004-05         16.150000         52.50000         29.3055933 23.50000         -         cold           chic         70.0         60.30000         2004-05         15.144444         34.25000         34.1276042 20.83333         -         cold           chic         70.0         50.40000         2004-05         17.80000         30.0000         29.6197917 24.828125         1.5690425         cold           chic         51.0         36.4	chic	54.0	45.80000	2004-05-	13.000000	20.000000	24.6636905	23.932292		cold	2004
chic         59.0         54.10000         2004-05-14         8.000000         1.3244048 19.505208         -         cold           chic         72.0         67.30000         2004-05-12.700000         13.000000         17.9727355 24.125659         -         cold           chic         76.0         65.40000         2004-05-14.500000         39.500000         28.9651783 22.052083         -         cold           chic         68.0         61.30000         2004-05-19.100000         41.500000         33.9370471 24.990489         2.8690425         cold           chic         70.0         61.60000         2004-05-19.100000         41.500000         33.9370471 24.990489         2.8690425         cold           chic         70.0         61.60000         2004-05-16.150000         52.500000         29.3055933 23.500000         -         cold           chic         70.0         60.30000         2004-05-17.40000         31.425000         34.1276042 20.083333         -         cold           chic         70.0         50.40000         2004-05-17.80000         17.00000         33.9575408 15.94270         -         cold           chic         71.0         36.40000         2004-05-17.450000         17.00000         31.4808239 33.784601         1.7815425 </td <td>chic</td> <td>47.0</td> <td>38.90000</td> <td>2004-05-</td> <td>3.262500</td> <td>9.000000</td> <td>20.5059524</td> <td>12.364583</td> <td>-</td> <td>cold</td> <td>2004</td>	chic	47.0	38.90000	2004-05-	3.262500	9.000000	20.5059524	12.364583	-	cold	2004
chic         72.0         67.30000         2004-05-13         12.700000         13.000000         17.9727355 24.125659         -         cold           chic         76.0         65.40000         2004-05-14.500000         39.500000         28.9651783 22.052083         -         cold           chic         68.0         61.30000         2004-05-19.100000         41.500000         33.9370471 24.990489         2.8690425         cold           chic         70.0         61.60000         2004-05-16.150000         52.500000         29.3055933 23.500000         -         cold           chic         70.0         60.30000         2004-05-15.144444         34.250000         34.1276042 20.083333         -         cold           chic         70.0         60.30000         2004-05-200-05         17.800000         30.00000         29.6197917 24.828125         1.5690425         cold           chic         51.0         36.40000         2004-05-200         7.450000         17.00000         31.4808239 33.784601         1.7815425         cold           chic         53.0         36.50000         2004-05-200         10.500000         26.00000         27.5114357 25.489583         -         cold           chic         42.0         28.10000         2004-05	chic	59.0	54.10000	2004-05-	8.000000	8.000000	11.3244048	19.505208	-	cold	2004
chic         76.0         65.40000         2004-05-12         14.500000         39.50000         28.9651783 22.052083         -         cold           chic         68.0         61.30000         2004-05-19.100000         41.50000         33.9370471 24.990489         2.8690425         cold           chic         70.0         61.60000         2004-05-16.150000         52.50000         29.3055933 23.500000         -         cold           chic         70.0         60.30000         2004-05-15.144444         34.250000         34.1276042 20.083333         -         cold           chic         67.0         50.40000         2004-05-2004-05-30         17.800000         30.00000         29.6197917 24.828125         15.690425         cold           chic         71.0         36.40000         2004-05-2004-05-200         17.800000         30.00000         29.6197917 24.828125         15.690425         cold           chic         71.0         36.40000         2004-05-2004-05-200         17.000000         31.4808239 33.784601         1.7815425         cold           chic         75.0         75.10000         26.000000         25.2940444 25.510349         -         cold           chic         75.0         44.30000         2004-05-2004-05-2004         24.8	chic	72.0	67.30000	2004-05-	12.700000	13.000000	17.9727355	24.125659	-	cold	2004
chic         68.0         61.30000         2004-05-11         19.100000         41.500000         33.9370471 24.990489         2.8690425         cold           chic         70.0         61.60000         2004-05-16.150000         52.500000         29.3055933 23.500000         -         cold           chic         70.0         60.30000         2004-05-109         15.144444         34.250000         34.1276042 20.083333         -         cold           chic         67.0         50.40000         2004-05-108         17.800000         30.000000         29.6197917 24.828125         1.5690425         cold           chic         67.0         36.40000         2004-05-108         17.800000         30.000000         33.9575408 15.942708         -         cold           chic         69.0         57.10000         2004-05-18.012500         59.000000         31.4808239 33.784601         1.7815425         cold           chic         53.0         36.50000         2004-05-10.500000         26.000000         27.5114357 25.489583         -         cold           chic         42.0         30.30000         2004-05-10.500000         44.500000         27.5114357 25.489583         -         cold           chic         42.0         30.30000         2004-0	chic	76.0	65.40000	2004-05-	14.500000	39.500000	28.9651783	22.052083	-	cold	2004
chic         70.0         61.60000         2004-05-10         16.150000         52.500000         29.3055933         23.500000         -         cold           chic         70.0         60.30000         2004-05-15.144444         34.250000         34.1276042         20.83333         -         cold           chic         67.0         50.40000         2004-05-20         17.800000         30.00000         29.6197917         24.828125         1.5690425         cold           chic         67.0         36.40000         2004-05-208         7.450000         17.000000         33.9575408         15.942708         -         cold           chic         69.0         57.10000         2004-05-208         18.012500         59.00000         31.4808239         33.784601         1.7815425         cold           chic         53.0         36.50000         2004-05-206         10.500000         26.00000         25.2940444         25.10349         -         cold           chic         55.0         44.30000         2004-05-206         11.100000         44.500000         27.5114357         25.489583         -         cold           chic         42.0         30.30000         2004-05-206         6.971429         24.80000         21.754302	chic	68.0	61.30000	2004-05-	19.100000	41.500000	33.9370471	24.990489		cold	2004
chic         70.0         60.30000         2004-05- 09         15.144444         34.250000         34.1276042 20.083333         - cold         cold           chic         67.0         50.40000         2004-05- 08         17.800000         30.00000         29.6197917 24.828125         1.5690425         cold           chic         51.0         36.40000         2004-05- 07         7.450000         17.000000         33.9575408 15.942708         - cold         - cold           chic         69.0         57.10000         2004-05- 06         18.012500         59.000000         31.4808239 33.784601         1.7815425         cold           chic         53.0         36.50000         2004-05- 06         10.500000         26.000000         25.2940444 25.510349         - cold         - cold           chic         55.0         44.30000         2004-05- 05         11.100000         44.500000         27.5114357 25.489583         - cold         51.309575           chic         42.0         28.10000         2004-05- 03         6.971429         24.80000         21.7543025 26.640625         - cold         - cold           chic         42.0         37.80000         2004-05- 03         6.90000         7.00000         28.4062500 10.744792         - cold         9.33095	chic	70.0	61.60000	2004-05-	16.150000	52.500000	29.3055933	23.500000		cold	2004
chic         67.0         50.40000         2004-05-08         17.800000         30.000000         29.6197917 24.828125         1.5690425         cold           chic         51.0         36.40000         2004-05-07         7.450000         17.000000         33.9575408 15.942708         -         cold           chic         69.0         57.10000         2004-05-06         18.012500         59.000000         31.4808239 33.784601         1.7815425         cold           chic         53.0         36.50000         2004-05-05         10.500000         26.00000         25.2940444 25.510349         -         cold           chic         55.0         44.30000         2004-05-05         11.100000         44.500000         27.5114357 25.489583         -         cold           chic         42.0         28.10000         2004-05-04         3.600000         4.500000         21.7543025 26.640625         -         cold           chic         42.0         30.30000         2004-05-02         3.600000         6.500000         32.4062500 10.744792         -         cold           chic         46.0         37.80000         2004-05-02         6.900000         7.000000         28.4088542 17.307292         -         cold           chic	chic	70.0	60.30000	2004-05-	15.144444	34.250000	34.1276042	20.083333	-	cold	2004
chic         51.0         36.40000         2004-05         7.450000         17.000000         33.9575408 15.942708         -         cold           chic         69.0         57.10000         2004-05-06         18.012500         59.000000         31.4808239 33.784601         1.7815425         cold           chic         53.0         36.50000         2004-05-06         10.500000         26.000000         25.2940444 25.510349         -         cold           chic         55.0         44.30000         2004-05-06         11.100000         44.500000         27.5114357 25.489583         -         cold           chic         42.0         28.10000         2004-05-06         6.971429         24.80000         21.7543025 26.640625         -         cold           chic         42.0         30.30000         2004-05-02         3.600000         6.500000         32.4062500 10.744792         -         cold           chic         46.0         37.80000         2004-05-00         6.900000         7.000000         28.4088542 17.307292         -         cold           chic         51.0         45.50000         2004-04-11.600000         17.000000         27.2005694 24.688492         -         cold           chic         69.0         5	chic	67.0	50.40000	2004-05-	17.800000	30.000000	29.6197917	24.828125		cold	2004
chic         69.0         57.10000         2004-05-06         18.012500         59.000000         31.4808239         33.784601         1.7815425         cold           chic         53.0         36.50000         2004-05-05         10.500000         26.000000         25.2940444         25.510349         -         cold           chic         55.0         44.30000         2004-05-04         11.100000         44.500000         27.5114357         25.489583         -         cold           chic         42.0         28.10000         2004-05-03         6.971429         24.800000         21.7543025         26.640625         -         cold           chic         42.0         30.30000         2004-05-03         3.600000         6.500000         32.4062500         10.744792         -         cold           chic         46.0         37.80000         2004-05-06         6.900000         7.000000         28.4088542         17.307292         -         cold           chic         51.0         45.50000         2004-04-11.60000         17.00000         27.2005694         24.688492         -         cold           chic         69.0         51.90000         2004-04-13.60000         44.500000         44.4824017         20.857488	chic	51.0	36.40000	2004-05-	7.450000	17.000000	33.9575408	15.942708	-	cold	2004
chic         53.0         36.50000         2004-05- 05         10.500000         26.000000         25.2940444 25.510349         - cold 5.7309575           chic         55.0         44.30000         2004-05- 04         11.100000         44.500000         27.5114357 25.489583         - cold 5.1309575           chic         42.0         28.10000         2004-05- 03         6.971429         24.800000         21.7543025 26.640625         - cold 9.2595290           chic         42.0         30.30000         2004-05- 02         3.600000         6.500000         32.4062500 10.744792         - cold 12.6309575           chic         46.0         37.80000         2004-05- 02         6.900000         7.000000         28.4088542 17.307292         - cold 12.6309575           chic         51.0         45.50000         2004-04- 30         11.600000         17.000000         27.2005694 24.688492         - cold 4.6309575           chic         69.0         51.90000         2004-04- 30         13.600000         44.500000         44.4824017 20.857488         - cold 2.6309575           chic         64.0         42.30000         2004-04- 30         13.600000         44.500000         40.5089447 22.555556         - cold 4.6309575	chic	69.0	57.10000	2004-05-	18.012500	59.000000	31.4808239	33.784601		cold	2004
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	chic	53.0	36.50000	2004-05-	10.500000	26.000000	25.2940444	25.510349		cold	2004
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	chic	55.0	44.30000	2004-05-	11.100000	44.500000	27.5114357	25.489583	-	cold	2004
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	chic	42.0	28.10000	2004-05-	6.971429	24.800000	21.7543025	26.640625	=	cold	2004
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	chic	42.0	30.30000	2004-05-	3.600000	6.500000	32.4062500	10.744792	-	cold	2004
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	chic	46.0	37.80000	2004-05-	6.900000	7.000000	28.4088542	17.307292	-	cold	2004
chic       69.0       51.90000       2004-04-       13.600000 44.500000       44.4824017 20.857488       -       cold         29       2.6309575         chic       64.0       42.30000       2004-04-       11.600000 82.000000       40.5089447 22.555556       -       cold         4.6309575       28       4.6309575	chic	51.0	45.50000	2004-04-	11.600000	17.000000	27.2005694	24.688492	-	cold	2004
chic $64.0$ $42.30000$ $2004-04$ $11.600000$ $82.000000$ $40.5089447$ $22.555556$ - cold $4.6309575$	chic	69.0	51.90000	2004-04-	13.600000	44.500000	44.4824017	20.857488	-	cold	2004
	chic	64.0	42.30000	2004-04-	11.600000	82.000000	40.5089447	22.55556	-	cold	2004
	chic	44.0	21.30000	2004-04-	6.422222	17.200000	28.2068982	23.708333	-	cold	2004
27 9.8087353 chic 52.0 34.20000 2004-04- 11.600000 27.000000 27.8839286 19.088854 - cold 26 4.6309575	chic	52.0	34.20000	2004-04-	11.600000	27.000000	27.8839286	19.088854	-	cold	2004

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	54.0	48.70000	2004-04- 25	9.300000	13.000000	25.2500000	15.736111	- 6.9309575	cold	2004
chic	45.0	39.50000	2004-04- 24	16.300000	33.500000	26.9404762	24.972222		cold	2004
chic	51.0	37.00000	24 2004-04- 23	16.100000	23.500000	22.9702381	33.080918	0.1309575	cold	2004
chic	48.0	37.50000	2004-04- 22	7.400000	9.500000	27.1350108	21.263889	8.8309575	cold	2004
chic	54.0	48.50000	2004-04- 21	8.555556	17.800000	26.3344979	18.555556	7.6754020	cold	2004
chic	54.0	48.40000	2004-04- 20	14.850000	30.500000	18.2650104	21.756643	1.3809575	cold	2004
chic	60.0	48.40000	2004-04- 19	6.900000	54.000000	29.2954193	16.188665	9.3309575	cold	2004
chic	69.0	50.70000	2004-04- 18	13.385714	59.500000	38.7797619	16.777778	2.8452433	cold	2004
chic	64.0	51.60000	2004-04-	16.500000	25.000000	44.4761905	24.125000		cold	2004
chic	70.0	45.60000	17 2004-04-	14.450000	40.000000	37.3329451	27.694444		cold	2004
chic	61.0	33.90000	16 2004-04-	14.525000	59.800000	31.1369048	33.344310	1.7809575	cold	2004
chic	49.0	27.50000	15 2004-04-	20.250000	61.000000	17.1102484	43.001984	$1.7059575 \\ 4.0190425$	cold	2004
chic	38.0	25.40000	14 2004-04-	7.050000	15.000000	29.4583333	19.972222	-	cold	2004
chic	36.0	21.80000	13 2004-04-	3.442857	16.000000	30.2516046	13.152778	9.1809575	cold	2004
chic	37.0	26.80000	12 2004-04-	5.900000	6.500000	32.2857143	12.597222	12.7881004	cold	2004
chic	44.0	30.30000	11 2004-04-	15.500000	25.000000	22.6279762	29.027778	10.3309575	cold	2004
chic	45.0	29.80000	10 2004-04-	12.437500	28.200000	20.2470238	33.333333	0.7309575	cold	2004
chic	46.0	35.90000	09 2004-04-	21.000000	32.000000	27.6816770	27.652778	$3.7934575 \\ 4.7690425$	cold	2004
chic	52.0	32.40000	08 2004-04-	18.500000	31.000000	33.5844979	31.833333	2.2690425	cold	2004
chic	56.0	37.50000	07 2004-04-	21.837500	55.500000	30.8113236	33.324074	5.6065425	cold	2004
chic	39.0	24.40000	06 2004-04-	11.000000	32.500000	29.0331748	29.732323		cold	2004
chic	37.0	24.50000	05 2004-04-	2.600000	6.000000	37.9166667	11.291667	5.2309575	cold	2004
chic	43.0	23.80000	04 2004-04-	7.762500	24.800000	27.4817708	23.541667	13.6309575	cold	2004
chic	44.0	23.70000	03 2004-04-	12.200000	16.000000	28.1730977	25.333333	8.4684575	cold	2004
chic	42.0	27.90000	02 2004-04-	11.100000	11.000000	32.2261905	18.920635	4.0309575	cold	2004
chic	42.0	32.10000	01 2004-03-	5.775000	8.500000	26.1709280	15.322222	5.1309575	cold	2004
			31					10.4559575		

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	48.0	37.00000	2004-03- 30	22.500000	54.500000	19.2109860	29.771135	6.2690425	cold	2004
chic	51.0	37.80000	2004-03-	13.300000	18.500000	21.1582633	24.333333		cold	2004
chic	61.0	52.50000	29 2004-03-	11.900000	18.200000	26.3273810	13.212302	2.9309575	cold	2004
chic	51.0	47.40000	28 2004-03-	14.000000	20.500000	16.0119048	24.944444	4.3309575	cold	2004
chic	56.0	54.90000	27 2004-03-	12.050000	23.000000	16.8519226	22.672619	2.2309575	cold	2004
chic	60.0	52.80000	26 2004-03-	17.987500	29.000000	20.3279691	26.430556	$4.1809575 \\ 1.7565425$	cold	2004
chic	54.0	44.80000	25 2004-03-	26.500000	28.000000	18.3515851	29.160024	10.2690425	cold	2004
chic	46.0	24.40000	24 2004-03-	30.000000	43.000000	22.6553119	30.840278	13.7690425	cold	2004
chic	30.0	10.00000	23 2004-03-	10.662500	23.400000	19.7216874	26.854167	-	cold	2004
chic	28.0	16.10000	22 2004-03-	7.300000	11.500000	31.6875000	12.104167	5.5684575	cold	2004
chic	47.0	28.80000	21 2004-03-	17.000000	24.000000	27.1875000	19.861111	8.9309575 0.7690425	cold	2004
chic	38.0	30.70000	20 2004-03-			14.9722222			cold	2004
chic	32.0	30.90000	19 2004-03-		21.000000			10.2690425	cold	2004
			18 2004-03-							
chic	32.0	28.40000	17				32.956522	0.8090425	cold	2004
chic	32.0	26.10000	2004-03- 16	10.677778	17.750000	27.3083333	21.826389	5.5531798	cold	2004
chic	32.0	22.40000	2004-03- 15	7.300000	9.500000	27.6956522	26.736842	- 8.9309575	cold	2004
chic	39.0	27.90000	2004-03- 14	13.400000	17.500000	29.5625000	14.187500	- 2.8309575	cold	2004
chic	33.0	18.40000	2004-03- 13	17.712500	24.500000	14.7500000	36.708333		cold	2004
chic	25.0	7.10000	2004-03- 12	10.100000	22.500000	16.7291667	23.479167	6.1309575	cold	2004
chic	31.0	16.80000	2004-03- 11	10.500000	47.500000	17.5312500	14.391215		cold	2004
chic	37.0	25.40000	2004-03-	13.825000	26.400000	20.6458333	29.797619	-	cold	2004
chic	33.0	25.60000	10 2004-03-	11.800000	12.500000	25.2249396	25.132850		cold	2004
chic	34.0	20.80000	09 2004-03-	11.800000	20.000000	21.8546196	23.402778	4.4309575	cold	2004
chic	40.0	28.30000	08 2004-03-	7.625000	12.000000	33.4687500	10.638889		cold	2004
chic	41.0	31.30000	07 2004-03-	11.000000	13.500000	23.1979167	17.125000		cold	2004
chic	50.0	41.80000	06 2004-03-	7.600000	19.000000	20.2916667	15.904287	5.2309575	cold	2004
			05					8.6309575		

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	41.0	39.40000	2004-03- 04	29.175000	37.2000000	6.8953804	23.415936	12.9440425	cold	2004
chic	43.0	34.50000	2004-03- 03	28.150000	33.000000	12.7007576	27.343434	11.9190425	cold	2004
chic	44.0	37.20000	2004-03- 02	15.950000	17.500000	16.3165761	15.416667	0.2809575	cold	2004
chic	54.0	42.40000	2004-03- 01	10.266667	13.500000	25.1250000	23.645833	5.9642909	cold	2004
chic	47.0	32.50000	2004-02- 29	18.200000	21.000000	20.6689312	32.458333	1.9690425	cold	2004
chic	40.0	27.60000	2004-02- 28	24.000000	37.000000	10.9895833	33.069444	7.7690425	cold	2004
chic	35.0	24.70000	2004-02- 27	30.711111	50.800000	12.0208333	33.794444	14.4801536	cold	2004
chic	34.0	25.20000	2004-02- 26	18.500000	25.000000	17.5520833	29.698413	2.2690425	cold	2004
chic	31.0	24.60000	2004-02- 25	11.000000	19.000000	23.5937500	27.443237	5.2309575	cold	2004
chic	34.0	29.70000	2004-02- 24	19.237500	17.500000	22.5375906	21.444444	3.0065425	cold	2004
chic	41.0	32.60000	2004-02- 23	27.500000	25.000000	11.8971920	29.275966	11.2690425	cold	2004
chic	34.0	28.10000	2004-02- 22	18.200000	22.500000	13.6562500	31.611111	1.9690425	cold	2004
chic	33.0	26.00000	2004-02- 21	7.866667	14.400000	26.6562500	20.986111	8.3642909	cold	2004
chic	39.0	35.10000	2004-02- 20	22.300000	22.000000	18.0416667	30.774759	6.0690425	cold	2004
chic	36.0	31.70000	2004-02- 19	40.000000	41.000000	5.3229167	42.22222	23.7690425	cold	2004
chic	29.0	23.50000	2004-02- 18	48.157143	61.000000	8.1621377	43.708333	31.9261853	cold	2004
chic	24.0	15.80000	2004-02- 17	43.400000	49.000000	8.2780797	44.978175	27.1690425	cold	2004
chic	16.0	7.70000	2004-02- 16	NA	31.000000	13.2708333	41.666667	NA	cold	2004
chic	14.0	10.90000	2004-02- 15	6.528571	13.750000	28.7291667	21.013889	9.7023861	cold	2004
chic	26.0	17.60000	2004-02- 14	9.300000	26.500000	23.9791667	21.703704	- 6.9309575	cold	2004
chic	20.0	11.20000	2004-02- 13	24.500000	17.500000	21.7708333	23.258816	8.2690425	cold	2004
chic	22.0	16.00000	2004-02- 12	22.100000	30.000000	16.6666667	28.916667	5.8690425	cold	2004
chic	23.0	16.50000	2004-02- 11	18.500000	31.000000	12.0113636	38.044686	2.2690425	cold	2004
chic	20.0	14.20000	2004-02- 10	28.900000	22.500000	22.9424819	23.430556	12.6690425	cold	2004
chic	28.0	20.90000	2004-02- 09	14.657143	20.600000	26.0027503	24.592947	1.5738147	cold	2004
chic	16.0	16.00000	2004-02- 08	20.450000	19.000000	16.7083333	32.033333		cold	2004

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	20.0	20.00000	2004-02- 07	20.900000	14.500000	19.5138889	27.888889	4.6690425	cold	2004
chic	28.0	23.60000	2004-02-	19.271429	21.500000	9.7604167	34.541667	3.0404710	cold	2004
chic	26.0	19.60000	06 2004-02-	8.200000	24.000000	17.4375000	30.513889		cold	2004
chic	13.0	3.80000	05 2004-02-	19.700000	55.000000	10.5179924	44.510823	8.0309575 3.4690425	cold	2004
chic	21.0	17.40000	04 2004-02-	26.377778	35.000000	8.6077899	33.679293	10.1468202	cold	2004
chic	28.0	22.20000	03 2004-02-	17.000000	49.000000	5.3683712	36.166667	0.7690425	cold	2004
chic	21.0	10.10000	02 2004-02-	22.300000	45.000000	13.4166667	35.513889	6.0690425	cold	2004
chic	4.0	-	01 2004-01-	22.285714	50.000000	8.1562500	36.902778	6.0547567	cold	2004
chic	-3.0	4.20000	31 2004-01-	18.300000	32.000000	13.2767210	28.497475	2.0690425	cold	2004
chic	2.0	12.70000	30 2004-01-	18.300000	29.000000	10.7547348	33.500000	2.0690425	cold	2004
chic	7.0	6.80000	29 2004-01-	16.300000	30.000000	13.6145833	26.513889	0.0690425	cold	2004
chic	17.0	$0.80000 \\ 12.90000$	28 2004-01-	16.400000	13.000000	13.9144022	29.606280	0.1690425	cold	2004
chic	22.0	18.30000	27 2004-01-	15.000000	24.000000	19.0208333	24.397727	-	cold	2004
chic	18.0	7.50000	26 2004-01-	7.885714	29.500000	26.7395833	18.166667	1.2309575	cold	2004
chic	15.0	10.90000	25 2004-01-	12.100000	19.000000	13.7708333	29.375000	8.3452433	cold	2004
chic	15.0	8.60000	24 2004-01-	12.800000	36.000000	8.3541667	27.150794	4.1309575	cold	2004
chic	11.0	_	23 2004-01-	5.944444	23.800000	20.8102355	18.307971	3.4309575	cold	2004
chic	24.0	7.20000 $14.30000$	22 2004-01-	20.200000	26.000000	10.1734601	26.041667	10.2865131 3.9690425	cold	2004
chic	15.0	2.20000	21 2004-01-			9.4057971			cold	2004
chic	11.0	0.30000	20 2004-01-			17.3437500		0.4309575	cold	2004
chic	18.0	2.80000	19 2004-01-			20.3854167		10.1559575	cold	2004
			18					8.6309575		
chic	31.0	28.30000	2004-01- 17			3.3437500			cold	2004
chic	27.0	18.40000	2004-01- 16			7.1746324			cold	2004
chic	19.0	7.10000	2004-01- 15			13.7812500		8.1309575	cold	2004
chic	27.0	21.10000	2004-01- 14	15.000000	31.500000	10.6541667	23.410353	1.2309575	cold	2004
chic	30.0	19.40000	2004-01- 13	12.628571	18.000000	12.1229620	27.652778	3.6023861	cold	2004

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	35.0	27.40000	2004-01- 12	18.000000	14.000000	7.7409420	19.760101	1.7690425	cold	2004
chic	33.0	24.90000	2004-01- 11	NA	12.000000	14.3958333	18.861111	NA	cold	2004
chic	21.0	16.50000	2004-01- 10	15.412500	24.200000	9.8750000	28.194444	0.8184575	cold	2004
chic	22.0	17.20000	2004-01- 09	13.900000	17.000000	20.5416667	25.782609	2.3309575	cold	2004
chic	24.0	17.30000	2004-01- 08	11.500000	25.000000	8.3125000	32.611111	4.7309575	cold	2004
chic	15.0	3.50000	2004-01-	13.800000	24.500000	10.0978261	29.333333	-	cold	2004
chic	3.0	-	07 2004-01-	17.200000	24.000000	19.5886034	19.111111	$\begin{array}{c} 2.4309575 \\ 0.9690425 \end{array}$	cold	2004
chic	17.0	$6.00000 \\ 12.40000$	06 2004-01-	11.000000	16.000000	15.2490942	23.439394		cold	2004
chic	31.0	25.80000	05 2004-01-	4.650000	7.400000	23.0833333	10.687500	5.2309575	cold	2004
chic	41.0	28.80000	04 2004-01-	10.000000	9.000000	10.0729167	20.625000	11.5809575	cold	2004
chic	49.0	47.50000	03 2004-01-	18.400000	20.500000	5.8854167	20.750000	$6.2309575 \\ 2.1690425$	cold	2004
chic	35.0	30.40000	02 2004-01-	14.385714	17.000000	6.8333333	26.520833		cold	2004
chic	32.0	20.30000	01 2003-12-	17.500000	15.500000	12.3854167	24.910714	1.8452433 1.2690425	cold	2003
chic	34.0	22.70000	31 2003-12-	10.000000	17.500000	10.9846014	19.533514		cold	2003
chic	39.0	26.70000	30 2003-12-	8.660000	15.500000	8.5951087	21.208333	6.2309575	cold	2003
chic	45.0	32.90000	29 2003-12-	10.500000	14.500000	13.1354167	20.500000	7.5709575	cold	2003
chic	39.0	23.90000	28 2003-12-	11.300000	18.500000	7.5520833	27.979167	5.7309575	cold	2003
chic	30.0	22.50000	27 2003-12-	17.362500	24.500000	2.8958333	39.687500	$4.9309575 \\ 1.1315425$	cold	2003
chic	27.0	15.40000	26 2003-12-	12.400000	21.000000	10.5208333	27.854167	-	cold	2003
chic	22.0	14.50000	25 2003-12-	9.600000	19.000000	13.7833333	22.625000	3.8309575	cold	2003
chic	32.0	27.60000	24 2003-12-	14.314286	14.800000	4.6714674	24.708333	6.6309575	cold	2003
chic	42.0	33.10000	23 2003-12-	22.500000	26.000000	4.8958333	25.130682	1.9166718 6.2690425	cold	2003
chic	37.0	25.90000	22 2003-12-	8.500000	21.500000	16.8229167	21.895833	_	cold	2003
chic	20.0	8.20000	21 2003-12-	7.928571	19.000000	11.1041667	26.458333	7.7309575	cold	2003
chic	25.0	15.40000	20 2003-12-			15.1770833		8.3023861	cold	2003
chic	23.0	19.70000	19 2003-12-					7.2309575 20.0690425		2003
CIIIC	∠J.U	19.10000	18	50.500000	20.000000	5.2500000	29.900200	20.0030420	cold	2000

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	23.0	18.50000	2003-12- 17	15.000000	22.200000	9.1142540	24.166667	- 1.2309575	cold	2003
chic	34.0	26.50000	2003-12- 16	13.300000	16.000000	9.4266304	19.708333	2.9309575	cold	2003
chic	31.0	27.70000	2003-12- 15	22.500000	18.000000	7.0692935	28.779167	6.2690425	cold	2003
chic	28.0	23.80000	2003-12- 14	17.825000	20.000000	10.6666667	29.062500	1.5940425	cold	2003
chic	21.0	16.70000	2003-12- 13	18.300000	24.000000	10.1666667	35.729167	2.0690425	cold	2003
chic	17.0	6.40000	2003-12- 12	18.800000	27.500000	6.8958333	34.990942	2.5690425	cold	2003
chic	22.0	14.30000	2003-12- 11	7.728571	12.000000	12.1619730	21.533333	8.5023861	cold	2003
chic	41.0	40.40000	2003-12- 10	12.000000	11.500000	6.7187500	23.569444	4.2309575	cold	2003
chic	45.0	41.90000	2003-12- 09	26.800000	33.500000	1.0978261	27.239899	10.5690425	cold	2003
chic	40.0	33.90000	2003-12- 08	21.950000	21.000000	3.0520833	28.868687	5.7190425	cold	2003
chic	34.0	28.50000	2003-12- 07	21.100000	21.000000	4.5833333	24.625000	4.8690425	cold	2003
chic	34.0	26.90000	2003-12- 06	11.800000	16.000000	6.0312500	28.194444	4.4309575	cold	2003
chic	37.0	30.90000	2003-12- 05	8.012500	15.000000	16.1770833	24.500000	4.4309373 - 8.2184575	cold	2003
chic	37.0	29.70000	2003-12- 04	15.800000	23.000000	3.9393116	28.062710	0.4309575	cold	2003
chic	34.0	22.30000	2003-12- 03	9.000000	23.500000	11.6562500	29.888889	-	cold	2003
chic	30.0	13.00000	2003-12- 02	6.457143	15.500000	10.5009058	34.828283	7.2309575 - 9.7738147	cold	2003
chic	35.0	14.40000	2003-12- 01	6.500000	18.500000	18.6290761	23.013889	9.7309575	cold	2003
chic	46.0	27.40000	2003-11- 30	5.600000	12.000000	16.2291667	19.097222	10.6309575	cold	2003
chic	31.0	21.30000	2003-11-	9.512500	13.750000	16.1354167	18.819444	-	cold	2003
chic	33.0	22.50000	29 2003-11- 28	15.800000	15.500000	17.1979167	19.111111	6.7184575 - 0.4309575	cold	2003
chic	41.0	37.40000	2003-11- 27	19.500000	17.500000	6.0520833	24.888889		cold	2003
chic	40.0	28.30000	2003-11- 26	15.087500	30.500000	5.5670290	29.805556		cold	2003
chic	33.0	21.60000	2003-11-	16.000000	28.500000	8.2812500	26.284091	1.1434575	cold	2003
chic	25.0	14.00000	25 2003-11- 24	7.400000	32.000000	17.1988225	14.674603	0.2309575 - 8.8309575	cold	2003
chic	48.0	47.10000	2003-11-	8.112500	11.600000	17.7395833	10.819444	-	cold	2003
chic	53.0	48.00000	23 2003-11- 22	24.200000	28.500000	5.3541667	23.361111	8.1184575 7.9690425	cold	2003

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	46.0	36.50000	2003-11- 21	7.700000	10.0000000	15.4895833	19.250000	- 8.5309575	cold	2003
chic	50.0	40.40000	2003-11- 20	7.785714	26.500000	9.4660326	28.031746	8.4452433	cold	2003
chic	47.0	34.70000	2003-11-	14.000000	17.000000	9.3750000	27.166667	-	cold	2003
chic	55.0	55.10000	19 2003-11-	9.100000	15.000000	7.6784420	22.284420	2.2309575	cold	2003
chic	44.0	44.70000	18 2003-11-	22.875000	27.200000	6.6657197	25.152778	7.1309575 6.6440425	cold	2003
chic	45.0	43.70000	17 2003-11-	14.300000	13.000000	2.9166667	18.305556	-	cold	2003
chic	40.0	39.80000	16 2003-11-	14.200000	17.000000	4.8541667	19.569444	1.9309575	cold	2003
chic	36.0	23.10000	15 2003-11-	9.825000	26.000000	6.2291667	28.135101	2.0309575	cold	2003
chic	35.0	15.80000	14 2003-11-	16 700000	16 000000	14.8319746	23 153382	6.4059575	cold	2003
			13					0.4030423		
chic	48.0	39.90000	2003-11- 12	12.500000	48.500000	12.5108696	15.527778	3.7309575	cold	2003
chic	50.0	50.10000	2003-11- 11	21.462500	31.200000	3.3750000	17.194444	5.2315425	cold	2003
chic	38.0	30.20000	2003-11- 10	25.600000	26.500000	6.2006341	33.666667	9.3690425	cold	2003
chic	31.0	16.90000	2003-11- 09	15.000000	19.000000	10.9895833	31.986111	1 9200575	cold	2003
chic	27.0	18.10000	2003-11-	7.685714	15.000000	13.1770833	26.347222	1.2309575	cold	2003
chic	35.0	17.30000	08 2003-11-	19.000000	21.500000	14.4361413	26.876984	8.5452433 2.7690425	cold	2003
chic	38.0	22.00000	07 2003-11-	NA	15.000000	8.9375000	25.557065	NA	cold	2003
chic	42.0	34.20000	06 2003-11-	11.587500	15.600000	8.2500000	17.993056	-	cold	2003
chic	59.0	57.00000	05 2003-11-	4.700000	28.500000	8.6173007	21.097222	4.6434575	cold	2003
abia			04 2003-11-					11.5309575		2003
chic	49.0	49.10000	03			6.5181159		6.6309575	cold	
chic	52.0	50.90000	2003-11- 02	12.375000	13.500000	3.8645833	14.812500	3.8559575	cold	2003
chic	47.0	41.70000	2003-11- 01	NA	15.000000	9.9895833	13.416667	NA	cold	2003
chic	58.0	52.60000	2003-10-	NA	35.500000	10.7559524	16.868056	NA	cold	2003
chic	55.0	49.00000	31 2003-10-	10.925000	25.400000	19.2331781	24.240404		cold	2003
chic	44.0	35.70000		NA	18.500000	7.2603654	16.541035	5.3059575 NA	cold	2003
chic	48.0	38.70000	29 2003-10-	8.000000	27.500000	8.2989130	15.993056		cold	2003
chic	38.0	32.30000	28 2003-10-	14.512500	22.000000	4.7494824	19.44444	8.2309575	cold	2003
			27					1.7184575		

city	$\operatorname{tmpd}$	dewptp	date	pm25		n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	40.0	33.50000	2003-10- 26	10.000000	8.500000	6.8065476	12.680556	6.2309575	cold	2003
chic	52.0	45.30000	2003-10- 25	17.100000	24.000000	4.6904762	26.361111	0.8690425	cold	2003
chic	48.0	42.80000	2003-10- 24	16.687500	37.400000	10.7559524	29.486111	0.4565425	cold	2003
chic	46.0	40.80000	2003-10- 23	6.800000	28.500000	12.4017653	27.168470	9.4309575	cold	2003
chic	48.0	38.50000	2003-10- 22	12.900000	12.500000	17.4906832	20.638889	3.3309575	cold	2003
chic	55.0	44.90000	2003-10-	14.112500	38.500000	17.6322464	25.541667	-	cold	2003
chic	66.0	51.60000	21 2003-10- 20	9.600000	58.000000	25.0119048	29.194444	2.1184575 - 6.6309575	cold	2003
chic	56.0	47.30000	2003-10- 19	10.600000	20.500000	22.5000000	22.000000	5.6309575	cold	2003
chic	57.0	41.90000	2003-10- 18	10.857143	28.000000	12.4285714	30.180556	5.3738147	cold	2003
chic	44.0	30.50000	2003-10-	8.100000	30.000000	8.8035714	37.638889	-	cold	2003
chic	45.0	35.80000	17 2003-10-	8.900000	21.500000	10.3902692	27.940053	8.1309575	cold	2003
chic	50.0	35.70000	16 2003-10-	7.928571	23.500000	12.3690476	26.513889	7.3309575	cold	2003
chic	53.0	47.60000	15 2003-10-	14.600000	10.500000	18.5274327	24.452020	8.3023861	cold	2003
chic	57.0	41.30000	14 2003-10-	17.400000	60.500000	12.3095238	38.194444	$1.6309575 \\ 1.1690425$	cold	2003
chic	58.0	42.20000	13 2003-10-	6.542857	20.000000	17.3630952	16.347222	-	cold	2003
chic	66.0	59.30000	12 2003-10-	18.300000	33.000000	20.7738095	21.916667	9.6881004 2.0690425	cold	2003
chic	64.0	57.90000	11 2003-10-	34.000000	58.500000	14.4702381	34.361111	17.7690425	cold	2003
chic	62.0	54.50000	10 2003-10-	32.087500	65.000000	8.8245342	47.250000	15.8565425	cold	2003
chic	64.0	53.10000	09 2003-10-	11.600000	68.000000	18.6891822	40.944444		cold	2003
chic	61.0	49.40000	08 2003-10-	7.400000	54.000000	12.2624224	37.666667	4.6309575	cold	2003
chic	48.0	37.50000	07 2003-10-	8.625000	22.600000	16.2424948	27.333333	8.8309575	cold	2003
chic	47.0	40.50000	06 2003-10-	9.400000	23.500000	16.1250000	20.944444		cold	2003
chic	49.0	36.90000	05 2003-10-	14.700000	25.000000	11.6071429	24.527778	6.8309575	cold	2003
chic	48.0	37.70000	04 2003-10-	12.162500	71.000000	7.7864907	31.291667	1.5309575	cold	2003
chic	42.0	22.20000	03 2003-10-	7.700000	34.500000	7.5178571	25.945268	4.0684575	cold	2003
chic	44.0	26.00000	02 2003-10-			10.7976190		8.5309575	cold	2003
	-	0	01					9.6309575		

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	48.0	32.20000	2003-09- 30	5.271429	21.000000	11.6161685	19.489583	- 10.9595290	cold	2003
chic	50.0	36.60000	2003-09- 29	12.700000	23.000000	10.5416667	19.209239	3.5309575	cold	2003
chic	52.0	41.60000	2003-09-	7.900000	11.500000	12.4341299	11.270833	-	cold	2003
chic	54.0	42.60000	28 2003-09-	5.600000	14.500000	12.7083333	12.989583	8.3309575	cold	2003
chic	57.0	48.70000	27 2003-09-	6.700000	28.000000	7.3779438	28.884470	10.6309575	cold	2003
chic	53.0	38.60000	26 2003-09-	12.300000	28.000000	11.9778080	19.780303	9.5309575	cold	2003
chic	62.0	50.10000	25 2003-09-	10.362500	25.000000	17.1460598	24.104167	3.9309575	cold	2003
			24 2003-09-					5.8684575		
chic	59.0	42.60000	23			15.2348279		4.0309575	cold	2003
chic	62.0	54.50000	2003-09- 22	6.500000		19.1060606	20.427083	9.7309575	cold	2003
chic	62.0	50.50000	2003-09- 21	15.700000	30.000000	32.3906250	19.541667	0.5309575	cold	2003
chic	56.0	43.00000	2003-09- 20	8.700000	26.000000	16.7135417	19.989583	- 7.5309575	cold	2003
chic	58.0	47.20000	2003-09- 19	16.800000	25.000000	15.9130435	18.270833		cold	2003
chic	68.0	54.20000	2003-09-	24.900000	40.200000	37.3906250	31.468750	8.6690425	cold	2003
chic	68.0	52.70000	18 2003-09-	17.600000	41.500000	28.6822917	35.315341	1.3690425	cold	2003
chic	66.0	50.00000	17 2003-09-	9.500000	58.500000	17.4811224	35.979167	-	cold	2003
chic	63.0	47.50000	16 2003-09-	9.325000	27.500000	13.0118371	26.427083	6.7309575	cold	2003
chic	67.0	61.20000	15 2003-09-	15 900000	17.000000	24.9114583	16 572917	6.9059575	cold	2003
			14					0.3309575		
chic	75.0	63.00000	2003-09- 13					19.4690425	cold	2003
chic	72.0	60.70000	2003-09- 12	32.612500	46.250000	29.9504076	29.620833	16.3815425	cold	2003
chic	74.0	60.60000	2003-09- 11	37.800000	58.500000	39.2262228	26.863225	21.5690425	cold	2003
chic	72.0	63.30000	2003-09- 10	37.900000	51.500000	32.3343009	29.671649	21.6690425	cold	2003
chic	72.0	63.10000	2003-09-	26.500000	45.000000	29.4544837	30.966856	10.2690425	cold	2003
chic	72.0	61.70000	09 2003-09-	23.300000	68.000000	22.0443841	43.843750	7.0690425	cold	2003
chic	73.0	60.30000	08 2003-09-	16.700000	30.500000	31.0052083	30.739583	0.4690425	cold	2003
chic	66.0	53.30000	07 2003-09-	13.575000	25.500000	24.4531250	32.682292	-	cold	2003
chic	62.0	50.90000	06 2003-09-			14.1831975		2.6559575	cold	2003
01110	02.0	50.50000	05	11.400000	52.500000	11.1001010	20.00000	4.8309575	JOIG	2000

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	62.0	51.70000	2003-09- 04	5.300000	11.500000	18.6111866	19.200149	- 10.9309575	cold	2003
chic	72.0	58.80000	2003-09- 03	14.250000	30.500000	22.0120018	25.463768	1.9809575	cold	2003
chic	67.0	59.90000	2003-09- 02	12.500000	21.000000	31.8237578	21.859375	3.7309575	cold	2003
chic	63.0	61.40000	2003-09- 01	6.800000	7.000000	32.9285714	7.697917	-	cold	2003
chic	66.0	57.50000	2003-08-	8.650000	18.000000	26.1696429	13.828125	9.4309575	cold	2003
chic	68.0	51.30000	31 2003-08-	2.500000	7.000000	27.4523810	9.614583	7.5809575	cold	2003
chic	76.0	63.40000	30 2003-08-	13.500000	25.000000	31.0357143	21.333333	13.7309575	cold	2003
chic	76.0	65.70000	29 2003-08-	18.157143	44.500000	37.0817482	26.234375	$2.7309575 \\ 1.9261853$	cold	2003
chic	74.0	62.60000	28 2003-08-	15.300000	20.000000	30.2971014	24.380208	-	cold	2003
chic	82.0	69.10000	27 2003-08-	19.700000	50.500000	40.3125000	34.075758	$0.9309575 \\ 3.4690425$	hot	2003
chic	83.0	67.10000	26 2003-08-	26.814286	52.400000	47.6337183	26.278986	10.5833282	hot	2003
chic	72.0	62.30000	25 2003-08-	15.000000	25.000000	33.2291667	18.322917	_	cold	2003
chic	69.0	55.90000	24 2003-08-		14.000000	19.7421875		1.2309575	cold	2003
chic	71.0	57.20000	23 2003-08-			24.0101902		9.6309575	cold	2003
			22					5.7595290		
chic	84.0	70.40000	2003-08- 21					11.1690425		2003
chic	77.0	67.70000	2003-08- 20					21.0690425	cold	2003
chic	71.0	60.40000	2003-08- 19	17.185714	30.250000	25.8825861	31.502717	0.9547567	cold	2003
chic	73.0	60.00000	2003-08- 18	12.600000	26.500000	25.1699811	23.383152	3.6309575	cold	2003
chic	78.0	63.40000	2003-08- 17	14.600000	19.000000	33.0078125	10.442708	1.6309575	cold	2003
chic	83.0	69.10000	2003-08- 16	23.587500	41.500000	41.1093750	16.718750		hot	2003
chic	79.0	71.60000	2003-08- 15	36.800000	55.000000	24.8846241	28.830492	20.5690425	cold	2003
chic	77.0	71.40000	2003-08-	33.500000	50.500000	37.6861737	26.687500	17.2690425	cold	2003
chic	72.0	66.60000	14 2003-08-	17.337500	28.600000	29.7570199	14.641304	1.1065425	cold	2003
chic	71.0	64.40000	13 2003-08-	11.300000	13.500000	24.6491477	11.213542		cold	2003
chic	69.0	64.00000	12 2003-08-	9.800000	18.500000	17.3695652	17.275000	4.9309575	cold	2003
chic	73.0	59.40000	11 2003-08-	11.637500	18.500000	24.0651042	16.385417	6.4309575	cold	2003
			10					4.5934575		

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	70.0	60.80000	2003-08- 09	6.200000	11.000000	22.1588542	13.395833	10.0309575	cold	2003
chic	69.0	64.30000	2003-08- 08	6.900000	10.000000	18.9322917	10.735507	9.3309575	cold	2003
chic	73.0	64.60000	2003-08-	11.714286	23.000000	22.6413661	19.453218	-	cold	2003
chic	74.0	65.60000	07 2003-08- 06	23.200000	47.500000	15.6801816	42.187500	4.5166718 6.9690425	cold	2003
chic	71.0	62.60000	2003-08- 05	19.800000	35.500000	25.6478714	31.870018	3.5690425	cold	2003
chic	69.0	62.40000	2003-08- 04	17.900000	20.500000	29.5211730	22.208333	1.6690425	cold	2003
chic	71.0	64.10000	2003-08-	14.500000	20.500000	20.7604167	24.833333		cold	2003
chic	72.0	62.40000	03 2003-08-	10.500000	25.500000	24.6067708	21.479167	1.7309575	cold	2003
chic	75.0	64.40000	02 2003-08-	23.862500	37.000000	32.3828125	30.554924	5.7309575 7.6315425	cold	2003
chic	75.0	63.00000	01 2003-07-	27.300000	54.000000	34.6500947	28.065341	11.0690425	cold	2003
chic	69.0	55.90000	31 2003-07-	20.100000	45.500000	28.6813859	36.993454	3.8690425	cold	2003
chic	68.0	51.40000	30 2003-07- 29	15.250000	36.500000	24.3081975	25.951993		cold	2003
chic	65.0	58.00000	2003-07-	10.200000	22.000000	22.1599864	16.447043	0.9809575	cold	2003
chic	74.0	63.10000	28 2003-07-	14.700000	21.000000	32.1171875	11.802083	6.0309575	cold	2003
chic	77.0	63.20000	27 2003-07-	23.900000	37.800000	49.0651042	14.270833	1.5309575 7.6690425	cold	2003
chic	71.0	57.70000	26 2003-07- 25	17.500000	52.500000	32.2813632	24.875000	1.2690425	cold	2003
chic	67.0	47.80000	2003-07-	6.400000	25.000000	15.7974411	21.166214		cold	2003
chic	67.0	53.10000	24 2003-07-	4.412500	8.500000	19.4765625	11.947917	9.8309575	cold	2003
chic	68.0	58.20000	23 2003-07-	5.800000	9.500000	21.2785326	9.916193	11.8184575	cold	2003
chic	75.0	64.40000	22 2003-07-	10.000000	18.000000	35.6677989	18.290179		cold	2003
chic	76.0	65.40000	21 2003-07-	14.485714	26.750000	30.7213542	20.666667		cold	2003
chic	68.0	53.20000	20 2003-07-	9.000000	22.000000	31.1354167	24.395833		cold	2003
chic	66.0	53.20000	19 2003-07-	6.200000	11.500000	26.1203578	16.070076	7.2309575	cold	2003
chic	75.0	65.10000	18 2003-07-	14.985714	35.500000	29.9040987	29.155844		cold	2003
chic	72.0	57.10000	17 2003-07-	8.700000	19.000000	21.1764040	26.128170	1.2452433	cold	2003
chic	77.0	64.40000		NA	25.000000	39.3020833	17.843750	7.5309575 NA	cold	2003
			15							

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmean	n@3tmean2	no2tmean2	2pm25detren	dempcat	year
chic	70.0	58.90000	2003-07- 14	22.912500	35.800000	31.4403306	31.786458	6.6815425	cold	2003
chic	70.0	56.30000	2003-07- 13	15.200000	27.500000	31.3958333	28.354167	1.0309575	cold	2003
chic	71.0	54.50000	2003-07- 12	8.400000	18.000000	22.9479167	21.812500	7.8309575	cold	2003
chic	69.0	56.50000	2003-07- 11	5.662500	18.000000	22.3973652	15.741395	10.5684575	cold	2003
chic	73.0	63.50000	2003-07- 10	6.800000	14.500000	26.0141531	15.661458	9.4309575	cold	2003
chic	69.0	61.20000	2003-07- 09	7.600000	16.500000	30.0947176	17.816288	- 8.6309575	cold	2003
chic	72.0	64.60000	2003-07- 08	8.612500	18.500000	24.0963542	22.442482	7.6184575	cold	2003
chic	79.0	70.80000	2003-07- 07	12.750000	42.000000	25.2511322	23.828125	3.4809575	cold	2003
chic	78.0	68.60000	2003-07- 06	13.900000	26.500000	40.9322917	16.411458	2.3309575	cold	2003
chic	78.0	66.20000	2003-07- 05	18.271429	24.500000	50.8619792	18.713542	2.0404710	cold	2003
chic	84.0	68.40000	2003-07- 04	32.900000	47.500000	45.6614583	21.343750	16.6690425	hot	2003
chic	79.0	65.40000	2003-07- 03	24.050000	71.500000	35.3435236	34.723958	7.8190425	cold	2003
chic	75.0	55.50000	2003-07- 02			50.2056159			cold	2003
chic	73.0	53.40000	2003-07- 01			42.0933589		3.6190425	cold	2003
chic	72.0	53.90000	2003-06- 30			28.2216938		3.5309575	cold	2003
chic	74.0	56.60000	2003-06- 29	9.775000		29.3541667		6.4559575	cold	2003
chic	73.0	60.60000	2003-06- 28			35.2682292		4.9309575	cold	2003
chic	70.0	51.60000	2003-06- 27			33.4479167		4.7309575	cold	2003
chic	68.0	56.00000	2003-06- 26			25.4809783		9.4881004	cold	2003
chic	82.0	65.10000	2003-06- 25					17.6690425		2003
chic	79.0	62.40000	2003-06- 24	NA		56.1660800			cold	2003
chic	75.0	55.40000	2003-06-			43.3460145			cold	2003
chic	70.0	51.70000	2003-06- 22			40.0078125		3.7690425	cold	2003
chic	64.0	46.90000	2003-06- 21			25.5260417		3.3309575	cold	2003
chic	59.0	40.90000	2003-06-			27.3307292		9.5023861	cold	2003
chic	60.0	39.80000	2003-06- 19	5.600000	9.000000	33.1667696	11.375000	10.6309575	cold	2003

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2	2pm25detren	dempcat	year
chic	74.0	58.70000	2003-06- 18	25.600000	75.000000	32.9677413	43.714583	9.3690425	cold	2003
chic	67.0	47.20000	2003-06- 17	15.750000	38.500000	42.6547060	38.439538	0.4809575	cold	2003
chic	66.0	48.90000	2003-06- 16	11.600000	22.000000	34.0840127	24.354455	4.6309575	cold	2003
chic	66.0	54.40000	2003-06- 15	8.600000	13.500000	31.0468750	13.447917	7.6309575	cold	2003
chic	65.0	54.70000	2003-06- 14	10.125000	19.800000	33.9166667	21.807292	-	cold	2003
chic	64.0	58.30000	2003-06-	NA	21.000000	21.9270833	28.598958	6.1059575 NA	cold	2003
chic	61.0	55.10000	13 2003-06-	17.500000	22.000000	28.4665061	24.690476	1.2690425	cold	2003
chic	61.0	52.60000	12 2003-06-	9.742857	11.500000	31.1901042	16.726934		cold	2003
chic	66.0	60.30000	11 2003-06-	15.100000	36.000000	30.4322917	31.833333	6.4881004	cold	2003
chic	65.0	53.20000	10 2003-06-	9.100000	22.500000	32.8044508	21.875000	1.1309575	cold	2003
chic	62.0	56.10000	09 2003-06-	10.271429	16.000000	26.2005208	20.364583	7.1309575	cold	2003
chic	66.0	53.30000	08 2003-06-	19.400000	28.000000	38.8932292	26.937500	5.9595290 3.1690425	cold	2003
chic	61.0	51.70000	07 2003-06-	25.500000	55.000000	22.7812500	45.916667	9.2690425	cold	2003
chic	63.0	44.90000	06 2003-06-	16.714286	39.000000	27.7083333	41.505952	0.4833282	cold	2003
chic	58.0	41.80000	05 2003-06-	11.300000	25.000000	31.8437500	30.609375	-	cold	2003
chic	57.0	46.90000	04 2003-06-	24.700000	18.500000	38.9730525	30.192708	4.9309575 8.4690425	cold	2003
chic	53.0	42.80000	03 2003-06-	16.800000	31.000000	19.2054924	37.637784	0.5690425	cold	2003
chic	51.0	34.40000	02 2003-06-	4.800000	13.000000	26.3750000			cold	2003
chic	48.0	42.70000	01 2003-05-	6.200000	9.500000	28.4244792		11.4309575	cold	2003
chic	58.0	51.80000	31 2003-05-	17.512500	46.500000	17.7474267	36.156250	$10.0309575 \\ 1.2815425$	cold	2003
chic	58.0	46.80000	30 2003-05-	10.100000	17.000000	15.8651495	26.005208	-	cold	2003
chic	65.0	52.00000	29 2003-05-	20.700000	50.500000	16.2210557	36.030438	6.1309575 4.4690425	cold	2003
chic	62.0	46.30000	28 2003-05-	10.214286	25.000000	21.1617671	28.245739	_	cold	2003
chic	59.0	44.80000	27 2003-05-			28.1302083		6.0166718	cold	2003
chic	57.0	42.80000	26 2003-05-	6.800000		32.7187500		7.9309575	cold	2003
chic	57.0	38.70000	25 2003-05-	9.700000		33.8645833		9.4309575	cold	2003
01110	31.0	30.,0000	24	31100000	_0.00000	33.0010000	_5.00000	6.5309575	5514	2000

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	53.0	35.20000	2003-05- 23	10.800000	24.500000	31.3932292	33.082927	5.4309575	cold	2003
chic	50.0	33.60000	2003-05- 22	NA	17.500000	31.2442255	23.499256		cold	2003
chic	51.0	36.00000	2003-05-	4.750000	12.000000	20.9437274	14.843750		cold	2003
chic	58.0	45.30000	21 2003-05-	11.300000	14.000000	24.9531250	17.765625	11.4809575	cold	2003
chic	66.0	61.40000	20 2003-05-	37.300000	40.500000	13.2149004	22.588542	4.9309575 21.0690425	cold	2003
chic	60.0	52.30000	19 2003-05-	22.628571	22.000000	30.7109375	15.364583	6.3976139	cold	2003
chic	59.0	50.30000	18 2003-05-	26.400000	21.500000	35.6744792	17.593750	10.1690425	cold	2003
chic	55.0	45.60000	17 2003-05-	19.100000	21.000000	30.4505208	28.972335	2.8690425	cold	2003
chic	52.0	45.40000	16 2003-05-	13.000000	19.400000	35.5729167	22.359375		cold	2003
chic	53.0	44.20000	15 2003-05-	16.200000	25.000000	17.0272871	38.218750	3.2309575	cold	2003
chic	61.0	35.80000	14 2003-05-	13.750000	22.000000	26.2274359	29.148551	0.0309575	cold	2003
chic	59.0	38.30000	13 2003-05-	5.657143	30.500000	31.2971735	20.700758	2.4809575	cold	2003
chic	60.0	44.50000	12 2003-05-	NA	8.500000	22.8995536	7.947917	10.5738147 NA	cold	2003
chic	65.0	57.90000	11 2003-05-	15.700000	21.500000	26.4479167	30.072917	_	cold	2003
chic	69.0	56.80000	10 2003-05-	15.075000	34.800000	25.7233922	32.510417	0.5309575	cold	2003
chic	55.0	47.80000	09 2003-05-	NA		23.4713615		1.1559575	cold	2003
chic	53.0	46.60000	08 2003-05-			26.8660553			cold	2003
chic	60.0	47.10000	07 2003-05-			28.9900362		1.9309575	cold	2003
	61.0		06			30.9406056		7.3023861		2003
chic		51.90000	2003-05- 05					4.9309575	cold	
chic	48.0	35.00000	2003-05-			29.5476190		3.8309575	cold	2003
chic	46.0	26.30000	2003-05-			31.5267857		8.5881004	cold	2003
chic	45.0	27.40000	2003-05- 02			37.4107143		9.0309575	cold	2003
chic	50.0	47.40000	2003-05- 01	NA	10.500000	15.9464286	27.552083	NA	cold	2003
chic	57.0	48.00000	2003-04- 30	19.114286	24.500000	14.1309524	37.592172	2.8833282	cold	2003
chic	54.0	38.40000	2003-04- 29	10.300000	22.000000	27.8341097	35.761111	5.9309575	cold	2003
chic	66.0	39.50000	2003-04- 28	16.800000	59.000000	28.0705228	41.678571		cold	2003

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	56.0	28.00000	2003-04- 27	13.512500	34.800000	39.6428571	33.333333	- 2.7184575	cold	2003
chic	48.0	24.00000	2003-04- 26	5.800000	15.500000	36.1101190	26.569444	10.4309575	cold	2003
chic	50.0	28.50000	2003-04- 25	7.850000	29.500000	34.2573052	28.483333	8.3809575	cold	2003
chic	49.0	28.40000	2003-04- 24	13.542857	37.000000	27.2886905	34.722222	2.6881004	cold	2003
chic	43.0	23.00000	2003-04- 23	NA	16.500000	32.1250000	35.204546	NA	cold	2003
chic	46.0	27.50000	2003-04- 22	6.600000	13.500000	31.7797619	28.569444		cold	2003
chic	47.0	37.60000	2003-04-	6.612500	11.200000	20.0781574	17.208937	9.6309575	cold	2003
chic	59.0	49.50000	21 2003-04-	8.100000	12.500000	33.8035714	12.083333	9.6184575	cold	2003
chic	60.0	50.00000	20 2003-04-	16.700000	39.000000	25.7113095	23.888889	$8.1309575 \\ 0.4690425$	cold	2003
chic	43.0	35.10000	19 2003-04-	17.325000	17.000000	22.4111025	23.611111	1.0940425	cold	2003
chic	42.0	33.50000	18 2003-04-	12.650000	22.000000	23.3203463	23.22222	-	cold	2003
chic	55.0	36.80000	17 2003-04-	10.700000	35.000000	27.4642857	21.914141	3.5809575	cold	2003
chic	75.0	42.90000	16 2003-04-	12.214286	61.400000	40.4689441	20.404971	5.5309575	cold	2003
chic	67.0	39.30000	15 2003-04-	16.800000	66.500000	39.6344893	19.797348	$\begin{array}{c} 4.0166718 \\ 0.5690425 \end{array}$	cold	2003
chic	48.0	32.90000	14 2003-04-	11.700000	22.000000	30.1458333	26.166667	_	cold	2003
chic	43.0	29.00000	13 2003-04-	3.985714	6.500000	36.9047619	14.108333	4.5309575	cold	2003
chic	51.0	26.00000	12 2003-04-	16.900000	58.500000	22.9523810	43.437500	$12.2452433 \\ 0.6690425$	cold	2003
chic	42.0	21.80000	11 2003-04-	8.900000	28.000000	23.0714286	43.258838	_	cold	2003
chic	36.0	25.70000	10 2003-04-			34.4690735		7.3309575	cold	2003
chic	32.0	28.20000	09 2003-04-			31.8095238		8.6738147	cold	2003
chic	32.0	30.30000	08 2003-04-			25.4076087		3.2309575	cold	2003
	34.0	23.20000	07 2003-04-	6.557143	8.000000			6.6309575	cold	2003
chic			06			37.8095238		9.6738147		
chic	29.0	20.40000	2003-04- 05	6.000000	8.500000	32.1994048		10.2309575	cold	2003
chic	36.0	35.10000	2003-04-	NA		7.5367495			cold	2003
chic	42.0	37.90000	2003-04- 03					22.7315425		2003
chic	54.0	38.40000	2003-04- 02	29.800000	51.000000	19.7172619	31.817029	13.5690425	cold	2003

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	60.0	40.00000	2003-04- 01	25.300000	50.500000	27.0535714	28.413462	9.0690425	cold	2003
chic	40.0	26.70000	2003-03- 31	13.475000	30.000000	20.3677536	27.674242	- 2.7559575	cold	2003
chic	33.0	20.90000	2003-03- 30	NA	13.000000	19.4791667	28.138889	NA	cold	2003
chic	32.0	22.30000	2003-03- 29	NA	8.000000	30.5000000	15.625000	NA	cold	2003
chic	49.0	42.70000	2003-03- 28	11.800000	18.000000	18.4737319	19.111111	4.4309575	cold	2003
chic	54.0	33.80000	2003-03-	14.500000	29.500000	22.1562500	31.236111	-	cold	2003
chic	45.0	28.70000	27 2003-03-	NA	45.500000	19.1622024	38.326087	1.7309575 NA	cold	2003
chic	49.0	33.50000	26 2003-03-	8.800000	23.000000	19.5416667	31.594444		cold	2003
chic	58.0	41.00000	25 2003-03-	15.100000	49.000000	26.7753623	32.416667	7.4309575	cold	2003
chic	52.0	34.70000	24 2003-03-	20.650000	36.000000	17.9479167	26.626389	1.1309575 4.4190425	cold	2003
chic	43.0	35.20000	23 2003-03-	15.600000	22.400000	17.2916667	18.831349	-	cold	2003
chic	44.0	35.00000	22 2003-03-	8.300000	15.500000	16.9017210	20.399471	0.6309575	cold	2003
chic	54.0	47.60000	21 2003-03-	NA	39.500000	7.9062500	33.767857	7.9309575 NA	cold	2003
chic	43.0	36.40000	20 2003-03-	28.062500	30.500000	21.2187500	27.791667	11.8315425	cold	2003
chic	41.0	38.20000	19 2003-03-	37.200000	44.500000	28.5828804	27.538889	20.9690425	cold	2003
chic	57.0	45.60000	18 2003-03-	33.700000	33.500000	13.6064312	40.319115	17.4690425	cold	2003
chic	55.0	47.00000	17 2003-03-	36.428571	43.000000	18.1770833	29.361111	20.1976139	cold	2003
chic	45.0	37.30000	16 2003-03-	22.050000	33.500000	6.9895833	36.263889	5.8190425	cold	2003
chic	39.0	23.60000	15 2003-03-	NA	44.000000	12.8645833	41.394444	NA	cold	2003
chic	31.0	24.40000	14 2003-03-	14.000000	13.000000	30.0729167	24.380435	_	cold	2003
chic	36.0	30.50000	13 2003-03-	32.100000	42.000000	15.7395833	29.500000	$\begin{array}{c} 2.2309575 \\ 15.8690425 \end{array}$	cold	2003
chic	31.0	18.40000	12 2003-03-			15.5979084			cold	2003
chic	11.0	0.90000	11 2003-03-			20.8777174		_	cold	2003
chic	10.0	_	10 2003-03-			31.7395833		3.5166718	cold	2003
chic	28.0	4.20000 22.30000	09 2003-03-					8.4309575 11.9690425		2003
chic	29.0		08 2003-03-					11.3315425		2003
CHIC	4J.U	25.50000	2005-05- 07	41.0020U	94.000000	10.5499011	90.04473U	11.3313423	coid	2003

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	20.0	16.80000	2003-03- 06	21.300000	20.000000	25.5208333	33.638889	5.0690425	cold	2003
chic	22.0	15.60000	2003-03- 05	14.100000	12.500000	30.4089674	22.583333	9 1200575	cold	2003
chic	25.0	23.30000	2003-03- 04	20.257143	26.600000	13.2672101	32.972222	$2.1309575 \\ 4.0261853$	cold	2003
chic	20.0	14.60000	2003-03- 03	15.200000	24.500000	13.5018116	33.263889	1.0309575	cold	2003
chic	21.0	15.00000	2003-03- 02	18.800000	19.500000	21.1458333	17.694444		cold	2003
chic	NA	22.90000	2003-03- 01	47.737500	47.500000	9.4166667	37.444444	31.5065425	NA	2003
chic	27.0	15.40000	2003-02- 28	46.200000	62.500000	8.7753623	57.564394	29.9690425	cold	2003
chic	21.0	12.90000	2003-02- 27	NA	37.000000	13.8750000	43.369565	NA	cold	2003
chic	18.0	9.40000	2003-02- 26	28.912500	37.200000	11.6553030	41.869048	12.6815425	cold	2003
chic	8.0	2.50000	2003-02- 25	30.900000	35.500000	11.5366848	37.708333	14.6690425	cold	2003
chic	15.0	8.80000	2003-02- 24	16.100000	21.500000	19.4823370	28.44444	0.1309575	cold	2003
chic	20.0	7.10000	2003-02- 23	6.737500	15.500000	29.8958333	17.125000	9.4934575	cold	2003
chic	28.0	24.20000	2003-02- 22	13.900000	19.000000	21.0729167	21.027778	2.3309575	cold	2003
chic	37.0	24.80000	2003-02- 21	28.600000	45.500000	5.1666667	40.597222	12.3690425	cold	2003
chic	39.0	23.80000	2003-02- 20	15.400000	24.000000	11.1096014	35.527778	0.8309575	cold	2003
chic	33.0	19.60000	2003-02- 19	15.500000	31.500000	13.0000000	33.180556	0.7309575	cold	2003
chic	31.0	27.40000	2003-02-	27.500000	28.000000	10.5480072	30.867064	11.2690425	cold	2003
chic	27.0	21.80000	18 2003-02-	14.350000	20.500000	22.3645833	27.625000		cold	2003
chic	23.0	12.90000	17 2003-02-	3.800000	9.000000	34.7812500	12.44444		cold	2003
chic	24.0	15.10000	16 2003-02-	5.300000	9.500000	34.0833333	12.833333	12.4309575	cold	2003
chic	25.0	19.90000	15 2003-02-	27.628571	60.500000	12.7653986	47.140873	10.9309575 11.3976139	cold	2003
chic	22.0	7.40000	14 2003-02-	18.500000	38.000000	12.4583333	35.694444	2.2690425	cold	2003
chic	13.0	0.30000	13 2003-02-	13.100000	34.000000	22.4687500	21.388889		cold	2003
chic	19.0	4.90000	12 2003-02-	11.171429	39.000000	19.3333333	21.458333	3.1309575	cold	2003
chic	18.0	9.80000	11 2003-02-	NA	17.000000	15.3740942	25.119950	5.0595290 NA	cold	2003
chic	15.0	0.00000	10 2003-02-	NA	18.000000	21.1562500	22.083333	NA	cold	2003
			09							

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	20.0	9.50000	2003-02- 08	12.937500	22.666667	19.0208333	18.555556	3.2934575	cold	2003
chic	13.0	1.80000	2003-02- 07	9.300000	19.000000	18.0312500	23.324275	- 6.9309575	cold	2003
chic	24.0	13.90000	2003-02- 06	NA	19.000000	14.2635870	26.486111	NA	cold	2003
chic	18.0	4.50000	2003-02- 05	11.650000	27.000000	13.5416667	27.375000	- 4.5809575	cold	2003
chic	21.0	12.50000	2003-02- 04	8.900000	15.000000	20.5240036	16.513889	- 7.3309575	cold	2003
chic	39.0	37.00000	2003-02- 03	30.400000	46.000000	3.6417572	29.334596	14.1690425	cold	2003
chic	37.0	33.90000	2003-02- 02	35.228571	44.750000	6.5833333	20.458333	18.9976139	cold	2003
chic	33.0	29.50000	2003-02- 01	30.300000	29.000000	6.6770833	22.605556	14.0690425	cold	2003
chic	34.0	30.40000	2003-01- 31	24.500000	40.000000	3.4479167	26.958333	8.2690425	cold	2003
chic	25.0	20.30000	2003-01- 30	22.800000	30.000000	8.2291667	35.247475	6.5690425	cold	2003
chic	21.0	17.10000	2003-01- 29	19.800000	19.000000	11.4904891	33.513889	3.5690425	cold	2003
chic	26.0	20.50000	2003-01- 28	29.400000	53.000000	4.6109601	36.902778	13.1690425	cold	2003
chic	7.0	0.10000	2003-01- 27	19.242857	37.250000	9.7056159	40.458333	3.0118996	cold	2003
chic	10.0	2.50000	2003-01- 26	9.000000	32.000000	24.5833333	20.180556	- 7.2309575	cold	2003
chic	25.0	11.50000	2003-01- 25	NA	30.000000	13.2708333	21.736111		cold	2003
chic	9.0	4.00000	2003-01- 24	16.887500	31.000000	10.3745471	29.252193	0.6565425	cold	2003
chic	4.0	9.30000	2003-01- 23	11.100000	22.000000	18.7291667	24.932971	5.1309575	cold	2003
chic	9.0	5.30000	2003-01- 22	12.500000	20.000000	18.8607955	23.402778	3.7309575	cold	2003
chic	12.0	5.20000	2003-01- 21	11.785714	29.600000	17.4796196	27.956349		cold	2003
chic	17.0	0.70000	2003-01- 20	10.900000	42.500000	20.2500000	25.722222		cold	2003
chic	16.0	8.90000	2003-01- 19	11.700000	27.000000	16.1250000	21.166667		cold	2003
chic	15.0	6.60000	2003-01- 18	15.650000	22.000000	16.8854167	22.791667		cold	2003
chic	17.0	1.90000	2003-01- 17	10.200000	29.000000	17.8093297	29.425505		cold	2003
chic	22.0	4.60000	2003-01- 16	NA	37.000000	9.3020833	38.550000		cold	2003
chic	13.0	1.30000	2003-01- 15	15.600000	29.800000	11.5937500	31.722222	0.6309575	cold	2003
chic	14.0	5.80000		NA	22.000000	14.6666667	24.472222		cold	2003

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	24.0	5.70000	2003-01- 13	11.700000	18.500000	17.4184783	24.160714	- 4.5309575	cold	2003
chic	21.0	8.10000	2003-01- 12	8.957143	20.500000	14.3958333	22.638889	7.2738147	cold	2003
chic	14.0	2.30000	2003-01-	6.200000	13.000000	20.3229167	15.875000	-	cold	2003
chic	21.0	9.10000	11 2003-01-	9.600000	18.000000	20.0394022	19.430556	10.0309575	cold	2003
chic	37.0	23.80000	10 2003-01-	6.657143	14.800000	17.5851449	20.958333	6.6309575	cold	2003
chic	46.0	30.60000	09 2003-01-	11.400000	21.500000	9.1229167	20.402778	9.5738147	cold	2003
chic	37.0	27.70000	08 2003-01-	16.300000	21.500000	8.6354167	18.958333	$4.8309575 \\ 0.0690425$	cold	2003
chic	30.0	21.50000	07 2003-01-	11.042857	15.000000	13.6875000	27.599206	-	cold	2003
chic	31.0	30.20000	06 2003-01-	32.900000	24.500000	2.5000000	26.027778	5.1881004 16.6690425	cold	2003
chic	25.0	21.60000	05 2003-01-	25.400000	25.500000	5.7500000	33.611111	9.1690425	cold	2003
chic	27.0	20.90000	04 2003-01-			10.0579710		_	cold	2003
chic	30.0	25.00000	03 2003-01-	9.400000	7.500000	22.6743659		3.5738147	cold	2003
			02					6.8309575		
chic	30.0	22.50000	2003-01- 01	4.200000	7.000000	26.3020833		12.0309575	cold	2003
chic	35.0	20.70000	2002-12- 31	11.575000	15.000000	10.2395833	24.395833	4.6559575	cold	2002
chic	49.0	43.50000	2002-12- 30	16.300000	23.000000	10.4166667	19.907197	0.0690425	cold	2002
chic	31.0	29.30000	2002-12- 29	42.300000	39.000000	6.6354167	25.750000	26.0690425	cold	2002
chic	31.0	28.20000	2002-12- 28	33.342857	36.666667	5.1250000	25.718750	17.1118996	cold	2002
chic	26.0	22.70000	2002-12- 27	25.900000	32.500000	4.8111413	28.260417	9.6690425	cold	2002
chic	24.0	18.50000	2002-12-	18.700000	21.500000	9.1666667	19.743371	2.4690425	cold	2002
chic	26.0	22.40000	26 2002-12-	7.675000	10.000000	18.2916667	12.510417		cold	2002
chic	26.0	21.10000	25 2002-12-	13.700000	15.000000	11.3541667	25.531250		cold	2002
chic	28.0	16.60000	24 2002-12-	9.700000	13.500000	12.6770833	17.906250		cold	2002
chic	28.0	20.40000	23 2002-12-	9.057143	15.000000	15.1145833	11.552083	6.5309575	cold	2002
chic	31.0	24.10000	22 2002-12-	8.500000	13.000000	14.7187500	14.343750	7.1738147	cold	2002
chic	32.0	26.00000	21 2002-12-	6.800000	12.000000	11.0312500	12.614583	7.7309575	cold	2002
chic	45.0	36.10000	20 2002-12-		17.000000			9.4309575	cold	2002
CIIIC	40.0	30.10000	19	10.007000	11.000000	1.0177320	10.010000	2.5434575	COIG	2002

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	46.0	47.50000	2002-12- 18	15.100000	23.000000	11.8161232	22.385417	- 1.1309575	cold	2002
chic	34.0	27.10000	2002-12- 17	16.600000	27.500000	8.8532609	22.354167		cold	2002
chic	32.0	22.30000	2002-12- 16	6.314286	14.000000	23.2187500	16.713315	9.9166718	cold	2002
chic	38.0	30.00000	2002-12- 15	13.800000	19.500000	12.2395833	16.458333	2.4309575	cold	2002
chic	35.0	30.10000	2002-12- 14	30.400000	34.500000	6.2187500	20.145833	14.1690425	cold	2002
chic	36.0	33.30000	2002-12- 13	37.937500	35.000000	3.4207428	26.013393	21.7065425	cold	2002
chic	34.0	30.00000	2002-12- 12	28.650000	30.000000	2.0964674	28.335038	12.4190425	cold	2002
chic	32.0	17.40000	2002-12- 11	27.300000	75.000000	3.2432065	47.760417	11.0690425	cold	2002
chic	34.0	18.80000	2002-12- 10	20.800000	43.500000	3.8750000	38.218750	4.5690425	cold	2002
chic	20.0	10.30000	2002-12- 09	19.900000	51.000000	6.1512681	40.920002	3.6690425	cold	2002
chic	22.0	10.90000	2002-12-	8.800000	18.500000	14.1250000	24.552083	7 4200575	cold	2002
chic	35.0	25.80000	08 2002-12-	20.528571	25.500000	7.3958333	21.479167	7.4309575 4.2976139	cold	2002
chic	21.0	13.60000	07 2002-12-	19.800000	41.000000	5.5018939	25.827899	3.5690425	cold	2002
chic	20.0	12.60000	06 2002-12-	20.000000	24.000000	9.3229167	30.135417	3.7690425	cold	2002
chic	19.0	12.80000	05 2002-12-	18.462500	35.666667	5.1250000	44.468297	2.2315425	cold	2002
chic	19.0	14.60000	04 2002-12-	11.400000	24.000000	11.8786232	36.635417	4 9200575	cold	2002
chic	29.0	22.20000	03 2002-12-	7.800000	14.500000	13.8854167	26.875947	4.8309575	cold	2002
chic	25.0	9.80000	02 2002-12-	6.550000	18.000000	14.9583333	17.291667	8.4309575	cold	2002
chic	29.0	15.30000	01 2002-11-	4.700000	15.000000	22.6458333	11.906250		cold	2002
chic	40.0	29.40000	30 2002-11-	6.200000	17.000000	12.4479167	15.114583	11.5309575	cold	2002
chic	24.0	20.20000	29 2002-11-	24.814286	32.500000	7.9479167	23.614583	10.0309575 8.5833282	cold	2002
chic	22.0	16.80000	28 2002-11-	21.400000	23.000000	6.0040761	35.473214	5.1690425	cold	2002
chic	25.0	21.60000	27 2002-11-	22.350000	25.500000	2.7930254	37.534226	6.1190425	cold	2002
chic	26.0	18.10000	26 2002-11-	9.585714	19.500000	6.8645833	29.489583	-	cold	2002
chic	32.0	24.40000	25 2002-11-	7.100000	10.500000	10.6979167	19.364583	6.6452433	cold	2002
chic	39.0	28.50000	24 2002-11-	14.600000	22.000000	8.0833333	25.093750		cold	2002
			23					1.6309575		

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	31.0	24.90000	2002-11- 22	8.487500	15.500000	12.4583333	28.350544	- 7.7434575	cold	2002
chic	39.0	32.80000	2002-11- 21	13.200000	28.500000	11.1050725	24.449275	3.0309575	cold	2002
chic	44.0	34.00000	2002-11- 20	13.800000	32.500000	3.3020833	30.406250	2.4309575	cold	2002
chic	44.0	33.50000	2002-11- 19	17.885714	22.000000	5.4954710	24.177083		cold	2002
chic	35.0	30.40000	2002-11- 18	27.650000	36.500000	2.8840580	33.195076	11.4190425	cold	2002
chic	32.0	25.80000	2002-11- 17	10.900000	11.500000	14.6354167	25.072917	- 5.3309575	cold	2002
chic	34.0	25.80000	2002-11- 16	4.100000	7.166667	27.3645833	14.447917	12.1309575	cold	2002
chic	38.0	28.60000	2002-11- 15	4.650000	4.000000	29.1041667	14.250000	11.5809575	cold	2002
chic	47.0	37.90000	2002-11- 14	9.200000	17.500000	12.1979167	21.439764	7.0309575	cold	2002
chic	46.0	34.20000	2002-11- 13	15.500000	36.500000	6.7798913	23.461309	0.7309575	cold	2002
chic	40.0	30.50000	2002-11- 12	17.150000	21.000000	6.0406785	22.958333	0.9190425	cold	2002
chic	39.0	34.50000	2002-11- 11	10.800000	24.000000	4.1770833	16.593750	5.4309575	cold	2002
chic	51.0	53.10000	2002-11- 10	18.062500	26.500000	14.7291667	12.468750		cold	2002
chic	58.0	52.70000	2002-11- 09	15.300000	37.000000	23.3333333	14.083333	0.9309575	cold	2002
chic	56.0	36.70000	2002-11- 08	7.500000	39.000000	22.3645833	21.979167	8.7309575	cold	2002
chic	44.0	35.60000	2002-11- 07	19.614286	51.500000	11.0317029	26.480461		cold	2002
chic	40.0	33.70000	2002-11- 06	26.600000	27.000000	8.3451087	23.375000	10.3690425	cold	2002
chic	38.0	35.40000	2002-11- 05	26.900000	29.500000	2.3854167	28.740036	10.6690425	cold	2002
chic	39.0	30.00000	2002-11- 04	25.485714	36.666667	6.9447826	28.349702	9.2547567	cold	2002
chic	36.0	27.90000	2002-11- 03	19.200000	20.000000	6.9083333	22.687500	2.9690425	cold	2002
chic	38.0	22.60000	2002-11- 02	10.800000	21.000000	11.0416667	21.822917	- 5.4309575	cold	2002
chic	33.0	19.90000	2002-11- 01	11.475000	18.500000	11.7893939	21.934783	4.7559575	cold	2002
chic	40.0	32.10000	2002-10- 31	15.900000	16.000000	8.9827899	26.125000		cold	2002
chic	45.0	35.00000	2002-10- 30	7.433333	9.000000	20.1616848	20.138134		cold	2002
chic	44.0	34.50000	2002-10- 29	7.875000	12.333333	18.1488095	16.257441		cold	2002
chic	44.0	36.30000	2002-10-	8.800000	11.000000	18.0496894	16.812500		cold	2002
			28					7.4509575		

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	42.0	31.00000	2002-10- 27	9.300000	9.000000	14.0076122	16.802083	6.9309575	cold	2002
chic	43.0	39.80000	2002-10- 26	15.862500	14.500000	4.1953125	20.114583	0.3684575	cold	2002
chic	45.0	43.20000	2002-10- 25	19.900000	29.000000	5.3697917	21.634964		cold	2002
chic	44.0	38.30000	2002-10- 24	7.500000	11.000000	11.5936853	21.319444	- 8.7309575	cold	2002
chic	43.0	37.80000	2002-10- 23	8.012500	14.333333	12.7129917	20.195652	8.2184575	cold	2002
chic	44.0	34.80000	2002-10- 22	14.400000	21.000000	8.6073370	23.838164	1.8309575	cold	2002
chic	45.0	35.30000	2002-10- 21	18.150000	42.000000	11.3255208	32.502525		cold	2002
chic	41.0	31.20000	2002-10- 20	16.280000	19.000000	11.8776042	24.736111	0.0490425	cold	2002
chic	42.0	32.40000	2002-10-	7.600000	10.000000	14.8229167	19.902778	- 0.6200575	cold	2002
chic	49.0	42.00000	19 2002-10-	15.200000	42.000000	7.1250000	25.638889	8.6309575	cold	2002
chic	41.0	35.80000	18 2002-10-	11.700000	20.500000	6.2156929	28.22222	1.0309575	cold	2002
chic	42.0	30.90000	17 2002-10-	8.600000	12.500000	14.8320879	26.602092	4.5309575	cold	2002
chic	50.0	33.50000	16 2002-10-	11.600000	30.000000	11.1271513	29.270202	7.6309575	cold	2002
chic	44.0	27.10000	15 2002-10-	10.114286	27.500000	10.1692708	29.166667	4.6309575	cold	2002
chic	42.0	27.50000	14 2002-10-	5.200000	9.500000	15.5598958	17.416667	6.1166718	cold	2002
chic	61.0	54.10000	13 2002-10-	25.700000	28.500000	14.2187500	21.472222	11.0309575 9.4690425	cold	2002
chic	61.0	50.60000	12 2002-10-	30.485714	54.833333	10.7070879	34.666667	14.2547567	cold	2002
chic	62.0	51.10000	11 2002-10-	22.400000	51.500000	10.5729167	33.760417	6.1690425	cold	2002
chic	57.0	48.50000	10 2002-10-	15.600000	44.500000	9.5737401	31.078598		cold	2002
chic	56.0	37.40000	09 2002-10-	9.375000	35.500000	9.5892857	30.895833		cold	2002
chic	48.0	33.40000	08 2002-10-	7.100000	14.500000	13.9973958	24.884770	6.8559575	cold	2002
chic	58.0	45.70000	07 2002-10-	7.500000	14.000000	23.1484375	15.562500	9.1309575	cold	2002
chic	55.0	44.20000	06 2002-10-	8.162500	17.666667	13.2708333	20.364583	8.7309575	cold	2002
chic	63.0	59.30000	05 2002-10-	11.900000	19.000000	15.1571558	17.416667	8.0684575	cold	2002
chic	61.0	58.50000	04 2002-10-			14.3696784		4.3309575	cold	2002
chic	66.0	62.70000	03 2002-10-			16.9766757		2.9309575	cold	2002
	20.0		02		2 22000	3.20.01	- 20 2201	1.0184575		

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	75.0	64.80000	2002-10- 01	23.700000	45.000000	25.5442708	31.870265	7.4690425	cold	2002
chic	77.0	56.90000	2002-09- 30	19.500000	56.500000	36.5648292	22.575893	3.2690425	cold	2002
chic	72.0	63.70000	2002-09- 29	26.957143	40.333333	36.2760417	16.843750	10.7261853	cold	2002
chic	62.0	57.00000	29 2002-09- 28	29.400000	38.000000	28.3880208	21.833333	13.1690425	cold	2002
chic	60.0	55.20000	2002-09- 27	13.500000	21.500000	27.1701766	20.881250	- 2.7309575	cold	2002
chic	62.0	53.80000	2002-09- 26	29.914286	53.000000	21.4684103	36.554924	13.6833282	cold	2002
chic	59.0	47.60000	2002-09- 25	10.450000	37.000000	18.4154772	27.525856	- 5.7809575	cold	2002
chic	52.0	41.50000	2002-09- 24	5.250000	15.000000	18.2843196	22.677083	10.9809575	cold	2002
chic	54.0	41.60000	2002-09- 23	7.600000	21.000000	17.3287879	26.805059	8.6309575	cold	2002
chic	56.0	45.20000	2002-09- 22	5.250000	12.500000	17.8177083	18.916667	10.9809575	cold	2002
chic	69.0	56.70000	2002-09- 21	8.600000	18.000000	24.0755208	19.031250	-	cold	2002
chic	67.0	66.60000	2002-09- 20	5.714286	40.000000	9.6382850	17.916667	7.6309575 - 10.5166718	cold	2002
chic	76.0	71.50000	2002-09- 19	12.450000	42.000000	14.3146410	20.989583	3.7809575	cold	2002
chic	71.0	66.10000	2002-09-	21.300000	31.000000	25.0585017	28.683053		cold	2002
chic	65.0	56.20000	18 2002-09- 17	20.562500	41.333333	24.5718142	39.238095	4.3315425	cold	2002
chic	62.0	51.90000	2002-09- 16	9.200000	34.000000	14.7258454	32.937500	- 7.0309575	cold	2002
chic	63.0	56.40000	2002-09- 15	5.950000	9.000000	26.9467593	11.072917	10.2809575	cold	2002
chic	68.0	57.30000	2002-09- 14	23.814286	41.000000	37.4768519	32.927083		cold	2002
chic	64.0	55.00000	2002-09- 13	15.800000	51.000000	25.6544686	38.203804	0.4309575	cold	2002
chic	64.0	52.60000	2002-09- 12	13.550000	47.000000	16.9884900	34.601490	2.6809575	cold	2002
chic	64.0	50.80000	2002-09- 11	7.157143	15.500000	22.8497383	19.510417	9.0738147	cold	2002
chic	76.0	64.90000	2002-09- 10	25.400000	75.500000	27.1868961	29.116667		cold	2002
chic	78.0	69.50000	2002-09- 09	39.400000	70.500000	29.0620974	45.258333	23.1690425	cold	2002
chic	76.0	66.00000	2002-09- 08	44.042857	65.000000	42.8842593	39.625000	27.8118996	cold	2002
chic	74.0	61.80000	2002-09- 07	31.950000	59.500000	38.8203704	40.058333	15.7190425	cold	2002
chic	71.0	61.00000	2002-09- 06	21.000000	33.000000	31.6829710	37.279167	4.7690425	cold	2002

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	72.0	60.50000	2002-09- 05	7.900000	24.000000	25.2396062	18.859601	- 8.3309575	cold	2002
chic	72.0	57.00000	2002-09- 04	8.600000	34.500000	21.1584138	27.596196	7.6309575	cold	2002
chic	72.0	57.30000	2002-09- 03	8.900000	17.500000	25.3721820	20.189394		cold	2002
chic	74.0	68.80000	2002-09- 02	22.171429	46.500000	43.8009259	14.370833		cold	2002
chic	74.0	66.20000	2002-09- 01	31.400000	45.000000	37.7870370	24.566667	15.1690425	cold	2002
chic	73.0	63.50000	2002-08- 31	24.300000	36.000000	45.9976852	21.391667	8.0690425	cold	2002
chic	73.0	63.30000	2002-08- 30	20.528571	35.400000	42.2069243	22.629167	4.2976139	cold	2002
chic	70.0	62.70000	2002-08- 29	13.600000	24.000000	38.2792874	19.507246	2.6309575	cold	2002
chic	72.0	64.70000	2002-08- 28	10.800000	20.000000	27.6018519	13.652273	-	cold	2002
chic	74.0	68.00000	2002-08-	14.112500	23.000000	32.8172303	16.119792	5.4309575	cold	2002
chic	74.0	65.60000	27 2002-08-	11.400000	17.000000	25.0231481	15.755208	2.1184575	cold	2002
chic	74.0	67.70000	26 2002-08-	17.100000	22.500000	28.1782407	21.572917	$4.8309575 \\ 0.8690425$	cold	2002
chic	74.0	67.80000	25 2002-08-	16.687500	27.833333	21.3865741	22.867301	0.4565425	cold	2002
chic	73.0	70.20000	24 2002-08-	18.350000	18.000000	20.3838567	22.961730	2.1190425	cold	2002
chic	74.0	69.90000	23 2002-08-	10.700000	16.000000	25.5067432	26.300000		cold	2002
chic	75.0	70.00000	22 2002-08-	23.075000	41.000000	31.3570670	21.029167	5.5309575 6.8440425	cold	2002
chic	66.0	58.00000	21 2002-08-	10.400000	22.500000	19.7077295	25.419565		cold	2002
chic	66.0	61.30000	20 2002-08-	9.200000	12.000000	19.3902778		5.8309575	cold	2002
chic	66.0	53.40000		7.700000	19.166667	24.5069444		7.0309575	cold	2002
chic	76.0	69.30000	18 2002-08-	12.900000	32.000000	23.5138889	12.491667	8.5309575	cold	2002
chic	75.0	69.00000	17 2002-08-	12.000000	24.000000	14.0427632	22.983333	3.3309575	cold	2002
chic	74.0	68.00000	16 2002-08-	13.912500	39.500000	25.5449605	19.225379	4.2309575	cold	2002
chic	70.0	63.80000	15 2002-08-	9.400000	24.500000	15.8346417	19.519264	2.3184575	cold	2002
chic	76.0	70.00000	14 2002-08-	12.700000	29.500000	29.8009259	19.897134	6.8309575	cold	2002
chic	79.0	68.60000	13 2002-08-	23.050000	40.000000	41.8330680	19.642857	$3.5309575 \\ 6.8190425$	cold	2002
chic	80.0	67.40000	12 2002-08- 11	30.800000	46.000000	51.0833333	20.691667	14.5690425	cold	2002

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	74.0	62.60000	2002-08- 10	27.850000	41.500000	47.8935185	29.908333	11.6190425	cold	2002
chic	70.0	58.40000	2002-08- 09	16.537500	33.500000	39.4067824	27.920000	0.3065425	cold	2002
chic	69.0	58.10000	2002-08-	8.900000	20.500000	29.1932916	19.005736	7 2200575	cold	2002
chic	67.0	54.90000	08 2002-08-	6.200000	12.000000	25.4704106	14.487500	7.3309575	cold	2002
chic	69.0	56.60000	07 2002-08-	3.637500	11.000000	23.5653363	9.554167	10.0309575	cold	2002
chic	77.0	68.40000	06 2002-08-	12.300000	17.000000	35.7106481	17.929167	12.5934575	cold	2002
chic	82.0	72.10000	05 2002-08-	22.900000	47.500000	43.5416667	18.641667	3.9309575 6.6690425	hot	2002
chic	75.0	66.90000	04 2002-08-	16.412500	38.500000	40.9305556	23.583333	0.1815425	cold	2002
chic	72.0	62.20000	03 2002-08-	6.000000	11.500000	31.2453704	17.518386	-	cold	2002
chic	85.0	74.00000	02 2002-08-	21.300000	56.500000	39.9837963	26.822917	$10.2309575 \\ 5.0690425$	hot	2002
chic	82.0	68.10000	01 2002-07-	17.987500	30.833333	34.3534622	34.478220	1.7565425	hot	2002
chic	80.0	68.90000	31 2002-07-			33.5359300			cold	2002
chic	77.0	71.40000	30 2002-07-			20.6176347		2.7309575	cold	2002
chic	81.0	74.60000	29 2002-07-			28.4930556		3.9309575		2002
			28					0.1738147	hot	
chic	80.0	73.80000	2002-07- 27			28.9166667			cold	2002
chic	79.0	71.70000	2002-07- 26					16.1690425	cold	2002
chic	73.0	64.80000	2002-07- 25	18.800000	30.200000	27.4955717	30.750000	2.5690425	cold	2002
chic	71.0	52.60000	2002-07- 24	5.700000	18.500000	34.0045290	16.287121	10.5309575	cold	2002
chic	70.0	57.40000	2002-07- 23	3.000000	7.500000	27.9461554	11.184964	13.2309575	cold	2002
chic	83.0	70.30000	2002-07- 22	15.587500	44.000000	33.6712963	22.933333	0.6434575	hot	2002
chic	87.0	74.90000	2002-07- 21	21.000000	35.000000	42.1782407	15.108333		hot	2002
chic	76.0	66.70000	2002-07-	21.900000	39.000000	39.7106481	18.587500	5.6690425	cold	2002
chic	74.0	65.10000	20 2002-07-	20.375000	34.833333	27.3751006	18.212500	4.1440425	cold	2002
chic	82.0	66.20000	19 2002-07-	38.850000	72.500000	44.9804549	26.069048	22.6190425	hot	2002
chic	78.0	66.30000	18 2002-07-	40.900000	91.500000	40.2255435	40.655698	24.6690425	cold	2002
chic	79.0	62.70000	17 2002-07-	25.528571	63.000000	42.0976248	36.008333	9.2976139	cold	2002
			16							

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmean	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	76.0	60.40000	2002-07- 15	26.300000	51.000000	42.8390313	44.934524	10.0690425	cold	2002
chic	72.0	53.00000	2002-07- 14	17.100000	27.500000	45.1197917	30.616667	0.8690425	cold	2002
chic	70.0	53.40000	2002-07- 13	12.271429	23.800000	44.4687500	21.508333	3.9595290	cold	2002
chic	68.0	53.50000	2002-07- 12	10.900000	24.500000	38.7951540	19.794565	5.3309575	cold	2002
chic	69.0	52.90000	2002-07- 11	7.300000	17.000000	32.1349638	12.659091	8.9309575	cold	2002
chic	74.0	60.10000	2002-07- 10	9.942857	19.000000	31.3040459	10.902355	6.2881004	cold	2002
chic	74.0	70.20000	2002-07- 09	12.300000	32.000000	31.5613929	16.886594	-	cold	2002
chic	81.0	70.40000	2002-07- 08	33.100000	64.000000	45.3496926	27.678571	3.9309575 16.8690425	hot	2002
chic	77.0	64.60000	2002-07- 07	25.412500	44.600000	51.1435185	27.779167	9.1815425	cold	2002
chic	75.0	61.00000	2002-07- 06	17.100000	24.500000	36.3194444	23.908333	0.8690425	cold	2002
chic	75.0	60.70000	2002-07-	6.700000	16.500000	30.5648148	10.800000	-	cold	2002
chic	80.0	68.30000	05 2002-07- 04	16.637500	35.500000	33.3776042	14.675000	$9.5309575 \\ 0.4065425$	cold	2002
chic	84.0	70.00000	2002-07- 03	28.700000	95.000000	36.3783967	31.369163	12.4690425	hot	2002
chic	84.0	65.80000	2002-07- 02	21.600000	69.500000	22.7783816	20.235507	5.3690425	hot	2002
chic	84.0	70.60000	2002-07- 01	20.042857	65.000000	23.1740137	19.308333	3.8118996	hot	2002
chic	81.0	73.10000	2002-06- 30	20.950000	38.500000	39.4557292	18.516667	4.7190425	hot	2002
chic	74.0	63.60000	2002-06- 29	21.800000	37.000000	30.5509259	27.616667	5.5690425	cold	2002
chic	74.0	60.30000	2002-06- 28	13.662500	29.000000	17.3104871	25.416667	- 2.5684575	cold	2002
chic	74.0	64.30000	2002-06- 27	8.200000	18.000000	23.5150966	16.556522	8.0309575	cold	2002
chic	79.0	66.40000	2002-06- 26	9.900000	26.500000	34.3665459	20.915422	6.3309575	cold	2002
chic	81.0	70.30000	2002-06- 25	23.987500	39.833333	19.8884680	33.735985		hot	2002
chic	78.0	63.90000	2002-06- 24	34.200000	88.000000	54.4484127	37.985145	17.9690425	cold	2002
chic	82.0	63.50000	2002-06-	42.500000	65.000000	54.8804348	30.039130	26.2690425	hot	2002
chic	80.0	65.40000	23 2002-06- 22	35.400000	75.500000	46.6250000	35.158333	19.1690425	cold	2002
chic	80.0	69.00000	2002-06-	31.300000	67.500000	37.3514291	38.541667	15.0690425	cold	2002
chic	82.0	67.40000	21 2002-06- 20	33.000000	80.500000	47.4267311	30.767029	16.7690425	hot	2002

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2	2pm25detren	dempcat	year
chic	75.0	60.60000	2002-06- 19	24.962500	47.666667	45.0124547	29.975000	8.7315425	cold	2002
chic	70.0	55.70000	2002-06- 18	15.500000	42.000000	38.2849327	26.000181	0.7309575	cold	2002
chic	67.0	53.50000	2002-06-	12.400000	27.500000	18.0872962	32.582971	-	cold	2002
chic	66.0	48.40000	17 2002-06-	6.485714	12.500000	24.9296875	17.316667	3.8309575	cold	2002
chic	67.0	54.10000	16 2002-06-	7.600000	13.000000	26.5277778	16.358333	9.7452433	cold	2002
chic	61.0	55.70000	15 2002-06-	7.100000	15.500000	15.7533853	24.066667	8.6309575	cold	2002
chic	60.0	57.20000	14 2002-06-			13.1978663		9.1309575	cold	2002
			13					5.7934575		
chic	64.0	60.10000	2002-06- 12	9.800000	17.000000	15.8882576	15.563745	6.4309575	cold	2002
chic	76.0	69.50000	2002-06- 11	9.600000	21.000000	22.6320451	18.168506	- 6.6309575	cold	2002
chic	80.0	70.60000	2002-06- 10	18.637500	48.000000	28.4845008	22.541667		cold	2002
chic	72.0	59.60000	2002-06-	30.050000	54.000000	51.7199074	23.587500	13.8190425	cold	2002
chic	71.0	58.60000	09 2002-06-	25.000000	45.000000	43.9537037	27.266667	8.7690425	cold	2002
chic	64.0	53.10000	08 2002-06-	17.175000	29.000000	22.8748994	32.045833	0.9440425	cold	2002
chic	58.0	51.80000	07 2002-06-	11.550000	16.000000	25.1726413	21.294048	-	cold	2002
chic	56.0	53.90000	06 2002-06-	10.850000	11.000000	14.3436997	18.302717	4.6809575	cold	2002
chic	65.0	64.10000	05 2002-06-	20.562500	35.000000	8.3394360	38.027899	5.3809575 4.3315425	cold	2002
chic	62.0	56.00000	04 2002-06-	18 100000	36 500000	21.8163837	22 636057	1 8600425	cold	2002
			03							
chic	62.0	45.60000	2002-06- 02	9.700000	22.000000	33.9745370	17.161905	6.5309575	cold	2002
chic	76.0	53.10000	2002-06- 01	9.875000	39.166667	40.5763889	24.525000	- 6.3559575	cold	2002
chic	77.0	56.40000	2002-05- 31	10.700000	59.500000	31.5879630	27.033333	5.5309575	cold	2002
chic	75.0	63.70000	2002-05-	19.100000	56.000000	30.4930556	25.479745		cold	2002
chic	73.0	62.00000	30 2002-05-	13.925000	49.000000	24.1001409	25.600000		cold	2002
chic	69.0	57.60000	29 2002-05-	27.200000	42.000000	26.1726596	34.948106	$2.3059575 \\ 10.9690425$	cold	2002
chic	64.0	51.00000	28 2002-05-	13.900000	21.500000	37.9953704	20.091667	-	cold	2002
chic	55.0	45.40000	27 2002-05-	9.775000	17.000000	25.3240741	20.250000	2.3309575	cold	2002
	49.0	46.00000	26 2002-05-			16.3726852		6.4559575	cold	2002
chic	4J.U	40.00000	25	11.900000	19.900000	10.0120002	17.312000	4.9309575	cold	2002

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	54.0	39.10000	2002-05- 24	6.700000	7.000000	24.0637077	14.116667	- 9.5309575	cold	2002
chic	65.0	52.40000	2002-05- 23	18.987500	56.500000	33.7650966	24.296429		cold	2002
chic	55.0	37.60000	2002-05- 22	14.250000	27.000000	28.3486312	23.074420	1.9809575	cold	2002
chic	45.0	29.80000	2002-05- 21	6.400000	16.000000	20.9094203	27.704167	9.8309575	cold	2002
chic	41.0	30.10000	2002-05- 20	3.485714	7.666667	31.2750421	12.900595	12.7452433	cold	2002
chic	46.0	35.60000	2002-05- 19	10.150000	14.500000	28.1388889	17.966667	6.0809575	cold	2002
chic	44.0	32.50000	2002-05-	5.750000	15.000000	25.5231481	18.345833	-	cold	2002
chic	41.0	32.70000	18 2002-05-	2.912500	6.000000	26.4095066	13.204167	10.4809575	cold	2002
chic	55.0	50.20000	17 2002-05-	8.000000	21.000000	22.4490741	21.418939	13.3184575	cold	2002
chic	58.0	48.20000	16 2002-05-	12.700000	59.000000	33.6334267	24.978409	8.2309575	cold	2002
chic	54.0	42.20000	15 2002-05-	12.312500	19.166667	22.1915258	29.937500	3.5309575	cold	2002
chic	50.0	40.60000	14 2002-05-	9.300000	16.000000	27.6348723	22.710714	3.9184575	cold	2002
chic	48.0	46.80000	13 2002-05-	10.700000	17.000000	24.0208333	20.083333	6.9309575	cold	2002
chic	51.0	39.20000	12 2002-05-	14.550000	29.500000	32.8463542	21.054167	5.5309575	cold	2002
chic	56.0	28.10000	11 2002-05-	9.300000	37.000000	31.4188808	23.250000	1.6809575	cold	2002
chic	58.0	41.80000	10 2002-05-	7.350000	28.000000	25.6113124	14.004167	6.9309575	cold	2002
chic	55.0	54.20000	09 2002-05-	16.225000	23.800000	14.6794485	19.905303	8.8809575	cold	2002
chic	56.0	44.90000	08 2002-05-	6.400000	7.000000	27.5550615	13.945833	0.0059575	cold	2002
chic	68.0	59.80000	07 2002-05-	11.000000	17.000000	26.4014694	24.650000	9.8309575	cold	2002
chic	59.0	44.60000	06 2002-05-	10.325000	16.000000	33.7847222	18.233333	5.2309575	cold	2002
chic	52.0	34.60000	05 2002-05-	9.500000	18.000000	27.7800926	27.212500	5.9059575	cold	2002
chic	46.0	27.00000	04 2002-05-	4.300000	15.000000	20.9058977	22.737500	6.7309575	cold	2002
chic	49.0	35.30000	03 2002-05-	8.512500	13.833333	31.2284805	18.099123	11.9309575	cold	2002
chic	53.0	35.30000	02 2002-05-	9.300000		22.4957912		7.7184575	cold	2002
chic	54.0	33.80000	01 2002-04-			20.5936997		6.9309575	cold	2002
chic	51.0	37.80000	30 2002-04-			25.1340488		7.7309575	cold	2002
	J1.U	31.00000	29	10.020011	30.00000	20.1010400	20.001040	5.3023861	5514	2002

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	50.0	41.40000	2002-04- 28	6.600000	14.000000	27.8101852	12.317708	- 9.6309575	cold	2002
chic	48.0	37.40000	2002-04- 27	12.600000	34.000000	24.6574074	20.604167	3.6309575	cold	2002
chic	45.0	25.70000	2002-04- 26	9.900000	30.250000	23.9322665	26.260417	6.3309575	cold	2002
chic	46.0	26.50000	2002-04- 25	7.800000	NA	24.8418881	17.044643	-	cold	2002
chic	58.0	44.50000	2002-04-	11.500000	19.000000	26.6563003	21.848020	8.4309575	cold	2002
chic	46.0	36.90000	24 2002-04-	17.400000	22.000000	20.1294375	32.925595	4.7309575 1.1690425	cold	2002
chic	40.0	33.50000	23 2002-04-	6.800000	8.000000	25.5663245	22.460417	-	cold	2002
chic	41.0	38.30000	22 2002-04-	5.700000	9.000000	30.2476852	10.197917	9.4309575	cold	2002
chic	45.0	29.60000	21 2002-04-	4.142857	6.800000	41.0092593	7.802083	10.5309575	cold	2002
chic	56.0	46.80000	20 2002-04-	5.700000	22.000000	30.3912037	17.583333	12.0881004	cold	2002
chic	76.0	61.10000	19 2002-04-	13.700000	67.000000	29.6387791	21.868961	10.5309575	cold	2002
chic	75.0	58.10000	18 2002-04-	13.462500	47.000000	28.6344422	24.339976	2.5309575	cold	2002
chic	78.0	60.80000	17 2002-04-			36.1854011		2.7684575	cold	2002
chic	75.0	59.00000	16 2002-04-			35.0972222		1.8309575	cold	2002
			15					2.1309575		
chic	59.0	50.30000	2002-04-			29.4074074			cold	2002
chic	52.0	45.50000	2002-04- 13			19.8472222		0.2309575	cold	2002
chic	57.0	51.40000	2002-04- 12	13.700000	36.000000	19.7606500	22.291667	- 2.5309575	cold	2002
chic	63.0	41.30000	2002-04- 11	11.425000	45.000000	30.1260064	26.417874	4.8059575	cold	2002
chic	49.0	35.60000	2002-04- 10	15.250000	31.000000	21.5643024	29.705492	0.9809575	cold	2002
chic	43.0	38.80000	2002-04- 09	9.800000	18.000000	18.8643569	26.760417	6.4309575	cold	2002
chic	49.0	48.30000	2002-04- 08	23.475000	27.500000	18.5677083	37.102273		cold	2002
chic	42.0	34.50000	2002-04-	15.600000	24.000000	22.9348958	21.208333		cold	2002
chic	34.0	22.80000	07 2002-04-	15.900000	25.000000	23.8671875	30.322917	0.6309575	cold	2002
chic	33.0	24.80000	06 2002-04-	18.642857	28.000000	18.1805933	29.197917	$0.3309575 \\ 2.4118996$	cold	2002
chic	31.0	25.00000	05 2002-04-	9.000000	15.000000	23.0562726	22.816123		cold	2002
chic	35.0	28.10000	04 2002-04-	9.700000	15.000000	21.0313118	23.128788	7.2309575	cold	2002
			03					6.5309575		

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	39.0	34.50000	2002-04- 02	19.125000	24.500000	16.2943841	25.730655	2.8940425	cold	2002
chic	34.0	27.10000	2002-04- 01	13.300000	25.000000	14.0338542	28.233696	2.9309575	cold	2002
chic	38.0	27.30000	2002-03- 31	10.600000	17.000000	19.5138889	22.156250	5.6309575	cold	2002
chic	43.0	29.20000	2002-03- 30	8.225000	12.000000	20.3611111	20.177083	8.0059575	cold	2002
chic	41.0	39.30000	2002-03- 29	20.500000	31.500000	9.4166667	34.385417		cold	2002
chic	40.0	32.60000	2002-03- 28	31.500000	52.500000	10.3387681	30.593750	15.2690425	cold	2002
chic	36.0	22.10000	2002-03- 27	20.562500	31.166667	14.3888889	33.911504	4.3315425	cold	2002
chic	32.0	23.70000	2002-03- 26	12.250000	16.000000	22.0694444	19.677083	3.9809575	cold	2002
chic	28.0	19.10000	2002-03- 25	7.100000	19.000000	26.3333333	11.368507	9.1309575	cold	2002
chic	34.0	22.90000	2002-03- 24	7.537500	19.000000	35.0972222	11.412138	8.6934575	cold	2002
chic	39.0	15.80000	2002-03- 23	12.100000	39.000000	26.7500000	17.927083	4.1309575	cold	2002
chic	26.0	8.10000	2002-03- 22	10.700000	34.500000	24.1805556	14.734849	5.5309575	cold	2002
chic	28.0	12.90000	2002-03- 21	10.928571	20.166667	22.8750000	16.403986	5.3023861	cold	2002
chic	40.0	34.00000	2002-03- 20	16.800000	20.500000	19.8888889	27.083333		cold	2002
chic	42.0	35.50000	2002-03- 19	30.450000	41.000000	9.1111111	28.593750	14.2190425	cold	2002
chic	42.0	32.00000	2002-03- 18	20.925000	23.500000	15.9263285	25.412202	4.6940425	cold	2002
chic	38.0	30.40000	2002-03- 17	16.100000	23.500000	18.444444	20.812500	0.1309575	cold	2002
chic	37.0	26.30000	2002-03- 16	5.500000	10.500000	36.3055556	11.302083	10.7309575	cold	2002
chic	47.0	31.50000	2002-03- 15	11.114286	19.400000	20.9305556	15.125000		cold	2002
chic	50.0	41.00000	2002-03- 14	27.000000	34.000000	18.8224638	22.166667	10.7690425	cold	2002
chic	48.0	37.60000	2002-03- 13	24.100000	48.000000	13.5138889	30.844656	7.8690425	cold	2002
chic	40.0	31.30000	2002-03- 12	25.325000	53.000000	6.7904589	31.125000	9.0940425	cold	2002
chic	33.0	21.00000	2002-03- 11	13.350000	33.000000	11.1690821	30.697917	- 2.8809575	cold	2002
chic	21.0	7.20000	2002-03- 10	7.550000	20.500000	27.5507246	12.041667	8.6809575	cold	2002
chic	42.0	30.90000	2002-03- 09	9.457143	23.500000	28.8750000	8.302083	6.7738147	cold	2002
chic	51.0	46.50000	2002-03- 08	13.600000	12.000000	18.9722222	23.166667	2.6309575	cold	2002
			00					2.0003010		

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	36.0	30.60000	2002-03- 07	33.700000	41.000000	16.1962560	25.213768	17.4690425	cold	2002
chic	35.0	28.10000	2002-03- 06	21.942857	20.000000	16.1388889	30.010417	5.7118996	cold	2002
chic	23.0	17.90000	2002-03- 05	22.700000	29.000000	8.8007246	36.723485	6.4690425	cold	2002
chic	6.0	0.60000	2002-03- 04	12.800000	29.000000	18.9510870	25.361607	- 3.4309575	cold	2002
chic	11.0	3.30000	2002-03- 03	7.200000	15.500000	30.1250000	14.885417	9.0309575	cold	2002
chic	28.0	27.90000	2002-03- 02	15.900000	19.000000	12.9166667	32.166667	0.3309575	cold	2002
chic	26.0	17.20000	2002-03- 01	17.800000	27.500000	16.3194444	28.906250		cold	2002
chic	23.0	14.00000	2002-02- 28	14.987500	43.500000	11.6666667	26.348485	1.2434575	cold	2002
chic	21.0	10.80000	2002-02- 27	9.200000	26.000000	18.3152174	23.668616	7.0309575	cold	2002
chic	26.0	19.60000	2002-02- 26	8.400000	26.500000	17.8333333	20.239583	7.8309575	cold	2002
chic	42.0	30.90000	2002-02- 25	9.828571	18.333333	20.7777778	17.117918	6.4023861	cold	2002
chic	50.0	31.60000	2002-02- 24	11.600000	30.500000	20.4722222	16.645833	4.6309575	cold	2002
chic	36.0	24.80000	2002-02- 23	10.500000	25.000000	13.8472222	24.166667	5.7309575	cold	2002
chic	30.0	18.40000	2002-02- 22	8.471429	15.000000	16.0694444	27.664855	7.7595290	cold	2002
chic	32.0	26.20000	2002-02- 21	8.400000	12.500000	13.9374177	21.559783	7.8309575	cold	2002
chic	44.0	42.80000	2002-02- 20	11.400000	20.000000	9.6666667	16.145833	4.8309575	cold	2002
chic	42.0	39.90000	2002-02- 19	14.850000	20.400000	12.9305556	24.306914	1.3809575	cold	2002
chic	38.0	22.90000	2002-02- 18	10.500000	31.000000	12.6805556	24.750000	5.7309575	cold	2002
chic	33.0	20.20000	2002-02- 17	5.800000	11.000000	20.4583333	19.656250	10.4309575	cold	2002
chic	37.0	24.50000	2002-02- 16	6.585714	13.500000	17.7916667	18.291667	9.6452433	cold	2002
chic	39.0	27.60000	2002-02- 15	12.800000	33.500000	12.0573671	19.871212	3.4309575	cold	2002
chic	38.0	21.70000	2002-02- 14	8.200000	46.500000	15.5416667	23.304924		cold	2002
chic	25.0	11.00000	2002-02- 13	7.712500	17.250000	12.7581522	29.395780	8.5184575	cold	2002
chic	35.0	22.00000	2002-02- 12	6.050000	22.500000	20.2708333	17.250000	10.1809575	cold	2002
chic	29.0	19.80000	2002-02- 11	8.100000	28.000000	15.1250000	22.875000	8.1309575	cold	2002
chic	37.0	29.30000	2002-02- 10	10.014286	20.000000	19.4583333	17.906250		cold	2002

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	40.0	32.90000	2002-02- 09	21.400000	30.500000	11.0833333	28.885417	5.1690425	cold	2002
chic	36.0	28.30000	2002-02- 08	34.850000	60.000000	5.8750000	32.805871	18.6190425	cold	2002
chic	32.0	26.10000	2002-02- 07	34.857143	41.166667	8.2119565	36.704546	18.6261853	cold	2002
chic	29.0	19.20000	2002-02- 06	25.000000	49.500000	4.2291667	36.649909	8.7690425	cold	2002
chic	20.0	12.20000	2002-02- 05	18.800000	38.500000	7.9583333	35.482639	2.5690425	cold	2002
chic	18.0	5.80000	2002-02- 04	9.757143	21.000000	14.8948413	27.699728	6.4738147	cold	2002
chic	27.0	20.10000	2002-02- 03	16.800000	22.000000	20.9818841	19.494112		cold	2002
chic	21.0	17.70000	2002-02- 02	19.200000	32.000000	11.5555556	29.895833	2.9690425	cold	2002
chic	27.0	22.50000	2002-02- 01	9.271429	12.000000	15.1899758	26.270833	- 6.9595290	cold	2002
chic	32.0	NA	2002-01- 31	8.650000	9.500000	12.0227273	21.270833	7.5809575	cold	2002
chic	32.0	28.30000	2002-01- 30	15.050000	11.500000	15.3520531	22.152627	1.1809575	cold	2002
chic	34.0	29.60000	2002-01- 29	9.585714	15.000000	16.0416667	19.041667	6.6452433	cold	2002
chic	41.0	33.50000	2002-01- 28	16.600000	32.000000	12.2572464	24.218750		cold	2002
chic	49.0	30.30000	2002-01- 27	7.000000	28.000000	19.9027778	18.260417	9.2309575	cold	2002
chic	44.0	25.60000	2002-01- 26	9.475000	15.666667	14.1666667	21.697917	6.7559575	cold	2002
chic	39.0	20.70000	2002-01- 25	8.800000	30.000000	12.1014493	22.375000		cold	2002
chic	36.0	24.20000	2002-01- 24	11.800000	17.500000	15.2632850	21.161355	4.4309575	cold	2002
chic	42.0	39.20000	2002-01- 23	18.700000	38.500000	8.0585749	23.135417		cold	2002
chic	44.0	24.70000	2002-01- 22	11.700000	37.500000	10.3611111	27.333333		cold	2002
chic	31.0	25.70000	2002-01-	18.500000	24.500000	9.0416667	23.708333	$4.5309575 \\ 2.2690425$	cold	2002
chic	29.0	22.80000	21 2002-01-	20.712500	22.833333	13.4166667	17.979167	4.4815425	cold	2002
chic	20.0	12.40000	20 2002-01-	19.500000	30.000000	7.7361111	30.614583	3.2690425	cold	2002
chic	16.0	6.50000	19 2002-01-	16.100000	28.500000	6.8333333	30.156250		cold	2002
chic	19.0	14.40000	18 2002-01-	17.937500	21.500000	8.0820707	25.354167	$0.1309575 \\ 1.7065425$	cold	2002
chic	29.0	23.50000	17 2002-01-	15.450000	22.500000	5.0277778	24.536849		cold	2002
chic	32.0	23.60000	16 2002-01- 15	18.600000	17.000000	10.2771739	18.510417	0.7809575 2.3690425	cold	2002

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	35.0	30.80000	2002-01- 14	16.800000	19.333333	3.6805556	21.555059	0.5690425	cold	2002
chic	33.0	22.70000	2002-01- 13	8.900000	19.500000	7.5416667	22.104167	- 7.3309575	cold	2002
chic	35.0	24.70000	2002-01- 12	10.400000	16.500000	10.3750000	20.770833	5.8309575	cold	2002
chic	38.0	27.00000	2002-01- 11	12.125000	19.500000	10.6250000	21.802083	4.1059575	cold	2002
chic	39.0	30.90000	2002-01- 10	13.150000	23.000000	5.7210145	27.218750	3.0809575	cold	2002
chic	47.0	33.70000	2002-01- 09	11.400000	29.500000	3.9722222	22.022110	4.8309575	cold	2002
chic	31.0	22.00000	2002-01- 08	14.762500	24.600000	6.0277778	23.031250	1.4684575	cold	2002
chic	22.0	12.40000	2002-01- 07	10.100000	24.000000	9.2336957	25.316423	6.1309575	cold	2002
chic	29.0	22.60000	2002-01- 06	13.300000	26.500000	11.3750000	19.520833	2.9309575	cold	2002
chic	32.0	25.90000	2002-01- 05	20.087500	40.000000	4.3055556	21.708333	3.8565425	cold	2002
chic	28.0	17.50000	2002-01- 04	16.000000	71.000000	8.4070048	24.011775	0.2309575	cold	2002
chic	20.0	11.30000	2002-01- 03	20.100000	50.000000	5.8478261	35.735054		cold	2002
chic	21.0	11.90000	2002-01- 02	25.785714	49.600000	3.6944444	41.875000	9.5547567	cold	2002
chic	18.0	6.00000	2002-01- 01	16.000000	51.500000	5.7083333	30.864583	0.2309575	cold	2002
chic	14.0	3.70000	2001-12- 31	17.400000	31.000000	11.1919192	22.047222		cold	2001
chic	13.0	4.80000	2001-12- 30	11.525000	27.500000	15.0694444	15.479167	4.7059575	cold	2001
chic	14.0	4.10000	2001-12- 29	8.200000	32.000000	17.5694444	18.145833	8.0309575	cold	2001
chic	21.0	12.10000	2001-12- 28	12.100000	37.000000	14.2777778	22.617754	4.1309575	cold	2001
chic	23.0	17.10000	2001-12- 27	15.312500	28.000000	11.9027778	18.819444		cold	2001
chic	14.0	8.10000	2001-12- 26	11.600000	41.500000	8.7727822	19.875000		cold	2001
chic	17.0	8.30000	2001-12- 25	10.200000	23.500000	15.2500000	15.805556	- 6.0309575	cold	2001
chic	18.0	12.00000	2001-12- 24	7.800000	34.000000	19.5138889	14.013889	8.4309575	cold	2001
chic	27.0	18.00000	2001-12-	9.800000	46.000000	17.1340580	10.125000	-	cold	2001
chic	41.0	34.40000	23 2001-12- 22	11.000000	24.000000	10.7312802	24.245169	6.4309575 - 5.2309575	cold	2001
chic	31.0	20.00000	2001-12-	18.187500	39.000000	3.5416667	36.513889		cold	2001
chic	33.0	18.80000	21 2001-12- 20	9.900000	30.000000	5.9722222	29.467597	- 6.3309575	cold	2001

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	36.0	25.60000	2001-12-	10.700000	22.500000	8.6642512	24.385417	-	cold	2001
chic	39.0	32.30000	19 2001-12- 18	19.737500	50.500000	3.7427536	26.566690	5.5309575 3.5065425	cold	2001
chic	40.0	38.50000	2001-12- 17	14.800000	17.000000	3.0422705	21.468750	1.4309575	cold	2001
chic	42.0	41.80000	2001-12- 16	17.600000	20.000000	2.5694444	25.411458		cold	2001
chic	35.0	34.60000	2001-12- 15	22.542857	25.800000	4.2361111	27.770833	6.3118996	cold	2001
chic	35.0	32.10000	2001-12- 14	27.500000	36.500000	2.2850242	26.078125	11.2690425	cold	2001
chic	39.0	36.60000	2001-12- 13	15.000000	19.000000	2.9633838	22.322917	1.2309575	cold	2001
chic	43.0	40.90000	2001-12- 12	27.200000	51.500000	1.7222222	30.199811	10.9690425	cold	2001
chic	36.0	26.90000	2001-12- 11	29.100000	55.000000	3.0772947	38.493433	12.8690425	cold	2001
chic	39.0	23.10000	2001-12- 10	22.350000	51.000000	3.9027778	33.994792	6.1190425	cold	2001
chic	31.0	21.90000	2001-12- 09	19.812500	23.166667	5.6388889	26.375000	3.5815425	cold	2001
chic	39.0	32.70000	2001-12- 08	21.100000	31.500000	10.7361111	24.447917	4.8690425	cold	2001
chic	41.0	34.10000	2001-12- 07	12.900000	23.500000	11.1186869	24.479167	3.3309575	cold	2001
chic	44.0	30.90000	2001-12- 06	9.812500	33.000000	8.555556	27.128788	6.4184575	cold	2001
chic	56.0	50.10000	2001-12- 05	19.600000	81.500000	22.8611111	21.177083		cold	2001
chic	58.0	51.10000	2001-12- 04	14.300000	58.000000	6.9565217	28.260417	1.9309575	cold	2001
chic	49.0	42.90000	2001-12- 03	20.137500	28.666667	5.6274155	32.226934	3.9065425	cold	2001
chic	39.0	35.40000	2001-12- 02	16.750000	29.000000	6.8611111	24.833333	0.5190425	cold	2001
chic	36.0	32.80000	2001-12- 01	19.000000	33.500000	7.4027778	18.447917	2.7690425	cold	2001
chic	45.0	42.50000	2001-11- 30	6.100000	13.000000	1.2361111	16.476799	10.1309575	cold	2001
chic	42.0	40.10000	2001-11- 29	5.000000	12.500000	2.9861111	17.338542		cold	2001
chic	39.0	34.30000	2001-11- 28	19.100000	23.500000	2.9747475	19.181159		cold	2001
chic	44.0	37.60000	2001-11- 27	13.837500	21.166667	4.9166667	18.802083	2.3934575	cold	2001
chic	43.0	40.40000	2001-11- 26	17.700000	35.500000	6.2693237	21.729167		cold	2001
chic	46.0	38.50000	2001-11- 25	4.400000	12.000000	9.0138889	11.062500	11.8309575	cold	2001
chic	57.0	51.50000	2001-11- 24	10.142857	27.000000	19.1733092	15.276721		cold	2001

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	52.0	39.90000	2001-11- 23	15.300000	34.500000	12.3282828	26.820707	0.9309575	cold	2001
chic	48.0	30.30000	2001-11- 22	10.800000	35.500000	9.4861111	22.437198	- 5.4309575	cold	2001
chic	44.0	29.70000	2001-11- 21	11.500000	29.600000	4.7916667	26.172101	4.7309575	cold	2001
chic	36.0	23.20000	2001-11- 20	6.700000	29.000000	7.5000000	26.222222	9.5309575	cold	2001
chic	46.0	33.90000	2001-11- 19	10.700000	28.000000	11.5295894	23.160714	5.5309575	cold	2001
chic	56.0	51.70000	2001-11-	38.075000	62.000000	5.6527778	25.109375	21.8440425	cold	2001
chic	52.0	47.40000	18 2001-11-	33.400000	73.000000	2.8333333	29.630208	17.1690425	cold	2001
chic	50.0	47.00000	17 2001-11-	27.050000	46.500000	8.2590580	24.656250	10.8190425	cold	2001
chic	61.0	53.50000	16 2001-11-	39.512500	59.666667	11.1111111	31.740942	23.2815425	cold	2001
chic	57.0	49.10000	15 2001-11-	38.900000	95.000000	9.1781401	38.563156	22.6690425	cold	2001
chic	52.0	33.40000	14 2001-11-	15.900000	78.500000	7.9722222	32.030208	-	cold	2001
chic	42.0	32.30000	13 2001-11-	20.037500	44.500000	4.0555556	34.218750	0.3309575 $3.8065425$	cold	2001
chic	43.0	32.50000	12 2001-11-	6.000000	15.500000	19.4583333	19.718750	-	cold	2001
chic	49.0	33.40000	11 2001-11-	10.100000	40.000000	14.0555556	17.270833	10.2309575	cold	2001
chic	40.0	29.80000	10 2001-11-	14.700000	32.000000	5.6527778	27.833333	6.1309575	cold	2001
chic	45.0	37.90000	09 2001-11-	15.800000	42.000000	9.6250000	26.341033	1.5309575	cold	2001
chic	56.0	43.30000	08 2001-11-	23.500000	84.500000	6.9329710	41.519475	0.4309575 $7.2690425$	cold	2001
chic	48.0	31.10000	07 2001-11-		75.500000		35.536458	_	cold	2001
chic	43.0	31.00000	06 2001-11-			4.3472222		2.6434575 3.6690425	cold	2001
chic	49.0	37.50000	05 2001-11-			14.3789683			cold	2001
chic	51.0	33.60000	04 2001-11-			8.9722222		5.9309575	cold	2001
			03					2.0166718		
chic	56.0	36.80000	2001-11-			13.1250000		8.0309575	cold	2001
chic	62.0	50.40000	2001-11-			25.5839372		1.1309575	cold	2001
chic	59.0	38.00000	2001-10- 31			23.7340342			cold	2001
chic	50.0	43.90000	2001-10- 30			3.8758783			cold	2001
chic	52.0	37.50000	2001-10- 29	9.100000	39.500000	11.9907407	25.510417	7.1309575	cold	2001

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmean	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	43.0	28.00000	2001-10- 28	10.625000	18.500000	13.2870370	23.035779	- 5.6059575	cold	2001
chic	38.0	23.60000	2001-10- 27	7.000000	26.000000	15.7492955	24.000000	9.2309575	cold	2001
chic	39.0	25.50000	2001-10- 26	6.500000	22.500000	14.1525765	19.062500	9.7309575	cold	2001
chic	38.0	26.10000	2001-10- 25	7.412500	34.000000	17.8463896	12.592579	8.8184575	cold	2001
chic	52.0	50.30000	2001-10- 24	7.700000	33.000000	10.4893461	19.776042	8.5309575	cold	2001
chic	62.0	57.70000	2001-10-	15.400000	44.000000	11.3331320	27.315341	-	cold	2001
chic	56.0	53.30000	23 2001-10-	21.571429	35.500000	10.4533743	29.072917	$0.8309575 \\ 5.3404710$	cold	2001
chic	59.0	46.20000	22 2001-10-	16.300000	44.500000	17.1180556	25.135417	0.0690425	cold	2001
chic	56.0	39.30000	21 2001-10-	10.100000	58.500000	13.1203704	33.656250		cold	2001
chic	53.0	35.40000	20 2001-10-	8.314286	39.500000	10.5034219	31.250000	6.1309575	cold	2001
chic	51.0	34.70000	19 2001-10-	7.800000	68.500000	13.3630051	27.496377	7.9166718	cold	2001
chic	42.0	28.60000	18 2001-10-	7.050000	41.000000	8.6316425	27.356061	8.4309575	cold	2001
chic	45.0	35.10000	17 2001-10-	6.314286	11.400000	7.9962121	20.002717	9.1809575	cold	2001
chic	47.0	38.10000	16 2001-10-	6.400000	32.500000	6.0454545	18.656250	9.9166718	cold	2001
chic	53.0	43.30000	15 2001-10-	5.800000	12.000000	13.9722222	13.583333	9.8309575	cold	2001
chic	60.0	57.20000	14 2001-10-	11.242857	26.500000	7.8726852	21.166667	10.4309575	cold	2001
chic	56.0	52.30000	13 2001-10-	9.500000	30.500000	9.5833333	24.593750	4.9881004	cold	2001
chic	58.0	47.10000	12 2001-10-	9.400000	36.000000	12.6797504	27.777462	6.7309575	cold	2001
chic	60.0	56.60000	11 2001-10-	14.928571	25.666667	17.1620370	19.048295	6.8309575	cold	2001
chic	65.0	47.60000	10 2001-10-	14.700000	52.000000	29.4004630	21.168561	1.3023861	cold	2001
chic	52.0	37.90000	09 2001-10-			18.0778986		1.5309575	cold	2001
chic	41.0	27.60000	08 2001-10-			12.0995370		5.5309575	cold	2001
chic	40.0	27.90000	07 2001-10-			10.6597222		3.9434575	cold	2001
chic	46.0	40.60000	06 2001-10-			5.2854908		9.0309575	cold	2001
			05					7.5309575		
chic	55.0	48.70000	2001-10-			6.4537037		3.5059575	cold	2001
chic	66.0	51.50000	2001-10- 03	10.200000	00.00000	35.4860105	<i>4</i> 1.470974	0.0309575	cold	2001

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	64.0	53.70000	2001-10- 02	19.400000	74.500000	23.3374780	40.215909	3.1690425	cold	2001
chic	64.0	52.70000	2001-10- 01	18.075000	62.000000	12.4394065	43.912202	1.8440425	cold	2001
chic	58.0	49.70000	2001-09- 30	16.700000	37.500000	11.8083333	31.937500	0.4690425	cold	2001
chic	56.0	48.80000	2001-09- 29	9.500000	17.000000	13.7937500	20.916667	6.7309575	cold	2001
chic	54.0	47.40000	2001-09- 28	5.442857	11.166667	15.3498188	15.905303	10.7881004	cold	2001
chic	54.0	44.90000	2001-09- 27	6.000000	17.000000	15.7999094	23.687500	-	cold	2001
chic	60.0	40.20000	2001-09-	6.000000	20.500000	15.6138230	25.308626	10.2309575	cold	2001
chic	49.0	34.40000	26 2001-09-	5.414286	15.500000	13.7728261	23.937500	10.2309575	cold	2001
chic	50.0	38.20000	25 2001-09-	3.200000	11.000000	15.0020916	16.825296	10.8166718	cold	2001
chic	58.0	54.50000	24 2001-09-	11.000000	21.500000	14.6541667	18.170833	13.0309575	cold	2001
chic	63.0	54.40000	23 2001-09-	14.425000	24.833333	14.5729167	27.175000	5.2309575	cold	2001
chic	62.0	58.50000	22 2001-09-	13.700000	28.500000	10.0938406	26.693841	1.8059575	cold	2001
chic	63.0	54.60000	21 2001-09-	16.900000	55.000000	14.9498188	26.937060	$\begin{array}{c} 2.5309575 \\ 0.6690425 \end{array}$	cold	2001
chic	62.0	59.90000	20 2001-09-	16.000000	17.000000	17.1153986	20.868144	-	cold	2001
chic	62.0	58.30000	19 2001-09-	27.500000	34.500000	34.8092391	23.723188	$\begin{array}{c} 0.2309575 \\ 11.2690425 \end{array}$	cold	2001
chic	59.0	54.30000	18 2001-09-	24.800000	38.500000	13.0634058	38.225000	8.5690425	cold	2001
chic	60.0	49.30000	17 2001-09-			24.0645833			cold	2001
chic	58.0	46.80000	16 2001-09-			18.4645833		0.2011001	cold	2001
			15					7.1309575		
chic	59.0	43.80000	14			22.2288208		12.4309575	cold	2001
chic	63.0	51.60000	2001-09- 13			23.3461957		11.1184575	cold	2001
chic	69.0	56.80000	2001-09- 12			26.4399457		1.8309575	cold	2001
chic	64.0	54.90000	2001-09- 11	13.600000	28.000000	15.5998188	31.836594	2.6309575	cold	2001
chic	65.0	50.60000	2001-09- 10	7.171429	19.400000	12.9635211	22.308333	9.0595290	cold	2001
chic	64.0	60.90000	2001-09- 09	8.100000	21.000000	11.1875000	19.275000	- 8.1309575	cold	2001
chic	72.0	65.10000	2001-09- 08	10.000000	30.500000	28.1291667	15.300000	6.2309575	cold	2001
chic	78.0	69.50000	2001-09- 07	12.475000	20.000000	20.8021739	16.993116	3.7559575	cold	2001

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	73.0	63.50000	2001-09- 06	20.400000	43.000000	32.7273221	29.404084	4.1690425	cold	2001
chic	66.0	58.50000	2001-09- 05	8.950000	31.500000	23.6516304	22.016288	- 7.2809575	cold	2001
chic	67.0	57.80000	2001-09- 04	5.650000	14.600000	22.1880435	13.195833	10.5809575	cold	2001
chic	74.0	63.00000	2001-09- 03	18.050000	37.000000	34.0229167	19.991667		cold	2001
chic	64.0	55.00000	2001-09- 02	11.650000	27.000000	21.0541667	26.191667	4.5809575	cold	2001
chic	60.0	49.80000	2001-09- 01	4.662500	14.000000	25.5812500	11.325000	11.5684575	cold	2001
chic	68.0	59.90000	2001-08- 31	6.100000	21.500000	18.8584239	16.206818	10.1309575	cold	2001
chic	77.0	65.10000	2001-08- 30	16.600000	36.500000	29.1650492	28.274144		cold	2001
chic	69.0	57.70000	2001-08- 29	15.175000	32.800000	22.8365539	25.857726	- 1.0559575	cold	2001
chic	68.0	57.30000	2001-08- 28	11.300000	24.500000	19.0765993	18.562500	4.9309575	cold	2001
chic	74.0	65.20000	2001-08- 27	17.100000	39.500000	19.6982689	32.708333	0.8690425	cold	2001
chic	75.0	65.10000	2001-08- 26	11.975000	24.500000	26.6388889	21.433333	4.2559575	cold	2001
chic	74.0	70.20000	2001-08- 25	19.550000	26.000000	20.6333333	22.966667	3.3190425	cold	2001
chic	74.0	67.70000	2001-08- 24	28.850000	38.000000	37.2157115	19.303788	12.6190425	cold	2001
chic	72.0	67.70000	2001-08- 23	22.000000	30.500000	29.8554513	19.111742	5.7690425	cold	2001
chic	77.0	68.10000	2001-08- 22	21.400000	44.000000	23.0271739	29.382143	5.1690425	cold	2001
chic	72.0	59.70000	2001-08- 21	19.900000	48.000000	17.9390399	27.937500	3.6690425	cold	2001
chic	69.0	55.80000	2001-08- 20	10.512500	36.000000	12.1166667	20.870833	5.7184575	cold	2001
chic	68.0	59.90000	2001-08- 19	7.200000	16.500000	23.0354167	12.537500	9.0309575	cold	2001
chic	66.0	61.00000	2001-08- 18	10.800000	22.000000	12.2958333	29.475000	5.4309575	cold	2001
chic	70.0	55.60000	2001-08- 17	8.987500	20.500000	15.3771739	21.834524	- 7.2434575	cold	2001
chic	68.0	63.70000	2001-08- 16	21.600000	31.000000	21.5771410	25.841667	5.3690425	cold	2001
chic	67.0	56.00000	2001-08- 15	16.300000	38.500000	22.3541749	38.013095	0.0690425	cold	2001
chic	66.0	52.10000	2001-08- 14	6.887500	16.500000	21.6938406	19.519203	9.3434575	cold	2001
chic	67.0	58.60000	2001-08- 13	7.750000	18.000000	25.9020833	15.612500	8.4809575	cold	2001
chic	72.0	59.30000	2001-08- 12	13.800000	27.000000	28.3277174	24.216667	2.4309575	cold	2001

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	69.0	56.00000	2001-08- 11	5.737500	16.666667	22.4854167	14.366667	- 10.4934575	cold	2001
chic	70.0	59.90000	2001-08- 10	6.350000	13.500000	23.5074879	13.817624		cold	2001
chic	84.0	72.60000	2001-08- 09	38.200000	66.000000	36.7324522	26.467424	21.9690425	hot	2001
chic	85.0	72.60000	2001-08- 08	38.837500	70.000000	37.9804682	27.627433	22.6065425	hot	2001
chic	85.0	73.70000	2001-08- 07	27.150000	40.500000	39.5966486	28.741667	10.9190425	hot	2001
chic	81.0	68.10000	2001-08- 06	22.700000	50.000000	32.3516304	33.075000	6.4690425	hot	2001
chic	76.0	68.50000	2001-08-	21.837500	32.500000	37.8480072	30.058333	5.6065425	cold	2001
chic	76.0	63.80000	05 2001-08-	10.300000	20.000000	23.4395833	21.108333		cold	2001
chic	75.0	70.50000	04 2001-08-	15.200000	23.000000	26.9838768	21.963044	5.9309575	cold	2001
chic	79.0	73.70000	03 2001-08-	15.085714	38.500000	22.3635481	33.087780	1.0309575	cold	2001
chic	84.0	72.90000	02 2001-08-	43.700000	81.500000	45.1773551	27.442391	1.1452433 27.4690425	hot	2001
chic	83.0	73.10000	01 2001-07-	27.100000	45.000000	42.1452122	26.918939	10.8690425	hot	2001
chic	80.0	69.90000	31 2001-07-	29.512500	48.166667	41.0873188	23.325000	13.2815425	cold	2001
chic	78.0	70.30000	30 2001-07-	27.400000	37.500000	37.4354167	17.983333	11.1690425	cold	2001
chic	72.0	66.20000	29 2001-07-	26.300000	37.500000	27.7454545	30.527273	10.0690425	cold	2001
chic	71.0	58.40000	28 2001-07-	10.912500	25.000000	30.5804348	18.833333		cold	2001
chic	73.0	62.90000	27 2001-07-	9.200000	11.000000	27.9526845	12.196970	5.3184575	cold	2001
chic	71.0	67.50000	26 2001-07-	10.400000	20.500000	30.7289855	16.483873	7.0309575	cold	2001
chic	79.0	71.80000	25 2001-07-	15.712500	32.400000	33.2979167	25.050000	5.8309575	cold	2001
chic	83.0	75.10000	24 2001-07-	20.600000	34.000000	21.0333132	32.020833	$0.5184575 \\ 4.3690425$	hot	2001
chic	82.0	72.00000	23 2001-07-	19.300000	25.500000	29.3125000	29.608333	3.0690425	hot	2001
chic	83.0	73.40000	22 2001-07-	21.985714	39.500000	30.4416667	30.291667	5.7547567	hot	2001
chic	82.0	72.20000	21 2001-07-	32.300000	58.500000	33.0038043	33.675000	16.0690425	hot	2001
chic	77.0	73.00000	20 2001-07-	28.500000	42.000000	32.7817761	29.462319	12.2690425	cold	2001
chic	78.0	72.90000	19 2001-07-	31.142857	47.800000	26.6572875	25.624374	14.9118996	cold	2001
chic	79.0	70.00000	18 2001-07- 17	39.000000	67.500000	41.8674242	33.038636	22.7690425	cold	2001

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2	2pm25detren	dempcat	year
chic	75.0	60.50000	2001-07- 16	26.100000	58.000000	40.8931159	34.444480	9.8690425	cold	2001
chic	74.0	57.20000	2001-07- 15	19.971429	47.500000	38.2875000	30.833333	3.7404710	cold	2001
chic	74.0	50.40000	2001-07-	11.100000	30.500000	28.5125000	27.675000		cold	2001
chic	68.0	50.90000	14 2001-07-	7.600000	20.000000	16.1972332	22.077609	5.1309575	cold	2001
chic	69.0	53.40000	13 2001-07-	8.157143	20.200000	18.0318264	21.222348	8.6309575	cold	2001
chic	69.0	51.70000	12 2001-07-	5.450000	10.000000	24.9645833	13.838636	8.0738147	cold	2001
chic	81.0	61.20000	11 2001-07-	17.000000	35.500000	33.7047101	27.344048	$10.7809575 \\ 0.7690425$	hot	2001
chic	79.0	67.40000	10 2001-07-	22.600000	36.500000	27.0644516	31.742424	6.3690425	cold	2001
chic	79.0	63.20000	09 2001-07-	14.300000	26.000000	23.0966184	24.183333	-	cold	2001
chic	74.0	71.80000	08 2001-07-	18.150000	34.500000	28.0143116	20.166667	1.9309575 1.9190425	cold	2001
chic	66.0	49.70000	07 2001-07-	10.262500	22.000000	26.0622283	24.902899	_	cold	2001
chic	64.0	49.20000	06 2001-07-			22.0190217		5.9684575	cold	2001
chic	78.0	58.80000	05 2001-07-			30.9833333		9.5309575 2.7690425	cold	2001
chic	72.0	63.30000	04 2001-07-	9.371429	26.000000	20.2451087			cold	2001
			03					6.8595290		
chic	62.0	42.70000	2001-07- 02	6.600000		21.4062500		9.6309575	cold	2001
chic	64.0	52.00000	2001-07- 01	7.200000		22.7395833		9.0309575	cold	2001
chic	78.0	64.90000	2001-06- 30	30.175000	45.666667	46.9458333	21.816667	13.9440425	cold	2001
chic	77.0	63.90000	2001-06- 29	38.850000	70.500000	42.5458333	35.098551	22.6190425	cold	2001
chic	75.0	62.90000	2001-06- 28	41.300000	66.000000	42.9583333	36.940000	25.0690425	cold	2001
chic	75.0	61.10000	2001-06- 27	31.300000	57.500000	42.1101449	37.222101	15.0690425	cold	2001
chic	74.0	57.90000	2001-06- 26	24.800000	43.000000	42.6815382	36.149275	8.5690425	cold	2001
chic	72.0	58.90000	2001-06- 25	21.850000	45.500000	39.3654891	33.608333	5.6190425	cold	2001
chic	66.0	55.00000	2001-06- 24	21.371429	30.166667	34.1958333	30.383333	5.1404710	cold	2001
chic	62.0	52.80000	2001-06-	13.550000	21.000000	19.5416667	24.566667	2 6900575	cold	2001
chic	60.0	54.30000	23 2001-06-	14.200000	20.000000	20.4875000	20.266667	2.6809575	cold	2001
chic	62.0	54.90000	22 2001-06- 21	16.662500	22.500000	23.3856108	28.537164	$\begin{array}{c} 2.0309575 \\ 0.4315425 \end{array}$	cold	2001

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	70.0	52.90000	2001-06- 20	14.650000	19.000000	30.0812500	24.929058	- 1.5809575	cold	2001
chic	75.0	61.50000	2001-06- 19	13.700000	39.500000	46.4770422	18.469928	2.5309575	cold	2001
chic	78.0	61.40000	2001-06- 18	13.450000	36.500000	48.3247283	21.878623	2.7809575	cold	2001
chic	71.0	55.40000	2001-06- 17	11.300000	27.000000	34.6229167	25.816667	4.9309575	cold	2001
chic	71.0	57.50000	2001-06- 16	7.800000	24.000000	32.6166667	21.625000	8.4309575	cold	2001
chic	70.0	62.10000	2001-06- 15	9.187500	25.000000	19.9731884	24.133333	-	cold	2001
chic	80.0	68.50000	2001-06-	30.100000	57.500000	41.3428030	21.408333	7.0434575 13.8690425	cold	2001
chic	80.0	69.50000	14 2001-06-	36.300000	61.000000	51.8198370	29.813768	20.0690425	cold	2001
chic	75.0	65.60000	13 2001-06-	16.237500	34.333333	37.9848732	29.325000	0.0065425	cold	2001
chic	76.0	66.20000	12 2001-06-	23.200000	50.000000	34.7547101	29.734091	6.9690425	cold	2001
chic	74.0	62.00000	11 2001-06-	18.200000	35.500000	42.8541667	16.266667	1.9690425	cold	2001
chic	66.0	55.70000	10 2001-06-	17.487500	43.500000	29.4291667	35.516667	1.2565425	cold	2001
chic	61.0	51.60000	09 2001-06-	15.300000	29.000000	21.8159420	32.787319	-	cold	2001
chic	59.0	53.20000	08 2001-06-	16.100000	21.500000	22.3791667	25.095833	0.9309575	cold	2001
chic	57.0	54.40000	07 2001-06-	29.175000	35.333333	15.4722826	21.536189	$0.1309575 \\ 12.9440425$	cold	2001
chic	53.0	51.70000	06 2001-06-	18.800000	19.000000	12.0006341	20.262500	2.5690425	cold	2001
chic	51.0	44.00000	05 2001-06-	6.100000	8.500000	19.5875000	11.467572	-	cold	2001
chic	52.0	44.50000	04 2001-06-	4.825000	5.000000	15.4250000	9.670833	10.1309575	cold	2001
chic	53.0	48.00000	03 2001-06-	6.250000	8.500000	22.7708333	15.125000		cold	2001
chic	57.0	49.50000	02 2001-06-	11.200000	15.500000	24.2144763	23.099638	9.9809575	cold	2001
chic	53.0	44.90000	01 2001-05-	13.271429	26.000000	22.4940217	21.697101	5.0309575	cold	2001
chic	53.0	35.10000	31 2001-05-	4.800000	11.500000	27.7185533	18.038060	2.9595290	cold	2001
chic	53.0	43.60000	30 2001-05-	7.800000	11.500000	20.6226852	23.252976	11.4309575	cold	2001
chic	59.0	51.80000	29 2001-05-	20.637500	23.500000	22.5879630	26.358333	8.4309575 4.4065425	cold	2001
chic	55.0	49.20000	28 2001-05-	14.900000	21.000000	25.2532206	20.300000	-	cold	2001
chic	48.0	44.30000	27 2001-05-			19.4470612		1.3309575	cold	2001
	-		26					3.5309575		

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	51.0	44.70000	2001-05- 25	14.900000	20.333333	11.6360709	27.949275	- 1.3309575	cold	2001
chic	51.0	45.90000	2001-05- 24	13.200000	16.500000	14.1075886	26.704167	3.0309575	cold	2001
chic	54.0	43.50000	2001-05- 23	9.500000	26.000000	12.6213627	28.868074	6.7309575	cold	2001
chic	53.0	42.20000	2001-05- 22	6.612500	25.000000	20.5608696	17.898188	9.6184575	cold	2001
chic	62.0	56.90000	2001-05- 21	13.600000	23.500000	24.2177536	19.958333	2.6309575	cold	2001
chic	63.0	48.60000	2001-05- 20	11.900000	23.500000	41.0005435	20.573551	-	cold	2001
chic	61.0	41.40000	2001-05-	8.000000	21.500000	36.1708333	19.800000	4.3309575	cold	2001
chic	65.0	40.00000	19 2001-05-	9.900000	20.500000	37.3773551	18.361775	8.2309575	cold	2001
chic	74.0	61.70000	18 2001-05-	21.900000	46.000000	24.3299819	40.907818	6.3309575 5.6690425	cold	2001
chic	77.0	62.40000	17 2001-05-	25.350000	41.000000	33.3641798	27.705402	9.1190425	cold	2001
chic	72.0	62.50000	16 2001-05-	17.100000	43.000000	30.1335145	29.479348	0.8690425	cold	2001
chic	54.0	46.30000	15 2001-05-	10.400000	42.000000	20.0022563	34.991667	-	cold	2001
chic	53.0	33.00000	14 2001-05-	13.387500	31.000000	22.9750000	28.325000	5.8309575	cold	2001
chic	48.0	33.30000	13 2001-05-	5.300000	7.500000	31.1568841	13.717029	2.8434575	cold	2001
chic	54.0	50.20000	12 2001-05-	6.250000	16.000000	21.1284420	16.800000	10.9309575	cold	2001
chic	70.0	55.80000	11 2001-05-	15.875000	68.000000	36.1219203	28.094697	9.9809575	cold	2001
chic	67.0	46.10000	10 2001-05-	10.700000	59.000000	36.8536891	29.293561	0.3559575	cold	2001
chic	62.0	45.30000	09 2001-05-	7.300000	51.500000	26.4762681	27.583333	5.5309575	cold	2001
chic	60.0	54.10000	08 2001-05-	15.450000	27.333333	18.7788043	26.791667	8.9309575	cold	2001
chic	65.0	48.40000	07 2001-05-	14.400000	32.500000	32.7708333	19.166667	0.7809575	cold	2001
chic	58.0	46.30000	06 2001-05-	8.100000	18.000000	30.7625000	14.145833	1.8309575	cold	2001
chic	55.0	46.20000	05 2001-05-	8.787500	17.000000	33.5202899	20.692482	8.1309575	cold	2001
chic	72.0	52.60000	04 2001-05-	22.700000	97.500000	42.2202899	27.886364	7.4434575 6.4690425	cold	2001
chic	73.0	53.40000	03 2001-05-			36.7003623			cold	2001
chic	73.0	53.20000	02 2001-05-			42.8200922			cold	2001
chic	68.0	45.30000	01 2001-04-			36.8586957			cold	2001
CIIIC	00.0	10.00000	30	211100000	30.00000	30.000001	55.051200	1.1000120	5014	2001

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	61.0	34.50000	2001-04- 29	10.400000	28.000000	35.3250000	22.989583	5.8309575	cold	2001
chic	53.0	35.80000	2001-04- 28	10.528571	18.500000	29.2333333	24.437500	5.7023861	cold	2001
chic	52.0	32.50000	2001-04- 27	7.900000	17.000000	35.8992754	21.895833	8.3309575	cold	2001
chic	61.0	43.30000	2001-04- 26	11.800000	63.500000	31.2251153	28.858631	4.4309575	cold	2001
chic	51.0	38.30000	2001-04- 25	13.157143	25.400000	19.1597826	37.823564	-	cold	2001
chic	52.0	31.10000	2001-04-	10.400000	21.000000	27.9536397	25.510417	3.0738147	cold	2001
chic	58.0	50.20000	24 2001-04-	10.850000	53.000000	25.7355072	13.393569	5.8309575	cold	2001
chic	65.0	55.50000	23 2001-04-	13.828571	30.000000	23.5583333	17.489583	5.3809575	cold	2001
chic	69.0	58.80000	22 2001-04-	13.600000	44.500000	29.2250000	15.145833	2.4023861	cold	2001
chic	64.0	54.50000	21 2001-04-	17.300000	56.000000	34.2333333	21.541667	$2.6309575 \\ 1.0690425$	cold	2001
chic	51.0	31.70000	20 2001-04-	13.200000	37.400000	28.2543478	32.465909	-	cold	2001
chic	41.0	24.40000	19 2001-04-	16.400000	33.000000	16.3295290	41.640399	3.0309575 $0.1690425$	cold	2001
chic	38.0	24.00000	18 2001-04-	6.950000	14.500000	29.6579710	21.903680	-	cold	2001
chic	36.0	24.00000	17 2001-04-	8.028571	17.000000	26.2677536	18.406250	9.2809575	cold	2001
chic	49.0	39.50000	16 2001-04-	8.100000	21.500000	39.8666667	15.968750	8.2023861	cold	2001
chic	52.0	35.10000	15 2001-04-	15.400000	26.000000	25.5541667	31.591856	8.1309575	cold	2001
chic	48.0	36.40000	14 2001-04-	9.075000	24.666667	20.6166667	27.510417	0.8309575	cold	2001
chic	57.0	40.40000	13 2001-04-	5.900000	38.000000	30.6807477	14.510281	7.1559575	cold	2001
chic	64.0	58.00000	12 2001-04-			15.6784420		10.3309575 0.1690425	cold	2001
chic	47.0	43.80000	11 2001-04-			13.9518116			cold	2001
chic	52.0	43.30000	10 2001-04-			26.8713768		-	cold	2001
chic	61.0		09 2001-04-			34.4833333		5.2309575	cold	2001
		41.70000	08					5.7309575		
chic	64.0	48.80000	2001-04- 07			32.4041667		1.9934575	cold	2001
chic	53.0	51.60000	2001-04- 06					22.6690425		2001
chic	48.0	37.40000	2001-04- 05					14.1690425		2001
chic	42.0	30.90000	2001-04- 04	27.587500	31.000000	28.7750000	28.488095	11.3565425	cold	2001

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	41.0	32.50000	2001-04- 03	20.550000	17.000000	37.9985507	19.936111	4.3190425	cold	2001
chic	45.0	27.20000	2001-04-	21.750000	37.500000	15.5780303	39.541667	5.5190425	cold	2001
chic	40.0	24.40000	02 2001-04-	10.685714	13.666667	25.7958333	22.027778	-	cold	2001
chic	46.0	34.90000	01 2001-03-	38.400000	44.500000	21.6111111	25.944444	5.5452433 22.1690425	cold	2001
chic	42.0	31.90000	31 2001-03- 30	40.300000	49.000000	26.5694444	28.305556	24.0690425	cold	2001
chic	41.0	32.10000	2001-03-	34.575000	37.000000	21.3736825	30.944444	18.3440425	cold	2001
chic	36.0	22.20000	29 2001-03-	25.200000	45.000000	19.3544686	35.208333	8.9690425	cold	2001
chic	32.0	18.80000	28 2001-03- 27	14.300000	20.500000	16.7204106	31.552083	1.9309575	cold	2001
chic	25.0	11.10000	2001-03- 26	10.025000	16.333333	14.7916667	22.678744	-	cold	2001
chic	22.0	7.80000	2001-03-	8.200000	24.000000	20.8472222	14.020833	6.2059575	cold	2001
chic	29.0	12.60000	25 2001-03-	11.650000	20.500000	28.5277778	15.187500	8.0309575	cold	2001
chic	42.0	30.70000	24 2001-03-	27.200000	32.500000	21.2777778	26.677083	4.5809575 10.9690425	cold	2001
chic	42.0	33.40000	23 2001-03-	36.050000	39.000000	18.1527778	41.739912	19.8190425	cold	2001
chic	41.0	26.60000	22 2001-03-	22.900000	34.500000	25.9957729	36.215774	6.6690425	cold	2001
chic	38.0	25.20000	21 2001-03-	15.950000	28.833333	27.9716184	32.845562	- 0.000575	cold	2001
chic	36.0	23.10000	20 2001-03-	16.150000	23.000000	24.9255051	35.270833	0.2809575	cold	2001
chic	32.0	21.50000	19 2001-03-	11.500000	16.500000	25.0833333	30.895833	0.0809575	cold	2001
chic	32.0	24.50000	18 2001-03-	7.540000	6.000000	30.3055556	21.721920	4.7309575	cold	2001
chic	32.0	30.00000	17 2001-03-	14.600000	7.000000	33.2777778	16.854167	8.6909575	cold	2001
chic	39.0	35.70000	16 2001-03-	20.050000	17.000000	20.2361111	21.229167	$1.6309575 \\ 3.8190425$	cold	2001
chic	38.0	32.90000	15 2001-03-	15.000000	20.000000	14.3913043	32.673913		cold	2001
chic	37.0	29.70000	14 2001-03-	24.300000	18.500000	22.8958333	21.287879	1.2309575 8.0690425	cold	2001
chic	40.0	34.20000	13 2001-03-	24.700000	31.500000	10.3541667	25.345644	8.4690425	cold	2001
chic	33.0	23.50000	12 2001-03-	10.728571	9.000000	29.1250000	14.010417		cold	2001
chic	34.0	25.00000	11 2001-03-	22.950000	45.500000	16.8333333	33.177083	5.5023861 6.7190425	cold	2001
chic	31.0	18.00000	10 2001-03- 09	10.200000	19.500000	13.6250000	32.747283	6.0309575	cold	2001

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	31.0	21.70000	2001-03- 08	16.557143	25.000000	22.2946429	27.116186	0.3261853	cold	2001
chic	33.0	19.20000	2001-03- 07	15.300000	31.000000	17.2916667	28.930556	0.9309575	cold	2001
chic	28.0	17.10000	2001-03- 06	5.700000	20.000000	15.5190217	28.538496	-	cold	2001
chic	23.0	11.60000	2001-03- 05	7.371429	22.500000	19.3541667	20.297348	10.5309575 - 8.8595290	cold	2001
chic	30.0	21.00000	2001-03-	11.300000	14.500000	23.0000000	20.653986	-	cold	2001
chic	36.0	25.10000	04 2001-03-	47.400000	49.500000	6.1875000	48.718750	4.9309575 31.1690425	cold	2001
chic	35.0	29.00000	03 2001-03-	30.057143	35.000000	7.5208333	30.250000	13.8261853	cold	2001
chic	31.0	15.50000	02 2001-03-	7.200000	27.000000	14.8750000	25.769886	- 0.0000575	cold	2001
chic	20.0	2.00000	01 2001-02-	6.800000	18.000000	15.2826087	26.479167	9.0309575	cold	2001
chic	23.0	8.20000	28 2001-02-	9.983333	11.000000	19.5587121	24.554924	9.4309575	cold	2001
chic	31.0	22.00000	27 2001-02-	22.100000	21.000000	18.7282609	28.454257	6.2476242 5.8690425	cold	2001
chic	42.0	29.10000	26 2001-02-	10.000000	12.000000	25.2708333	11.614583	-	cold	2001
chic	43.0	35.70000	25 2001-02-	28.675000	31.500000	9.5625000	21.093750	6.2309575 12.4440425	cold	2001
chic	24.0	14.80000	24 2001-02-	18.100000	23.500000	25.4166667	24.235548	1.8690425	cold	2001
chic	23.0	18.60000	23 2001-02-	20.300000	21.500000	13.4166667	23.718750	4.0690425	cold	2001
chic	15.0	-	22 2001-02-	8.537500	16.000000	23.1956522	20.681612	-	cold	2001
chic	27.0	0.90000 17.10000	21 2001-02-	28.650000	30.000000	18.7500000	30.501488	7.6934575 12.4190425	cold	2001
chic	35.0	26.20000	20 2001-02-	22.800000	64.000000	10.5000000	22.819294	6.5690425	cold	2001
chic	18.0	6.10000	19 2001-02-	9.475000	16.400000	17.5000000	18.875000		cold	2001
chic	13.0	0.30000	18 2001-02-	10.100000	11.000000	16.9791667	19.646286	6.7559575	cold	2001
chic	23.0	17.30000	17 2001-02-	20.350000	23.000000	16.5625000	28.982337	6.1309575 4.1190425	cold	2001
chic	29.0	23.90000	16 2001-02-	15.071429	12.000000	23.8541667	18.559330		cold	2001
chic	33.0	31.10000	15 2001-02-	22.800000	18.500000	10.1875000	22.182871	$1.1595290 \\ 6.5690425$	cold	2001
chic	35.0	29.70000	14 2001-02-	37.300000	34.000000	7.1739130	29.547917	21.0690425	cold	2001
chic	29.0	23.20000	13 2001-02-	22.537500	29.000000	6.1458333	26.697917	6.3065425	cold	2001
chic	19.0	12.40000	12 2001-02- 11	12.850000	19.000000	14.0744048	23.751894	3.3809575	cold	2001

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	16.0	7.20000	2001-02- 10	10.450000	16.500000	15.8639706	25.057971	- 5.7809575	cold	2001
chic	37.0	35.90000	2001-02- 09	12.740000	22.500000	14.8750000	23.890399	3.4909575	cold	2001
chic	44.0	42.20000	2001-02- 08	39.500000	44.500000	5.1875000	35.259058	23.2690425	cold	2001
chic	26.0	24.70000	2001-02- 07	47.500000	34.000000	4.7291667	38.598755	31.2690425	cold	2001
chic	28.0	25.30000	2001-02- 06	30.171429	36.500000	5.8632246	33.991667	13.9404710	cold	2001
chic	29.0	24.40000	2001-02- 05	32.950000	35.000000	5.4565217	28.088068	16.7190425	cold	2001
chic	30.0	29.00000	2001-02- 04	26.750000	18.000000	4.5833333	28.604167	10.5190425	cold	2001
chic	20.0	16.40000	2001-02- 03	17.175000	25.500000	5.0833333	23.812500	0.9440425	cold	2001
chic	5.0	1.70000	2001-02- 02	22.000000	32.500000	10.4791667	25.065217	5.7690425	cold	2001
chic	18.0	15.30000	2001-02- 01	21.700000	29.000000	10.6458333	28.483734	5.4690425	cold	2001
chic	31.0	29.00000	2001-01- 31	24.066667	24.333333	4.9990942	26.037879	7.8357091	cold	2001
chic	36.0	33.60000	2001-01- 30	17.150000	11.000000	6.2500000	34.385417	0.9190425	cold	2001
chic	36.0	33.00000	2001-01- 29	26.800000	31.000000	4.8522727	29.042749	10.5690425	cold	2001
chic	22.0	15.20000	2001-01- 28	23.457143	29.000000	7.4583333	30.614583	7.2261853	cold	2001
chic	21.0	12.50000	2001-01- 27	11.950000	14.500000	19.0625000	21.781250	4.2809575	cold	2001
chic	26.0	21.70000	2001-01- 26	24.000000	34.000000	4.6250000	28.770833		cold	2001
chic	19.0	11.00000	2001-01- 25	16.500000	28.500000	7.1585145	34.682018	0.2690425	cold	2001
chic	22.0	16.60000	2001-01- 24	19.100000	31.000000	8.1534091	33.667861	2.8690425	cold	2001
chic	28.0	22.70000	2001-01- 23	45.700000	45.000000	3.1875000	36.792046	29.4690425	cold	2001
chic	18.0	14.60000	2001-01- 22	49.471429	68.000000	3.1250000	43.677083	33.2404710	cold	2001
chic	17.0	10.50000	2001-01- 21	30.600000	34.000000	5.1458333	30.906250	14.3690425	cold	2001
chic	18.0	9.90000	2001-01- 20	12.650000	20.000000	10.6250000	29.437500	3.5809575	cold	2001
chic	22.0	17.80000	2001-01- 19	18.137500	26.000000	8.0461957	27.968750		cold	2001
chic	25.0	20.60000	2001-01- 18	34.700000	43.000000	4.3822464	31.302989	18.4690425	cold	2001
chic	23.0	19.30000	2001-01- 17	27.400000	30.000000	4.4375000	30.495536	11.1690425	cold	2001
chic	29.0	25.00000	2001-01- 16	23.580000	15.000000	4.2500000	23.964583	7.3490425	cold	2001

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	33.0	31.40000	2001-01- 15	19.200000	13.500000	1.5833333	17.510417	2.9690425	cold	2001
chic	34.0	33.90000	2001-01-	28.000000	22.000000	0.5000000	26.187500	11.7690425	cold	2001
chic	34.0	31.60000	14 2001-01- 13	30.300000	31.833333	4.5833333	27.635417	14.0690425	cold	2001
chic	30.0	29.30000	2001-01- 12	41.100000	35.000000	1.8623188	40.528533	24.8690425	cold	2001
chic	29.0	23.70000	2001-01-	37.450000	36.000000	2.1974638	42.041990	21.2190425	cold	2001
chic	26.0	19.10000	11 2001-01-	26.650000	31.000000	4.7500000	35.721591	10.4190425	cold	2001
chic	17.0	11.40000	10 2001-01- 09	26.000000	NA	7.6041667	36.062500	9.7690425	cold	2001
chic	19.0	13.00000	2001-01- 08	7.500000	17.000000	7.9791667	34.479167	- 8.7309575	cold	2001
chic	28.0	22.80000	2001-01- 07	15.766667	21.800000	8.6250000	27.750000	0.4642909	cold	2001
chic	25.0	19.40000	2001-01-	18.400000	22.000000	6.0000000	33.239583	2.1690425	cold	2001
chic	29.0	23.70000	06 2001-01-	11.050000	24.000000	9.2780797	31.328598	-	cold	2001
chic	25.0	21.30000	05 2001-01-	25.000000	25.000000	7.6250000	30.750000	5.1809575 8.7690425	cold	2001
chic	18.0	18.30000	04 2001-01-	27.200000	30.000000	5.9166667	31.812500	10.9690425	cold	2001
chic	12.0	6.10000	03 2001-01-	27.100000	26.000000	4.9753788	43.004464	10.8690425	cold	2001
chic	15.0	9.90000	02 2001-01-	18.633333	28.200000	7.2708333	37.041667	2.4023758	cold	2001
chic	16.0	16.30000	01 2000-12-	14.450000	10.500000	12.8541667	30.041667	1 7000575	cold	2000
chic	27.0	23.00000	31 2000-12-	6.200000	8.500000	17.1458333	23.916667	1.7809575	cold	2000
chic	21.0	16.90000	30 2000-12-	17.366667	23.000000	11.7083333	33.303788	10.0309575 1.1357091	cold	2000
chic	13.0	9.00000	29 2000-12-	21.550000	31.500000	7.2708333	36.125774	5.3190425	cold	2000
chic	12.0	7.60000	28 2000-12-	27.250000	38.000000	5.0833333	33.022464	11.0190425	cold	2000
chic	11.0	9.20000	27 2000-12-	20.100000	25.833333	6.9375000	36.850000	3.8690425	cold	2000
chic	5.0	-	26 2000-12-	18.250000	40.500000	4.5000000	41.800000	2.0190425	cold	2000
chic	5.0	1.70000	25 2000-12-	21.700000	35.500000	8.9791667	31.766667	5.4690425	cold	2000
chic	8.0	$1.40000 \\ 5.10000$	24 2000-12-	23.233333	33.000000	4.6041667	35.160870	7.0023758	cold	2000
chic	-1.0	_	23 2000-12-	16.700000	24.500000	7.7916667	30.888043	0.4690425	cold	2000
chic	6.0	7.10000 0.10000	22 2000-12- 21			10.9239130			cold	2000

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	6.0	4.70000	2000-12- 20	24.157143	38.571429	3.1657609	39.008772	7.9261853	cold	2000
chic	14.0	9.20000	2000-12- 19	14.150000	25.500000	6.7916667	35.133136	2.0809575	cold	2000
chic	8.0	3.50000	2000-12- 18	24.750000	27.500000	3.6041667	33.525000	8.5190425	cold	2000
chic	8.0	0.60000	2000-12- 17	12.957143	18.500000	13.4166667	16.116667	3.2738147	cold	2000
chic	25.0	27.00000	2000-12- 16	20.550000	16.500000	1.2083333	26.041667	4.3190425	cold	2000
chic	17.0	17.40000	2000-12- 15	39.650000	39.000000	1.4631643	35.468841	23.4190425	cold	2000
chic	17.0	17.10000	2000-12- 14	29.575000	33.571429	2.6527778	41.783333	13.3440425	cold	2000
chic	8.0	7.90000	2000-12- 13	23.400000	37.000000	3.9335749	34.745244	7.1690425	cold	2000
chic	4.0	0.30000	2000-12- 12	25.100000	28.000000	8.2361111	32.116667	8.8690425	cold	2000
chic	23.0	21.20000	2000-12- 11	7.860000	14.000000	15.5694444	18.483333	8.3709575	cold	2000
chic	30.0	24.80000	2000-12- 10	24.450000	27.000000	2.4444444	23.125000		cold	2000
chic	16.0	13.10000	2000-12- 09	26.500000	37.500000	3.1944444	35.258333	10.2690425	cold	2000
chic	18.0	11.80000	2000-12- 08	20.262500	30.000000	7.0694444	27.616667	4.0315425	cold	2000
chic	25.0	23.50000	2000-12- 07	27.600000	26.500000	1.7741546	25.321212	11.3690425	cold	2000
chic	15.0	8.00000	2000-12- 06	18.100000	23.000000	4.8333333	25.436472	1.8690425	cold	2000
chic	21.0	2.80000	2000-12- 05	7.360000	18.000000	13.2071256	22.971739	- 8.8709575	cold	2000
chic	32.0	24.00000	2000-12- 04	18.050000	30.500000	6.1250000	21.114394		cold	2000
chic	28.0	19.30000	2000-12-	13.200000	16.000000	6.1388889	31.409848	2 0200575	cold	2000
chic	31.0	21.60000	03 2000-12-	3.914286	6.428571	27.7083333	15.525000	3.0309575	cold	2000
chic	34.0	24.80000	02 2000-12-	3.950000	7.000000	21.1666667	17.866667	12.3166718	cold	2000
chic	34.0	30.70000	01 2000-11-	16.750000	16.500000	4.8712121	23.851223	12.2809575 0.5190425	cold	2000
chic	35.0	33.10000	30 2000-11-	19.362500	21.000000	1.3194444	22.303977	3.1315425	cold	2000
chic	34.0	29.70000	29 2000-11-	20.450000	28.500000	2.6944444	23.166667	4.2190425	cold	2000
chic	34.0	30.50000	28 2000-11-	41.700000	40.500000	1.1388889	19.360054	25.4690425	cold	2000
chic	39.0	36.60000	27 2000-11-	20.014286	23.285714	1.0416667	19.010417	3.7833282	cold	2000
chic	38.0	32.60000	26 2000-11- 25	17.750000	28.000000	7.3750000	24.786458	1.5190425	cold	2000

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	32.0	19.20000	2000-11- 24	28.200000	34.000000	3.7886473	33.384058	11.9690425	cold	2000
chic	29.0	17.00000	2000-11-	26.600000	33.000000	4.2916667	34.218750	10.3690425	cold	2000
chic	22.0	11.00000	23 2000-11- 22	24.700000	30.000000	4.7916667	32.479167	8.4690425	cold	2000
chic	19.0	8.00000	2000-11- 21	11.000000	24.000000	10.7222222	25.378968	- 5.2309575	cold	2000
chic	24.0	17.90000	2000-11- 20	10.025000	20.428571	10.2159091	16.132102	6.2059575	cold	2000
chic	30.0	22.00000	2000-11- 19	10.900000	17.500000	11.2083333	16.791667	5.3309575	cold	2000
chic	27.0	18.30000	2000-11-	15.500000	27.000000	12.222222	15.948823	=	cold	2000
chic	30.0	20.80000	18 2000-11-	13.114286	15.000000	8.3490338	19.902627	0.7309575	cold	2000
chic	36.0	29.20000	17 2000-11-	14.850000	26.500000	4.9045894	18.327989	3.1166718	cold	2000
chic	31.0	23.60000	16 2000-11-	NA	26.500000	7.5416667	24.258929	1.3809575 NA	cold	2000
chic	32.0	26.40000	15 2000-11-	10.866667	13.571429	7.0000000	16.305871	-	cold	2000
chic	36.0	29.70000	14 2000-11-	NA	16.000000	3.8333333	17.031250	5.3642909 NA	cold	2000
chic	45.0	37.30000	13 2000-11-	16.500000	14.500000	5.7361111	17.578125	0.2690425	cold	2000
chic	38.0	32.10000	12 2000-11-	18.625000	22.000000	4.9305556	21.989583	2.3940425	cold	2000
chic	37.0	31.60000	11 2000-11-	17.050000	17.500000	3.5694444	19.750000	0.8190425	cold	2000
chic	39.0	37.00000	10 2000-11-	8.300000	10.500000	4.8562802	17.025136	-	cold	2000
chic	40.0	31.50000	09 2000-11-	10.100000	17.714286	3.0060386	21.739583	7.9309575	cold	2000
chic	49.0	41.90000	08 2000-11-	12.250000	13.500000	4.8617150	16.009923	6.1309575	cold	2000
chic	49.0	38.00000	07 2000-11-			18.6129227		3.9809575	cold	2000
chic	46.0	31.00000	06 2000-11-			14.3080808		0.5809575	cold	2000
chic	46.0	31.40000	05 2000-11-			6.7192029		4.1595290	cold	2000
			04					4.9809575		
chic	48.0	34.80000	2000-11-			7.4414251		6.8809575	cold	2000
chic	55.0	48.60000	2000-11- 02			5.6805556			cold	2000
chic	63.0	44.60000	2000-11- 01	18.950000	38.500000	7.8472222	32.234649	2.7190425	cold	2000
chic	59.0	37.60000	2000-10- 31	13.850000	36.500000	5.4569746	30.641667	2.3809575	cold	2000
chic	50.0	32.70000	2000-10- 30	12.414286	24.000000	11.0664855	28.008333	3.8166718	cold	2000

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	46.0	36.80000	2000-10- 29	10.900000	23.500000	16.3750000	17.029167	- 5.3309575	cold	2000
chic	50.0	41.40000	2000-10- 28	4.000000	8.500000	23.3437500	10.283333		cold	2000
chic	61.0	53.40000	2000-10- 27	21.214286	29.714286	15.2509058	19.826316		cold	2000
chic	68.0	58.30000	2000-10- 26	41.400000	65.500000	18.0453804	32.055435	25.1690425	cold	2000
chic	62.0	57.90000	2000-10- 25	26.400000	33.000000	11.7938406	23.860079	10.1690425	cold	2000
chic	63.0	60.30000	2000-10-	34.185714	31.500000	10.1743659	22.916667	17.9547567	cold	2000
chic	65.0	60.50000	24 2000-10-	39.800000	55.500000	3.1515152	37.191667	23.5690425	cold	2000
chic	59.0	51.80000	23 2000-10-	26.050000	35.000000	11.6414855	24.282609	9.8190425	cold	2000
chic	58.0	50.30000	22 2000-10-	19.771429	39.000000	20.6562500	22.891667	3.5404710	cold	2000
chic	66.0	49.10000	21 2000-10-	18.200000	57.000000	22.8370965	35.103571	1.9690425	cold	2000
chic	62.0	47.30000	20 2000-10-	14.450000	45.500000	12.8011117	35.744746		cold	2000
chic	54.0	45.70000	19 2000-10-	23.828571	57.500000	9.2684783	37.993182	1.7809575 7.5976139	cold	2000
chic	52.0	45.50000	18 2000-10-	19.700000	28.500000	10.0142045	26.255952	3.4690425	cold	2000
chic	51.0	46.60000	17 2000-10-	14.800000	27.000000	15.5695652	19.805797		cold	2000
chic	55.0	47.60000	16 2000-10-	11.428571	19.571429	17.0520833	17.529167	1.4309575	cold	2000
chic	67.0	49.30000	15 2000-10-	19.400000	54.500000	24.9229167	31.041667	4.8023861 3.1690425	cold	2000
chic	66.0	39.60000	14 2000-10-	17.900000	81.000000	29.0133152	32.541667	1.6690425	cold	2000
chic	58.0	36.30000	13 2000-10-	16.100000	79.000000	20.0672678			cold	2000
chic	53.0	30.20000	12 2000-10-	16.000000	52.500000	8.7750000			cold	2000
chic	49.0	27.00000	11 2000-10-	17.400000	33.500000	7.6597003	31.539530	$0.2309575 \\ 1.1690425$	cold	2000
chic	44.0	25.90000	10 2000-10-	10.366667	18.285714	7.8063406	29.331522		cold	2000
chic	39.0	26.60000	09 2000-10-	4.600000	8.000000	12.4270833	16.370175	5.8642909	cold	2000
chic	40.0	26.70000	08 2000-10-	5.300000	13.000000	10.8460145	15.850000		cold	2000
chic	41.0	29.40000	07 2000-10-	8.387500	14.500000	14.4154397	19.394928	10.9309575	cold	2000
chic	52.0	48.20000	06 2000-10-	8.100000	13.500000	16.8499094	18.210178	7.8434575	cold	2000
chic	57.0	47.10000	05 2000-10-	4.800000	10.000000	27.5807971	12.107971	8.1309575	cold	2000
			04					11.4309575		

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	59.0	49.70000	2000-10- 03	14.237500	30.000000	14.3790184	20.650099	- 1.9934575	cold	2000
chic	69.0	53.80000	2000-10- 02	17.100000	46.000000	29.1939394	23.296970		cold	2000
chic	72.0	50.70000	2000-10- 01	21.500000	65.000000	47.0927536	15.038044	5.2690425	cold	2000
chic	65.0	48.10000	2000-09- 30	16.150000	47.500000	24.0000000	22.920000	0.0809575	cold	2000
chic	61.0	42.10000	2000-09- 29	11.600000	37.500000	10.2178524	28.962912	4.6309575	cold	2000
chic	55.0	41.10000	2000-09- 28	8.800000	16.000000	15.2486974	17.535326	7.4309575	cold	2000
chic	59.0	46.60000	2000-09- 27	9.925000	22.000000	15.3781291	21.724638	6.3059575	cold	2000
chic	56.0	41.20000	2000-09- 26	12.300000	28.500000	10.1703647	31.640783	3.9309575	cold	2000
chic	49.0	40.20000	2000-09- 25	6.600000	7.000000	17.2075099	15.488519	9.6309575	cold	2000
chic	53.0	46.20000	2000-09- 24	3.875000	4.500000	22.5075758	8.208333	12.3559575	cold	2000
chic	63.0	58.20000	2000-09- 23	13.100000	13.500000	12.3593544	16.839976	3.1309575	cold	2000
chic	58.0	51.30000	2000-09- 22	15.000000	27.000000	7.4078557	26.136926	1.2309575	cold	2000
chic	54.0	40.50000	2000-09- 21	6.312500	17.000000	14.8480207	18.939141	9.9184575	cold	2000
chic	58.0	53.00000	2000-09- 20	10.900000	21.500000	9.2270257	23.494565	5.3309575	cold	2000
chic	75.0	51.10000	2000-09- 19	17.400000	69.500000	39.6236525	30.532828		cold	2000
chic	69.0	53.20000	2000-09- 18	18.071429	57.000000	23.7109684	41.397947	1.8404710	cold	2000
chic	68.0	47.70000	2000-09- 17	10.900000	25.000000	27.9453228	22.972222	- 5.3309575	cold	2000
chic	56.0	41.00000	2000-09- 16	6.900000	14.500000	13.8200758	23.791667	9.3309575	cold	2000
chic	56.0	40.10000	2000-09- 15	5.250000	13.142857	12.6590909	19.977808	10.9809575	cold	2000
chic	65.0	52.50000	2000-09- 14	8.750000	23.500000	18.6069664	27.326389	7.4809575	cold	2000
chic	63.0	49.70000	2000-09- 13	13.700000	41.500000	11.5561594	35.018763	2.5309575	cold	2000
chic	63.0	52.90000	2000-09- 12	7.642857	16.500000	17.4166667	20.193015	8.5881004	cold	2000
chic	75.0	67.90000	2000-09- 11	15.550000	37.000000	20.0946558	19.396149	0.6809575	cold	2000
chic	78.0	70.50000	2000-09-	13.400000	20.000000	13.8291667	13.572917	-	cold	2000
chic	76.0	67.40000	10 2000-09-	17.750000	26.714286	18.2395833	17.687500	2.8309575 1.5190425	cold	2000
chic	75.0	66.80000	09 2000-09- 08	20.200000	42.000000	14.9514493	29.669192	3.9690425	cold	2000

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	74.0	60.50000	2000-09- 07	20.400000	48.000000	26.0270833	29.435833	4.1690425	cold	2000
chic	61.0	48.40000	2000-09- 06	13.562500	30.500000	24.7773551	24.058020		cold	2000
chic	63.0	45.20000	2000-09-	3.900000	12.500000	29.8736550	10.993401	2.6684575	cold	2000
chic	66.0	55.10000	05 2000-09-	4.900000	9.000000	24.4097222	6.158333	12.3309575	cold	2000
chic	77.0	66.80000	04 2000-09-	18.771429	33.714286	36.2824074	16.920833	11.3309575 2.5404710	cold	2000
chic	79.0	67.30000	03 2000-09-	15.600000	31.500000	37.3865741	20.308333	-	cold	2000
chic	80.0	69.00000	02 2000-09-	31.300000	57.500000	40.8192758	32.700000	$\begin{array}{c} 0.6309575 \\ 15.0690425 \end{array}$	cold	2000
chic	80.0	68.20000	01 2000-08-					18.4190425		2000
			31							
chic	77.0	70.60000	2000-08- 30					25.4690425		2000
chic	77.0	68.70000	2000-08- 29	33.700000	44.500000	28.3520257	18.816919	17.4690425	cold	2000
chic	75.0	64.20000	2000-08- 28	23.687500	37.285714	31.2518939	20.611111	7.4565425	cold	2000
chic	72.0	64.30000	2000-08- 27	15.500000	18.500000	41.7935606	7.295592	- 0.7309575	cold	2000
chic	73.0	64.60000	2000-08- 26	33.100000	48.000000	29.8768939	23.864583	16.8690425	cold	2000
chic	70.0	59.00000	2000-08-	24.937500	53.500000	23.8659420	36.174819	8.7065425	cold	2000
chic	71.0	58.50000	25 2000-08-	20.600000	29.500000	25.2206701	21.807672	4.3690425	cold	2000
chic	76.0	69.00000	24 2000-08-	27.600000	46.500000	28.4123024	24.118056	11.3690425	cold	2000
chic	76.0	67.60000	23 2000-08-	29.825000	41.166667	28.7535408	26.785722	13.5940425	cold	2000
chic	67.0	56.30000	22 2000-08-	19.100000	27.500000	29.0049407	23.159722	2.8690425	cold	2000
chic	65.0	54.00000	21 2000-08-	8.700000	11 500000	27.8371212	12 979167	_	cold	2000
		56.00000	20 20 2000-08-					7.5309575		
chic	64.0		19	9.487500		17.3958333		6.7434575	cold	2000
chic	67.0	59.50000	2000-08- 18			22.8465460		7.9309575	cold	2000
chic	68.0	62.30000	2000-08- 17	13.600000	22.000000	21.5627117	19.489773	2.6309575	cold	2000
chic	70.0	54.90000	2000-08- 16	6.012500	17.500000	21.2249671	12.202446	- 10.2184575	cold	2000
chic	82.0	68.80000	2000-08- 15	29.000000	53.500000	38.9682302	21.005050	12.7690425	hot	2000
chic	76.0	67.90000	2000-08-	28.400000	50.000000	30.8886094	25.590593	12.1690425	cold	2000
chic	74.0	62.50000	14 2000-08-	13.562500	23.000000	25.9375000	22.104167		cold	2000
			13					2.6684575		

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	71.0	61.00000	2000-08- 12	12.600000	25.500000	23.5056818	22.270833	- 3.6309575	cold	2000
chic	71.0	60.80000	2000-08- 11	11.800000	23.500000	17.5833333	20.024206	4.4309575	cold	2000
chic	74.0	62.30000	2000-08- 10	13.112500	26.200000	22.8556489	22.298611	3.1184575	cold	2000
chic	79.0	67.00000	2000-08- 09	13.100000	38.500000	25.8103875	19.152147	3.1309575	cold	2000
chic	77.0	69.40000	2000-08- 08	10.300000	30.000000	20.7565876	21.790260	5.9309575	cold	2000
chic	76.0	66.50000	2000-08-	13.412500	22.000000	18.4277726	20.679473	-	cold	2000
chic	78.0	70.60000	07 2000-08-	22.900000	32.000000	30.5073052	15.062500	2.8184575 6.6690425	cold	2000
chic	67.0	61.30000	06 2000-08-	17.700000	33.500000	23.5359848	25.156250	1.4690425	cold	2000
chic	67.0	53.80000	05 2000-08-	11.014286	27.200000	22.7420949	25.184028	-	cold	2000
chic	63.0	54.50000	04 2000-08-	3.100000	5.500000	27.6556324	9.829861	5.2166718	cold	2000
chic	76.0	64.60000	03 2000-08-	12.300000	34.000000	26.0803689	15.899256	13.1309575	cold	2000
chic	73.0	67.20000	02 2000-08-	15.771429	31.500000	18.0361271	26.372998	3.9309575	cold	2000
chic	70.0	66.20000	01 2000-07-	17.500000	24.500000	17.7862768	24.437500	$0.4595290 \\ 1.2690425$	cold	2000
chic	71.0	67.10000	31 2000-07-	25.300000	20.500000	35.3130764	11.026872	9.0690425	cold	2000
chic	73.0	65.90000	30 2000-07-	19.962500	27.285714	48.2083333	10.170139	3.7315425	cold	2000
chic	74.0	65.50000	29 2000-07-	20.150000	30.000000	32.2343469	24.692331	3.9190425	cold	2000
chic	77.0	65.80000	28 2000-07-	33.000000	59.000000	32.0309618	32.364899	16.7690425	cold	2000
chic	73.0	60.80000	27 2000-07-	26.262500	62.000000	35.8824934	29.769066	10.0315425	cold	2000
chic	69.0	56.70000	26 2000-07-	17.900000	37.000000	30.7792325	30.227506	1.6690425	cold	2000
chic	66.0	53.60000	25 2000-07-			29.7289196			cold	2000
chic	63.0	49.70000	24 2000-07-			17.5946970		4.1309575	cold	2000
chic	63.0	53.90000	23 2000-07-			17.1553030		10.4738147	cold	2000
chic	67.0	51.10000	22 2000-07-			16.5859919		9.3309575	cold	2000
			21					7.1309575		
chic	67.0	56.30000	2000-07-			17.3878309		5.9809575	cold	2000
chic	63.0	53.90000	2000-07-			19.4132830		10.8809575	cold	2000
chic	66.0	54.30000	2000-07- 18	4.800000	17.000000	21.2627635	7.064513	11.4309575	cold	2000

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detrer	ndempcat	year
chic	77.0	63.40000	2000-07- 17	12.900000	29.285714	23.8148880	22.924874	3.3309575	cold	2000
chic	73.0	57.70000	2000-07- 16	14.400000	21.500000	22.6856061	19.312500		cold	2000
chic	73.0	60.10000	2000-07- 15	9.900000	16.000000	26.8712121	11.902778	6.3309575	cold	2000
chic	77.0	63.40000	2000-07- 14	11.514286	23.000000	32.6572793	18.292659		cold	2000
chic	75.0	64.50000	2000-07-	18.100000	36.500000	33.1995224	25.795455		cold	2000
chic	72.0	58.10000	13 2000-07-	14.200000	25.500000	36.7943841	17.683333		cold	2000
chic	69.0	64.00000	12 2000-07-	13.712500	25.166667	32.6178442	11.827651	2.0309575	cold	2000
chic	73.0	68.30000	11 2000-07-	10.600000	20.500000	29.3157197	20.948919		cold	2000
chic	81.0	70.70000	10 2000-07-	25.500000	46.500000	37.2045455	12.923611	5.6309575 9.2690425	hot	2000
chic	73.0	64.00000	09 2000-07-	17.525000	38.000000	34.3446970	18.763889	1.2940425	cold	2000
chic	70.0	58.00000	08 2000-07-	7.600000	22.000000	24.5747694	13.753386		cold	2000
chic	74.0	64.20000	07 2000-07-	16.900000	26.500000	38.0099413	15.646465	8.6309575 0.6690425	cold	2000
chic	76.0	65.00000	06 2000-07-	18.750000	31.250000	40.7925725	16.224418	2.5190425	cold	2000
chic	70.0	64.50000	05 2000-07-	15.900000	22.000000	27.2803030	11.965278	_	cold	2000
chic	68.0	64.70000	04 2000-07-	11.900000	15.000000	21.2736331	13.583333	0.3309575	cold	2000
chic	74.0	70.00000	03 2000-07-	24.257143	32.000000	35.7113801	13.888889	$4.3309575 \\ 8.0261853$	cold	2000
chic	71.0	61.20000	02 2000-07-	18.200000	27.000000	34.7453887	20.003321	1.9690425	cold	2000
chic	66.0	54.70000	01 2000-06-	14.300000	28.000000	20.9635585	29.555556	_	cold	2000
chic	66.0	52.30000	30 2000-06-			20.1049901		1.9309575	cold	2000
chic	62.0	57.00000	29 2000-06-			10.0169631		5.9684575	cold	2000
chic	68.0	52.60000	28 2000-06-			19.6862648		4.8309575	cold	2000
	72.0	63.90000	27 2000-06-			22.3811983		7.5309575		2000
chic			26					6.3059575	cold	
chic	75.0	65.10000	2000-06- 25			29.9223485			cold	2000
chic	71.0	67.50000	2000-06- 24			22.7613636		6.8309575	cold	2000
chic	71.0	61.70000	2000-06- 23			24.2180501		2.0023861	cold	2000
chic	72.0	56.20000	2000-06- 22	7.200000	23.000000	28.5978261	16.611111	9.0309575	cold	2000

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	74.0	58.00000	2000-06- 21	6.500000	16.500000	26.4754312	15.430089	- 9.7309575	cold	2000
chic	74.0	68.60000	2000-06- 20	16.262500	31.500000	21.4263085	19.654167		cold	2000
chic	66.0	57.00000	2000-06-	15.900000	40.500000	30.6439394	25.998106	-	cold	2000
chic	65.0	46.90000	19 2000-06-	6.000000	11.500000	29.3939394	15.625000	0.3309575	cold	2000
chic	60.0	45.30000	18 2000-06-	4.200000	11.833333	25.7594697	11.506944	10.2309575	cold	2000
chic	67.0	60.30000	17 2000-06-	8.500000	22.500000	23.0317852	17.958031	12.0309575	cold	2000
chic	70.0	58.80000	16 2000-06-	9.300000	21.000000	26.6968948	16.791667	7.7309575	cold	2000
chic	72.0	64.60000	15 2000-06-	10.642857	33.000000	27.5567358	22.674107	6.9309575	cold	2000
chic	69.0	63.80000	14 2000-06-			12.9690382		5.5881004	cold	2000
chic	57.0	56.00000	13 2000-06-	9.200000	11.500000		10.517532	2.5309575	cold	2000
			12					7.0309575		
chic	70.0	66.80000	2000-06- 11			16.0227273		5.5595290	cold	2000
chic	80.0	67.00000	2000-06- 10	15.900000	82.500000	32.0492424	16.166667	0.3309575	cold	2000
chic	77.0	57.50000	2000-06- 09	18.300000	76.000000	55.7610343	24.190476	2.0690425	cold	2000
chic	78.0	59.80000	2000-06- 08	17.228571	55.000000	50.6192358	24.581349	0.9976139	cold	2000
chic	64.0	46.80000	2000-06- 07	13.250000	65.500000	33.5615119	30.248024	2.9809575	cold	2000
chic	60.0	41.80000	2000-06-	8.700000	36.000000	20.4231345	28.655236	-	cold	2000
chic	54.0	47.00000	06 2000-06-	9.575000	15.142857	30.6409151	13.004960	7.5309575	cold	2000
chic	56.0	50.60000	05 2000-06-	12.800000	20.000000	28.0311265	14.449275	6.6559575	cold	2000
chic	55.0	44.90000	04 2000-06-	2.800000	12.000000	29.4507576	13.118056	3.4309575	cold	2000
chic	60.0	52.80000	03 2000-06-			25.8739669		13.4309575	cold	2000
chic	73.0	65.50000	02 2000-06-			33.4529028		6.2059575	cold	2000
			01							
chic	67.0	64.80000	2000-05- 31					11.7690425		2000
chic	65.0	61.40000	2000-05- 30	22.828571	32.714286	26.4211433	29.211477	6.5976139	cold	2000
chic	56.0	47.40000	2000-05- 29	7.000000	9.500000	25.8636364	14.250000	9.2309575	cold	2000
chic	55.0	52.00000	2000-05- 28	13.500000	10.500000	25.3901515	11.525000	2.7309575	cold	2000
chic	60.0	55.90000	2000-05-	26.612500	31.500000	32.3257576	13.618056	10.3815425	cold	2000
			27							

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	61.0	48.50000	2000-05- 26	18.400000	58.500000	17.3155468	38.584088	2.1690425	cold	2000
chic	64.0	36.50000	2000-05- 25	9.100000	56.500000	29.2757067	26.544643	7.1309575	cold	2000
chic	68.0	42.20000	2000-05- 24	11.012500	59.142857	33.9851779	26.201691	5.2184575	cold	2000
chic	69.0	52.00000	2000-05- 23	9.900000	42.000000	24.7363307	29.841994	6.3309575	cold	2000
chic	67.0	56.40000	2000-05- 22	15.700000	51.500000	19.0360672	32.516908	0.5309575	cold	2000
chic	57.0	48.60000	2000-05- 21	17.814286	29.500000	26.5946970	24.744318		cold	2000
chic	55.0	37.80000	2000-05-	9.700000	16.500000	23.3185262	22.016414		cold	2000
chic	46.0	40.30000	2000-05-	5.600000	5.500000	25.2396245	14.034722	6.5309575	cold	2000
chic	58.0	51.80000	19 2000-05-	15.050000	24.857143	27.8990448	17.958333	10.6309575	cold	2000
chic	61.0	56.50000	18 2000-05-	40.300000	48.000000	14.4518805	29.492797	1.1809575 24.0690425	cold	2000
chic	61.0	49.60000	17 2000-05-	22.100000	41.000000	19.0441777	32.107954	5.8690425	cold	2000
chic	57.0	35.00000	16 2000-05-	11.475000	37.000000	18.5075758	37.446970	-	cold	2000
chic	52.0	33.00000	15 2000-05-	7.200000	20.000000	32.1022727	18.972222	4.7559575	cold	2000
chic	53.0	38.40000	14 2000-05-	5.000000	31.500000	24.5378788	13.375000	9.0309575	cold	2000
chic	73.0	66.80000	13 2000-05-	25.725000	38.000000	22.8211462	21.051630	11.2309575 9.4940425	cold	2000
chic	67.0	59.90000	12 2000-05-	22.500000	43.500000	19.2763851	28.437239	6.2690425	cold	2000
chic	55.0	45.00000	11 2000-05-	8.000000	21.500000	20.4873188	23.307065	_	cold	2000
chic	59.0	55.00000	10 2000-05-	8.657143	15.500000	20.7728920	16.652778	8.2309575	cold	2000
chic	76.0	67.50000	09 2000-05-	23.000000	85.000000	24.9407115	16.354641	7.5738147 6.7690425	cold	2000
chic	71.0	65.00000	08 2000-05-	14.650000	29.500000	25.2875000	15.850198	-	cold	2000
chic	74.0	61.30000	07 2000-05-	13.487500	38.285714	32.0166667	15.944444	1.5809575	cold	2000
chic	74.0	59.30000	06 2000-05-	18.600000	65.000000	33.8415679	24.069444	$2.7434575 \\ 2.3690425$	cold	2000
chic	72.0	58.10000	05 2000-05-	12.600000	62.500000	31.4991765	23.238095	-	cold	2000
chic	63.0	48.60000	04 2000-05-	17.325000	45.500000	30.8350252	34.719368	$3.6309575 \\ 1.0940425$	cold	2000
chic	57.0	43.10000	03 2000-05-	12.400000	36.000000	25.7184393	30.612456	-	cold	2000
chic	57.0	49.20000	02 2000-05-	24.700000	45.000000	21.1313930	39.181187	$\begin{array}{c} 3.8309575 \\ 8.4690425 \end{array}$	cold	2000
			01							

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmean	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	54.0	40.00000	2000-04- 30	14.662500	35.333333	23.0151515	29.558333	- 1.5684575	cold	2000
chic	48.0	39.10000	2000-04- 29	5.400000	10.500000	22.2234848	11.191667	10.8309575	cold	2000
chic	54.0	32.20000	2000-04-	14.900000	52.500000	28.8450413	34.650000	-	cold	2000
chic	53.0	26.30000	28 2000-04- 27	17.628571	60.000000	23.0046113	43.864583	1.3309575 1.3976139	cold	2000
chic	52.0	24.20000	2000-04- 26	12.250000	24.500000	26.4833427	34.115217	3.9809575	cold	2000
chic	49.0	23.40000	2000-04-	13.000000	13.000000	34.9130884	21.025000	-	cold	2000
chic	52.0	32.60000	25 2000-04-	9.266667	18.714286	32.9659420	20.716304		cold	2000
chic	47.0	40.30000	24 2000-04-	13.000000	20.500000	31.5500000	21.491667	6.9642909	cold	2000
chic	48.0	31.40000	23 2000-04-	17.750000	24.500000	20.0331522	37.358333	$3.2309575 \\ 1.5190425$	cold	2000
chic	44.0	35.00000	22 2000-04-	7.571429	8.000000	28.3438735	18.891667	-	cold	2000
chic	53.0	50.20000	21 2000-04-	25.250000	27.000000	12.6097886	22.566667	8.6595290 9.0190425	cold	2000
chic	52.0	48.80000	20 2000-04-	46.700000	45.500000	8.8286621	25.882251	30.4690425	cold	2000
chic	48.0	42.50000	19 2000-04- 18	29.385714	35.285714	7.8055456	28.605790	13.1547567	cold	2000
chic	41.0	38.90000	2000-04-	16.400000	14.500000	14.6953463	17.045952	0.1690425	cold	2000
chic	44.0	40.90000	17 2000-04-	14.800000	20.000000	17.7977602	15.739583	-	cold	2000
chic	56.0	46.90000	16 2000-04-	23.462500	46.000000	23.3560606	15.575000	$1.4309575 \\ 7.2315425$	cold	2000
chic	58.0	42.80000	15 2000-04- 14	21.000000	72.000000	23.7765152	28.108333	4.7690425	cold	2000
chic	49.0	28.30000	2000-04-	19.400000	39.000000	21.0615942	33.241667	3.1690425	cold	2000
chic	39.0	25.30000	13 2000-04-	18.037500	28.571429	19.8152174	29.512681	1.8065425	cold	2000
chic	34.0	33.10000	12 2000-04-	12.100000	12.000000	20.9599436	22.373485		cold	2000
chic	37.0	28.10000	11 2000-04-	9.100000	17.500000	26.9801932	16.269203		cold	2000
chic	45.0	26.70000	10 2000-04-	12.112500	21.500000	21.6982456	22.278333	7.1309575	cold	2000
chic	34.0	23.00000	09 2000-04-	8.700000	22.500000	25.8583333	22.864583	4.1184575	cold	2000
chic	41.0	32.70000	08 2000-04-	9.400000	29.000000	13.8905303	23.427083	7.5309575	cold	2000
chic	53.0	27.30000	07 2000-04-	8.428571	78.166667	23.8436594	21.348551	6.8309575	cold	2000
chic	44.0	23.80000	06 2000-04-	14.700000	61.000000	22.3500000	30.960714	7.8023861	cold	2000
-	-	0	05		0			1.5309575	-	

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	38.0	19.70000	2000-04- 04	7.100000	18.500000	23.7969203	24.372727	- 9.1309575	cold	2000
chic	52.0	34.30000	2000-04- 03	26.342857	45.000000	17.7923913	27.066667	10.1118996	cold	2000
chic	51.0	42.50000	2000-04- 02	40.300000	46.000000	21.6712963	25.925000	24.0690425	cold	2000
chic	52.0	33.90000	2000-04- 01	22.900000	48.000000	14.0694444	37.233333	6.6690425	cold	2000
chic	45.0	28.10000	2000-03- 31	27.957143	51.571429	10.0652174	50.811232	11.7261853	cold	2000
chic	40.0	31.00000	2000-03- 30	15.000000	27.000000	19.7500000	27.900000	1.2309575	cold	2000
chic	40.0	29.30000	2000-03- 29	9.700000	18.500000	16.5295455	23.881258	6.5309575	cold	2000
chic	39.0	31.10000	2000-03- 28	8.128571	14.000000	14.9891304	25.035870	8.1023861	cold	2000
chic	47.0	31.20000	2000-03- 27	7.200000	21.000000	27.8246377	18.866667	9.0309575	cold	2000
chic	52.0	31.80000	2000-03- 26	7.800000	24.500000	30.5916667	22.241667	- 8.4309575	cold	2000
chic	53.0	32.80000	2000-03- 25	6.628571	18.714286	30.4500000	15.991667	9.6023861	cold	2000
chic	57.0	49.00000	2000-03- 24	25.500000	39.000000	18.0985507	29.600000		cold	2000
chic	50.0	43.70000	2000-03- 23	39.800000	62.500000	14.9054348	36.352743	23.5690425	cold	2000
chic	51.0	44.00000	2000-03- 22	34.462500	52.500000	7.1321429	35.068182	18.2315425	cold	2000
chic	47.0	45.30000	2000-03- 21	28.900000	36.000000	1.8594203	25.616667	12.6690425	cold	2000
chic	49.0	46.40000	2000-03- 20	17.050000	19.500000	14.2833333	21.758333	0.8190425	cold	2000
chic	39.0	34.10000	2000-03- 19	21.742857	26.857143	15.0416667	16.066667	5.5118996	cold	2000
chic	34.0	20.80000	2000-03- 18	15.100000	18.000000	21.2500000	20.733333	1.1309575	cold	2000
chic	32.0	18.50000	2000-03- 17	7.500000	11.000000	34.5056936	15.151812	8.7309575	cold	2000
chic	33.0	22.30000	2000-03- 16	5.614286	5.500000	37.4166667	11.825000	10.6166718	cold	2000
chic	50.0	41.90000	2000-03- 15	29.900000	34.000000	16.5561594	25.854710	13.6690425	cold	2000
chic	45.0	32.60000	2000-03- 14	26.100000	45.500000	13.9939614	25.342029	9.8690425	cold	2000
chic	39.0	33.40000	2000-03- 13	30.262500	33.571429	4.1250000	32.263333	14.0315425	cold	2000
chic	34.0	19.30000	2000-03- 12	17.900000	20.000000	13.4305556	31.575000	1.6690425	cold	2000
chic	30.0	19.00000	2000-03- 11	5.900000	6.000000	27.4583333	14.200000	10.3309575	cold	2000
chic	30.0	21.90000	2000-03- 10	8.987500	11.000000	19.2463768	18.569565	7.2434575	cold	2000

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	46.0	32.70000	2000-03- 09	7.300000	42.500000	18.1968599	13.316667	- 8.9309575	cold	2000
chic	67.0	50.90000	2000-03- 08	21.300000	78.000000	27.4861111	24.903623		cold	2000
chic	66.0	49.70000	2000-03- 07	21.287500	38.285714	21.7500000	30.395843	5.0565425	cold	2000
chic	51.0	32.10000	2000-03- 06	23.200000	51.500000	16.6250000	40.408333	6.9690425	cold	2000
chic	52.0	36.50000	2000-03- 05	25.800000	32.000000	11.8611111	31.308333	9.5690425	cold	2000
chic	46.0	30.70000	2000-03- 04	19.962500	37.000000	13.0138889	33.025000	3.7315425	cold	2000
chic	35.0	24.10000	2000-03- 03	11.600000	27.000000	20.0000000	31.033333	4.6309575	cold	2000
chic	33.0	23.80000	2000-03- 02	7.000000	11.500000	25.7669082	19.247464	9.2309575	cold	2000
chic	46.0	32.90000	2000-03- 01	9.912500	15.833333	23.5912698	18.892236	6.3184575	cold	2000
chic	54.0	34.40000	2000-02- 29	12.400000	35.000000	19.9673913	28.324275	3.8309575	cold	2000
chic	43.0	26.80000	2000-02- 28	18.100000	37.000000	10.5000000	36.415476		cold	2000
chic	45.0	30.70000	2000-02- 27	4.962500	11.500000	21.8333333	13.068627	11.2684575	cold	2000
chic	56.0	51.70000	2000-02- 26	9.700000	28.500000	24.6111111	15.616667	6.5309575	cold	2000
chic	55.0	50.30000	2000-02- 25	17.200000	48.500000	15.3278986	25.399275		cold	2000
chic	49.0	49.90000	2000-02- 24	19.642857	22.166667	15.2689786	26.655390	3.4118996	cold	2000
chic	59.0	40.60000	2000-02- 23	26.800000	61.000000	26.4861111	31.834058	10.5690425	cold	2000
chic	49.0	40.30000	2000-02- 22	21.100000	39.000000	8.3055556	32.231818	4.8690425	cold	2000
chic	35.0	29.10000	2000-02- 21	24.342857	40.000000	8.3055556	37.345652	8.1118996	cold	2000
chic	27.0	19.70000	2000-02- 20	26.300000	26.000000	23.0833333	28.600000	10.0690425	cold	2000
chic	29.0	21.70000	2000-02- 19	21.500000	16.000000	22.3737374	23.766667	5.2690425	cold	2000
chic	30.0	27.80000	2000-02- 18	14.828571	20.142857	24.0416667	17.511364	1.4023861	cold	2000
chic	27.0	18.60000	2000-02- 17	25.200000	34.000000	14.3007246	30.875947		cold	2000
chic	28.0	19.00000	2000-02- 16	15.400000	25.000000	16.4649758	28.981431	0.8309575	cold	2000
chic	31.0	28.10000	2000-02- 15	26.833333	29.500000	4.9861111	31.991667	10.6023758	cold	2000
chic	26.0	22.50000	2000-02-	13.450000	17.000000	13.1780303	30.771212		cold	2000
chic	30.0	26.80000	14 2000-02- 13	26.750000	36.000000	11.8194444	21.991667	2.7809575 10.5190425	cold	2000

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	24.0	14.50000	2000-02- 12	20.028571	27.166667	21.3750000	26.491667	3.7976139	cold	2000
chic	24.0	13.90000	2000-02-	8.500000	16.000000	19.4305556	24.891667	- 7.7309575	cold	2000
chic	35.0	32.10000	11 2000-02- 10	40.400000	55.000000	7.8888889	30.016667	24.1690425	cold	2000
chic	41.0	30.20000	2000-02- 09	37.250000	41.500000	11.5205314	29.142292	21.0190425	cold	2000
chic	22.0	21.60000	2000-02- 08	30.600000	39.000000	9.8611111	42.684783	14.3690425	cold	2000
chic	26.0	23.30000	2000-02-	25.000000	25.500000	14.3647343	30.136569	8.7690425	cold	2000
chic	23.0	21.60000	07 2000-02-	34.300000	37.666667	6.3055556	33.281250	18.0690425	cold	2000
chic	21.0	16.50000	06 2000-02-	19.800000	27.000000	11.4722222	28.208333	3.5690425	cold	2000
chic	25.0	19.00000	05 2000-02-	15.500000	20.500000	12.2089372	30.066304		cold	2000
chic	33.0	26.70000	04 2000-02-	25.050000	28.000000	10.1868687	29.039328	0.7309575 8.8190425	cold	2000
chic	21.0	16.00000	03 2000-02-	31.700000	41.000000	6.5000000	37.121320	15.4690425	cold	2000
chic	25.0	16.50000	02 2000-02-	21.100000	28.500000	9.4027778	33.534524	4.8690425	cold	2000
chic	20.0	14.40000	01 2000-01-	32.425000	33.857143	11.6527778	32.775000	16.1940425	cold	2000
chic	28.0	23.30000	31 2000-01-	32.100000	28.000000	8.8194444	30.341667	15.8690425	cold	2000
chic	24.0	19.10000	30 2000-01-	17.100000	32.000000	21.3055556	22.066667	0.8690425	cold	2000
chic	21.0	14.50000	29 2000-01-	30.614286	48.500000	6.1944444	47.250000	14.3833282	cold	2000
chic	20.0	11.50000	28 2000-01-	16.700000	26.000000	10.8532609	35.511364	0.4690425	cold	2000
chic	15.0	5.40000	27 2000-01-	10.100000	31.000000	9.1944444	31.817457		cold	2000
chic	17.0	8.50000	26 2000-01-	15.085714	23.857143	10.5757576	28.091061	6.1309575	cold	2000
chic	6.0	-	25 2000-01-	25.400000	36.000000	6.1805556	36.100000	1.1452433 9.1690425	cold	2000
chic	16.0	0.60000 $4.30000$	24 2000-01-	19.800000	27.000000	14.6388889	20.100000	3.5690425	cold	2000
chic	17.0	14.50000	23 2000-01-	27.757143	31.500000	5.4305556	36.375000	11.5261853	cold	2000
chic	5.0	_	22 2000-01-	31.800000	46.500000	6.3926768	38.187022	15.5690425	cold	2000
chic	10.0	3.20000 $2.10000$	21 2000-01-	16.000000	22.500000	12.8345411	27.923810		cold	2000
chic	21.0	15.70000	20 2000-01-	23.050000	33.285714	3.0277778	41.322464	$\begin{array}{c} 0.2309575 \\ 6.8190425 \end{array}$	cold	2000
chic	25.0	20.90000	19 2000-01- 18	20.100000	24.500000	4.1400966	28.315584	3.8690425	cold	2000

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	22.0	12.70000	2000-01- 17	11.700000	23.500000	17.9444444	20.066667	4.5309575	cold	2000
chic	31.0	19.40000	2000-01- 16	11.675000	16.000000	20.5000000	13.783333	4.5559575	cold	2000
chic	34.0	24.20000	2000-01- 15	19.650000	35.000000	3.3194444	23.841667		cold	2000
chic	20.0	14.50000	2000-01- 14	20.450000	28.000000	3.1117150	35.158333	4.2190425	cold	2000
chic	25.0	18.40000	2000-01-	12.100000	19.142857	8.7361111	26.708696	-	cold	2000
chic	31.0	21.70000	13 2000-01-	11.300000	18.000000	11.9335749	21.394565	4.1309575	cold	2000
chic	33.0	21.50000	12 2000-01-	7.800000	24.500000	11.8194444	17.765349	4.9309575	cold	2000
chic	42.0	34.90000	11 2000-01-	15.185714	17.000000	7.9444444	19.732143	8.4309575	cold	2000
chic	39.0	38.50000	10 2000-01-	25.700000	25.500000	1.8055556	21.241667	$1.0452433 \\ 9.4690425$	cold	2000
chic	37.0	28.50000	09 2000-01-	15.500000	27.000000	6.1944444	23.766667	_	cold	2000
chic	25.0	13.30000	08 2000-01-	16.800000	27.000000	7.9381313	26.100000	$0.7309575 \\ 0.5690425$	cold	2000
chic	34.0	25.30000	07 2000-01-	18.400000	32.000000	3.7618577	22.088044	2.1690425	cold	2000
chic	20.0	16.60000	06 2000-01-	18.600000	23.500000	4.3526570	20.349802	2.3690425	cold	2000
chic	28.0	22.20000	05 2000-01-	11.550000	19.000000	11.0591787	23.801786	-	cold	2000
chic	35.0	33.70000	04 2000-01-	12.450000	11.500000	9.0990338	15.114583	4.6809575	cold	2000
chic	48.0	42.30000	03 2000-01-	30.600000	47.500000	16.5277778	16.312500	$3.7809575 \\ 14.3690425$	cold	2000
chic	42.0	32.20000	02 2000-01-	25.700000	29.333333	4.6212121	24.069444	9.4690425	cold	2000
chic	34.0	25.90000	01 1999-12-	NA	21.500000	5.6805556	27.500000	NA	cold	1999
chic	34.0	28.90000	31 1999-12-	NA	13.000000	9.7518116	25.040267	NA	cold	1999
chic	36.0	30.20000	30 1999-12-	12.800000	24.500000	3.6443237	25.538571		cold	1999
chic	21.0	16.40000	29 1999-12-	NA	23.000000	8.4583333	26.041667	3.4309575 NA	cold	1999
chic	19.0	11.60000	28 1999-12-	NA	29.500000	10.8484300	27.095238	NA	cold	1999
chic	28.0	14.30000	27 1999-12-	6.728571	26.750000	20.0277778	15.566667	-	cold	1999
chic	19.0	14.00000	26 1999-12-	NA	45.500000	7.1388889	23.741667	9.5023861 NA	cold	1999
chic	14.0	4.70000	25 1999-12-	NA	35.000000	7.1111111	31.266667	NA	cold	1999
chic	10.0	3.80000	24 1999-12-	20.800000	39.000000	6.2361111	29.600000	4.5690425	cold	1999
			23							

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detrei	ndempcat	year
chic	13.0	5.80000	1999-12- 22	NA	24.500000	4.6733092	33.725000	NA	cold	1999
chic	8.0	1.60000	1999-12- 21	12.600000	27.000000	7.9015152	28.162022	3.6309575	cold	1999
chic	21.0	11.00000	1999-12- 20	12.700000	24.750000	13.5664251	16.906250	3.5309575	cold	1999
chic	32.0	29.10000	1999-12- 19	NA	32.000000	3.4027778	22.416667	NA	cold	1999
chic	19.0	14.60000	1999-12- 18	NA	26.500000	7.1805556	30.908333	NA	cold	1999
chic	23.0	17.90000	1999-12- 17	13.500000	17.500000	7.8907005	24.629831	- 2.7309575	cold	1999
chic	27.0	20.30000	1999-12- 16	NA	18.500000	4.0477053	19.069565	NA	cold	1999
chic	36.0	33.90000	1999-12- 15	NA	19.000000	2.444444	24.250000	NA	cold	1999
chic	38.0	34.20000	1999-12- 14	13.762500	15.285714	10.5507246	21.135870	- 2.4684575	cold	1999
chic	35.0	31.20000	1999-12- 13	NA	38.000000	7.5809179	24.312754	NA	cold	1999
chic	35.0	30.60000	1999-12- 12	23.800000	19.500000	1.5972222	24.958333	7.5690425	cold	1999
chic	31.0	25.00000	12 1999-12- 11	12.600000	24.000000	4.7083333	30.229167	3.6309575	cold	1999
chic	31.0	23.40000	1999-12-	NA	17.500000	6.9886364	22.785038	0.0009979 NA	cold	1999
chic	43.0	38.60000	10 1999-12-	NA	44.500000	4.6944444	28.218479	NA	cold	1999
chic	38.0	33.50000	09 1999-12-	24.957143	28.285714	2.2826087	25.950758	8.7261853	cold	1999
chic	33.0	29.10000	08 1999-12- 07	NA	26.000000	3.4305556	23.187500	NA	cold	1999
chic	29.0	22.60000	1999-12-	NA	16.500000	6.9583333	25.906250	NA	cold	1999
chic	39.0	34.30000	06 1999-12-	NA	5.500000	10.7638889	13.968750	NA	cold	1999
chic	49.0	48.50000		NA	39.500000	2.4166667	25.937500	NA	cold	1999
chic	53.0	48.00000	04 1999-12-	18.500000	43.000000	8.2669082	28.415308	2.2690425	cold	1999
chic	50.0	32.90000	03 1999-12-	16.440000	31.142857	5.9444444	30.514286	0.2090425	cold	1999
chic	36.0	20.80000	02 1999-12-	NA	38.000000	3.9293478	26.774333	NA	cold	1999
chic	30.0	15.30000	01 1999-11-	20.600000	25.000000	3.9516908	34.206522	4.3690425	cold	1999
chic	32.0	19.90000	30 1999-11-	11.200000	17.000000	7.6527778	27.266667	-	cold	1999
chic	34.0	25.00000	29 1999-11-	NA	11.000000	7.0138889	25.975000	5.0309575 NA	cold	1999
chic	41.0	30.10000	28 1999-11- 27	NA	15.000000	6.4722222	25.250000	NA	cold	1999

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean:	2pm25detren	dempcat	year
chic	37.0	32.20000	1999-11- 26	23.450000	29.625000	6.5694444	27.784848	7.2190425	cold	1999
chic	36.0	27.80000	1999-11- 25	NA	30.000000	5.7222222	30.683333	NA	cold	1999
chic	40.0	30.70000	1999-11-	NA	19.000000	6.1225845	21.265942	NA	cold	1999
chic	52.0	50.00000	24 1999-11- 23	NA	38.000000	6.5467172	19.859058	NA	cold	1999
chic	54.0	46.00000	1999-11-	NA	58.000000	5.5833333	29.204420	NA	cold	1999
chic	42.0	42.00000	22 1999-11-	NA	51.000000	1.5625000	20.458333	NA	cold	1999
chic	39.0	35.20000	21 1999-11-	26.212500	37.625000	0.8541667	15.116667	9.9815425	cold	1999
chic	49.0	37.70000	20 1999-11-	NA	80.000000	11.7252415	18.190580	NA	cold	1999
chic	58.0	36.20000	19 1999-11-	NA	91.000000	14.5694444	27.410714	NA	cold	1999
chic	40.0	25.00000	18 1999-11-	13.700000	25.000000	7.1497585	32.309524		cold	1999
chic	38.0	29.30000	17 1999-11-	NA	16.500000	12.0138889	23.341667	2.5309575 NA	cold	1999
chic	41.0	26.30000	16 1999-11-	NA	22.000000	6.5833333	29.833333	NA	cold	1999
chic	45.0	30.50000	15 1999-11-	7.728571	23.750000	18.9861111	17.108333		cold	1999
chic	54.0	43.80000	14 1999-11-	NA	66.000000	12.4166667	35.141667	8.5023861 NA	cold	1999
chic	47.0	41.20000	13 1999-11-	NA	61.500000	2.6976285	31.354183	NA	cold	1999
chic	44.0	38.00000	12 1999-11-	NA	18.000000	18.2777778	20.016667	NA	cold	1999
chic	58.0	46.70000	11 1999-11-	NA	49.500000	23.1944444	21.435266	NA	cold	1999
chic	67.0	48.50000	10 1999-11-	NA	51.000000	22.0833333	29.808333	NA	cold	1999
chic	55.0	41.00000	09 1999-11-	18.414286	42.142857	5.8611111	42.919048	2.1833282	cold	1999
chic	44.0	32.30000	08 1999-11-	NA	36.000000	17.3055556	31.298529	NA	cold	1999
chic	45.0	20.30000	07 1999-11-	NA	29.000000	10.3888889	33.987879	NA	cold	1999
chic	55.0	34.30000	06 1999-11-	22.200000	51.500000	11.3623188	33.958333	5.9690425	cold	1999
chic	46.0	24.20000	05 1999-11-	NA	79.500000	8.7753623	37.851774	NA	cold	1999
chic	37.0	17.70000	04 1999-11-	NA	28.500000	12.9444444	27.253788	NA	cold	1999
chic	42.0	22.60000	03 1999-11-	5.180000	20.285714	16.9728261	19.615476		cold	1999
chic	59.0	46.90000	02 1999-11- 01	NA	54.500000	12.7676768	30.241667	11.0509575 NA	cold	1999

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmean	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	58.0	49.30000	1999-10- 31	NA	46.500000	14.7666667	24.925000	NA	cold	1999
chic	66.0	50.70000	1999-10- 30	NA	68.500000	38.6916667	23.108333	NA	cold	1999
chic	62.0	47.00000	1999-10- 29	NA	71.000000	26.6230896	38.090909	NA	cold	1999
chic	64.0	43.30000	1999-10- 28	NA	68.000000	15.0750000	33.291667	NA	cold	1999
chic	48.0	37.00000	1999-10- 27	16.262500	38.857143	9.8317523	27.090119	0.0315425	cold	1999
chic	53.0	29.40000	1999-10- 26	NA	46.500000	11.3244565	32.700000	NA	cold	1999
chic	50.0	28.10000	1999-10- 25	NA	51.000000	13.2169887	31.207609	NA	cold	1999
chic	40.0	22.10000	1999-10- 24	NA	13.500000	13.7500000	23.141667	NA	cold	1999
chic	43.0	25.70000	1999-10- 23	NA	14.500000	20.7208333	12.208333	NA	cold	1999
chic	51.0	26.60000	1999-10- 22	NA	29.500000	20.1387681	15.083333	NA	cold	1999
chic	52.0	36.30000	1999-10- 21	11.500000	36.428571	10.4373188	27.431522	4.7309575	cold	1999
chic	44.0	30.70000	1999-10- 20	NA	31.000000	6.8682971	22.946739	NA	cold	1999
chic	50.0	33.50000	1999-10- 19	NA	36.500000	9.1001812	24.925000	NA	cold	1999
chic	44.0	34.40000	1999-10- 18	14.700000	23.000000	4.7847826	24.533333	1.5309575	cold	1999
chic	45.0	33.80000	1999-10- 17	NA	9.500000	14.8958333	17.020833		cold	1999
chic	58.0	54.20000	1999-10- 16	NA	43.500000	23.2166667	20.833333	NA	cold	1999
chic	64.0	46.30000	1999-10- 15	16.400000	44.285714	24.8472826	23.923814	0.1690425	cold	1999
chic	48.0	34.80000	1999-10- 14	NA	25.000000	10.8197464	23.230797	NA	cold	1999
chic	56.0	44.00000	1999-10-	NA	27.000000	14.2385870	19.791017	NA	cold	1999
chic	62.0	47.20000	13 1999-10- 12	NA	56.500000	20.8960145	28.753788	NA	cold	1999
chic	55.0	46.10000	1999-10-	NA	27.000000	14.3541667	26.108333	NA	cold	1999
chic	66.0	58.00000	11 1999-10-	NA	24.500000	23.1000000	16.825000	NA	cold	1999
chic	59.0	57.60000	10 1999-10-	34.857143	47.000000	5.9458333	24.100000	18.6261853	cold	1999
chic	61.0	54.10000	09 1999-10-	NA	49.500000	14.4223485	28.836034	NA	cold	1999
chic	59.0	42.40000	08 1999-10-	NA	28.500000	14.4694335	28.836726	NA	cold	1999
chic	52.0	41.80000	07 1999-10- 06	10.550000	20.500000	17.6117754	17.569851	- 5.6809575	cold	1999

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	51.0	36.80000	1999-10- 05	NA	33.000000	9.3844203	30.808333	NA	cold	1999
chic	47.0	38.00000	1999-10- 04	NA	13.500000	15.7666667	20.685714	NA	cold	1999
chic	44.0	40.20000	1999-10- 03	7.450000	14.750000	16.4083333	15.300000	- 8.7809575	cold	1999
chic	46.0	40.80000	1999-10- 02	NA	19.000000	10.1750000	20.833333	NA	cold	1999
chic	51.0	35.00000	1999-10-	NA	27.000000	9.0634881	28.652273	NA	cold	1999
chic	56.0	38.90000	01 1999-09-	9.100000	29.500000	13.5112319	26.263466	-	cold	1999
chic	56.0	43.70000	30 1999-09-	NA	11.000000	12.6240119	19.203804	7.1309575 NA	cold	1999
chic	58.0	56.70000	29 1999-09-	8.300000	12.500000	18.0453152	19.252976	-	cold	1999
chic	66.0	58.70000	28 1999-09-	11.100000	23.571429	37.1234848	14.201389	7.9309575	cold	1999
chic	72.0	49.30000	27 1999-09-	NA	72.000000	46.6708333	20.756944	5.1309575 NA	cold	1999
chic	62.0	48.40000	26 1999-09-	NA	38.000000	26.9125000	25.395833	NA	cold	1999
chic	57.0	47.10000	25 1999-09-	6.000000	9.000000	21.2514822	10.425615	-	cold	1999
chic	66.0	46.30000	24 1999-09-	NA	44.500000	24.8959157	26.643912	10.2309575 NA	cold	1999
chic	57.0	39.80000	23 1999-09-	NA	30.000000	13.6994401	33.804799	NA	cold	1999
chic	51.0	44.60000	22 1999-09-	5.650000	11.875000	15.8804348	14.549603	-	cold	1999
chic	58.0	45.90000	21 1999-09-	NA	13.000000	13.2434573	12.750000	10.5809575 NA	cold	1999
chic	64.0	53.50000	20 1999-09-	NA	43.500000	31.4886364	26.090278	NA	cold	1999
chic	62.0	49.00000	19 1999-09-	NA	42.500000	20.2689394	32.635417	NA	cold	1999
chic	59.0	48.10000	18 1999-09-					NA		1999
chic	59.0	47.80000	17 1999-09-	8.700000		13.7194574			cold	1999
chic	55.0	46.20000	16 1999-09-	9.816667		10.4568511		7.5309575	cold	1999
chic	59.0	44.40000	15 1999-09-	NA		10.2284256		6.4142909 NA	cold	1999
			14							
chic	59.0	49.90000	1999-09- 13	NA		7.8633070		NA	cold	1999
chic	68.0	58.90000	1999-09- 12	NA		26.4128788			cold	1999
chic	64.0	48.70000	1999-09- 11	NA		21.9469697		NA	cold	1999
chic	62.0	45.20000	1999-09- 10	NA	52.000000	15.0385375	29.140042	NA	cold	1999

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	62.0	46.60000	1999-09- 09	8.400000	40.285714	13.4068002	21.221014	7.8309575	cold	1999
chic	71.0	54.20000	1999-09- 08	NA	37.500000	19.4150198	31.543561	NA	cold	1999
chic	65.0	55.20000	1999-09- 07	NA	28.000000	16.3842227	25.791667	NA	cold	1999
chic	66.0	54.90000	1999-09- 06	NA	14.000000	25.3181818	11.048611	NA	cold	1999
chic	77.0	63.50000	1999-09- 05	NA	59.000000	54.9621212	25.458333	NA	cold	1999
chic	79.0	61.60000	1999-09- 04	NA	60.500000	57.4886364	26.701389	NA	cold	1999
chic	76.0	61.50000	1999-09- 03	44.957143	74.000000	48.1165559	42.982790	28.7261853	cold	1999
chic	74.0	62.10000	1999-09- 02	NA	83.500000	40.0575069	49.549242	NA	cold	1999
chic	70.0	57.30000	1999-09- 01	NA	62.500000	35.8590721	36.589647	NA	cold	1999
chic	65.0	54.40000	1999-08- 31	NA	28.000000	25.3017128	22.296014	NA	cold	1999
chic	62.0	51.80000	1999-08- 30	NA	17.500000	26.0186571	12.683333	NA	cold	1999
chic	69.0	56.00000	1999-08- 29	NA	13.500000	29.9500000	7.641667	NA	cold	1999
chic	80.0	69.70000	1999-08- 28	39.540000	56.571429	31.5125000	30.650000	23.3090425	cold	1999
chic	74.0	66.10000	1999-08- 27	29.300000	57.500000	24.5159420	42.297101	13.0690425	cold	1999
chic	72.0	64.60000	1999-08-	NA	33.500000	25.9395586	25.147041	NA	cold	1999
chic	70.0	66.10000	26 1999-08- 25	28.800000	24.000000	32.6908911	20.802226	12.5690425	cold	1999
chic	71.0	67.10000	1999-08- 24	NA	33.500000	29.3176877	19.423611	NA	cold	1999
chic	72.0	64.20000	1999-08- 23	NA	36.500000	20.5278223	33.979167	NA	cold	1999
chic	67.0	57.10000	1999-08- 22	20.371429	28.571429	22.6296296	34.340278	4.1404710	cold	1999
chic	65.0	57.40000	1999-08-	NA	28.500000	18.4772727	34.979167	NA	cold	1999
chic	67.0	57.20000	21 1999-08-	NA	16.500000	22.6190711	19.804650	NA	cold	1999
chic	68.0	62.30000	20 1999-08-	12.000000	16.500000	23.5757875	15.085090		cold	1999
chic	67.0	62.70000	19 1999-08-	NA	36.000000	6.8282279	36.461490	4.2309575 NA	cold	1999
chic	75.0	60.60000	18 1999-08-	NA	34.000000	28.6749012	23.433207	NA	cold	1999
chic	73.0	57.90000	17 1999-08-	21.366667	32.857143	30.0610552	27.993056	5.1357091	cold	1999
chic	66.0	54.40000	16 1999-08- 15	NA	16.500000	20.5871212	20.118056	NA	cold	1999

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	64.0	52.70000	1999-08- 14	NA	8.500000	22.2083333	10.048611	NA	cold	1999
chic	72.0	65.60000	1999-08- 13	NA	28.000000	22.5632411	12.918176	NA	cold	1999
chic	70.0	65.90000	1999-08- 12	NA	26.000000	14.0435531	29.152256	NA	cold	1999
chic	75.0	61.10000	1999-08- 11	NA	34.500000	17.9173254	25.759415	NA	cold	1999
chic	78.0	63.80000	1999-08- 10	15.828571	31.428571	31.2180501	20.361111	0.4023861	cold	1999
chic	66.0	56.20000	1999-08- 09	NA	26.000000	22.2824440	19.437500	NA	cold	1999
chic	66.0	57.00000	1999-08- 08	NA	10.000000	25.3863636	7.881944	NA	cold	1999
chic	72.0	67.70000	1999-08- 07	NA	38.500000	22.1742424	25.083333	NA	cold	1999
chic	76.0	62.00000	1999-08- 06	NA	43.000000	28.6839592	23.812720	NA	cold	1999
chic	73.0	55.60000	1999-08- 05	10.900000	19.500000	20.4930830	22.712596	5.3309575	cold	1999
chic	76.0	58.30000	1999-08- 04	13.633333	29.142857	23.7701845	25.261364	2.5976242	cold	1999
chic	71.0	59.00000	1999-08- 03	NA	37.000000	23.4925725	30.630556	NA	cold	1999
chic	71.0	56.30000	1999-08- 02	NA	13.500000	17.2570346	15.361111	NA	cold	1999
chic	74.0	60.10000	1999-08-	NA	12.000000	26.1576923	9.652778	NA	cold	1999
chic	83.0	71.40000	01 1999-07- 31	NA	30.000000	37.6958333	18.409722	NA	hot	1999
chic	90.0	77.10000	1999-07- 30	NA	54.000000	34.1706522	27.479771	NA	hot	1999
chic	83.0	76.60000	1999-07- 29	22.616667	42.857143	30.4891903	25.026515	6.3857091	hot	1999
chic	82.0	71.80000	1999-07- 28	NA	35.500000	34.0021410	22.534091	NA	hot	1999
chic	79.0	68.30000	1999-07- 27	NA	26.000000	26.2572464	21.608333	NA	cold	1999
chic	80.0	69.50000	1999-07- 26	20.400000	41.500000	24.0243742	30.175000	4.1690425	cold	1999
chic	85.0	70.60000	1999-07- 25	NA	25.000000	37.3750000	18.229167	NA	hot	1999
chic	82.0	73.20000	1999-07- 24	NA	23.500000	34.6439394	25.135417	NA	hot	1999
chic	83.0	72.80000	1999-07-	18.785714	33.875000	25.6688675	29.458333	2.5547567	hot	1999
chic	82.0	73.40000	23 1999-07- 22	NA	40.000000	27.1665619	21.643116	NA	hot	1999
chic	83.0	72.10000	1999-07-	NA	39.000000	30.2704216	24.256944	NA	hot	1999
chic	76.0	70.40000	21 1999-07- 20	23.300000	26.500000	27.9329710	17.044192	7.0690425	cold	1999

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2	2pm25detren	dempcat	year
chic	79.0	70.10000	1999-07- 19	NA	35.000000	26.9342287	19.763889	NA	cold	1999
chic	77.0	66.60000	1999-07- 18	NA	28.000000	31.9469697	17.152778	NA	cold	1999
chic	75.0	70.60000	1999-07- 17	19.450000	29.285714	26.0984848	17.416667	3.2190425	cold	1999
chic	82.0	68.30000	1999-07- 16	NA	82.500000	45.8812582	22.229167	NA	hot	1999
chic	78.0	62.80000	1999-07-	NA	71.000000	51.4741436	23.051027	NA	cold	1999
chic	74.0	59.20000	15 1999-07-	NA	71.500000	45.6510061	30.882453	NA	cold	1999
chic	70.0	55.70000	14 1999-07-	NA	64.000000	33.0295544	35.219066	NA	cold	1999
chic	68.0	50.80000	13 1999-07-	NA	37.000000	25.5634058	29.357488	NA	cold	1999
chic	67.0	50.30000	12 1999-07-	10.462500	23.571429	21.3409091	22.208333		cold	1999
chic	64.0	51.50000	11 1999-07-	NA	11.500000	23.7916667	10.062500	5.7684575 NA	cold	1999
chic	76.0	65.00000	10 1999-07-	NA	40.500000	34.6907713	17.176010	NA	cold	1999
chic	76.0	60.40000	09 1999-07-	20.400000	59.000000	38.9889059	29.396970	4.1690425	cold	1999
chic	75.0	53.70000	08 1999-07-	NA	28.000000	29.8133908	30.816667	NA	cold	1999
chic	79.0	62.70000	07 1999-07-	NA	27.500000	28.4048090	23.151429	NA	cold	1999
chic	87.0	74.40000	06 1999-07-	24.500000	32.875000	33.2916667	10.270833	8.2690425	hot	1999
chic	86.0	74.10000	05 1999-07-	NA	45.000000	29.8939394	10.232051	NA	hot	1999
chic	84.0	76.20000	04 1999-07-	NA	55.500000	28.9886364	12.738095	NA	hot	1999
chic	77.0	67.30000	03 1999-07-	NA	30.500000	28.7727273	21.661836	NA	cold	1999
chic	74.0	64.30000	02 1999-07-	NA	31.500000	27.2788208	23.815151	NA	cold	1999
chic	68.0	54.70000	01 1999-06-	NA	26.000000	28.6918643	27.283734	NA	cold	1999
chic	66.0	51.10000	30 1999-06-	8.212500	20.625000	23.5313618	16.964848	_	cold	1999
chic	77.0	69.20000	29 1999-06-	NA		31.3669302		8.0184575	cold	1999
chic	78.0	70.60000	28 1999-06-	NA		41.5208333			cold	1999
chic	76.0	66.20000	27 1999-06-			35.5991736			cold	1999
			26 1999-06-	24.900000 NA		30.2672925			cold	
chic	75.0	58.20000	25							1999
chic	76.0	65.90000	1999-06- 24	NA	∠b.UUUUUU	28.3783152	24.109298	NA	cold	1999

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	76.0	67.30000	1999-06- 23	49.042857	57.571429	45.5660334	27.472881	32.8118996	cold	1999
chic	74.0	66.20000	1999-06- 22	NA	71.000000	33.9745671	40.428030	NA	cold	1999
chic	72.0	59.80000	1999-06- 21	NA	57.000000	53.4065457	27.722222	NA	cold	1999
chic	67.0	54.40000	1999-06- 20	26.000000	39.000000	52.9659091	19.263889	9.7690425	cold	1999
chic	68.0	49.90000	1999-06- 19	NA	26.500000	38.4469697	20.159722	NA	cold	1999
chic	59.0	47.60000	1999-06- 18	NA	27.500000	27.4995059	20.489130	NA	cold	1999
chic	57.0	42.90000	1999-06- 17	6.362500	13.142857	25.3883399	13.232186	0.0604575	cold	1999
chic	61.0	44.70000	1999-06- 16	NA	18.000000	28.8123727	16.721014	9.8684575 NA	cold	1999
chic	58.0	37.90000	1999-06-	NA	8.500000	25.8932806	10.791667	NA	cold	1999
chic	66.0	55.00000	15 1999-06-	NA	13.500000	25.5826746	14.965278	NA	cold	1999
chic	65.0	63.50000	14 1999-06-	NA	21.500000	28.1969697	19.604167	NA	cold	1999
chic	75.0	68.20000	13 1999-06-	36.000000	39.500000	39.6780303	30.958333	19.7690425	cold	1999
chic	78.0	67.50000	12 1999-06-	32.783333	43.285714	32.7997365	34.839674	16.5523758	cold	1999
chic	79.0	66.70000	11 1999-06-	NA	50.000000	28.9107378	36.042874	NA	cold	1999
chic	79.0	63.20000	10 1999-06-	NA	44.500000	27.1026620	35.266908	NA	cold	1999
chic	80.0	63.20000	09 1999-06-	NA	45.500000	38.2723979	28.178571	NA	cold	1999
chic	81.0	63.80000	08 1999-06-	NA	38.500000	36.4055426	19.083333	NA	hot	1999
chic	80.0	69.90000	07 1999-06-	NA	41.000000	33.0492424	16.891667	NA	cold	1999
chic	75.0	68.00000	06 1999-06-	17.516667	26.142857	30.3674242	21.183333	1.2857091	cold	1999
chic	64.0	56.60000	05 1999-06-	NA	29.500000	32.3335879	23.046717	NA	cold	1999
chic	58.0	47.70000	04 1999-06-	NA	16.500000	22.8189005	16.962423	NA	cold	1999
chic	64.0	57.70000	03 1999-06-	NA	16.000000	15.1701252	21.657440	NA	cold	1999
chic	65.0	59.70000	02 1999-06-	NA	27.500000	17.2887022	20.891667	NA	cold	1999
chic	73.0	63.40000	01 1999-05-	NA	32.000000	30.5538538	15.500000	NA	cold	1999
chic	70.0	56.00000	31 1999-05-	32.400000	48.571429	51.8484848	26.758333	16.1690425	cold	1999
chic	76.0	54.40000	30 1999-05-	NA	53.500000	46.4583333	33.008333	NA	cold	1999
			29							

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmean	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	75.0	53.80000	1999-05- 28	NA	54.000000	29.5657115	35.814815	NA	cold	1999
chic	64.0	41.30000	1999-05- 27	NA	53.000000	25.7648371	40.712286	NA	cold	1999
chic	60.0	40.40000	1999-05- 26	NA	23.000000	24.1317523	22.709568	NA	cold	1999
chic	56.0	38.70000	1999-05- 25	NA	35.000000	26.7654809	19.277778	NA	cold	1999
chic	51.0	40.70000	1999-05-	6.433333	13.000000	17.4826476	17.662500	-	cold	1999
chic	60.0	50.70000	24 1999-05-	NA	20.500000	18.2424242	20.425000	9.7976242 NA	cold	1999
chic	59.0	52.80000	23 1999-05-	NA	16.500000	35.4053030	11.291667	NA	cold	1999
chic	66.0	56.80000	22 1999-05-	34.700000	54.500000	47.5087286	27.77778	18.4690425	cold	1999
chic	64.0	49.10000	21 1999-05-	NA	41.000000	36.1734190	30.569005	NA	cold	1999
chic	61.0	44.80000	20 1999-05-	NA	30.000000	21.0604414	29.319158	NA	cold	1999
chic	61.0	52.30000	19 1999-05-	8.637500	15.375000	22.2849144	21.830556	-	cold	1999
chic	69.0	62.60000	18 1999-05-	NA	28.000000	29.6730896	18.906944	7.5934575 NA	cold	1999
chic	69.0	63.10000	17 1999-05-	NA	43.500000	37.0189394	19.895833	NA	cold	1999
chic	60.0	54.80000	16 1999-05-	45.600000	45.500000	22.4242424	23.555556	29.3690425	cold	1999
chic	53.0	41.30000	15 1999-05-	NA	16.000000	26.9986825	18.452778	NA	cold	1999
chic	51.0	41.00000	14 1999-05-	NA	16.500000	28.3415978	18.086051	NA	cold	1999
chic	62.0	52.70000	13 1999-05-	21.383333	41.142857	28.8812582	25.807246	5.1523758	cold	1999
chic	67.0	52.10000	12 1999-05-	NA		34.1333864		NA	cold	1999
chic	58.0	46.50000	11 1999-05-	NA		33.3829710			cold	1999
chic	51.0	42.70000	10 1999-05-	NA		18.5871212		NA	cold	1999
chic	53.0	48.20000	09 1999-05-	NA		12.2901515		NA	cold	1999
			08							
chic	56.0	46.90000	1999-05- 07	NA		21.5342556			cold	1999
chic	58.0	52.80000	1999-05- 06			19.7294436		4.7559575	cold	1999
chic	70.0	57.20000	1999-05- 05	NA		35.6200593		NA	cold	1999
chic	67.0	52.20000	1999-05- 04	NA		41.2494910			cold	1999
chic	64.0	42.80000	1999-05- 03	NA	44.500000	39.9886364	33.221230	NA	cold	1999

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	58.0	37.30000	1999-05- 02	NA	30.500000	43.1250000	27.270833	NA	cold	1999
chic	56.0	30.50000	1999-05- 01	NA	24.000000	31.0600233	29.541667	NA	cold	1999
chic	51.0	29.00000	1999-04- 30	9.100000	22.285714	30.8572134	26.467172	7.1309575	cold	1999
chic	52.0	32.70000	1999-04- 29	NA	15.500000	34.9648386	16.796219	NA	cold	1999
chic	51.0	38.40000	1999-04- 28	NA	14.500000	30.0328632	15.645202	NA	cold	1999
chic	50.0	41.50000	1999-04- 27	NA	32.000000	28.8778147	22.279491	NA	cold	1999
chic	51.0	33.40000	1999-04- 26	NA	31.000000	37.2500000	29.479167	NA	cold	1999
chic	48.0	30.50000	1999-04- 25	NA	23.000000	32.2375000	23.625000	NA	cold	1999
chic	44.0	24.60000	1999-04- 24	7.137500	13.428571	31.8500000	18.625000	9.0934575	cold	1999
chic	43.0	35.60000	1999-04- 23	NA	6.000000	29.2937253	15.658730	9.0934575 NA	cold	1999
chic	48.0	47.20000	1999-04- 22	NA	31.500000	11.6968599	23.236111	NA	cold	1999
chic	54.0	48.00000	1999-04- 21	NA	31.000000	24.7616930	23.649304	NA	cold	1999
chic	45.0	39.40000	1999-04-	25.900000	35.500000	22.3904809	28.244565	9.6690425	cold	1999
chic	42.0	36.50000	20 1999-04-	NA	35.000000	12.7521559	32.350000	NA	cold	1999
chic	42.0	37.10000	19 1999-04-	19.185714	24.285714	12.3583333	29.741667	2.9547567	cold	1999
chic	44.0	34.00000	18 1999-04- 17	NA	11.500000	16.8440989	25.066667	NA	cold	1999
chic	44.0	37.30000	1999-04- 16	NA	11.000000	26.3334980	26.910507	NA	cold	1999
chic	49.0	39.40000	1999-04-	16.950000	25.500000	35.4686489	18.658465	0.7190425	cold	1999
chic	49.0	26.00000		NA	47.000000	26.7829381	38.298551	NA	cold	1999
chic	50.0	33.30000	14 1999-04-	19.900000	32.500000	19.8962451	32.950000	3.6690425	cold	1999
chic	45.0	32.10000	13 1999-04-	10.925000	21.428571	23.5533597	26.883333		cold	1999
chic	46.0	39.70000	12 1999-04-	NA	14.500000	22.3522727	16.000000	5.3059575 NA	cold	1999
chic	47.0	35.00000	11 1999-04-	NA	18.000000	33.8825758	12.783333	NA	cold	1999
chic	45.0	40.00000	10 1999-04-	8.400000	12.000000	30.8616601	18.100000		cold	1999
chic	55.0	43.70000	09 1999-04-	14.500000	35.500000	29.0095520	28.476449		cold	1999
chic	55.0	42.70000	08 1999-04- 07	NA	47.000000	27.8142292	34.547464	1.7309575 NA	cold	1999

chic chic chic chic chic chic chic chic	53.0 50.0 56.0 63.0 64.0 58.0 60.0 55.0 48.0	42.40000 43.20000 47.30000 57.80000 54.60000 51.70000 41.30000 28.50000	1999-04- 06 1999-04- 05 1999-04- 04 1999-04- 02 1999-04- 01 1999-03- 31	NA NA NA NA	19.000000 18.000000 35.000000 43.500000 38.000000	23.4967032 20.4144565 22.4886364 15.9810606 15.2765152 15.7148311	19.643478 15.983333 23.550000 34.100000	4.6142909 NA NA NA NA	cold cold cold cold cold	1999 1999 1999 1999
chic chic chic chic chic chic chic chic	56.0 63.0 64.0 58.0 60.0 55.0	47.30000 57.80000 54.60000 51.70000 41.30000	1999-04- 05 1999-04- 04 1999-04- 03 1999-04- 02 1999-04- 01 1999-03- 31	NA NA NA	18.000000 35.000000 43.500000 38.000000	22.4886364 15.9810606 15.2765152	15.983333 23.550000 34.100000	NA NA NA	cold cold	1999 1999
chic chic chic chic chic chic chic	63.0 64.0 58.0 60.0 55.0	57.80000 54.60000 51.70000 41.30000	1999-04- 04 1999-04- 03 1999-04- 02 1999-04- 01 1999-03- 31	NA NA NA	35.000000 43.500000 38.000000	15.9810606 15.2765152	23.550000 34.100000	NA	cold	1999
chic chic chic chic chic	64.0 58.0 60.0 55.0	54.60000 51.70000 41.30000	1999-04- 03 1999-04- 02 1999-04- 01 1999-03- 31	NA NA	43.500000 38.000000	15.2765152	34.100000			
chic chic chic	58.0 60.0 55.0	51.70000 41.30000	1999-04- 02 1999-04- 01 1999-03- 31	NA	38.000000			NA	cold	1999
chic chic	60.0 55.0	41.30000	01 1999-03- 31			15.7148311	26.250000			
chic	55.0		31	26.814286			20.250000	NA	cold	1999
		28.50000			61.000000	31.0729578	21.197917	10.5833282	cold	1999
chic 4	48.0		1999-03- 30	NA	75.000000	25.4435935	33.250000	NA	cold	1999
01110		24.50000	1999-03- 29	NA	33.500000	16.8891908	36.406291	NA	cold	1999
chic	43.0	33.70000	1999-03- 28	NA	49.500000	18.9236111	29.650000	NA	cold	1999
chic	41.0	26.30000	1999-03- 27	NA	36.000000	22.9305556	35.225000	NA	cold	1999
chic	35.0	25.90000	1999-03- 26	11.000000	14.000000	31.4513889	25.100000	5.2309575	cold	1999
chic	32.0	23.30000	1999-03- 25	9.914286	18.285714	32.4323671	24.883333	6.3166718	cold	1999
chic	35.0	21.90000	1999-03- 24	NA	17.500000	34.3242754	21.740580	NA	cold	1999
chic	38.0	21.00000	1999-03- 23	NA	40.500000	15.4202899	38.803623	NA	cold	1999
chic ;	36.0	21.30000	1999-03- 22	NA	22.500000	22.5471014	30.650000	NA	cold	1999
chic	38.0	23.20000	1999-03- 21	NA	11.000000	32.4513889	15.425000	NA	cold	1999
chic	39.0	27.20000	1999-03- 20	NA	28.500000	19.6736111	33.740942	NA	cold	1999
chic	36.0	23.70000	1999-03- 19	10.483333	18.000000	23.6250431	27.475000	5.7476242	cold	1999
chic	38.0	27.10000	1999-03- 18	NA	17.000000	27.8996212	19.431818	NA	cold	1999
chic	50.0	40.70000	1999-03- 17	NA	43.000000	30.2533213	19.120652	NA	cold	1999
chic	43.0	29.80000	1999-03- 16	20.000000	36.500000	12.8663043	37.568808	3.7690425	cold	1999
chic :	31.0	19.20000	1999-03- 15	NA	30.000000	14.7287138	45.225000	NA	cold	1999
chic :	32.0	18.90000	1999-03- 14	NA	7.000000	37.2395833	13.266667	NA	cold	1999
chic 5	28.0	18.10000	1999-03- 13	10.914286	19.142857	29.9375000	22.408333	5.3166718	cold	1999
chic 5	27.0	19.60000	1999-03- 12	NA	11.000000	28.9157197	26.163768	NA	cold	1999

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	28.0	20.40000	1999-03- 11	NA	15.000000	22.3635540	35.116304	NA	cold	1999
chic	29.0	20.30000	1999-03- 10	NA	6.500000	33.6388889	17.794895	NA	cold	1999
chic	29.0	26.40000	1999-03- 09	NA	15.000000	21.6805556	20.041667	NA	cold	1999
chic	24.0	16.20000	1999-03-	NA	35.000000	25.1527778	21.950000	NA	cold	1999
chic	21.0	14.40000	08 1999-03-	11.842857	17.000000	35.0000000	18.733333	-	cold	1999
chic	25.0	19.70000	07 1999-03-	NA	7.000000	32.2083333	12.466667	4.3881004 NA	cold	1999
chic	35.0	28.70000	06 1999-03-	NA	30.500000	11.8611111	25.453623	NA	cold	1999
chic	30.0	18.40000	05 1999-03-	18.800000	20.500000	12.7602657	33.443478	2.5690425	cold	1999
chic	31.0	18.70000	04 1999-03-	NA	10.500000	17.7361111	22.675000	NA	cold	1999
chic	37.0	33.10000	03 1999-03-	NA	30.000000	2.2803030	35.934091	NA	cold	1999
chic	38.0	25.30000	02 1999-03-	10.100000	18.250000	21.2361111	25.358333	-	cold	1999
chic	37.0	32.10000	01 1999-02-	NA	10.500000	12.5000000	15.083333	6.1309575 NA	cold	1999
chic	43.0	39.20000	28 1999-02-	NA	35.000000	3.8194444	27.716667	NA	cold	1999
chic	36.0	27.90000	27 1999-02-	48.100000	40.500000	5.6473430	34.739027	31.8690425	cold	1999
chic	33.0	26.50000	26 1999-02-	NA	30.000000	6.1618357	30.191304	NA	cold	1999
chic	27.0	22.90000	25 1999-02-	39.900000	52.500000	3.3750000	31.750000	23.6690425	cold	1999
chic	29.0	14.90000	24 1999-02-	19.800000	32.857143	11.4082126	23.343841	3.5690425	cold	1999
chic	26.0	9.40000	23 1999-02-	NA	18.500000	23.9722222	22.183333	NA	cold	1999
chic	28.0	15.70000		NA	4.500000	32.1805556	12.475000	NA	cold	1999
chic	25.0	17.00000	21 1999-02-	10.250000	10.500000	20.7916667	20.916667		cold	1999
chic	28.0	20.90000	20 1999-02-	NA	11.000000	22.9293478	20.725000	5.9809575 NA	cold	1999
chic	29.0	21.80000		NA	30.500000	9.3568841	33.460766	NA	cold	1999
chic	27.0	20.40000	18 1999-02-	15.250000	16.428571	11.1073232	23.645909		cold	1999
chic	39.0	32.10000	17 1999-02-	NA	31.000000	6.6944444	22.380435	0.9809575 NA	cold	1999
chic	45.0	30.60000		NA	37.000000	12.7361111	28.841667	NA	cold	1999
chic	34.0	21.90000	15 1999-02- 14	13.300000	27.500000	12.6666667	27.075000	- 2.9309575	cold	1999

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2	2pm25detren	dempcat	year
chic	23.0	10.80000	1999-02- 13	NA	26.000000	14.7638889	27.116667	NA	cold	1999
chic	23.0	13.10000	1999-02- 12	NA	21.000000	22.0972222	16.966667	NA	cold	1999
chic	49.0	47.80000	1999-02- 11	17.380000	24.857143	12.0815217	16.270454	1.1490425	cold	1999
chic	44.0	27.20000	1999-02- 10	NA	38.000000	9.2083333	41.525000	NA	cold	1999
chic	44.0	29.80000	1999-02- 09	NA	17.500000	8.5063131	36.087253	NA	cold	1999
chic	37.0	36.20000	1999-02- 08	27.600000	29.500000	4.4321476	29.679658	11.3690425	cold	1999
chic	33.0	29.80000	1999-02- 07	NA	27.500000	11.9722222	19.033333	NA	cold	1999
chic	40.0	30.40000	1999-02- 06	NA	24.500000	8.4305556	27.500000	NA	cold	1999
chic	31.0	24.20000	1999-02- 05	19.637500	23.857143	3.0555556	32.684849	3.4065425	cold	1999
chic	31.0	21.10000	1999-02- 04	NA	20.500000	14.0328283	24.194129	NA	cold	1999
chic	41.0	27.40000	1999-02- 03	NA	28.500000	12.9583333	26.829710	NA	cold	1999
chic	38.0	32.40000	1999-02- 02	NA	10.500000	4.7548309	28.062500	NA	cold	1999
chic	40.0	38.40000	1999-02- 01	NA	21.500000	4.3611111	22.255263	NA	cold	1999
chic	36.0	27.50000	1999-01- 31	32.500000	22.500000	20.5972222	16.108333	16.2690425	cold	1999
chic	34.0	28.00000	1999-01- 30	31.928571	38.000000	15.2222222	24.666667	15.6976139	cold	1999
chic	33.0	25.60000	1999-01- 29	NA	29.500000	9.8399758	31.675000	NA	cold	1999
chic	33.0	27.40000	1999-01- 28	NA	27.000000	7.6805556	24.819697	NA	cold	1999
chic	42.0	34.00000	1999-01- 27	NA	40.000000	8.1388889	24.193478	NA	cold	1999
chic	29.0	23.40000	1999-01- 26	NA	29.500000	5.6135266	31.925000	NA	cold	1999
chic	28.0	24.60000	1999-01- 25	NA	19.000000	7.4583333	26.241667	NA	cold	1999
chic	33.0	30.00000	1999-01- 24	21.450000	16.142857	14.8750000	21.591667	5.2190425	cold	1999
chic	39.0	35.30000	1999-01- 23	NA	10.000000	4.944444	24.016667	NA	cold	1999
chic	42.0	41.50000	1999-01- 22	NA	18.000000	2.7638889	35.448485	NA	cold	1999
chic	37.0	32.60000	1999-01- 21	NA	46.000000	4.2916667	35.109058	NA	cold	1999
chic	30.0	28.80000	1999-01- 20	28.600000	48.000000	3.9583333	44.491770	12.3690425	cold	1999
chic	27.0	20.00000	1999-01- 19	NA	30.000000	6.4722222	40.895454	NA	cold	1999

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detreno	dempcat	year
chic	29.0	25.80000	1999-01- 18	13.300000	10.857143	19.0138889	16.890217	- 2.9309575	cold	1999
chic	28.0	31.30000	1999-01- 17	NA	33.500000	5.0416667	30.283333		cold	1999
chic	30.0	29.80000	1999-01- 16	NA	31.500000	6.3333333	29.075000	NA	cold	1999
chic	23.0	20.20000	1999-01- 15	NA	33.500000	2.9690382	32.764888	NA	cold	1999
chic	18.0	12.60000	1999-01- 14	NA	22.500000	14.8055556	26.656061	NA	cold	1999
chic	20.0	15.40000	1999-01- 13	NA	6.000000	28.222222	12.397727	NA	cold	1999
chic	20.0	14.10000	1999-01- 12	NA	31.142857	6.6165459	34.914855	NA	cold	1999
chic	5.0	0.00000	1999-01- 11	NA	29.000000	6.7222222	40.966667	NA	cold	1999
chic	6.0	0.40000	1999-01- 10	NA	22.500000	15.6527778	23.375000	NA	cold	1999
chic	4.0	1.10000	1999-01- 09	NA	23.000000	9.1805556	32.183333	NA	cold	1999
chic	16.0	10.90000	1999-01- 08	14.100000	23.000000	12.7361111	36.250758	2.1309575	cold	1999
chic	1.0	6.70000	1999-01- 07	NA	38.000000	3.6527778	45.908333		cold	1999
chic	12.0	9.80000	1999-01- 06	22.333333	22.000000	5.5169082	32.853623	6.1023758	cold	1999
chic	1.0	6.10000	1999-01- 05	NA	28.000000	4.8194444	35.125000	NA	cold	1999
chic	-2.0	6.90000	1999-01- 04	NA	16.500000	8.5972222	28.450000	NA	cold	1999
chic	16.0	8.40000	1999-01- 03	NA	29.500000	19.3888889	19.041667	NA	cold	1999
chic	22.0	21.00000	1999-01- 02	NA	NA	25.7638889	12.641667	NA	cold	1999
chic	14.0	7.70000	1999-01- 01	NA	21.500000	15.6111111	21.491667	NA	cold	1999
chic	13.0	5.10000	1998-12- 31	20.400000	23.900000	6.3888889	28.169763	4.1690425	cold	1998
chic	7.0	1.60000	1998-12- 30	NA	28.000000	6.0138889	32.430105	NA	cold	1998
chic	22.0	18.40000	1998-12- 29	NA	28.000000	9.5694444	21.708333	NA	cold	1998
chic	29.0	23.30000	1998-12-	NA	33.000000	2.3774155	32.618643	NA	cold	1998
chic	36.0	24.00000	28 1998-12-	NA	29.500000	6.8750000	21.758333	NA	cold	1998
chic	26.0	12.30000	27 1998-12-	NA	31.000000	9.2083333	22.608333	NA	cold	1998
chic	25.0	11.10000	26 1998-12-	11.800000	17.583333	11.8888889	19.575000		cold	1998
chic	19.0	4.80000	25 1998-12- 24	11.000000	24.000000	7.3333333	28.100000	4.4309575 - 5.2309575	cold	1998

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmean	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	17.0	5.70000	1998-12- 23	15.800000	25.000000	5.8810386	27.947727	0.4309575	cold	1998
chic	10.0	1.90000	1998-12- 22	14.800000	24.000000	11.8985507	23.791304	- 1.4309575	cold	1998
chic	23.0	18.80000	1998-12- 21	22.600000	22.500000	3.6919192	24.796970		cold	1998
chic	31.0	27.60000	1998-12- 20	19.200000	16.500000	2.8055556	24.725000	2.9690425	cold	1998
chic	35.0	26.30000	1998-12- 19	17.750000	21.666667	6.0416667	18.658333	1.5190425	cold	1998
chic	43.0	30.10000	1998-12- 18	14.300000	40.000000	5.2500000	24.247727	1.9309575	cold	1998
chic	32.0	22.30000	1998-12- 17	14.200000	19.500000	5.4317633	29.566667	2.0309575	cold	1998
chic	37.0	27.20000	1998-12- 16	NA	18.000000	2.5833333	32.437879	NA	cold	1998
chic	44.0	31.20000	1998-12- 15	NA	31.500000	3.2032828	28.123715	NA	cold	1998
chic	36.0	32.10000	1998-12- 14	22.900000	40.500000	4.6183575	40.964888	6.6690425	cold	1998
chic	38.0	31.20000	1998-12- 13	19.500000	24.615385	9.1666667	28.316667	3.2690425	cold	1998
chic	38.0	26.10000	1998-12- 12	18.000000	27.000000	3.7222222	34.158333	1.7690425	cold	1998
chic	39.0	26.10000	1998-12- 11	15.000000	28.500000	2.9402174	32.025000	1.2309575	cold	1998
chic	35.0	29.00000	1998-12- 10	23.000000	22.500000	1.8925121	30.091667		cold	1998
chic	39.0	29.50000	1998-12- 09	20.700000	27.500000	3.0896465	31.040476	4.4690425	cold	1998
chic	38.0	29.00000	1998-12- 08	24.900000	25.000000	2.9444444	33.539493	8.6690425	cold	1998
chic	39.0	31.60000	1998-12- 07	11.800000	9.166667	15.5277778	19.145238	4.4309575	cold	1998
chic	50.0	49.20000	1998-12- 06	15.600000	17.000000	4.8194444	14.108333	0.6309575	cold	1998
chic	59.0	56.60000	1998-12- 05	23.900000	30.000000	4.8055556	21.250000		cold	1998
chic	61.0	59.30000	1998-12- 04	31.600000	42.500000	0.555556	24.391667	15.3690425	cold	1998
chic	61.0	54.90000	1998-12- 03	22.900000	37.000000	6.0740558	24.474012	6.6690425	cold	1998
chic	55.0	45.80000	1998-12- 02	14.800000	29.000000	5.8472222	25.816831	1 4200575	cold	1998
chic	45.0	37.70000	1998-12-	17.850000	22.846154	3.6376812	25.025000	$1.4309575 \\ 1.6190425$	cold	1998
chic	52.0	50.70000	01 1998-11-	25.100000	31.000000	9.5138889	17.766667	8.8690425	cold	1998
chic	63.0	58.40000	30 1998-11-	31.700000	43.500000	10.3472222	15.516667	15.4690425	cold	1998
chic	54.0	48.60000	29 1998-11- 28	28.000000	39.000000	8.3055556	28.941667	11.7690425	cold	1998

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	48.0	35.70000	1998-11- 27	NA	50.500000	2.5000000	35.983333	NA	cold	1998
chic	50.0	32.30000	1998-11- 26	NA	20.000000	6.8750000	21.583333	NA	cold	1998
chic	50.0	35.80000	1998-11- 25	14.700000	33.307692	1.1997930	30.541356	- 1.5309575	cold	1998
chic	46.0	30.10000	1998-11- 24	17.600000	34.500000	3.3750000	37.326515	1.3690425	cold	1998
chic	50.0	35.40000	1998-11- 23	10.900000	34.000000	9.3472222	25.561957	5.3309575	cold	1998
chic	49.0	34.90000	1998-11- 22	11.700000	40.500000	12.5972222	20.558333	4.5309575	cold	1998
chic	34.0	24.40000	1998-11- 21	16.500000	28.000000	5.5000000	27.041667	0.2690425	cold	1998
chic	31.0	24.40000	1998-11- 20	14.800000	17.000000	5.3571429	22.036905	1.4309575	cold	1998
chic	45.0	31.10000	1998-11- 19	12.950000	25.846154	5.3508454	14.993206	3.2809575	cold	1998
chic	48.0	38.70000	1998-11- 18	24.100000	35.500000	3.9772727	25.622727	7.8690425	cold	1998
chic	42.0	34.60000	1998-11- 17	18.900000	27.000000	4.1388889	25.575000	2.6690425	cold	1998
chic	48.0	39.10000	1998-11- 16	23.500000	31.500000	3.5416667	22.250000	7.2690425	cold	1998
chic	43.0	32.20000	1998-11- 15	15.100000	16.000000	14.2500000	16.758333	1.1309575	cold	1998
chic	50.0	40.20000	1998-11- 14	16.600000	27.000000	6.8194444	23.816667	0.3690425	cold	1998
chic	43.0	34.60000	1998-11- 13	20.500000	31.090909	8.5618687	31.847727	4.2690425	cold	1998
chic	40.0	31.10000	1998-11- 12	19.400000	28.000000	1.8055556	33.196970	3.1690425	cold	1998
chic	41.0	28.50000	1998-11- 11	11.300000	25.000000	14.2083333	18.900000	4.9309575	cold	1998
chic	52.0	41.20000	1998-11- 10	9.800000	31.000000	14.7083333	12.616667	6.4309575	cold	1998
chic	43.0	37.30000	1998-11- 09	36.500000	45.000000	6.1385870	28.190670	20.2690425	cold	1998
chic	37.0	31.80000	1998-11- 08	33.700000	34.000000	5.8437500	30.406250	17.4690425	cold	1998
chic	35.0	26.10000	1998-11- 07	21.250000	38.384615	5.7916667	31.635417	5.0190425	cold	1998
chic	38.0	25.80000	1998-11- 06	13.500000	23.000000	6.9876894	30.271822	2.7309575	cold	1998
chic	39.0	27.40000	1998-11- 05	10.800000	20.000000	5.5243590	30.467929	5.4309575	cold	1998
chic	37.0	32.80000	1998-11- 04	10.200000	11.000000	19.6594203	25.927042	6.0309575	cold	1998
chic	41.0	33.40000	1998-11- 03	3.700000	7.500000	28.7750000	10.975000	- 12.5309575	cold	1998
chic	49.0	39.80000	1998-11- 02	5.500000	8.000000	22.3000000	10.776515	- 10.7309575	cold	1998

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmean	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	54.0	50.00000	1998-11- 01	5.550000	8.833333	19.6416667	8.800000	10.6809575	cold	1998
chic	57.0	52.70000	1998-10- 31	11.500000	15.500000	4.7250000	13.133333	4.7309575	cold	1998
chic	61.0	58.40000	1998-10- 30	41.000000	45.000000	1.4791667	23.025000	24.7690425	cold	1998
chic	52.0	51.90000	1998-10- 29	29.000000	33.000000	5.1025033	25.136905	12.7690425	cold	1998
chic	54.0	52.30000	1998-10- 28	11.700000	16.500000	12.2939394	20.037879	4.5309575	cold	1998
chic	63.0	58.60000	1998-10- 27	36.100000	64.500000	5.2090580	39.391667	19.8690425	cold	1998
chic	62.0	49.70000	1998-10- 26	28.600000	55.307692	10.7835465	46.733333	12.3690425	cold	1998
chic	55.0	44.80000	1998-10- 25	23.800000	35.500000	7.6708333	34.875000	7.5690425	cold	1998
chic	54.0	38.90000	1998-10- 24	18.200000	45.500000	11.2208333	31.500000	1.9690425	cold	1998
chic	52.0	36.30000	1998-10- 23	NA	44.000000	7.6685606	32.061924	NA	cold	1998
chic	45.0	31.10000	1998-10- 22	NA	23.500000	7.3923419	29.216667	NA	cold	1998
chic	48.0	34.50000	1998-10- 21	NA	15.500000	10.4311430	22.914394	NA	cold	1998
chic	50.0	33.90000	1998-10- 20	6.450000	19.916667	9.8799572	27.524242	9.7809575	cold	1998
chic	52.0	39.20000	1998-10- 19	9.000000	25.000000	7.9376812	23.441667	7.2309575	cold	1998
chic	57.0	48.10000	1998-10- 18	6.300000	14.000000	16.2875000	9.575000	9.9309575	cold	1998
chic	67.0	64.40000	1998-10- 17	32.200000	46.500000	24.3708333	21.250000	15.9690425	cold	1998
chic	68.0	57.20000	1998-10- 16	24.900000	45.500000	25.1534420	27.550000	8.6690425	cold	1998
chic	58.0	48.40000	1998-10- 15	14.800000	26.500000	7.3969203	27.109632	- 1.4309575	cold	1998
chic	48.0	40.40000	1998-10- 14	6.450000	25.153846	6.1551383	21.386001	9.7809575	cold	1998
chic	49.0	36.80000	1998-10- 13	6.900000	24.000000	7.0092227	21.716667	9.3309575	cold	1998
chic	60.0	46.90000	1998-10- 12	18.100000	39.500000	10.9625000	33.741667		cold	1998
chic	56.0	49.10000	1998-10- 11	30.900000	34.500000	22.1916667	28.341667	14.6690425	cold	1998
chic	53.0	46.40000	1998-10- 10	26.400000	45.500000	9.9666667	31.400000	10.1690425	cold	1998
chic	53.0	45.60000	1998-10- 09	16.300000	29.000000	6.7065217	29.275000	0.0690425	cold	1998
chic	54.0	44.80000	1998-10- 08	5.150000	11.307692	12.6961957	18.250000	11.0809575	cold	1998
chic	56.0	49.20000	1998-10- 07	7.300000	17.000000	4.7053195	17.891667	8.9309575	cold	1998

chic chic chic chic chic chic	65.0 65.0 60.0 55.0 49.0 53.0 64.0	61.20000 61.40000 50.30000 49.30000 41.90000 35.70000	1998-10- 06 1998-10- 05 1998-10- 04 1998-10- 03 1998-10- 02	9.300000 32.500000 8.400000 7.100000 7.550000	37.000000 15.000000	10.6549407 12.3833992 21.9696970 21.7575758	19.400000 9.675000	6.9309575 16.2690425 - 7.8309575	cold cold cold	1998 1998 1998
chic chic chic	60.0 55.0 49.0 53.0	50.30000 49.30000 41.90000 35.70000	1998-10- 05 1998-10- 04 1998-10- 03 1998-10- 02	8.400000 7.100000	15.000000	21.9696970	9.675000	16.2690425		
chic chic	55.0 49.0 53.0	49.30000 41.90000 35.70000	1998-10- 04 1998-10- 03 1998-10- 02	7.100000				- 7.8309575	cold	1998
chic	49.0 53.0	41.90000 35.70000	1998-10- 03 1998-10- 02		12.500000	21.7575758	11 050000	7.8309373		
	53.0	35.70000	1998-10- 02	7.550000			11.250000	-	cold	1998
ahia			-		23.384615	12.8284226	24.241667	9.1309575	cold	1998
CITIC	64.0		1998-10-	5.100000	14.500000	11.8074769	20.658696	8.6809575	cold	1998
chic		57.90000	01 1998-09-	17.700000	35.500000	15.7202809	28.167463	11.1309575 1.4690425	cold	1998
chic	63.0	57.00000	30 1998-09-	21.300000	44.500000	7.9321176	40.131341	5.0690425	cold	1998
chic	63.0	52.50000	29 1998-09-	9.400000	28.500000	19.3859444	22.355072	-	cold	1998
chic	73.0	63.80000	28 1998-09-	19.200000	34.500000	32.7689394	13.694444	$6.8309575 \\ 2.9690425$	cold	1998
chic	79.0	65.80000	27 1998-09-	29.650000	53.230769	39.5946970	18.534722	13.4190425	cold	1998
chic	66.0	64.10000	26 1998-09-	31.600000	57.500000	12.3043478	34.633454	15.3690425	cold	1998
chic	59.0	53.60000	25 1998-09-	21.300000	37.000000	8.4253953	33.302371	5.0690425	cold	1998
chic	56.0	41.50000	24 1998-09-	9.900000	27.000000	11.9227602	28.824879	_	cold	1998
chic	58.0	47.70000	23 1998-09-	4.600000	10.000000	19.6769481	13.312500	6.3309575	cold	1998
chic	63.0	51.80000	22 1998-09-	5.500000	13.500000	14.6393281	14.585749	11.6309575	cold	1998
chic	76.0	66.30000	21 1998-09-	30.300000	47.583333	22.0227273	27.798611	10.7309575 14.0690425	cold	1998
chic	72.0	60.90000	20 1998-09-					17.4690425		1998
chic	68.0	57.80000	19 1998-09-			28.2346838			cold	1998
chic	68.0	58.40000	18 1998-09-			28.6442688		-	cold	1998
chic	72.0	64.90000	17 1998-09-			25.5892472		0.9309575	cold	1998
			16					3.3309575		
chic	70.0	67.00000	1998-09- 15			16.5097167		5.0309575	cold	1998
chic	72.0	67.50000	1998-09- 14					10.2190425		1998
chic	74.0	62.70000	1998-09- 13					11.8690425		1998
chic	74.0	56.70000	1998-09- 12			37.3939394			cold	1998
chic	71.0	53.10000	1998-09- 11	21.700000	48.000000	30.5937687	44.892512	5.4690425	cold	1998

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	63.0	52.80000	1998-09- 10	14.800000	39.500000	17.3251288	35.664773	- 1.4309575	cold	1998
chic	63.0	50.30000	1998-09- 09	7.400000	17.500000	16.1712780	20.707428	- 8.8309575	cold	1998
chic	63.0	46.90000	1998-09- 08	5.150000	14.692308	18.0282369	16.906181	11.0809575	cold	1998
chic	66.0	57.10000	1998-09- 07	10.300000	21.500000	30.3750000	14.486111	5.9309575	cold	1998
chic	81.0	70.40000	1998-09- 06	31.500000	50.500000	50.6625000	20.312500	15.2690425	hot	1998
chic	70.0	61.40000	1998-09- 05	27.300000	45.000000	33.0666667	37.041667	11.0690425	cold	1998
chic	69.0	54.20000	1998-09- 04	14.700000	25.500000	36.7898551	20.093254	1.5309575	cold	1998
chic	68.0	57.90000	1998-09- 03	19.300000	42.000000	25.6174242	31.740985		cold	1998
chic	65.0	50.10000	1998-09- 02	24.150000	44.692308	22.6763834	28.077020	7.9190425	cold	1998
chic	69.0	58.50000	1998-09- 01	14.300000	45.000000	19.4769733	31.972132	- 1.9309575	cold	1998
chic	69.0	54.60000	1998-08-	8.600000	28.000000	20.1583423	24.586490	-	cold	1998
chic	70.0	55.70000	31 1998-08-	7.200000	20.000000	23.4886364	18.805556	7.6309575	cold	1998
chic	76.0	63.10000	30 1998-08-	11.300000	29.000000	22.0378788	23.750000	9.0309575	cold	1998
chic	69.0	66.40000	29 1998-08-	21.500000	35.500000	14.7121212	33.146825	4.9309575 5.2690425	cold	1998
chic	72.0	64.50000	28 1998-08-	18.950000	32.416667	28.2634298	27.307093	2.7190425	cold	1998
chic	73.0	60.90000	27 1998-08-	14.800000	34.000000	26.7824440	26.089839	-	cold	1998
chic	76.0	63.90000	26 1998-08-	13.200000	26.500000	26.9160426	23.625000		cold	1998
chic	76.0	71.40000	25 1998-08-	23.400000	54.000000	20.8777448	27.116244	3.0309575 $7.1690425$	cold	1998
chic	81.0	71.20000	24 1998-08-	39.600000	59.000000	45.8636364	14.326389	23.3690425	hot	1998
chic	78.0	69.50000	23 1998-08-	21.300000	40.000000	34.1074561	18.104167	5.0690425	cold	1998
chic	80.0	70.80000	22 1998-08-	29.300000	48.272727	33.1681749	24.826389	13.0690425	cold	1998
chic	73.0	65.40000	21 1998-08-	24.400000	51.500000	27.1338933	32.763450	8.1690425	cold	1998
chic	69.0	55.10000	20 1998-08-	16.000000	34.000000	22.7753388	20.965278	-	cold	1998
chic	68.0	63.90000	19 1998-08-	8.800000	16.500000	23.2677866	16.220548	0.2309575	cold	1998
chic	75.0	69.00000	18 1998-08-	29.000000	53.500000	25.5788396	31.534722	7.4309575 12.7690425	cold	1998
chic	72.0	62.90000	17 1998-08-	16.400000	24.500000	29.0378788	17.743056	0.1690425	cold	1998
			16							

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	71.0	64.30000	1998-08- 15	13.950000	28.461538	22.9924242	20.743056	- 2.2809575	cold	1998
chic	71.0	64.40000	1998-08-	28.400000	60.000000	28.3109504	42.229167	12.1690425	cold	1998
chic	71.0	60.20000	14 1998-08- 13	22.900000	41.500000	32.9503234	27.897727	6.6690425	cold	1998
chic	70.0	60.90000	1998-08- 12	20.700000	29.000000	30.5862828	15.432230	4.4690425	cold	1998
chic	71.0	63.40000	1998-08- 11	NA	35.000000	25.1931818	15.688982	NA	cold	1998
chic	76.0	68.50000	1998-08- 10	NA	33.000000	29.8970772	22.177632	NA	cold	1998
chic	77.0	70.10000	1998-08- 09	32.500000	35.615385	22.7666667	23.569444	16.2690425	cold	1998
chic	77.0	70.70000	1998-08- 08	NA	30.000000	20.8125000	19.076389	NA	cold	1998
chic	75.0	70.80000	1998-08- 07	NA	30.000000	12.6844862	25.680556	NA	cold	1998
chic	78.0	71.30000	1998-08-	NA	36.000000	22.8838184	20.115174	NA	cold	1998
chic	76.0	70.70000	06 1998-08-	NA	27.000000	24.0726285	20.229167	NA	cold	1998
chic	70.0	68.60000	05 1998-08-	16.000000	25.500000	21.2755570	26.948864	-	cold	1998
chic	78.0	64.80000	04 1998-08-	36.400000	61.538461	34.8022069	24.715278	$0.2309575 \\ 20.1690425$	cold	1998
chic	72.0	55.90000	03 1998-08-	11.600000	29.000000	40.5530303	23.930556	-	cold	1998
chic	72.0	57.30000	02 1998-08-	11.800000	30.000000	32.7840909	20.319444	4.6309575	cold	1998
chic	71.0	54.70000	01 1998-07-	13.900000	12.000000	26.3491436	10.124616	4.4309575	cold	1998
chic	72.0	57.50000	31 1998-07-	16.800000	29.000000	21.8555665	23.266606	$\begin{array}{c} 2.3309575 \\ 0.5690425 \end{array}$	cold	1998
chic	77.0	55.20000	30 1998-07-	16.000000	20.000000	34.1142951	15.242236	-	cold	1998
chic	79.0	64.90000	29 1998-07-	11.350000	44.153846	26.9542161	20.075758	0.2309575	cold	1998
chic	74.0	65.10000	28 1998-07-	25.200000	44.000000	30.0037879	22.116793	4.8809575 8.9690425	cold	1998
chic	70.0	56.80000	27 1998-07-	11.600000	23.000000	28.5984848	21.666667	-	cold	1998
chic	70.0	55.40000	26 1998-07-	11.300000	28.500000	25.3863636	25.284722	4.6309575	cold	1998
chic	72.0	51.10000	25 1998-07-	8.500000	25.500000	22.7068511	23.419686	4.9309575	cold	1998
chic	73.0	56.60000	24 1998-07-	13.700000	35.000000	22.1042490	21.655221	7.7309575	cold	1998
chic	76.0	67.60000	23 1998-07-			20.5943227		2.5309575	cold	1998
chic	85.0	72.90000	22 1998-07-	NA		36.8904919		6.4309575	hot	1998
			21							

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	79.0	68.10000	1998-07- 20	NA	36.500000	29.2348485	26.868056	NA	cold	1998
chic	81.0	71.80000	1998-07- 19	NA	32.000000	36.1704545	17.125000	NA	hot	1998
chic	77.0	65.50000	1998-07- 18	NA	52.500000	32.8750000	31.395833	NA	cold	1998
chic	75.0	64.70000	1998-07- 17	NA	39.500000	29.1617965	17.798611	NA	cold	1998
chic	80.0	57.90000	1998-07- 16	NA	32.583333	24.8050725	23.044219	NA	cold	1998
chic	79.0	66.10000	1998-07- 15	32.600000	57.500000	40.2307013	24.525966	16.3690425	cold	1998
chic	78.0	67.10000	1998-07- 14	41.400000	75.000000	40.0809017	32.590537	25.1690425	cold	1998
chic	73.0	60.30000	1998-07- 13	30.300000	64.500000	37.0188645	37.930556	14.0690425	cold	1998
chic	71.0	55.60000	1998-07- 12	19.800000	26.000000	39.6893939	25.736111	3.5690425	cold	1998
chic	71.0	55.90000	1998-07- 11	13.500000	23.000000	39.7916667	18.666667	2.7309575	cold	1998
chic	73.0	62.40000	1998-07- 10	20.600000	30.916667	31.4917355	19.546023		cold	1998
chic	75.0	64.20000	1998-07- 09	25.400000	33.000000	33.6043838	26.451449	9.1690425	cold	1998
chic	74.0	64.90000	1998-07- 08	14.700000	19.500000	36.1142951	16.033213	1.5309575	cold	1998
chic	72.0	66.70000	1998-07- 07	18.800000	31.500000	35.7628458	16.185516		cold	1998
chic	78.0	69.00000	1998-07- 06	24.400000	36.500000	31.5879447	24.55556	8.1690425	cold	1998
chic	70.0	56.30000	1998-07- 05	8.200000	19.000000	26.9318182	11.715278	- 8.0309575	cold	1998
chic	69.0	62.40000	1998-07- 04	15.250000	23.923077	26.5606061	12.430556	0.9809575	cold	1998
chic	79.0	65.40000	1998-07- 03	21.600000	43.500000	35.1439394	24.930556		cold	1998
chic	73.0	57.80000	1998-07- 02	25.700000	53.500000	28.4280303	31.566468	9.4690425	cold	1998
chic	70.0	56.70000	1998-07- 01	22.100000	27.500000	25.4446640	20.173611	5.8690425	cold	1998
chic	74.0	60.50000	1998-06- 30	9.100000	19.500000	28.3203228	18.763285	7.1309575	cold	1998
chic	77.0	68.20000	1998-06- 29	14.600000	31.000000	22.8156879	30.934481	1.6309575	cold	1998
chic	78.0	69.00000	1998-06- 28	11.450000	22.181818	40.8231749	18.326389	4.7809575	cold	1998
chic	82.0	70.30000	1998-06- 27	21.400000	43.000000	49.6555258	21.152778		hot	1998
chic	79.0	68.40000	1998-06- 26	15.600000	34.000000	39.0717676	24.546498	0.6309575	cold	1998
chic	83.0	70.80000	1998-06- 25	21.300000	58.500000	45.4599802	19.775664		hot	1998

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	83.0	70.20000	1998-06- 24	25.400000	59.000000	37.8826506	28.765206	9.1690425	hot	1998
chic	74.0	60.60000	1998-06- 23	15.700000	38.500000	41.7213439	29.348485	0.5309575	cold	1998
chic	74.0	61.90000	1998-06- 22	12.550000	31.083333	28.7689394	24.361111	3.6809575	cold	1998
chic	79.0	66.00000	1998-06- 21	13.700000	21.500000	34.4696970	22.118056		cold	1998
chic	78.0	68.00000	1998-06-	16.700000	33.000000	33.8825758	26.173611		cold	1998
chic	73.0	61.20000	20 1998-06-	9.700000	28.000000	32.8838933	23.270833		cold	1998
chic	77.0	69.30000	19 1998-06-	22.000000	52.500000	37.2627304	25.679293	6.5309575 5.7690425	cold	1998
chic	73.0	63.70000	18 1998-06-	20.300000	37.000000	22.4922596	31.136473	4.0690425	cold	1998
chic	70.0	61.20000	17 1998-06-	14.100000	39.500000	16.0332675	31.314484		cold	1998
chic	70.0	58.70000	16 1998-06-	19.400000	23.000000	29.6342975	21.555556	$2.1309575 \\ 3.1690425$	cold	1998
chic	67.0	57.50000	15 1998-06-	20.000000	26.500000	29.0909091	27.340278	3.7690425	cold	1998
chic	69.0	58.20000	14 1998-06-	15.500000	18.500000	33.5643939	23.368056		cold	1998
chic	74.0	61.50000	13 1998-06-	11.700000	27.000000	33.7623967	19.742452	0.7309575	cold	1998
chic	68.0	65.80000	12 1998-06-	23.100000	31.500000	18.7687747	27.445350	4.5309575 6.8690425	cold	1998
chic	68.0	58.00000	11 1998-06-	27.150000	37.000000	23.2416008	25.755901	10.9190425	cold	1998
chic	61.0	59.00000	10 1998-06-	33.800000	26.000000	17.8908103	25.496679	17.5690425	cold	1998
chic	56.0	46.00000	09 1998-06-	19.000000	33.500000	18.4759552	31.000000	2.7690425	cold	1998
chic	58.0	41.10000	08 1998-06-	8.400000	15.000000	23.8939394	20.020833	_	cold	1998
chic	54.0	38.90000	07 1998-06-			9.1250000		7.8309575	cold	1998
chic	50.0	41.60000	06 1998-06-			21.3558959		4.4309575	cold	1998
chic	56.0	37.70000	05 1998-06-	6.850000		23.3387681		6.8309575	cold	1998
	55.0		04 1998-06-			14.8677536		9.3809575	cold	1998
chic		45.70000	03					9.1309575		
chic	63.0	50.70000	1998-06- 02			26.7329321		8.4309575	cold	1998
chic	63.0	45.70000	1998-06- 01			28.1915349		6.2309575	cold	1998
chic	70.0	60.20000	1998-05- 31			40.2651515		5.8309575	cold	1998
chic	73.0	62.70000	1998-05- 30	18.900000	49.500000	33.4734848	27.680556	2.6690425	cold	1998

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	74.0	62.30000	1998-05- 29	12.300000	29.846154	29.0000000	32.944444	3.9309575	cold	1998
chic	75.0	64.30000	1998-05- 28	25.600000	72.000000	34.3322276	30.119565	9.3690425	cold	1998
chic	67.0	52.80000	1998-05- 27	29.500000	59.500000	37.2611989	39.269571	13.2690425	cold	1998
chic	63.0	45.70000	1998-05- 26	27.700000	40.500000	26.9117260	38.246981	11.4690425	cold	1998
chic	62.0	48.30000	1998-05- 25	11.600000	17.500000	37.9469697	17.312500	4.6309575	cold	1998
chic	61.0	54.30000	1998-05- 24	19.400000	27.000000	33.2537879	16.263889		cold	1998
chic	61.0	45.50000	1998-05-	10.100000	31.923077	34.0000000	14.541667	- 4200575	cold	1998
chic	57.0	47.90000	23 1998-05-	9.000000	28.000000	22.7348485	17.388889	6.1309575	cold	1998
chic	64.0	46.90000	22 1998-05-	5.700000	26.000000	26.7475789	21.832757	7.2309575	cold	1998
chic	65.0	52.80000	21 1998-05-	12.200000	37.500000	21.9545290	34.276120	10.5309575	cold	1998
chic	79.0	61.00000	20 1998-05-	25.900000	78.000000	37.3800366	44.208333	$4.0309575 \\ 9.6690425$	cold	1998
chic	76.0	49.40000	19 1998-05-	13.200000	79.000000	38.1110507	31.274638	-	cold	1998
chic	68.0	49.20000	18 1998-05-	10.600000	34.000000	28.7541667	31.841667	3.0309575	cold	1998
chic	72.0	50.90000	17 1998-05-	7.300000	37.500000	36.2541667	15.583333	5.6309575	cold	1998
chic	75.0	65.80000	16 1998-05-	56.500000	91.000000	38.5730072	29.032609	8.9309575 40.2690425	cold	1998
chic	68.0	55.40000	15 1998-05-	26.200000	48.000000	35.2766469	38.431818	9.9690425	cold	1998
chic	68.0	52.50000	14 1998-05-	15.600000	35.000000	31.6682971	28.940010	-	cold	1998
chic	63.0	55.10000	13 1998-05-	23.500000	46.000000	35.2473500	22.975000	$0.6309575 \\ 7.2690425$	cold	1998
chic	61.0	48.10000	12 1998-05-	11.750000	28.666667	23.0743802	22.232576	_	cold	1998
chic	58.0	40.10000	11 1998-05-	6.600000	11.000000	29.1174242	14.812500	4.4809575	cold	1998
chic	58.0	43.50000	10 1998-05-	7.900000	13.500000	26.6780303	14.593750	9.6309575	cold	1998
chic	62.0	51.30000	09 1998-05-	16.900000	21.000000	36.5405609	17.867210	8.3309575 0.6690425	cold	1998
chic	57.0	56.00000	08 1998-05-					15.8690425		1998
chic	68.0	56.80000	07 1998-05-			25.0227273			cold	1998
chic	62.0	54.10000	06 1998-05-					11.7690425		1998
			05							
chic	60.0	47.00000	1998-05- 04	18.900000	∠8.UUUUUU	21.8173584	21.152118	z.009U425	cold	1998

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	53.0	50.30000	1998-05- 03	19.300000	18.500000	22.8825758	15.784722	3.0690425	cold	1998
chic	57.0	52.00000	1998-05- 02	33.300000	35.000000	20.6628788	26.798611	17.0690425	cold	1998
chic	59.0	53.70000	1998-05-	35.400000	28.500000	14.2951252	31.429046	19.1690425	cold	1998
chic	55.0	51.30000	01 1998-04-	39.400000	34.000000	10.7862319	25.313095	23.1690425	cold	1998
chic	54.0	48.40000	30 1998-04-	29.450000	51.000000	14.4608636	23.542029	13.2190425	cold	1998
chic	46.0	33.80000	29 1998-04-	18.200000	24.500000	22.6856061	21.833333	1.9690425	cold	1998
chic	45.0	27.50000	28 1998-04-	8.500000	10.500000	31.3614954	12.025000		cold	1998
chic	48.0	43.30000	27 1998-04-	18.400000	24.000000	28.3446970	12.675000	$7.7309575 \\ 2.1690425$	cold	1998
chic	56.0	46.80000	26 1998-04-	23.200000	35.000000	30.7045455	22.025000	6.9690425	cold	1998
chic	62.0	36.50000	25 1998-04-	16.800000	44.000000	26.7753623	30.439493	0.5690425	cold	1998
chic	56.0	35.60000	24 1998-04-	18.500000	44.692308	18.3115448	47.815580	2.2690425	cold	1998
chic	53.0	37.10000	23 1998-04-	NA	21.500000	31.3150826	25.524832	NA	cold	1998
chic	50.0	46.20000	22 1998-04-	NA	23.500000	30.6028986	20.207702	NA	cold	1998
chic	52.0	40.80000	21 1998-04-	NA	41.000000	24.3111001	34.604167	NA	cold	1998
chic	52.0	33.00000	20 1998-04-	20.000000	26.000000	29.3030303	29.840278	3.7690425	cold	1998
chic	50.0	32.10000	19 1998-04-	16.100000	36.000000	22.5984848	29.694444	-	cold	1998
chic	45.0	30.20000	18 1998-04-	11.550000	20.153846	18.4957180	30.188104	0.1309575	cold	1998
			17					4.6809575		
chic	42.0	40.00000	1998-04- 16	8.500000	13.000000	11.7908432	20.012242	7.7309575	cold	1998
chic	53.0	46.60000	1998-04- 15	23.600000	36.000000	15.5706971	26.233366	7.3690425	cold	1998
chic	58.0	48.10000	1998-04- 14	NA	24.500000	23.5189394	23.731667	NA	cold	1998
chic	62.0	46.70000	1998-04-	NA	40.000000	33.8250000	20.466667	NA	cold	1998
chic	64.0	38.50000	13 1998-04-	NA	34.000000	44.8833333	13.575000	NA	cold	1998
chic	50.0	34.90000	12 1998-04-	16.950000	31.000000	22.4333333	32.575000	0.7190425	cold	1998
chic	46.0	27.00000	11 1998-04-	11.900000	15.500000	25.7958333	24.991667	-	cold	1998
chic	43.0	32.80000	10 1998-04-	14.300000	13.500000	26.0441206	16.783498	4.3309575	cold	1998
chic	48.0	46.30000	09 1998-04-			9.6612319		1.9309575 6.4690425	cold	1998
	-3.0	-2.20000	08		5.550000		3.233000		<del> </del>	

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	52.0	39.40000	1998-04- 07	27.600000	43.000000	20.3433161	25.181884	11.3690425	cold	1998
chic	48.0	32.60000	1998-04- 06	14.900000	33.500000	20.9166667	29.233333	1.3309575	cold	1998
chic	41.0	23.70000	1998-04- 05	6.400000	16.000000	21.3560606	23.016667	9.8309575	cold	1998
chic	41.0	28.10000	1998-04- 04	2.100000	6.500000	29.4393939	13.200000	14.1309575	cold	1998
chic	41.0	35.00000	1998-04- 03	7.000000	10.500000	20.6045784	16.884420	9.2309575	cold	1998
chic	44.0	37.10000	1998-04-	9.100000	14.500000	14.8737573	21.367424	-	cold	1998
chic	44.0	36.60000	02 1998-04-	NA	12.500000	20.9637681	19.379348	7.1309575 NA	cold	1998
chic	59.0	51.70000	01 1998-03-	NA	21.500000	24.6757246	20.316102	NA	cold	1998
chic	73.0	59.40000	31 1998-03-	15.600000	30.083333	27.2500000	14.665756	-	cold	1998
chic	62.0	54.30000	30 1998-03-	NA	33.000000	22.8645833	16.739583	0.6309575 NA	cold	1998
chic	57.0	50.90000	29 1998-03-	NA	15.500000	31.2291667	15.270833	NA	cold	1998
chic	67.0	52.30000	28 1998-03-	NA	68.500000	34.3444444	18.140470	NA	cold	1998
chic	68.0	53.90000	27 1998-03-	NA	68.500000	35.4648551	17.051515	NA	cold	1998
chic	51.0	38.60000	26 1998-03-	NA	30.500000	21.8329710	28.981917	NA	cold	1998
chic	40.0	23.30000	25 1998-03-	15.950000	31.461538	17.6001318	36.113768	-	cold	1998
chic	38.0	21.60000	24 1998-03-	NA	33.500000	18.1833333	38.500000	0.2809575 NA	cold	1998
chic	36.0	22.60000	23 1998-03-	NA	12.500000	26.8500000	27.058333	NA	cold	1998
chic	37.0	24.70000	22 1998-03-	NA	6.500000	37.9000000	14.741667	NA	cold	1998
chic	35.0	27.10000	21 1998-03-	NA	8.000000	39.0500000	13.227536	NA	cold	1998
chic	37.0	34.20000	20 1998-03-	NA	9.000000	21.2500000	22.075000	NA	cold	1998
chic	45.0	41.90000	19 1998-03-	26.400000	35.166667	4.8907005	31.310548	10.1690425	cold	1998
chic	36.0	31.70000	18 1998-03-	NA	37.500000	16.3055556	26.328869	NA	cold	1998
chic	30.0	22.60000	17 1998-03-	NA	26.000000	30.2035024	20.558333	NA	cold	1998
chic	27.0	20.90000	16 1998-03-	NA	15.500000	29.1805556	24.019203	NA	cold	1998
chic	28.0	14.00000	15 1998-03-	NA	18.000000	28.2638889	22.383333	NA	cold	1998
chic	29.0	20.70000	14 1998-03- 13	NA	38.000000	17.2821558	29.351449	NA	cold	1998

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	18.0	6.70000	1998-03- 12	18.900000	36.909091	15.0244565	32.538913	2.6690425	cold	1998
chic	18.0	2.30000	1998-03- 11	NA	20.000000	16.1388889	29.894928	NA	cold	1998
chic	18.0	4.90000	1998-03- 10	NA	17.000000	20.4305556	24.927083	NA	cold	1998
chic	26.0	20.70000	1998-03- 09	NA	23.000000	30.0292398	12.347222	NA	cold	1998
chic	38.0	34.20000	1998-03- 08	NA	15.000000	21.7638889	12.983333	NA	cold	1998
chic	36.0	28.10000	1998-03- 07	NA	24.500000	22.5694444	20.491667	NA	cold	1998
chic	34.0	27.90000	1998-03- 06	19.600000	31.923077	9.0946970	29.224671	3.3690425	cold	1998
chic	36.0	24.10000	1998-03- 05	NA	10.500000	19.6105072	21.800725	NA	cold	1998
chic	34.0	24.10000	1998-03- 04	NA	12.000000	21.4088164	23.242544	NA	cold	1998
chic	34.0	30.40000	1998-03- 03	NA	9.000000	17.6111111	24.781818	NA	cold	1998
chic	33.0	31.50000	1998-03- 02	NA	20.000000	4.1666667	29.023551	NA	cold	1998
chic	35.0	28.50000	1998-03- 01	NA	11.000000	11.0000000	20.116667	NA	cold	1998
chic	41.0	33.20000	1998-02- 28	16.500000	21.230769	12.6805556	28.108333	0.2690425	cold	1998
chic	42.0	37.70000	1998-02- 27	NA	24.500000	14.8230676	26.025000	NA	cold	1998
chic	54.0	36.70000	1998-02- 26	NA	31.000000	14.4027778	27.867260	NA	cold	1998
chic	42.0	34.60000	1998-02- 25	NA	34.500000	17.8278986	25.332609	NA	cold	1998
chic	45.0	36.70000	1998-02- 24	NA	36.500000	7.8955314	30.449242	NA	cold	1998
chic	41.0	29.70000	1998-02- 23	NA	29.000000	18.9583333	32.002569	NA	cold	1998
chic	44.0	35.00000	1998-02- 22	27.750000	39.076923	11.8333333	23.300000	11.5190425	cold	1998
chic	38.0	30.10000	1998-02- 21	NA	25.500000	12.5833333	28.900000	NA	cold	1998
chic	39.0	33.50000	1998-02- 20	NA	19.500000	8.3768939	27.870238	NA	cold	1998
chic	40.0	35.00000	1998-02-	NA	20.500000	5.5214646	27.844400	NA	cold	1998
chic	39.0	35.30000	19 1998-02-	NA	8.000000	14.4368687	22.920870	NA	cold	1998
chic	41.0	38.80000	18 1998-02-	NA	16.000000	11.2916667	19.681818	NA	cold	1998
chic	42.0	35.30000	17 1998-02-	22.550000	33.692308	11.4305556	22.216667	6.3190425	cold	1998
chic	43.0	32.00000	16 1998-02- 15	NA	26.000000	7.5833333	25.833333	NA	cold	1998

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	38.0	31.00000	1998-02- 14	NA	29.000000	3.9583333	26.633333	NA	cold	1998
chic	36.0	31.40000	1998-02- 13	NA	30.000000	5.7805556	26.091667	NA	cold	1998
chic	35.0	28.30000	1998-02- 12	NA	16.000000	12.1805556	24.283333	NA	cold	1998
chic	41.0	38.60000	1998-02- 11	NA	34.000000	4.2916667	29.301087	NA	cold	1998
chic	39.0	33.90000	1998-02- 10	29.500000	62.846154	4.9776570	36.241634	13.2690425	cold	1998
chic	35.0	28.80000	1998-02- 09	NA	69.000000	4.5416667	45.394697	NA	cold	1998
chic	33.0	28.30000	1998-02- 08	NA	24.500000	23.4722222	20.883333	NA	cold	1998
chic	34.0	28.70000	1998-02- 07	NA	25.000000	18.1111111	20.691667	NA	cold	1998
chic	36.0	29.40000	1998-02- 06	NA	14.500000	22.7397343	23.500000	NA	cold	1998
chic	32.0	27.40000	1998-02- 05	NA	8.000000	27.6425121	14.639625	NA	cold	1998
chic	32.0	25.60000	1998-02- 04	13.900000	12.769231	24.7385266	14.084420	2.3309575	cold	1998
chic	34.0	28.90000	1998-02- 03	NA	21.500000	12.6527778	25.237582	NA	cold	1998
chic	33.0	26.60000	1998-02- 02	NA	19.500000	8.7638889	23.975000	NA	cold	1998
chic	39.0	31.00000	1998-02-	NA	23.500000	6.2361111	23.866667	NA	cold	1998
chic	35.0	29.10000	01 1998-01- 31	NA	31.500000	4.5000000	27.427273	NA	cold	1998
chic	31.0	25.60000	1998-01- 30	NA	21.000000	4.6527778	31.122475	NA	cold	1998
chic	37.0	30.60000	1998-01- 29	21.400000	30.166667	3.0972222	30.316667	5.1690425	cold	1998
chic	36.0	32.50000	1998-01- 28	NA	34.000000	1.2234300	33.193116	NA	cold	1998
chic	33.0	30.40000	1998-01- 27	NA	34.000000	1.4734300	36.417391	NA	cold	1998
chic	31.0	28.60000	1998-01- 26	NA	38.000000	1.6666667	31.525000	NA	cold	1998
chic	28.0	22.90000	1998-01- 25	NA	24.000000	8.555556	23.816667	NA	cold	1998
chic	28.0	24.20000	1998-01- 24	NA	44.500000	2.2222222	35.166667	NA	cold	1998
chic	28.0	25.80000	1998-01-	33.950000	38.692308	1.7500000	29.376299	17.7190425	cold	1998
chic	32.0	29.90000	23 1998-01- 22	NA	39.000000	1.7946860	26.485507	NA	cold	1998
chic	31.0	26.80000	1998-01-	NA	42.000000	5.1250000	24.725000	NA	cold	1998
chic	26.0	21.30000	21 1998-01- 20	NA	51.500000	3.5307971	35.375000	NA	cold	1998

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean	2pm25detren	dempcat	year
chic	24.0	19.10000	1998-01- 19	NA	44.500000	1.6805556	35.150000	NA	cold	1998
chic	16.0	13.50000	1998-01- 18	NA	41.500000	3.6388889	31.216667	NA	cold	1998
chic	23.0	21.90000	1998-01- 17	38.100000	32.461539	3.1805556	25.300000	21.8690425	cold	1998
chic	28.0	23.60000	1998-01- 16	NA	19.500000	8.4190821	23.685507	NA	cold	1998
chic	28.0	23.10000	1998-01- 15	NA	30.000000	3.4861111	30.745455	NA	cold	1998
chic	17.0	15.40000	1998-01-	NA	46.500000	9.0694444	28.951515	NA	cold	1998
chic	7.0	-	14 1998-01-	NA	41.500000	6.2107488	33.917424	NA	cold	1998
chic	23.0	6.00000 20.60000	13 1998-01-	NA	27.000000	2.1944444	24.908333	NA	cold	1998
chic	18.0	7.10000	12 1998-01-	10.200000	30.750000	5.7083333	28.475000	-	cold	1998
chic	12.0	2.80000	11 1998-01-	NA	23.500000	11.1250000	16.458333	6.0309575 NA	cold	1998
chic	25.0	25.30000	10 1998-01-	NA	20.000000	10.2777778	20.284420	NA	cold	1998
chic	34.0	30.80000	09 1998-01-	NA	4.500000	15.9643720	14.633333	NA	cold	1998
chic	38.0	34.20000	08 1998-01-	NA	6.000000	14.1388889	11.422826	NA	cold	1998
chic	43.0	41.10000	07 1998-01-	NA	30.000000	5.3888889	19.955303	NA	cold	1998
chic	48.0	46.70000	06 1998-01-	11.500000	20.615385	2.8000110	20.916074	-	cold	1998
chic	45.0	40.00000	05 1998-01-	NA	12.000000	7.1111111	13.883333	4.7309575 NA	cold	1998
chic	47.0	46.90000	04 1998-01-	NA	23.500000	10.3194444	16.025000	NA	cold	1998
chic	44.0	35.90000	03 1998-01-	NA	28.000000	8.4305556	21.425000	NA	cold	1998
chic	28.0	22.50000	02 1998-01-	NA	23.000000	12.8194444	17.883333	NA	cold	1998
chic	18.0	5.25000	01 1997-12-	NA		8.6041667		NA	cold	1997
chic	21.5	17.25000	31 1997-12-	NA		4.1992754		NA	cold	1997
chic	29.5	23.62500	30 1997-12-	NA		2.0878623		NA	cold	1997
chic	25.5	28.75000	29 1997-12-	NA		3.5833333		NA	cold	1997
			28	NA NA						
chic	23.0	13.75000	1997-12- 27			3.6875000		NA	cold	1997
chic	28.5	23.75000	1997-12- 26	NA		3.5416667		NA	cold	1997
chic	30.5	24.50000	1997-12- 25	NA	18.000000	5.5000000	19.052083	NA	cold	1997

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	m25detrendem	pcat year
chic	34.0	31.50000	1997-12- 24	NA	31.846154	5.6458333	21.760417	NA cold	1997
chic	34.0	27.62500	1997-12- 23	NA	36.500000	1.9673913	24.770833	NA cold	1997
chic	34.5	33.00000	1997-12- 22	NA	19.500000	5.6250000	22.979167	NA cold	1997
chic	32.5	25.00000	1997-12- 21	NA	16.500000	15.5208333	19.479167	NA cold	1997
chic	33.0	23.87500	1997-12- 20	NA	15.500000	6.3958333	23.531250	NA cold	1997
chic	40.5	33.12500	1997-12- 19	NA	53.000000	1.6875000	37.506629	NA cold	1997
chic	38.5	32.75000	1997-12- 18	NA	44.416667	1.6956522	31.250000	NA cold	1997
chic	37.0	26.50000	1997-12- 17	NA	40.500000	5.2916667	43.367754	NA cold	1997
chic	39.0	30.00000	1997-12- 16	NA	42.000000	2.5625000	32.156250	NA cold	1997
chic	37.5	30.87500	1997-12- 15	NA	40.500000	2.5416667	30.419508	NA cold	1997
chic	31.0	25.87500	1997-12- 14	NA	35.500000	3.1458333	33.718750	NA cold	1997
chic	26.5	22.25000	1997-12- 13	NA	28.500000	4.8333333	24.958333	NA cold	1997
chic	27.5	21.25000	1997-12- 12	NA	25.076923	7.7989130	25.270833	NA cold	1997
chic	33.5	25.00000	1997-12- 11	NA	13.500000	15.2282609	28.591938	NA cold	1997
chic	34.5	31.00000	1997-12- 10	NA	10.000000	11.1875000	24.108243	NA cold	1997
chic	33.0	30.62500	1997-12- 09	NA	41.500000	1.6458333	24.446023	NA cold	1997
chic	28.5	26.87500	1997-12- 08	NA	25.500000	4.3333333	21.175725	NA cold	1997
chic	30.0	27.00000	1997-12- 07	NA	17.500000	6.9375000	17.739583	NA cold	1997
chic	28.5	25.75000	1997-12- 06	NA	19.538462	6.7916667	18.333333	NA cold	1997
chic	26.0	17.37500	1997-12- 05	NA	22.000000	4.2083333	17.718750	NA cold	1997
chic	32.0	21.37500	1997-12- 04	NA	15.500000	4.8125000	20.728714	NA cold	1997
chic	36.5	32.75000	1997-12- 03	NA	29.500000	1.4375000	23.418561	NA cold	1997
chic	36.5	30.00000	1997-12- 02	NA	25.000000	7.0235507	24.913949	NA cold	1997
chic	37.0	31.12500	1997-12- 01	NA	6.000000	19.3750000	16.762311	NA cold	1997
chic	42.0	31.87500	1997-11-	NA	16.230769	13.0000000	11.895833	NA cold	1997
chic	45.5	47.12500	30 1997-11- 29	NA	41.000000	3.1875000	16.718750	NA cold	l 1997

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmear	n <b>2</b> 3tmean2	no2tmean2p	m25detrendempcat	year
chic	49.0	45.25000	1997-11- 28	NA	28.000000	2.6458333	20.000000	NA cold	1997
chic	37.5	39.00000	1997-11- 27	NA	23.000000	3.8125000	23.916667	NA cold	1997
chic	43.0	23.62500	1997-11- 26	NA	33.000000	6.5625000	26.734848	NA cold	1997
chic	47.0	41.25000	1997-11- 25	NA	44.000000	7.4538043	27.922425	NA cold	1997
chic	26.5	17.12500	1997-11- 24	NA	31.846154	4.8541667	34.587409	NA cold	1997
chic	26.0	20.75000	1997-11-	NA	18.500000	10.1458333	19.083333	NA cold	1997
chic	34.5	25.62500	23 1997-11-	NA	30.000000	8.2500000	23.583333	NA cold	1997
chic	35.5	29.62500	22 1997-11-	NA	19.000000	16.9375000	21.510417	NA cold	1997
chic	33.5	37.50000	21 1997-11-	NA	50.000000	0.9565217	35.520833	NA cold	1997
chic	27.5	22.62500	20 1997-11-	NA	42.000000	2.5652174	32.453228	NA cold	1997
chic	32.0	25.12500	19 1997-11-	NA	36.307692	4.0833333	28.942935	NA cold	1997
chic	25.5	24.00000	18 1997-11-	NA	37.000000	4.4791667	30.114583	NA cold	1997
chic	22.0	14.00000	17 1997-11-	NA	12.500000	12.3958333	23.020833	NA cold	1997
chic	29.0	24.37500	16 1997-11-	NA	15.000000	5.2083333	26.895833	NA cold	1997
chic	36.0	31.25000	15 1997-11-	NA	14.000000	13.0833333	26.625000	NA cold	1997
chic	31.5	22.25000	14 1997-11-	NA	31.000000	7.0416667	29.371377	NA cold	1997
chic	26.5	16.75000	13 1997-11-	NA	28.153846	5.5217391	27.916214	NA cold	1997
chic	28.5	18.25000	12 1997-11-	NA	24.500000	3.9375000	28.062500	NA cold	1997
chic	36.5	22.12500	11 1997-11-	NA	16.500000	4.9166667	26.323370	NA cold	1997
chic	42.5	34.87500	10 1997-11-	NA	26.000000	5.2708333	23.718750	NA cold	1997
chic	44.0	34.12500	09 1997-11-	NA	17.000000	11.2708333	25.447917	NA cold	1997
chic	43.0	35.25000	08 1997-11-	NA	12.500000	15.2291667	20.375000	NA cold	1997
chic	45.0	39.87500	07 1997-11-	NA	21.153846	6.8842593	19.781250	NA cold	1997
chic	40.0	40.50000	06 1997-11-	NA		3.3768116		NA cold	1997
chic	39.0	35.25000	05 1997-11-	NA		1.3854167		NA cold	1997
chic	36.5	34.12500	04 1997-11-	NA		2.3437500		NA cold	1997
CIIIC	50.0	31.12000	03	1111	11.000000	2.0101000	10.001101	1111 0010	1001

city	tmpd	$\operatorname{dewptp}$	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	m25detrende	empcat year
chic	38.5	30.12500	1997-11- 02	NA	8.000000	9.2395833	11.708333	NA co	old 1997
chic	50.0	36.12500	1997-11- 01	NA	18.500000	8.2916667	14.677083	NA co	old 1997
chic	59.5	52.50000	1997-10- 31	NA	36.384615	11.8216586	24.152174	NA co	old 1997
chic	51.0	50.25000	1997-10- 30	NA	44.500000	12.5688406	30.244565	NA co	old 1997
chic	44.0	36.00000	1997-10- 29	NA	44.500000	3.7073269	36.454257	NA co	old 1997
chic	39.0	36.12500	1997-10-	NA	30.500000	6.0169082	27.761364	NA co	old 1997
chic	32.5	25.57143	28 1997-10-	NA	14.000000	12.3949275	25.437500	NA co	old 1997
chic	40.0	36.00000	27 1997-10-	NA	7.500000	22.9398148	8.927083	NA co	old 1997
chic	47.0	37.87500	26 1997-10-	NA	21.230769	16.2592593	14.885417	NA co	old 1997
chic	46.0	44.37500	25 1997-10-	NA	31.500000	1.5416667	28.187500	NA co	old 1997
chic	44.5	31.25000	24 1997-10-	NA	43.500000	3.9094203	28.756250	NA co	old 1997
chic	36.0	23.50000	23 1997-10-	NA	27.000000	12.4302079	24.982008	NA co	old 1997
chic	42.5	20.62500	22 1997-10-	NA	24.000000	10.3766103	20.940670	NA co	old 1997
chic	45.5	32.62500	21 1997-10-	NA	17.000000	7.0404589	23.943910	NA co	old 1997
chic	50.0	45.25000	20 1997-10-	NA	35.000000	14.5879630	24.722222	NA co	old 1997
chic	44.5	36.37500	19 1997-10-	NA	40.000000	7.4583333	33.958333	NA co	old 1997
chic	45.5	39.25000	18 1997-10-	NA	37.500000	7.2973027	36.112058	NA co	old 1997
chic	47.5	38.50000	17 1997-10-	NA	35.000000	8.6115137	31.442564	NA co	old 1997
chic	42.5	36.75000	16 1997-10-	NA	39.500000	4.3582931	35.562500	NA co	old 1997
chic	42.5	30.25000	15 1997-10-	NA	16.500000	8.5785024	19.760417	NA co	old 1997
chic	59.5	39.37500	14 1997-10-	NA	20.083333	13.2268519	14.947917	NA co	old 1997
chic	70.0	56.12500	13 1997-10-	NA	34.500000	31.9227053	17.042572	NA co	old 1997
chic	61.5	44.25000	12 1997-10-	NA	25.500000	18.4953704	28.041667	NA co	old 1997
chic	59.0	47.25000	11 1997-10-	NA	36.500000	9.1944444	28.833333	NA co	old 1997
chic	64.0	44.75000	10 1997-10-	NA	35.000000	15.8607085	22.056612	NA co	old 1997
chic	72.5	60.37500	09 1997-10- 08	NA	65.000000	32.2568438	27.656250	NA co	old 1997

city	tmpd	dewptp	date	pm25	pm10tmean	n <b>2</b> 3tmean2	no2tmean2	m pm25detren	dempo	at year
chic	73.5	58.87500	1997-10- 07	NA	54.416667	19.7524155	41.027045	NA	cold	1997
chic	70.5	56.37500	1997-10- 06	NA	66.500000	21.2453704	41.479167	NA	cold	1997
chic	70.0	54.87500	1997-10- 05	NA	45.000000	28.8518519	24.208333	NA	cold	1997
chic	68.0	55.75000	1997-10- 04	NA	42.500000	18.2824074	29.604167	NA	cold	1997
chic	73.0	60.75000	1997-10- 03	NA	68.000000	30.4583333	32.414855	NA	cold	1997
chic	61.0	51.87500	1997-10-	NA	56.500000	15.1144928	30.010417	NA	cold	1997
chic	52.0	42.50000	02 1997-10-	NA	17.500000	15.6670290	18.302734	NA	cold	1997
chic	59.5	47.00000	01 1997-09-	NA	20.000000	10.0175725	18.616125	NA	cold	1997
chic	65.0	44.12500	30 1997-09-	NA	82.500000	17.8685897	16.160507	NA	cold	1997
chic	64.0	48.00000	29 1997-09-	NA	23.500000	15.3500000	25.708333	NA	cold	1997
chic	62.5	54.12500	28 1997-09-	NA	27.000000	18.7375000	26.216667	NA	cold	1997
chic	60.0	51.12500	27 1997-09-	NA	16.500000	15.4775362	16.500000	NA	cold	1997
chic	66.0	55.12500	26 1997-09-	NA	27.500000	16.3210474	26.432609	NA	cold	1997
chic	56.5	47.37500	25 1997-09-	NA	27.500000	9.7019928	29.191667	NA	cold	1997
chic	59.0	46.37500	24 1997-09-	NA	15.500000	11.2255435	20.691667	NA	cold	1997
chic	57.5	51.87500	23 1997-09-	NA	31.000000	5.8447464	33.058333	NA	cold	1997
chic	57.0	46.12500	22 1997-09-	NA	13.000000	10.3291667	22.608333	NA	cold	1997
chic	58.5	48.50000	21 1997-09-	NA	7.500000	16.0958333	11.300000	NA	cold	1997
chic	73.0	67.87500	20 1997-09-	NA	34.000000	23.1766304	29.018841	NA	cold	1997
chic	69.0	50.37500	19 1997-09-	NA	96.000000	21.5639493	29.834091	NA	cold	1997
chic	70.0	50.87500	18 1997-09-	NA	31.000000	15.4704710	26.272859	NA	cold	1997
chic	74.5	68.87500	17 1997-09-	NA	77.000000	39.7175000	23.390476	NA	cold	1997
chic	69.5	65.37500	16 1997-09-	NA	73.000000	34.1811594	29.416667	NA	cold	1997
chic	69.0	62.37500	15 1997-09-	NA	47.500000	33.3041667	30.208333	NA	cold	1997
chic	63.5	58.62500	14 1997-09-	NA	39.583333	19.7166667	33.641667	NA	cold	1997
chic	61.5	52.75000	13 1997-09- 12	NA	34.500000	12.2773551	29.528623	NA	cold	1997

chic chic chic chic chic chic chic	61.5 64.5 68.5 67.5 66.0 74.5	53.75000 55.37500 60.37500 62.87500 60.12500 64.75000	1997-09- 11 1997-09- 10 1997-09- 09 1997-09- 08 1997-09-	NA NA NA		8.6878788 14.6114130 20.2525362	17.501812	NA NA	cold cold	1997 1997
chic chic chic chic	68.5 67.5 66.0 74.5	60.37500 62.87500 60.12500	1997-09- 10 1997-09- 09 1997-09- 08	NA NA	28.000000				cold	1997
chic chic chic	67.5 66.0 74.5	62.87500 60.12500	1997-09- 09 1997-09- 08	NA		20.2525362	17.766667	3.T.A		
chic chic	66.0 74.5	60.12500	1997-09- 08		23 000000			NA	cold	1997
chic	74.5				49.000000	18.7751812	15.647464	NA	cold	1997
		64.75000	07	NA	19.000000	23.1922101	12.733333	NA	cold	1997
chic	60.5		1997-09- 06	NA	40.000000	32.2041667	23.458333	NA	cold	1997
	00.5	51.00000	1997-09- 05	NA	46.500000	16.7928195	32.146212	NA	cold	1997
chic	59.0	44.87500	1997-09- 04	NA	26.500000	15.1501812	22.179004	NA	cold	1997
chic	58.5	47.12500	1997-09- 03	NA	7.500000	17.0769928	9.650000	NA	cold	1997
chic	68.0	51.75000	1997-09- 02	NA	29.500000	12.1960145	18.666667	NA	cold	1997
chic	70.5	65.87500	1997-09- 01	NA	30.333333	27.0375000	22.135417	NA	cold	1997
chic	72.0	62.12500	1997-08- 31	NA	21.000000	28.2625000	11.906250	NA	cold	1997
chic	65.0	68.12500	1997-08- 30	NA	37.500000	18.3041667	19.979167	NA	cold	1997
chic	67.0	58.87500	1997-08- 29	NA	25.500000	18.5416667	16.564752	NA	cold	1997
chic	68.5	58.12500	1997-08- 28	NA	15.000000	18.5074275	10.882576	NA	cold	1997
chic	77.0	67.50000	1997-08- 27	NA	48.000000	16.6823188	31.821970	NA	cold	1997
chic	69.0	68.75000	1997-08- 26	NA	43.666667	18.8320323	31.504710	NA	cold	1997
chic	65.5	59.50000	1997-08-	NA	29.500000	27.5773551	16.088768	NA	cold	1997
chic	70.5	62.75000	25 1997-08-	NA	22.000000	28.8833333	12.050000	NA	cold	1997
chic	65.5	57.75000	24 1997-08-	NA	28.000000	17.7375000	25.850000	NA	cold	1997
chic	64.0	54.87500	23 1997-08-	NA	22.500000	12.2449275	23.094928	NA	cold	1997
chic	63.5	52.87500	22 1997-08-	NA	14.500000	17.5981884	19.411905	NA	cold	1997
chic	67.0	59.37500	21 1997-08-	NA	28.083333	15.1213768	23.897464	NA	cold	1997
chic	64.0	60.00000	20 1997-08-	NA	27.500000	16.4501812	23.108827	NA	cold	1997
chic	63.5	54.37500	19 1997-08-	NA	7.500000	17.5952899	11.591667	NA	cold	1997
chic	68.5	64.00000	18 1997-08- 17	NA	11.000000	23.0458333	14.333333	NA	cold	1997

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrend	empcat	year
chic	80.0	69.87500	1997-08- 16	NA	32.000000	32.7691667	16.900000	NA c	old	1997
chic	77.0	70.00000	1997-08- 15	NA	36.500000	21.6637681	22.741667	NA c	old	1997
chic	65.5	63.12500	1997-08-	NA	27.750000	20.4052536	22.434058	NA c	old	1997
chic	68.5	58.75000	14 1997-08-	NA	17.000000	17.7650362	15.476449	NA c	old	1997
chic	69.5	67.87500	13 1997-08-	NA	28.500000	5.9250000	21.925000	NA c	old	1997
chic	67.5	62.12500	12 1997-08-	NA	14.500000	16.0326087	13.366667	NA c	old	1997
chic	75.5	65.50000	11 1997-08-	NA	39.000000	25.1416667	14.125000	NA c	old	1997
chic	70.5	66.00000	10 1997-08-	NA	45.000000	26.6333333	23.191667	NA c	old	1997
chic	69.5	52.87500	09 1997-08-	NA	44.416667	34.7488095	36.100000	NA c	old	1997
chic	67.0	55.50000	08 1997-08-	NA	54.000000	26.8952899	36.856522	NA c	old	1997
chic	64.5	54.00000	07 1997-08-	NA	36.500000	16.1416667	33.378656	NA c	old	1997
chic	62.5	45.87500	06 1997-08-	NA	10.500000	20.2820513	13.353788	NA c	old	1997
chic	71.0	57.75000	05 1997-08-	NA	14.500000	21.8977456	11.599967	NA c	old	1997
chic	78.0	66.50000	04 1997-08-	NA	40.000000	37.0462963			cold	1997
chic	81.5	59.37500	03 1997-08-	NA	47.666667	43.7314815			not	1997
chic	74.5	58.87500	02 1997-08-	NA	67.500000	42.4958333			old	1997
			01							
chic	69.0	56.25000	1997-07- 31	NA	34.000000	24.7958333			old	1997
chic	68.5	52.37500	1997-07- 30	NA	16.500000	21.3333333	16.495059	NA c	old	1997
chic	66.5	50.87500	1997-07- 29	NA	8.500000	20.7356884	9.717424	NA c	old	1997
chic	74.5	57.37500	1997-07- 28	NA	19.000000	21.7446970	14.979546	NA c	old	1997
chic	81.5	73.75000	1997-07- 27	NA	35.454546	27.6250000	28.625000	NA h	not	1997
chic	85.5	73.37500	1997-07- 26	NA	57.000000	43.7408333	18.475000	NA h	not	1997
chic	76.0	75.75000	1997-07-	NA	68.000000	37.7351449	24.346667	NA c	old	1997
chic	72.5	64.75000	25 1997-07-	NA	40.000000	38.3942029	25.147101	NA c	cold	1997
chic	69.0	59.75000	24 1997-07-	NA	26.500000	31.1199275	19.910145	NA c	old	1997
chic	69.0	64.37500	23 1997-07-	NA	23.500000	27.6534750	17.058333	NA c	cold	1997
			22							

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	hom 25 detren	dempca	at year
chic	72.0	65.12500	1997-07- 21	NA	25.666667	31.6306159	19.775000	NA	cold	1997
chic	76.5	71.62500	1997-07- 20	NA	32.000000	36.8125000	18.008333	NA	cold	1997
chic	74.5	60.62500	1997-07- 19	NA	21.000000	30.9708333	14.633333	NA	cold	1997
chic	79.0	69.12500	1997-07- 18	NA	56.500000	20.8335145	38.127174	NA	cold	1997
chic	84.0	68.62500	1997-07- 17	NA	60.000000	44.5055642	30.298990	NA	hot	1997
chic	82.5	59.87500	1997-07- 16	NA	42.000000	33.5333498	25.481431	NA	hot	1997
chic	79.0	64.25000	1997-07- 15	NA	27.333333	25.1706357	24.190151	NA	cold	1997
chic	83.0	62.37500	1997-07- 14	NA	43.000000	28.9121377	22.941667	NA	hot	1997
chic	82.5	71.75000	1997-07- 13	NA	53.000000	39.4625000	19.625000	NA	hot	1997
chic	74.5	63.50000	1997-07-	NA	57.500000	48.2541667	32.925000	NA	cold	1997
chic	68.5	59.12500	12 1997-07-	NA	45.000000	34.2333333	31.120652	NA	cold	1997
chic	64.5	51.00000	11 1997-07-	NA	25.500000	25.0759591	22.306522	NA	cold	1997
chic	62.0	50.75000	10 1997-07-	NA	12.750000	28.3326087	15.497727	NA	cold	1997
chic	71.0	58.00000	09 1997-07-	NA	42.000000	31.3168478	21.860870	NA	cold	1997
chic	65.5	52.50000	08 1997-07-	NA	19.000000	27.3589262	13.625000	NA	cold	1997
chic	70.0	57.75000	07 1997-07-	NA	23.500000	31.9958333	17.216667	NA	cold	1997
chic	65.5	50.75000	06 1997-07-	NA	25.500000	21.7583333	16.666667	NA	cold	1997
chic	61.5	51.87500	05 1997-07-	NA	26.000000	10.9375000	14.991667	NA	cold	1997
chic	68.5	54.25000	04 1997-07-	NA	23.166667	18.1791667	12.183333	NA	cold	1997
chic	79.5	55.75000	03 1997-07-	NA	70.000000	31.3538043	16.692754	NA	cold	1997
chic	77.5	68.62500	02 1997-07-	NA	49.000000	38.1458333	33.347826	NA	cold	1997
chic	76.0	69.25000	01 1997-06-	NA	35.000000	20.7777668	32.141667	NA	cold	1997
chic	75.0	65.25000	30 1997-06-	NA	66.500000	56.5416667	35.291667	NA	cold	1997
chic	74.0	62.00000	29 1997-06-	NA	48.500000	46.3000000	36.625000	NA	cold	1997
chic	72.5	59.00000	28 1997-06-	NA	44.833333	32.0572464	42.156159	NA	cold	1997
chic	73.5	55.25000	27 1997-06- 26	NA	29.500000	29.5112319	31.086284	NA	cold	1997

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrende	empcat	year
chic	78.0	62.75000	1997-06- 25	NA	47.000000	29.6572783	26.887121	NA co	old	1997
chic	84.0	60.00000	1997-06- 24	NA	113.500000	33.2342391	26.116667	NA h	ot	1997
chic	82.5	69.62500	1997-06- 23	NA	58.500000	30.5405797	29.900000	NA h	ot	1997
chic	77.0	66.87500	1997-06- 22	NA	29.000000	37.6916667	32.158333	NA c	old	1997
chic	75.5	64.75000	1997-06- 21	NA	27.250000	29.6944444	23.158333	NA co	old	1997
chic	81.5	72.87500	1997-06-	NA	65.000000	40.4743116	24.501087	NA h	ot	1997
chic	70.0	65.87500	20 1997-06-	NA	60.500000	32.4356884	39.900132	NA co	old	1997
chic	67.0	61.12500	19 1997-06-	NA	45.500000	30.5518116	30.962681	NA co	old	1997
chic	60.5	50.37500	18 1997-06-	NA	19.000000	23.1875000	17.209091	NA co	old	1997
chic	67.0	53.37500	17 1997-06-	NA	25.000000	32.8179348	22.175000	NA c	old	1997
chic	63.0	59.75000	16 1997-06-	NA	32.000000	35.6416667	21.266667	NA co	old	1997
chic	56.5	41.87500	15 1997-06-	NA	11.500000	21.3625000	16.216667	NA co	old	1997
chic	71.0	52.00000	14 1997-06-	NA	41.500000	28.3413043	34.554348	NA co	old	1997
chic	70.0	63.62500	13 1997-06-	NA	51.000000	20.7578722	41.913636	NA co	old	1997
chic	67.5	63.12500	12 1997-06-	NA	54.000000	20.1510705	50.989130	NA co	old	1997
chic	66.5	53.87500	11 1997-06-	NA	47.500000	40.6208333	38.650758	NA co	old	1997
chic	62.5	51.75000	10 1997-06-	NA	33.000000	41.0408926	29.197727	NA co	old	1997
chic	61.0	48.62500	09 1997-06-	NA	21.500000	41.0291667	18.383333	NA co	old	1997
chic	58.5	55.37500	08 1997-06-	NA	20.500000	22.1833333	21.666667	NA co	old	1997
chic	63.5	58.75000	07 1997-06-	NA	36.000000	23.2639493	27.608333	NA co	old	1997
chic	62.0	56.00000	06 1997-06-	NA	44.500000	30.9833851	36.375000	NA co	old	1997
chic	59.0	47.50000	05 1997-06-	NA	29.000000	30.2195652	33.072101	NA co	old	1997
chic	61.5	52.62500	04 1997-06-	NA	24.538462	30.5096014	19.369927	NA co	old	1997
chic	58.0	54.50000	03 1997-06-	NA	21.000000	29.6900362	18.682609	NA co	old	1997
chic	60.5	51.25000	02 1997-06-	NA	19.500000	44.5875000	12.641667	NA co	old	1997
chic	59.0	53.37500	01 1997-05-	NA		37.3083333		NA co	old	1997
			31		0					- •

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2	pm25detren	dempca	at year
chic	61.0	51.75000	1997-05- 30	NA	32.000000	29.3106555	26.696739	NA	cold	1997
chic	58.0	50.75000	1997-05- 29	NA	22.500000	18.1927536	22.853623	NA	cold	1997
chic	58.5	56.87500	1997-05- 28	NA	30.307692	21.8239130	22.051416	NA	cold	1997
chic	56.0	39.37500	1997-05- 27	NA	26.000000	30.0548913	18.232246	NA	cold	1997
chic	50.0	35.87500	1997-05- 26	NA	9.500000	33.1291667	10.941667	NA	cold	1997
chic	50.0	44.50000	1997-05- 25	NA	25.000000	37.2791667	13.158333	NA	cold	1997
chic	68.5	56.12500	1997-05- 24	NA	54.000000	41.1000000	29.341667	NA	cold	1997
chic	58.0	40.75000	1997-05- 23	NA	47.000000	26.3353261	33.946509	NA	cold	1997
chic	50.5	34.62500	1997-05- 22	NA	28.153846	19.3647892	28.726087	NA	cold	1997
chic	48.0	34.37500	1997-05-	NA	12.000000	19.0514397	21.162121	NA	cold	1997
chic	51.5	38.12500	21 1997-05-	NA	24.500000	17.5827899	28.496970	NA	cold	1997
chic	54.0	42.37500	20 1997-05-	NA	26.500000	19.7623188	24.627174	NA	cold	1997
chic	59.5	63.87500	19 1997-05-	NA	34.500000	23.6791667	25.941667	NA	cold	1997
chic	50.5	38.25000	18 1997-05-	NA	21.000000	29.7541667	17.777899	NA	cold	1997
chic	51.0	41.37500	17 1997-05-	NA	36.615385	22.8035714	24.024047	NA	cold	1997
chic	45.0	35.50000	16 1997-05-	NA	15.500000	13.2083333	19.941667	NA	cold	1997
chic	49.5	40.62500	15 1997-05-	NA	31.000000	13.1291667	32.875000	NA	cold	1997
chic	45.5	38.75000	14 1997-05-	NA	25.000000	18.1996706	21.478261	NA	cold	1997
chic	52.5	32.50000	13 1997-05-	NA	35.500000	26.2458333	16.760417	NA	cold	1997
chic	59.5	43.87500	12 1997-05-	NA	31.500000	27.6875000	18.166667	NA	cold	1997
chic	52.5	32.62500	11 1997-05-	NA	26.769231	21.8041667	25.135417	NA	cold	1997
chic	50.5	36.00000	10 1997-05-	NA	19.000000	21.1276186	18.928977	NA	cold	1997
chic	61.0	42.75000	09 1997-05-	NA	33.500000	29.7259058	20.447917	NA	cold	1997
chic	52.5	49.25000	08 1997-05-	NA	38.000000	20.6483696	34.779356	NA	cold	1997
chic	55.5	35.00000	07 1997-05-	NA	29.500000	24.5588768	31.760417	NA	cold	1997
chic	62.0	38.87500	06 1997-05- 05	NA	68.000000	30.7701087	22.228673	NA	cold	1997

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrend	tempcat	year
chic	51.5	33.25000	1997-05- 04	NA	19.615385	29.0666667	29.843750	NA	cold	1997
chic	49.0	40.37500	1997-05- 03	NA	18.000000	22.4333333	25.093750	NA	cold	1997
chic	48.5	45.50000	1997-05- 02	NA	33.000000	10.2949275	33.610507	NA	cold	1997
chic	48.5	36.87500	1997-05- 01	NA	22.000000	21.2460145	24.543025	NA	cold	1997
chic	55.0	50.00000	1997-04-	NA	47.000000	26.1713768	28.171672	NA	cold	1997
chic	60.0	45.25000	30 1997-04-	NA	72.000000	35.8416667	33.552083	NA	cold	1997
chic	50.5	40.75000	29 1997-04-	NA	61.000000	19.5965580	53.010417	NA	cold	1997
chic	47.5	40.25000	28 1997-04-	NA	28.000000	28.2708333	28.062500	NA	cold	1997
chic	49.5	24.25000	27 1997-04-	NA	38.500000	23.0875000	40.145833	NA	cold	1997
chic	48.0	27.75000	26 1997-04-	NA	21.500000	23.7101449	31.500000	NA	cold	1997
chic	47.5	36.50000	25 1997-04-	NA	12.000000	22.4181159	28.104167	NA	cold	1997
chic	48.5	34.00000	24 1997-04-	NA	10.000000	26.8789855	22.703442	NA	cold	1997
chic	43.0	33.62500	23 1997-04-	NA	13.076923	30.0309783	18.687500	NA	cold	1997
chic	45.0	31.00000	22 1997-04-	NA	19.000000	34.4541667	27.052083	NA	cold	1997
chic	49.0	42.25000	21 1997-04-	NA	37.500000	23.3875000	37.041667	NA	cold	1997
chic	45.5	30.87500	20 1997-04-	NA	26.000000	23.6041667	34.177083	NA	cold	1997
chic	40.0	34.75000	19 1997-04-	NA	42.500000	13.1914855	52.552989	NA	cold	1997
chic	40.5	25.75000	18 1997-04-	NA	16.000000	18.4827899	24.117754	NA	cold	1997
chic	43.0	25.62500	17 1997-04-	NA	23.307692	22.2873188	23.780303	NA	cold	1997
chic	49.0	36.25000	16 1997-04-	NA	57.000000	29.0110507	33.972222	NA	cold	1997
chic	41.5	28.12500	15 1997-04-	NA	44.500000	19.0505435	43.611111	NA	cold	1997
chic	38.5	24.62500	14 1997-04-	NA	17.500000	30.5509259	26.333333	NA	cold	1997
chic	33.5	30.37500	13 1997-04-	NA	20.000000	24.3148148	23.111111	NA	cold	1997
chic	33.5	32.00000	12 1997-04-	NA	25.000000	25.6224211	26.944444	NA	cold	1997
chic	30.5	22.00000	11 1997-04-	NA	24.230769	21.6336957	34.892622	NA	cold	1997
chic	30.0	18.87500	10 1997-04- 09	NA	18.500000	22.5875000	28.308575	NA	cold	1997

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2j	pm25detrend	tempcat	year
chic	28.5	9.25000	1997-04- 08	NA	23.000000	22.4378623	22.777778	NA	cold	1997
chic	34.0	18.37500	1997-04- 07	NA	29.500000	27.3750000	14.152778	NA	cold	1997
chic	45.0	21.75000	1997-04- 06	NA	35.000000	29.3333333	8.833333	NA	cold	1997
chic	60.5	54.37500	1997-04- 05	NA	20.000000	28.6547101	17.055556	NA	cold	1997
chic	62.5	48.25000	1997-04- 04	NA	51.076923	31.1197464	34.291667	NA	cold	1997
chic	59.5	49.87500	1997-04-	NA	45.000000	12.8223485	38.010101	NA	$\operatorname{cold}$	1997
chic	53.0	29.87500	03 1997-04-	NA	50.500000	13.8210145	42.658213	NA	$\operatorname{cold}$	1997
chic	44.5	28.12500	02 1997-04-	NA	51.500000	15.0919314	47.718434	NA	cold	1997
chic	38.5	22.00000	01 1997-03-	NA	18.000000	26.6246377	29.069444	NA	cold	1997
chic	37.5	33.75000	31 1997-03-	NA	11.000000	22.7833333	18.000000	NA	cold	1997
chic	43.5	41.00000	30 1997-03-	NA	21.076923	15.2333333	16.819444	NA	$\operatorname{cold}$	1997
chic	55.5	53.87500	29 1997-03-	NA	39.000000	13.3109903	32.597222	NA	cold	1997
chic	60.5	40.12500	28 1997-03-	NA	44.000000	26.6074879	26.972222	NA	$\operatorname{cold}$	1997
chic	44.0	36.75000	27 1997-03-	NA	23.500000	20.7955251	25.867840	NA	$\operatorname{cold}$	1997
chic	40.5	30.00000	26 1997-03-	NA	25.500000	15.2043478	27.305556	NA	$\operatorname{cold}$	1997
chic	33.0	32.37500	25 1997-03-	NA	28.000000	20.2606061	26.375000	NA	cold	1997
chic	32.5	20.37500	24 1997-03-	NA	14.230769	25.4250000	19.027778	NA	cold	1997
chic	37.5	28.62500	23 1997-03-	NA	21.500000	26.9500000	29.500000	NA	$\operatorname{cold}$	1997
chic	53.5	42.50000	22 1997-03-	NA	53.000000	19.1949275	31.578502	NA	$\operatorname{cold}$	1997
chic	46.0	31.87500	21 1997-03-	NA	37.500000	25.9452381	37.621032	NA	cold	1997
chic	35.5	28.87500	20 1997-03-	NA	28.500000	27.4166667	32.628968	NA	cold	1997
chic	33.5	27.00000	19 1997-03-	NA	19.500000	36.0944444	19.259259	NA	cold	1997
chic	45.0	33.62500	18 1997-03-	NA	31.307692	18.6388889	29.125000	NA	$\operatorname{cold}$	1997
chic	24.5	23.75000	17 1997-03-	NA	19.000000	24.2361111	21.305556	NA	cold	1997
chic	19.0	8.37500	16 1997-03-	NA	16.000000	28.6666667	19.166667	NA	cold	1997
chic	26.5	15.50000	15 1997-03- 14	NA	22.000000	21.4305556	21.083333	NA	cold	1997

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrend	empcat	year
chic	37.5	30.50000	1997-03- 13	NA	27.500000	24.0416667	22.930556	NA o	old	1997
chic	33.5	25.00000	1997-03- 12	NA	18.500000	28.2385266	30.878788	NA o	old	1997
chic	37.0	23.37500	1997-03- 11	NA	18.769231	25.6666667	27.513889	NA o	old	1997
chic	44.0	33.25000	1997-03- 10	NA	27.000000	16.5972222	28.055556	NA o	old	1997
chic	37.0	32.62500	1997-03- 09	NA	27.000000	9.5694444	26.819444	NA o	old	1997
chic	39.0	28.25000	1997-03- 08	NA	20.500000	25.9583333	21.180556	NA o	old	1997
chic	35.5	35.25000	1997-03-	NA	29.500000	14.1805556	33.513889	NA o	old	1997
chic	26.5	13.37500	07 1997-03-	NA	29.000000	21.9359903	24.897343	NA o	old	1997
chic	33.0	28.62500	06 1997-03-	NA	29.692308	14.1250000	26.272947	NA o	old	1997
chic	38.0	28.87500	05 1997-03-	NA	30.000000	12.1388889	26.837121	NA o	old	1997
chic	33.5	29.37500	04 1997-03-	NA	19.000000	25.0277778	23.000000	NA o	old	1997
chic	35.0	27.37500	03 1997-03-	NA	18.500000	28.4583333	17.236111	NA o	old	1997
chic	45.5	44.00000	02 1997-03-	NA	32.000000	12.7222222	25.694444	NA o	old	1997
chic	37.5	36.00000	01 1997-02-	NA	33.000000	12.0277778	27.681159	NA o	old	1997
chic	34.5	30.25000	28 1997-02-	NA	18.538462	9.0972222	31.042271	NA o	old	1997
chic	36.5	35.00000	27 1997-02-	NA	33.500000	5.3907005	33.891963	NA o	old	1997
chic	25.5	27.12500	26 1997-02-	NA	40.000000	11.0090580	35.722222	NA o	old	1997
chic	21.5	10.87500	25 1997-02-	NA	23.000000	15.7928744	34.555556	NA o	old	1997
chic	28.0	14.62500	24 1997-02-	NA	16.500000	22.4761905	19.347222	NA o	old	1997
chic	26.0	24.25000	23 1997-02-	NA	14.500000	21.8750000	25.777778	NA o	old	1997
chic	36.0	29.62500	22 1997-02-	NA	6.538462	14.4710145	21.116546	NA o	old	1997
chic	35.5	44.12500	21 1997-02-	NA	34.000000	3.5138889	37.262681	NA o	old	1997
chic	37.5	27.50000	20 1997-02-	NA	26.000000	17.2083333	30.583333	NA o	old	1997
chic	48.5	41.37500	19 1997-02-	NA	27.000000	25.5799517	29.143939	NA o	old	1997
chic	30.0	32.62500	18 1997-02-	NA	33.000000	12.7500000	33.166667	NA o	old	1997
chic	18.5	8.12500	17 1997-02- 16	NA	22.000000	14.7291667	30.569444	NA o	old	1997

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrender	mpcat year
chic	20.0	15.25000	1997-02- 15	NA	27.230769	16.5208333	30.638889	NA col	ld 1997
chic	25.5	23.00000	1997-02-	NA	38.500000	10.8541667	31.893720	NA col	ld 1997
chic	20.5	16.37500	14 1997-02- 13	NA	28.500000	15.5833333	29.944444	NA col	ld 1997
chic	21.0	11.60000	1997-02- 12	NA	18.500000	18.5000000	26.902778	NA col	ld 1997
chic	23.5	19.50000	1997-02- 11	NA	28.000000	15.9166667	29.750000	NA col	ld 1997
chic	27.0	21.75000	1997-02-	NA	29.000000	11.3541667	35.347222	NA col	ld 1997
chic	26.0	21.00000	10 1997-02-	NA	28.769231	8.2083333	39.041667	NA col	ld 1997
chic	25.5	22.50000	09 1997-02-	NA	18.500000	14.6458333	26.652778	NA col	ld 1997
chic	25.5	23.37500	08 1997-02-	NA	31.500000	12.3194444	31.208333	NA col	ld 1997
chic	26.0	21.87500	07 1997-02-	NA	22.500000	14.8556763	27.402778	NA col	ld 1997
chic	30.0	24.25000	06 1997-02-	NA	17.500000	14.0694444	26.686594	NA col	ld 1997
chic	34.5	32.00000	05 1997-02-	NA	24.000000	9.2192029	24.566339	NA col	ld 1997
chic	30.0	28.00000	04 1997-02-	NA	20.615385	19.1250000	26.125000	NA col	ld 1997
chic	36.5	29.62500	03 1997-02-	NA	34.500000	9.5277778	32.319444	NA col	ld 1997
chic	35.0	29.66667	02 1997-02-	NA	28.500000	12.8623188	34.577899	NA col	ld 1997
chic	31.5	33.75000	01 1997-01-	NA	27.500000	9.2807971	32.486111	NA col	ld 1997
chic	16.5	16.37500	31 1997-01-	NA	45.500000	2.7083333	40.273990	NA col	ld 1997
chic	8.0	11.00000	30 1997-01-	NA	52.500000	4.1944444	48.902778	NA col	ld 1997
chic	2.0	_	29 1997-01-	NA		11.2210145		NA col	
chic	17.0	$6.37500 \\ 8.37500$	28 1997-01-	NA		6.2500000		NA col	
chic	11.0	17.12500	27 1997-01-	NA		7.8055556		NA col	
chic	14.5	-	26 1997-01-	NA		12.8611111		NA col	
		1.37500	25						
chic	32.0	29.50000	1997-01- 24	NA		4.6932367		NA col	
chic	26.0	18.75000	1997-01- 23	NA		14.5235507		NA col	
chic	36.5	20.75000	1997-01- 22	NA	17.375000	17.4393939	19.413889	NA col	ld 1997
chic	35.0	41.62500	1997-01- 21	NA	31.000000	9.7083333	32.569444	NA col	ld 1997

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2	pm25detrende	empcat year
chic	31.0	27.25000	1997-01- 20	NA	25.500000	13.2777778	32.486111	NA co	old 1997
chic	14.0	22.62500	1997-01- 19	NA	31.500000	4.8888889	32.361111	NA co	old 1997
chic	0.0	4.12500	1997-01- 18	NA	32.000000	10.8750000	32.166667	NA co	old 1997
chic	-3.0	10.37500	1997-01- 17	NA	24.000000	12.6884058	28.236111	NA co	old 1997
chic	9.5	9.75000	1997-01- 16	NA	26.545455	18.6944444	20.861111	NA co	old 1997
chic	19.0	23.25000	1997-01- 15	NA	30.000000	2.1998792	35.220960	NA co	old 1997
chic	10.0	11.50000	1997-01-	NA	53.000000	2.9679952	40.696256	NA co	old 1997
chic	3.0	1.50000	14 1997-01- 13	NA	33.500000	4.6527778	33.612319	NA co	old 1997
chic	1.0	- 0.07500	1997-01-	NA	21.000000	12.1805556	22.583333	NA co	old 1997
chic	1.5	8.87500	12 1997-01-	NA	21.500000	11.9444444	22.555556	NA co	old 1997
chic	16.0	$6.62500 \\ 5.37500$	11 1997-01-	NA	24.230769	6.1594203	23.015097	NA co	old 1997
chic	26.0	24.00000	10 1997-01-	NA	21.500000	9.8194444	27.763889	NA co	old 1997
chic	19.0	17.75000	09 1997-01-	NA	34.500000	5.1884058	31.444444	NA co	old 1997
chic	16.0	7.00000	08 1997-01-	NA	25.500000	9.5646135	28.348732	NA co	old 1997
chic	17.0	5.75000	07 1997-01-	NA	18.500000	12.8333333	19.833333	NA co	old 1997
chic	27.0	11.25000	06 1997-01-	NA	22.500000	16.3194444	7.729167	NA co	old 1997
chic	51.5	45.50000	05 1997-01-	NA	24.384615	2.8339372	15.520833	NA co	old 1997
chic	40.0	38.00000	04 1997-01-	NA	31.000000	2.4027778	19.277778	NA co	old 1997
chic	45.0	47.25000	03 1997-01-	NA	41.500000	1.5959596	21.243687	NA co	old 1997
chic	36.0	37.50000	02 1997-01-	NA	19.000000	1.7777778	19.416667	NA co	old 1997
chic	27.5	30.12500	01 1996-12-	NA	33.000000	2.9287440	27.573232	NA co	old 1996
chic	27.5	29.87500	31 1996-12-	NA	42.000000	1.9722222	24.194444	NA co	old 1996
chic	30.0	22.87500	30 1996-12-	NA	29.307692	3.2361111	19.986111	NA co	old 1996
chic	37.0	37.75000	29 1996-12-	NA	23.000000	1.6805556	22.347222	NA co	old 1996
chic	26.0	31.75000	28 1996-12-	NA	36.500000	1.9396135	32.751208	NA co	old 1996
chic	14.0	12.00000	27 1996-12- 26	NA	30.500000	4.7638889	35.259058	NA co	old 1996

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendempca	t year
chic	4.5	3.00000	1996-12- 25	NA	17.000000	12.5972222	19.583333	NA cold	1996
chic	20.0	5.37500	1996-12- 24	NA	24.000000	15.6871981	15.986111	NA cold	1996
chic	42.5	40.62500	1996-12- 23	NA	17.583333	2.0694444	24.986111	NA cold	1996
chic	34.5	36.87500	1996-12- 22	NA	20.000000	2.9722222	25.055556	NA cold	1996
chic	26.5	25.62500	1996-12- 21	NA	37.000000	7.0000000	21.388889	NA cold	1996
chic	9.5	8.62500	1996-12- 20	NA	30.000000	5.6906566	23.295290	NA cold	1996
chic	8.0	5.75000	1996-12- 19	NA	41.000000	7.1250000	19.361111	NA cold	1996
chic	13.0	2.12500	1996-12- 18	NA	33.000000	9.2361111	17.590909	NA cold	1996
chic	24.0	13.37500	1996-12- 17	NA	26.846154	4.2958937	21.958333	NA cold	1996
chic	29.0	26.12500	1996-12- 16	NA	29.000000	8.4166667	24.902778	NA cold	1996
chic	38.0	25.37500	1996-12- 15	NA	17.000000	6.4027778	17.388889	NA cold	1996
chic	36.5	31.75000	1996-12- 14	NA	28.000000	2.5833333	23.208333	NA cold	1996
chic	34.5	34.75000	1996-12- 13	NA	28.000000	2.1533816	25.629831	NA cold	1996
chic	36.5	33.75000	1996-12- 12	NA	22.000000	3.2777778	17.472826	NA cold	1996
chic	37.0	34.50000	1996-12- 11	NA	18.769231	5.0609903	20.017512	NA cold	1996
chic	35.5	34.75000	1996-12- 10	NA	39.000000	1.8888889	28.643116	NA cold	1996
chic	28.5	23.37500	1996-12- 09	NA	22.000000	5.4722222	21.152778	NA cold	1996
chic	28.5	22.25000	1996-12- 08	NA	19.000000	13.9583333	16.736111	NA cold	1996
chic	30.5	24.87500	1996-12- 07	NA	25.500000	7.0833333	26.875000	NA cold	1996
chic	33.5	28.62500	1996-12- 06	NA	26.000000	1.9021739	27.628843	NA cold	1996
chic	32.5	32.25000	1996-12- 05	NA	22.846154	2.1962560	26.802536	NA cold	1996
chic	26.5	25.25000	1996-12- 04	NA	35.000000	1.8882850	30.988691	NA cold	1996
chic	30.0	23.00000	1996-12-	NA	27.000000	2.1262626	28.277778	NA cold	1996
chic	27.5	24.87500	03 1996-12- 02	NA	28.000000	7.7638889	24.611111	NA cold	1996
chic	30.5	22.87500	1996-12-	NA	17.000000	8.5277778	17.138889	NA cold	1996
chic	40.5	36.75000	01 1996-11- 30	NA	16.000000	3.5277778	18.305556	NA cold	1996

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chic	33.5	31.37500	1996-11- 29	NA	26.583333	2.8472222	29.666667	NA cold	1996
	29.5	25.62500	1996-11- 28	NA	28.000000	4.2083333	26.430556	NA cold	1996
chic	22.5	18.75000	1996-11- 27	NA	36.000000	2.4836957	31.219203	NA cold	1996
	20.0	9.62500	1996-11- 26	NA	26.000000	7.7361111	29.680556	NA cold	1996
chic	26.5	19.12500	1996-11- 25	NA	11.000000	14.0948068	23.234127	NA cold	1996
chic	35.0	30.37500	1996-11- 24	NA	18.000000	6.1527778	19.125000	NA cold	1996
chic	35.5	34.62500	1996-11- 23	NA	28.583333	1.8194444	20.972222	NA cold	1996
chic	34.5	29.37500	1996-11- 22	NA	31.000000	4.9305556	32.271355	NA cold	1996
chic	34.0	26.37500	1996-11- 21	NA	17.500000	9.5277778	28.784091	NA cold	1996
chic	29.0	29.62500	1996-11- 20	NA	23.000000	8.9722222	26.945906	NA cold	1996
chic	29.5	19.00000	1996-11- 19	NA	19.000000	3.4782609	29.108696	NA cold	1996
chic	31.0	24.75000	1996-11- 18	NA	21.000000	4.1666667	23.625000	NA cold	1996
chic	41.5	25.00000	1996-11- 17	NA	14.083333	10.1805556	14.236111	NA cold	1996
chic	48.0	32.12500	1996-11- 16	NA	31.000000	6.9722222	25.569444	NA cold	1996
chic	40.0	22.50000	1996-11- 15	NA	30.000000	6.3611111	28.916667	NA cold	1996
chic	25.0	18.85714	1996-11- 14	NA	23.000000	10.8291063	30.599747	NA cold	1996
chic	22.5	11.37500	1996-11- 13	NA	28.000000	3.3888889	36.500000	NA cold	1996
chic	23.0	11.00000	1996-11- 12	NA	20.000000	7.3611111	32.388889	NA cold	1996
chic	26.5	12.62500	1996-11- 11	NA	13.384615	9.9722222	28.638889	NA cold	1996
chic	28.0	21.87500	1996-11- 10	NA	15.000000	12.555556	19.833333	NA cold	1996
chic	34.5	28.00000	1996-11- 09	NA	13.500000	9.9305556	20.333333	NA cold	1996
chic	37.0	33.25000	1996-11- 08	NA	32.000000	2.7306763	28.861111	NA cold	1996
chic	43.0	36.87500	1996-11- 07	NA	20.000000	2.6805556	28.210145	NA cold	1996
chic	54.0	60.25000	1996-11- 06	NA	32.000000	3.2379658	29.944444	NA cold	1996
chic	46.5	47.37500	1996-11- 05	NA	34.692308	1.8020833	34.370773	NA cold	1996
chic	42.0	33.50000	1996-11- 04	NA	37.000000	2.1562500	31.208333	NA cold	1996

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	pm25detrendempca	at year
chic	35.5	26.87500	1996-11- 03	NA	30.000000	6.5104167	25.708333	NA cold	1996
chic	29.0	24.12500	1996-11- 02	NA	18.000000	8.5991848	24.055556	NA cold	1996
chic	31.0	21.62500	1996-11- 01	NA	25.000000	8.6458333	24.888889	NA cold	1996
chic	33.0	21.25000	1996-10- 31	NA	30.000000	12.6764040	19.432367	NA cold	1996
chic	44.5	22.85714	1996-10- 30	NA	18.384615	13.9482337	16.205314	NA cold	1996
chic	50.5	54.12500	1996-10- 29	NA	27.000000	6.3358243	30.709541	NA cold	1996
chic	46.5	37.62500	1996-10- 28	NA	38.000000	6.0717844	28.958333	NA cold	1996
chic	59.0	47.50000	1996-10- 27	NA	21.000000	12.1614583	14.579710	NA cold	1996
chic	62.0	62.25000	1996-10- 26	NA	34.000000	8.8489583	23.180556	NA cold	1996
chic	52.5	49.12500	1996-10- 25	NA	32.000000	11.9352355	32.916667	NA cold	1996
chic	48.0	43.87500	1996-10- 24	NA	26.153846	6.0905797	24.180556	NA cold	1996
chic	43.0	40.62500	1996-10- 23	NA	15.500000	4.8145380	17.430556	NA cold	1996
chic	55.5	57.87500	1996-10- 22	NA	33.000000	4.9472991	27.145696	NA cold	1996
chic	53.0	50.00000	1996-10-	NA	34.000000	6.3780797	37.185386	NA cold	1996
chic	47.5	48.25000	21 1996-10-	NA	35.000000	6.2440476	31.222222	NA cold	1996
chic	45.0	34.62500	20 1996-10-	NA	24.000000	6.9047619	28.402778	NA cold	1996
chic	46.5	28.37500	19 1996-10-	NA	20.153846	9.2742301	22.059343	NA cold	1996
chic	59.0	49.12500	18 1996-10-	NA	39.000000	21.6906703	25.539251	NA cold	1996
chic	63.0	61.12500		NA	33.000000	5.8122118	36.619949	NA cold	1996
chic	64.0	54.62500	16 1996-10-	NA	48.000000	12.3960598	39.472222	NA cold	1996
chic	57.0	51.00000	15 1996-10-	NA	18.000000	17.3229167	15.972222	NA cold	1996
chic	66.0	62.12500	14 1996-10-	NA	40.000000	24.0572917	32.902778	NA cold	1996
chic	61.0	54.25000	13 1996-10-	NA	29.833333	15.3177083	29.388889	NA cold	1996
chic	42.0	42.37500	12 1996-10-	NA	23.000000	7.0781250	29.625000	NA cold	1996
chic	42.5	35.75000	11 1996-10-	NA	13.000000	6.7244112	21.309783	NA cold	1996
chic	47.5	41.62500	10 1996-10- 09	NA	32.000000	4.4531250	32.416667	NA cold	1996

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2	pm25detrendempca	t year
chic	45.5	40.25000	1996-10- 08	NA	9.000000	7.0700758	20.529040	NA cold	1996
chic	53.5	45.62500	1996-10- 07	NA	14.000000	12.3906250	18.836353	NA cold	1996
chic	63.5	57.12500	1996-10- 06	NA	38.230769	25.0781250	29.486111	NA cold	1996
chic	53.5	45.50000	1996-10- 05	NA	25.000000	8.0312500	33.750000	NA cold	1996
chic	47.0	40.37500	1996-10- 04	NA	25.000000	10.8020833	30.428140	NA cold	1996
chic	46.5	36.75000	1996-10- 03	NA	12.000000	18.5104167	18.777778	NA cold	1996
chic	57.0	40.87500	1996-10- 02	NA	24.000000	13.9166667	20.516414	NA cold	1996
chic	62.0	58.25000	1996-10- 01	NA	44.000000	20.2395833	35.861111	NA cold	1996
chic	63.0	52.87500	1996-09- 30	NA	27.461538	13.8690476	35.250000	NA cold	1996
chic	57.5	50.37500	1996-09-	NA	20.000000	11.1666667	21.694444	NA cold	1996
chic	53.5	47.00000	29 1996-09-	NA	17.000000	6.0892857	21.125000	NA cold	1996
chic	58.5	48.00000	28 1996-09-	NA	14.000000	6.5246914	17.739583	NA cold	1996
chic	60.5	63.37500	27 1996-09-	NA	28.000000	14.8120921	23.416667	NA cold	1996
chic	53.0	46.12500	26 1996-09-	NA	46.000000	12.3476248	29.983863	NA cold	1996
chic	57.0	43.12500	25 1996-09-	NA	24.230769	13.6966769	27.196558	NA cold	1996
chic	59.0	56.87500	24 1996-09-	NA	43.000000	4.6729066	36.256794	NA cold	1996
chic	62.5	50.25000	23 1996-09-	NA	28.000000	16.1338567	20.238678	NA cold	1996
chic	64.0	54.87500	22 1996-09-	NA	42.000000	9.9305556	33.104167	NA cold	1996
chic	58.5	58.25000	21 1996-09-	NA	40.000000	9.6743156	39.104167	NA cold	1996
chic	61.0	51.75000	20 1996-09-	NA	29.000000	17.2312619	21.885417	NA cold	1996
chic	62.0	52.62500	19 1996-09-	NA	17.307692	11.7250403	14.947334	NA cold	1996
chic	60.5	52.25000	18 1996-09-	NA	11.000000	17.9440419	10.458333	NA cold	1996
chic	58.5	54.37500	17 1996-09-	NA	17.000000	13.8399758	14.581975	NA cold	1996
chic	59.0	51.87500	16 1996-09-	NA	21.000000	10.6203704	19.812500	NA cold	1996
chic	53.0	50.75000	15 1996-09-	NA	19.000000	6.3888889	18.333333	NA cold	1996
chic	56.0	46.62500	14 1996-09- 13	NA	22.000000	10.0106683	19.856431	NA cold	1996

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendempca	t year
chic	58.0	50.25000	1996-09- 12	NA	16.818182	8.5787037	18.610960	NA cold	1996
chic	67.0	57.12500	1996-09- 11	NA	39.000000	9.2485910	34.794055	NA cold	1996
chic	69.5	61.37500	1996-09- 10	NA	48.000000	16.4059984	35.650298	NA cold	1996
chic	68.5	64.62500	1996-09- 09	NA	32.000000	20.8435673	22.927083	NA cold	1996
chic	73.0	67.25000	1996-09- 08	NA	62.000000	20.9895833	29.593750	NA cold	1996
chic	73.5	69.62500	1996-09- 07	NA	51.000000	21.9398148	27.093750	NA cold	1996
chic	74.0	71.12500	1996-09- 06	NA	53.461539	38.5805153	20.415761	NA cold	1996
chic	74.0	68.37500	1996-09- 05	NA	68.000000	45.0873591	24.185688	NA cold	1996
chic	73.0	64.75000	1996-09- 04	NA	112.000000	38.2415459	41.947917	NA cold	1996
chic	73.0	67.00000	1996-09- 03	NA	83.000000	37.3146135	33.219697	NA cold	1996
chic	71.0	62.50000	1996-09- 02	NA	53.000000	42.9027778	26.343750	NA cold	1996
chic	73.5	60.75000	1996-09- 01	NA	53.000000	37.2638889	31.031250	NA cold	1996
chic	70.5	61.50000	1996-08- 31	NA	48.076923	32.7361111	22.864583	NA cold	1996
chic	69.0	61.25000	1996-08- 30	NA	23.000000	29.7737520	20.697917	NA cold	1996
chic	69.5	58.75000	1996-08- 29	NA	20.000000	31.9267311	20.354167	NA cold	1996
chic	68.5	63.00000	1996-08- 28	NA	39.000000	21.3516506	22.750947	NA cold	1996
chic	70.0	64.87500	1996-08- 27	NA	24.000000	25.5140902	13.063406	NA cold	1996
chic	72.0	65.75000	1996-08- 26	NA	46.000000	32.5579710	29.583333	NA cold	1996
chic	69.5	64.50000	1996-08-	NA	33.923077	26.7604167	30.937500	NA cold	1996
chic	71.0	58.87500	25 1996-08- 24	NA	22.000000	21.7083333	23.885417	NA cold	1996
chic	70.0	55.12500	1996-08-	NA	17.000000	14.8263134	17.406250	NA cold	1996
chic	79.0	71.12500	23 1996-08-	NA	59.000000	30.7667874	27.001217	NA cold	1996
chic	78.0	72.75000	22 1996-08-	NA	58.000000	20.7338054	41.495224	NA cold	1996
chic	77.0	71.25000	21 1996-08-	NA	48.000000	20.0674316	26.847826	NA cold	1996
chic	76.0	71.37500	20 1996-08-	NA	42.076923	25.1423108	23.416667	NA cold	1996
chic	70.5	69.37500	19 1996-08- 18	NA	34.000000	25.9259259	22.739583	NA cold	1996

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrende	mpcat year
chic	69.0	64.12500	1996-08- 17	NA	29.000000	21.0277778	25.833333	NA co	old 1996
chic	68.5	61.12500	1996-08- 16	NA	19.000000	14.0215378	19.468750	NA co	ld 1996
chic	69.5	60.00000	1996-08- 15	NA	27.000000	15.0432770	24.314383	NA co	old 1996
chic	76.0	63.62500	1996-08- 14	NA	45.000000	22.5803872	26.120842	NA co	ld 1996
chic	74.0	67.62500	1996-08- 13	NA	44.307692	25.8393720	30.001488	NA co	old 1996
chic	71.0	64.12500	1996-08- 12	NA	46.000000	22.3802910	32.114583	NA co	old 1996
chic	69.5	65.12500	1996-08- 11	NA	30.000000	16.9583333	29.520833	NA co	old 1996
chic	68.5	59.75000	1996-08- 10	NA	12.000000	22.1149356	11.958333	NA co	ld 1996
chic	71.0	57.87500	1996-08- 09	NA	25.000000	17.7201178	23.145833	NA co	old 1996
chic	77.0	55.00000	1996-08- 08	NA	24.000000	24.8057568	24.791667	NA co	old 1996
chic	83.0	74.37500	1996-08-	NA	45.076923	27.9098229	25.833333	NA ho	ot 1996
chic	79.5	75.62500	07 1996-08- 06	NA	47.000000	29.7407407	22.722908	NA co	old 1996
chic	82.0	75.37500	1996-08- 05	NA	69.000000	38.8480676	18.093750	NA ho	ot 1996
chic	74.0	67.87500	1996-08- 04	NA	45.000000	39.5277778	22.687500	NA co	old 1996
chic	68.5	62.62500	1996-08- 03	NA	41.000000	22.555556	28.145833	NA co	old 1996
chic	67.5	59.62500	1996-08- 02	NA	29.000000	18.6806836	28.228261	NA co	old 1996
chic	66.5	59.87500	1996-08- 01	NA	28.769231	16.4188808	30.679348	NA co	ld 1996
chic	65.5	58.12500	1996-07- 31	NA	28.000000	12.3300725	22.992424	NA co	ld 1996
chic	68.5	57.87500	1996-07- 30	NA	25.500000	16.1250000	26.764394	NA co	old 1996
chic	70.0	62.75000	1996-07- 29	NA	34.000000	22.1875000	27.283333	NA co	old 1996
chic	67.5	66.62500	1996-07- 28	NA	26.000000	24.3166667	24.345000	NA co	ld 1996
chic	68.5	64.12500	1996-07-	NA	21.000000	19.5875000	22.383333	NA co	old 1996
chic	69.5	58.62500	27 1996-07-	NA	24.583333	16.6989130	22.108333	NA co	old 1996
chic	68.5	58.25000	26 1996-07- 25	NA	25.000000	15.3775362	23.801087	NA co	old 1996
chic	73.5	61.62500	1996-07-	NA	25.000000	17.1608696	27.521091	NA co	old 1996
chic	70.5	59.00000	24 1996-07- 23	NA	35.000000	17.8949934	27.815151	NA co	old 1996

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2	pm25detrend	tempca	year
chic	65.5	67.62500	1996-07- 22	NA	35.000000	22.5322464	26.641667	NA	cold	1996
chic	61.5	54.00000	1996-07- 21	NA	19.000000	21.7750000	17.558333	NA	cold	1996
chic	65.0	53.75000	1996-07- 20	NA	15.666667	24.2875000	10.991667	NA	cold	1996
chic	72.0	57.37500	1996-07- 19	NA	17.000000	20.5472222	14.045652	NA	cold	1996
chic	79.0	78.25000	1996-07- 18	NA	28.000000	24.4543478	25.386298	NA	cold	1996
chic	73.5	69.75000	1996-07- 17	NA	32.000000	18.8953197	39.257576	NA	cold	1996
chic	76.5	58.87500	1996-07- 16	NA	37.000000	25.4878623	34.177767	NA	cold	1996
chic	71.5	62.37500	1996-07- 15	NA	37.000000	22.4083333	25.833333	NA	cold	1996
chic	69.0	64.62500	1996-07- 14	NA	21.923077	17.1458333	24.616667	NA	cold	1996
chic	74.5	60.62500	1996-07- 13	NA	31.000000	29.7875000	20.258333	NA	cold	1996
chic	73.0	66.37500	1996-07- 12	NA	51.000000	33.1923913	37.241667	NA	cold	1996
chic	66.0	55.25000	1996-07- 11	NA	45.000000	35.2405797	30.493478	NA	cold	1996
chic	63.5	46.62500	1996-07-	NA	24.000000	19.3023551	22.707609	NA	cold	1996
chic	63.0	55.00000	10 1996-07- 09	NA	19.000000	18.5141304	18.912319	NA	cold	1996
chic	71.5	55.12500	1996-07- 08	NA	42.076923	26.5583333	27.741667	NA	cold	1996
chic	78.0	57.12500	1996-07- 07	NA	49.000000	52.6708333	25.425000	NA	cold	1996
chic	73.0	61.75000	1996-07- 06	NA	60.000000	55.0250000	34.333333	NA	cold	1996
chic	70.5	57.12500	1996-07- 05	NA	69.000000	30.8125000	39.901515	NA	cold	1996
chic	64.0	51.50000	1996-07-	NA	66.000000	24.2666667	19.608333	NA	cold	1996
chic	65.0	48.87500	04 1996-07-	NA	13.000000	24.3958333	15.816667	NA	cold	1996
chic	73.0	61.75000	03 1996-07-	NA	38.500000	30.8650362	33.822464	NA	cold	1996
chic	75.5	57.62500	02 1996-07-	NA	31.000000	30.4536232	30.250000	NA	cold	1996
chic	83.0	66.12500	01 1996-06-	NA	36.000000	38.0166667	19.358333	NA	hot	1996
chic	83.0	74.25000	30 1996-06-	NA	73.000000	58.3958333	22.475000	NA	hot	1996
chic	77.5	65.87500	29 1996-06-	NA	76.000000	39.7313406	51.605435	NA	cold	1996
chic	74.0	68.00000	28 1996-06- 27	NA	63.000000	45.8902174	52.208333	NA	cold	1996

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2	pm25detrend	tempcat	t year
chic	68.0	62.37500	1996-06- 26	NA	47.307692	29.5288043	40.062549	NA o	cold	1996
chic	65.5	50.75000	1996-06- 25	NA	24.000000	24.8867754	21.875000	NA o	cold	1996
chic	68.5	57.75000	1996-06- 24	NA	31.000000	22.4121377	21.266667	NA o	cold	1996
chic	61.0	54.00000	1996-06- 23	NA	28.000000	28.2500000	20.616667	NA o	cold	1996
chic	71.0	57.12500	1996-06- 22	NA	28.000000	33.0875000	16.066667	NA o	cold	1996
chic	76.5	75.12500	1996-06- 21	NA	71.000000	27.3091568	40.753030	NA o	cold	1996
chic	73.5	71.00000	1996-06- 20	NA	47.583333	28.2146739	36.878261	NA o	cold	1996
chic	69.5	65.62500	1996-06- 19	NA	32.500000	19.9348476	31.427964	NA o	cold	1996
chic	73.5	69.75000	1996-06- 18	NA	31.000000	23.8479649	23.109058	NA o	cold	1996
chic	74.0	72.50000	1996-06- 17	NA	57.000000	33.5183489	26.336429	NA o	cold	1996
chic	72.5	67.00000	1996-06- 16	NA	64.000000	38.8000000	33.937500	NA o	cold	1996
chic	71.0	51.75000	1996-06- 15	NA	46.000000	33.9958333	33.108333	NA o	cold	1996
chic	71.5	59.62500	1996-06- 14	NA	43.923077	29.5039614	33.223913	NA o	cold	1996
chic	75.5	68.50000	1996-06- 13	NA	55.500000	32.2322299	36.674242	NA o	cold	1996
chic	65.5	63.75000	1996-06- 12	NA	53.000000	23.6226449	46.031159	NA o	cold	1996
chic	60.0	59.12500	1996-06- 11	NA	22.000000	28.4201087	28.489394	NA o	cold	1996
chic	61.5	59.12500	1996-06- 10	NA	29.000000	21.6826087	25.206884	NA o	cold	1996
chic	56.5	56.75000	1996-06- 09	NA	17.000000	23.7500000	16.425000	NA o	cold	1996
chic	53.0	56.62500	1996-06- 08	NA	28.615385	20.7291667	19.891667	NA o	cold	1996
chic	54.5	53.25000	1996-06- 07	NA	24.000000	16.8708333	28.666667	NA o	cold	1996
chic	63.5	63.75000	1996-06- 06	NA	31.000000	20.8565217	29.179879	NA o	cold	1996
chic	61.5	54.87500	1996-06- 05	NA	38.000000	30.1786232	24.050000	NA o	cold	1996
chic	57.5	55.87500	1996-06-	NA	23.000000	6.2288043	22.470290	NA o	cold	1996
chic	60.5	52.37500	04 1996-06-	NA	20.000000	21.5666667	19.016667	NA o	cold	1996
chic	67.5	57.14286	03 1996-06-	NA	18.846154	41.1166667	13.758333	NA o	cold	1996
chic	62.5	64.00000	02 1996-06- 01	NA	52.000000	31.3833333	35.516667	NA o	cold	1996

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2	pm25detren	dempca	t year
chic	57.5	50.37500	1996-05- 31	NA	41.000000	30.6815217	34.632971	NA	cold	1996
chic	51.5	34.00000	1996-05- 30	NA	18.000000	22.8746377	28.632453	NA	cold	1996
chic	51.0	34.87500	1996-05- 29	NA	19.000000	29.4519928	24.584848	NA	cold	1996
chic	51.5	50.00000	1996-05- 28	NA	24.000000	28.2440217	25.903788	NA	cold	1996
chic	51.0	46.75000	1996-05- 27	NA	23.307692	32.3625000	12.416667	NA	cold	1996
chic	54.0	47.00000	1996-05- 26	NA	18.000000	37.1666667	14.333333	NA	cold	1996
chic	51.5	41.25000	1996-05-	NA	17.000000	28.0083333	21.258333	NA	cold	1996
chic	52.0	45.50000	25 1996-05-	NA	17.000000	21.2375000	22.303985	NA	cold	1996
chic	56.0	46.75000	24 1996-05-	NA	27.000000	15.4533267	34.254875	NA	cold	1996
chic	67.0	55.25000	23 1996-05-	NA	46.000000	24.0317852	38.571667	NA	cold	1996
chic	65.0	52.62500	22 1996-05-	NA	26.461538	23.7018116	30.816667	NA	cold	1996
chic	64.0	56.00000	21 1996-05-	NA	28.000000	22.6750000	26.641667	NA	cold	1996
chic	81.0	65.25000	20 1996-05-	NA	86.000000	33.7833333	12.800000	NA	hot	1996
chic	81.0	68.87500	19 1996-05-	NA	38.000000	38.0500000	17.308333	NA	hot	1996
chic	69.5	71.87500	18 1996-05-	NA	38.000000	27.0250000	23.983333	NA	cold	1996
chic	53.5	52.12500	17 1996-05-	NA	38.000000	6.5557336	30.032378	NA	cold	1996
chic	54.5	52.12500	16 1996-05-	NA	50.384615	17.2739130	30.450362	NA	cold	1996
chic	47.5	42.87500	15 1996-05-	NA	28.000000	21.8606884	31.408333	NA	cold	1996
chic	45.0	33.25000	14 1996-05-	NA	21.000000	15.6787879	38.358333	NA	cold	1996
chic	42.5	24.12500	13 1996-05-	NA	15.000000	28.3583333	15.675000	NA	cold	1996
chic	45.0	28.50000	12 1996-05-	NA	8.000000	23.6250000	15.791667	NA	cold	1996
chic	51.0	38.25000	11 1996-05-	NA	16.000000	15.6525000	21.783333	NA	cold	1996
chic	58.0	54.14286	10 1996-05-	NA	36.166667	4.0615942	32.312681	NA	cold	1996
chic	57.0	56.50000	09 1996-05-	NA	57.000000	5.2159783	30.056884	NA	cold	1996
chic	50.5	43.37500	08 1996-05-	NA	37.000000	14.5673913	28.763636	NA	cold	1996
chic	45.5	40.25000	07 1996-05- 06	NA	17.000000	20.3875000	23.283333	NA	cold	1996

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	m25detrend	tempcat	year
chic	49.0	41.25000	1996-05- 05	NA	20.000000	21.9708333	22.950000	NA	cold	1996
chic	47.5	30.62500	1996-05- 04	NA	17.000000	26.2458333	23.058333	NA	cold	1996
chic	52.5	42.62500	1996-05- 03	NA	34.538461	24.9916667	28.750000	NA	cold	1996
chic	52.5	39.00000	1996-05- 02	NA	38.000000	22.4824275	32.112609	NA	cold	1996
chic	50.0	32.62500	1996-05-	NA	41.000000	24.0019928	24.786836	NA	cold	1996
chic	43.5	32.62500	01 1996-04-	NA	20.000000	24.8038043	23.362121	NA	cold	1996
chic	40.5	37.25000	30 1996-04-	NA	14.000000	21.0222826	23.566667	NA	cold	1996
chic	44.0	30.62500	29 1996-04-	NA	37.500000	19.2083333	26.166667	NA	cold	1996
chic	45.0	30.37500	28 1996-04-	NA	28.846154	19.4398148	29.291667	NA	cold	1996
chic	45.5	24.87500	27 1996-04-	NA	45.000000	17.1206522	23.116667	NA	cold	1996
chic	61.0	43.87500	26 1996-04-	NA	52.000000	25.5555665	22.433333	NA	cold	1996
chic	52.5	46.12500	25 1996-04-	NA	28.000000	20.0211957	27.966667	NA	cold	1996
chic	45.0	31.12500	24 1996-04-	NA	16.000000	22.3003623	24.461174	NA	cold	1996
chic	51.5	38.37500	23 1996-04-	NA	27.000000	18.2064394	33.520833	NA	cold	1996
chic	52.0	37.87500	22 1996-04-	NA	25.583333	21.4625000	26.333333	NA	cold	1996
chic	52.0	40.50000	21 1996-04-	NA	25.000000	15.1916667	18.927083	NA	cold	1996
chic	62.5	50.12500	20 1996-04-	NA	35.000000	22.3755435	27.145833	NA	$\operatorname{cold}$	1996
chic	63.5	54.37500	19 1996-04-	NA	54.000000	30.4634058	26.714427	NA	cold	1996
chic	47.0	40.62500	18 1996-04-	NA	32.000000	20.5081522	36.891757	NA	cold	1996
chic	42.5	31.62500	17 1996-04-	NA	21.000000	22.0231884	30.714962	NA	$\operatorname{cold}$	1996
chic	40.0	31.75000	16 1996-04-	NA	20.846154	19.6076087	29.208333	NA	cold	1996
chic	37.5	33.12500	15 1996-04-	NA	15.000000	33.2375000	13.822917	NA	cold	1996
chic	40.5	29.37500	14 1996-04-	NA	15.000000	19.5333333	18.041667	NA	cold	1996
chic	53.0	42.62500	13 1996-04-	NA	40.000000	20.0626812	37.964674	NA	cold	1996
chic	64.0	48.50000	12 1996-04-	NA	128.000000	33.6128623	34.272727	NA	cold	1996
chic	45.5	28.12500	11 1996-04- 10	NA	58.000000	17.2596014	46.134058	NA	cold	1996

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2	pm25detrend	empcat	year
chic	36.0	25.75000	1996-04- 09	NA	26.846154	14.2695911	34.250000	NA o	cold	1996
chic	30.0	20.87500	1996-04- 08	NA	17.500000	17.5245572	33.354167	NA o	cold	1996
chic	32.0	17.37500	1996-04- 07	NA	9.000000	25.1250000	22.270833	NA o	cold	1996
chic	33.0	21.25000	1996-04- 06	NA	9.000000	27.1157407	24.489583	NA o	cold	1996
chic	32.0	19.75000	1996-04- 05	NA	8.000000	27.6898148	25.604167	NA o	cold	1996
chic	33.5	25.50000	1996-04- 04	NA	23.000000	21.1334541	24.072917	NA o	cold	1996
chic	52.0	37.50000	1996-04- 03	NA	42.384615	16.9744364	36.979167	NA o	cold	1996
chic	47.5	37.37500	1996-04- 02	NA	52.000000	19.5550981	34.617795	NA o	cold	1996
chic	35.5	19.62500	1996-04- 01	NA	15.000000	29.4589372	25.520833	NA o	cold	1996
chic	36.5	30.62500	1996-03-	NA	24.000000	29.9583333	21.750000	NA o	cold	1996
chic	42.0	39.87500	31 1996-03-	NA	45.000000	15.0312500	33.364583	NA o	cold	1996
chic	38.5	28.50000	30 1996-03-	NA	32.000000	27.1666667	37.562500	NA o	cold	1996
chic	37.0	25.50000	29 1996-03-	NA	34.454546	19.4756410	33.364583	NA o	cold	1996
chic	24.0	20.25000	28 1996-03-	NA	26.000000	24.5937500	31.441288	NA o	cold	1996
chic	18.5	2.25000	27 1996-03-	NA	24.500000	28.7708333	20.913826	NA o	cold	1996
chic	35.5	12.12500	26 1996-03-	NA	33.000000	23.6950000	13.976449	NA o	cold	1996
chic	50.5	51.00000	25 1996-03-	NA	29.000000	31.2166667	20.770833	NA o	cold	1996
chic	39.0	22.12500	24 1996-03-	NA	57.000000	17.9166667	42.104167	NA o	cold	1996
chic	35.0	12.12500	23 1996-03-	NA	28.727273	20.0597826	34.019928	NA o	cold	1996
chic	29.5	20.12500	22 1996-03-	NA	18.000000	20.6363872	26.982790	NA o	cold	1996
chic	31.5	20.37500	21 1996-03-	NA	23.000000	34.0588768	14.135417	NA o	cold	1996
chic	35.5	25.87500	20 1996-03-	NA	26.000000	32.4791667	22.373106	NA o	cold	1996
chic	34.5	24.62500	19 1996-03-	NA	54.000000	9.5416667	39.531703	NA o	cold	1996
chic	31.0	32.62500	18 1996-03-	NA	36.000000	6.2638889	36.302083	NA o	cold	1996
chic	34.5	27.87500	17 1996-03-	NA	24.692308	20.6527778	22.520833	NA o	cold	1996
chic	40.5	30.75000	16 1996-03- 15	NA	32.000000	16.4722222	31.247736	NA o	cold	1996

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2	pm25detrendem	pcat year
chic	47.5	39.50000	1996-03- 14	NA	54.000000	16.8888889	39.843750	NA cold	1996
chic	45.0	39.75000	1996-03- 13	NA	59.000000	7.6618357	52.688496	NA cold	1996
chic	43.0	31.50000	1996-03- 12	NA	40.000000	10.8055556	43.463225	NA cold	1996
chic	37.5	28.37500	1996-03- 11	NA	31.000000	9.2708333	35.656250	NA cold	1996
chic	26.0	25.87500	1996-03- 10	NA	33.916667	12.3541667	32.979167	NA cold	1996
chic	17.5	14.00000	1996-03-	NA	29.000000	12.5000000	34.140152	NA cold	1996
chic	8.0	8.25000	09 1996-03-	NA	31.000000	15.1920290	23.533967	NA cold	1996
chic	11.5	0.12500	08 1996-03-	NA	18.000000	14.6300505	27.531250	NA cold	1996
chic	20.5	10.00000	07 1996-03-	NA	17.000000	25.1111111	21.494112	NA cold	1996
chic	31.5	27.75000	06 1996-03-	NA	23.500000	11.6805556	24.591856	NA cold	1996
chic	25.0	18.87500	05 1996-03-	NA	29.923077	5.2777778	37.361111	NA cold	1996
chic	12.5	0.75000	04 1996-03-	NA	22.000000	16.1111111	18.041667	NA cold	1996
chic	15.0	-	03 1996-03-	NA	39.000000	22.7638889	13.861111	NA cold	1996
chic	26.0	$4.50000 \\ 21.00000$	02 1996-03-	NA	36.000000	13.2790404	26.229167	NA cold	1996
chic	17.0	6.37500	01 1996-02-	NA	20.000000	15.9507576	23.821429	NA cold	1996
chic	20.0	6.62500	29 1996-02-	NA	25.000000	17.3991546	15.173136	NA cold	1996
chic	38.5	28.37500	28 1996-02-	NA	31.916667	4.5229469	26.562500	NA cold	1996
chic	40.5	40.00000	27 1996-02-	NA	50.500000	4.6944444	32.993659	NA cold	1996
chic	46.5	39.25000	26 1996-02-	NA	31.000000	7.3055556	36.813859	NA cold	1996
chic	46.0	30.50000	25 1996-02-	NA	19.000000	14.8888889	24.072917	NA cold	1996
chic	44.5	37.87500	24 1996-02-	NA	42.000000	3.9444444	24.283991	NA cold	1996
chic	35.5	34.87500	23 1996-02-	NA	35.000000	6.9885266	23.226449	NA cold	1996
chic	31.5	31.87500	22 1996-02-	NA	19.846154	14.3635266	22.645833	NA cold	1996
chic	43.5	41.25000	21 1996-02-	NA	43.000000	2.9667874	36.044508	NA cold	1996
chic	33.0	31.87500	20 1996-02-	NA	35.000000	5.0138889	36.906250	NA cold	1996
chic	18.5	19.75000	19 1996-02- 18	NA	32.000000	10.444444	31.177083	NA cold	1996

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendempca	t year
chic	23.5	10.62500	1996-02- 17	NA	28.000000	10.9722222	25.479167	NA cold	1996
chic	21.0	14.25000	1996-02- 16	NA	23.000000	13.3888889	26.780344	NA cold	1996
chic	24.0	20.62500	1996-02- 15	NA	22.153846	9.9583333	30.712862	NA cold	1996
chic	27.5	19.25000	1996-02- 14	NA	21.000000	6.6237374	32.552083	NA cold	1996
chic	27.5	26.87500	1996-02- 13	NA	29.000000	4.1186869	30.937371	NA cold	1996
chic	23.0	14.37500	1996-02- 12	NA	17.000000	14.5625000	27.072917	NA cold	1996
chic	32.0	19.62500	1996-02- 11	NA	15.000000	22.1041667	14.791667	NA cold	1996
chic	44.5	29.62500	1996-02- 10	NA	27.000000	14.3541667	21.437500	NA cold	1996
chic	39.0	37.75000	1996-02- 09	NA	28.076923	3.9447464	40.802083	NA cold	1996
chic	39.5	34.50000	1996-02- 08	NA	28.000000	2.6277778	29.208333	NA cold	1996
chic	38.0	34.75000	1996-02- 07	NA	37.000000	4.7916667	31.250000	NA cold	1996
chic	18.5	20.62500	1996-02- 06	NA	58.000000	5.4323671	48.981266	NA cold	1996
chic	11.5	5.25000	1996-02- 05	NA	51.000000	6.4027778	38.239583	NA cold	1996
chic	-6.0	- 7.87500	1996-02- 04	NA	21.000000	9.5833333	29.958333	NA cold	1996
chic	-12.0	18.87500	1996-02- 03	NA	25.615385	7.7361111	30.135417	NA cold	1996
chic	-10.5	21.00000	1996-02- 02	NA	35.000000	9.555556	31.479167	NA cold	1996
chic	1.5	12.87500	1996-02- 01	NA	33.000000	9.8997585	32.092391	NA cold	1996
chic	-3.0	10.00000	1996-01- 31	NA	34.500000	8.1325758	34.547472	NA cold	1996
chic	2.0	13.62500	1996-01- 30	NA	42.500000	9.3008640	34.488563	NA cold	1996
chic	18.5	2.50000	1996-01- 29	NA	46.000000	14.9305556	24.145833	NA cold	1996
chic	19.0	15.12500	1996-01- 28	NA	22.615385	8.9583333	33.489583	NA cold	1996
chic	16.5	3.87500	1996-01- 27	NA	38.500000	20.0972222	20.062500	NA cold	1996
chic	32.0	28.37500	1996-01- 26	NA	27.000000	5.8750000	29.188159	NA cold	1996
chic	20.0	23.37500	1996-01- 25	NA	35.000000	4.0917874	35.521780	NA cold	1996
chic	20.5	4.37500	1996-01- 24	NA	21.000000	12.0332126	25.914855	NA cold	1996
chic	33.0	33.00000	1996-01- 23	NA	28.000000	3.6992754	23.248119	NA cold	1996

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendempca	t year
chic	37.5	33.00000	1996-01- 22	NA	27.615385	6.5694444	26.194444	NA cold	1996
chic	25.5	26.25000	1996-01- 21	NA	28.000000	4.8888889	25.887077	NA cold	1996
chic	15.5	12.00000	1996-01- 20	NA	24.000000	4.6944444	32.722222	NA cold	1996
chic	9.0	1.50000	1996-01- 19	NA	25.000000	15.1630435	23.000000	NA cold	1996
chic	36.5	19.75000	1996-01- 18	NA	17.500000	13.1805556	18.819627	NA cold	1996
chic	47.0	49.12500	1996-01- 17	NA	35.000000	4.7518116	27.061012	NA cold	1996
chic	32.5	40.00000	1996-01- 16	NA	36.416667	1.1666667	29.266304	NA cold	1996
chic	24.0	14.25000	1996-01- 15	NA	11.500000	20.0833333	23.625000	NA cold	1996
chic	37.5	28.50000	1996-01- 14	NA	19.000000	10.6041667	24.562500	NA cold	1996
chic	32.0	30.75000	1996-01-	NA	41.000000	1.6250000	38.552083	NA cold	1996
chic	28.5	27.12500	13 1996-01-	NA	31.500000	4.5416667	31.534091	NA cold	1996
chic	26.5	24.50000	12 1996-01-	NA	27.500000	5.6031746	33.489130	NA cold	1996
chic	21.5	18.12500	11 1996-01-	NA	33.416667	5.3375604	38.477657	NA cold	1996
chic	27.0	20.62500	10 1996-01-	NA	37.500000	5.5307971	34.289079	NA cold	1996
chic	13.0	13.00000	09 1996-01-	NA	44.000000	6.7083333	37.729167	NA cold	1996
chic	18.5	7.37500	08 1996-01-	NA	20.000000	18.4166667	24.750000	NA cold	1996
chic	19.0	17.37500	07 1996-01-	NA	20.500000	11.4027778	31.833333	NA cold	1996
chic	16.0	7.87500	06 1996-01-	NA	40.500000	3.9861111	38.406250	NA cold	1996
chic	21.0	12.62500	05 1996-01-	NA	30.916667	2.8218599	41.682518	NA cold	1996
chic	21.0	17.62500	04 1996-01-	NA	18.000000	17.4468599	27.002394	NA cold	1996
chic	27.5	13.50000	03 1996-01-	NA	8.000000	22.0000000	14.533213	NA cold	1996
chic	35.0	31.25000	02 1996-01-	NA	30.000000	6.5694444	17.916667	NA cold	1996
chic	34.0	32.25000	01 1995-12-	NA	35.000000	1.9166667	23.312500	NA cold	1995
chic	29.5	27.12500	31 1995-12-	NA	31.500000	1.9583333	29.656250	NA cold	1995
chic	25.0	19.00000	30 1995-12-	NA	39.000000	4.2916667	31.976902	NA cold	1995
chic	23.0	11.87500	29 1995-12- 28	NA	41.000000	2.9891304	38.968297	NA cold	1995

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendemp	cat year
chic	23.0	14.37500	1995-12- 27	NA	30.500000	4.2946860	34.195199	NA cold	1995
chic	21.0	21.00000	1995-12- 26	NA	26.000000	3.3097826	32.000000	NA cold	1995
chic	22.5	10.50000	1995-12- 25	NA	22.000000	18.2083333	19.111111	NA cold	1995
chic	25.0	23.75000	1995-12- 24	NA	24.000000	10.1250000	18.333333	NA cold	1995
chic	27.0	21.25000	1995-12- 23	NA	22.777778	5.7222222	28.555556	NA cold	1995
chic	22.0	18.12500	1995-12- 22	NA	19.000000	5.2777778	38.007850	NA cold	1995
chic	24.0	15.37500	1995-12- 21	NA	19.000000	7.2638889	33.125000	NA cold	1995
chic	26.0	14.87500	1995-12- 20	NA	24.500000	7.2361111	28.041667	NA cold	1995
chic	30.0	21.87500	1995-12- 19	NA	11.000000	24.5471014	16.191964	NA cold	1995
chic	35.0	27.87500	1995-12- 18	NA	16.000000	11.4444444	19.354167	NA cold	1995
chic	30.0	27.00000	1995-12- 17	NA	29.444444	8.2083333	24.354167	NA cold	1995
chic	27.0	18.25000	1995-12- 16	NA	35.500000	5.8194444	32.885417	NA cold	1995
chic	34.0	23.50000	1995-12- 15	NA	41.500000	2.2083333	36.151515	NA cold	1995
chic	38.0	32.12500	1995-12- 14	NA	33.500000	1.4698068	24.182971	NA cold	1995
chic	28.5	29.50000	1995-12- 13	NA	37.500000	4.7916667	28.446558	NA cold	1995
chic	15.5	18.62500	1995-12- 12	NA	32.500000	5.3556763	41.581645	NA cold	1995
chic	4.5	2.50000	1995-12- 11	NA	36.555556	5.7777778	39.145833	NA cold	1995
chic	7.5	3.75000	1995-12-	NA	37.500000	16.9444444	18.114583	NA cold	1995
chic	0.5	2.87500	1995-12- 09	NA	75.000000	20.1527778	13.458333	NA cold	1995
chic	21.5	21.00000	1995-12- 08	NA	35.000000	6.1388889	35.044056	NA cold	1995
chic	25.0	4.75000	1995-12- 07	NA	29.000000	7.2222222	33.394737	NA cold	1995
chic	28.0	8.12500	1995-12- 06	NA	28.500000	7.6425121	27.122247	NA cold	1995
chic	35.0	5.12500	1995-12- 05	NA	26.444444	9.9033816	25.650568	NA cold	1995
chic	36.5	29.75000	1995-12-	NA	20.500000	10.5694444	29.864583	NA cold	1995
chic	47.0	29.62500	04 1995-12-	NA	33.000000	9.2083333	23.562500	NA cold	1995
chic	40.5	30.25000	03 1995-12- 02	NA	32.500000	8.7777778	29.020833	NA cold	1995

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendempca	t year
chic	39.0	24.50000	1995-12- 01	NA	26.500000	5.3421717	29.336806	NA cold	1995
chic	36.5	30.87500	1995-11- 30	NA	35.500000	2.8423913	33.750000	NA cold	1995
chic	22.0	18.75000	1995-11- 29	NA	44.222222	2.1055665	50.000000	NA cold	1995
chic	21.0	13.12500	1995-11- 28	NA	23.000000	6.6461353	39.226010	NA cold	1995
chic	34.5	29.12500	1995-11- 27	NA	25.000000	6.5694444	29.347826	NA cold	1995
chic	43.0	31.37500	1995-11- 26	NA	42.000000	2.1388889	28.986111	NA cold	1995
chic	40.0	27.37500	1995-11-	NA	45.000000	5.4305556	28.458333	NA cold	1995
chic	24.0	11.37500	25 1995-11-	NA	35.000000	6.1666667	34.500000	NA cold	1995
chic	27.0	9.62500	24 1995-11-	NA	16.000000	9.1805556	23.416667	NA cold	1995
chic	27.5	22.37500	23 1995-11-	NA	43.500000	2.2638889	32.354167	NA cold	1995
chic	28.5	15.87500	22 1995-11-	NA	26.500000	10.7500000	24.346920	NA cold	1995
chic	44.5	26.00000	21 1995-11-	NA	44.000000	9.3750000	21.833333	NA cold	1995
chic	39.0	38.50000	20 1995-11-	NA	34.500000	3.7500000	24.656250	NA cold	1995
chic	36.5	28.75000	19 1995-11-	NA	30.000000	1.1250000	28.739583	NA cold	1995
chic	34.5	32.50000	18 1995-11-	NA	35.000000	2.5694444	30.666667	NA cold	1995
chic	32.5	22.75000	17 1995-11-	NA	33.500000	2.8979469	33.864583	NA cold	1995
chic	27.0	22.25000	16 1995-11-	NA	27.000000	4.9166667	34.943452	NA cold	1995
chic	27.0	15.75000	15 1995-11-	NA	34.000000	3.9462560	41.512228	NA cold	1995
chic	26.0	18.25000	14 1995-11-	NA	31.000000	1.7361111	37.218750	NA cold	1995
chic	22.5	20.12500	13 1995-11-	NA	17.500000	4.7638889	27.562500	NA cold	1995
chic	26.5	11.37500	12 1995-11-	NA	10.555556	13.8194444	19.739583	NA cold	1995
chic	46.5	37.62500	11 1995-11-	NA	29.000000	6.5972222	25.750000	NA cold	1995
chic	32.5	27.12500	10 1995-11-	NA	42.000000	4.2083333	28.544956	NA cold	1995
chic	26.0	11.37500	09 1995-11-	NA	18.500000	9.9969807	25.758243	NA cold	1995
chic	38.0	19.00000	08 1995-11-	NA	25.000000	7.0138889	22.065670	NA cold	1995
chic	40.5	39.50000	07 1995-11- 06	NA	36.000000	4.6250000	26.729167	NA cold	1995

	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	m25detrenc	tempcat	year
chic	28.5	28.62500	1995-11- 05	NA	18.444444	5.2777778	26.645833	NA	cold	1995
chic	27.5	16.62500	1995-11- 04	NA	12.500000	8.8194444	20.864583	NA	cold	1995
chic	30.0	19.25000	1995-11- 03	NA	16.500000	10.0416667	17.665226	NA	cold	1995
chic	44.5	27.87500	1995-11- 02	NA	12.000000	4.0235507	15.730525	NA	cold	1995
chic	55.5	59.25000	1995-11- 01	NA	28.500000	3.3611111	27.937500	NA	cold	1995
chic	44.5	45.37500	1995-10-	NA	14.500000	6.3590982	18.012311	NA	cold	1995
chic	43.0	38.62500	31 1995-10-	NA	13.111111	8.5599839	22.052083	NA	$\operatorname{cold}$	1995
chic	44.0	34.75000	30 1995-10-	NA	12.500000	9.6250000	18.229167	NA	cold	1995
chic	45.5	40.75000	29 1995-10-	NA	14.000000	7.0648148	22.489583	NA	cold	1995
chic	53.0	45.75000	28 1995-10-	NA	21.000000	11.5623628	19.203063	NA	cold	1995
chic	51.5	44.62500	27 1995-10-	NA	39.000000	6.9669887	32.673007	NA	cold	1995
chic	46.5	33.25000	26 1995-10-	NA	46.000000	7.2105475	31.274004	NA	cold	1995
chic	42.5	34.75000	25 1995-10-	NA	16.666667	10.2261905	17.885417	NA	cold	1995
chic	60.0	46.62500	24 1995-10-	NA	40.000000	25.9537037	24.625000	NA	cold	1995
chic	48.0	39.00000	23 1995-10-	NA	26.000000	9.6712963	24.854167	NA	cold	1995
chic	38.5	35.25000	22 1995-10-	NA	11.500000	4.6157407	15.479167	NA	cold	1995
chic	44.5	39.00000	21 1995-10-	NA	13.500000	3.8097826	16.187500	NA	$\operatorname{cold}$	1995
chic	64.0	51.75000	20 1995-10-	NA	68.000000	24.7095411	28.994112	NA	cold	1995
chic	58.0	47.12500	19 1995-10-	NA	33.777778	12.0704509	28.395833	NA	cold	1995
chic	59.5	44.12500	18 1995-10-	NA	78.500000	13.9476651	34.750000	NA	cold	1995
chic	48.0	30.62500	17 1995-10-	NA	33.000000	7.6250000	35.520833	NA	$\operatorname{cold}$	1995
chic	46.5	29.75000	16 1995-10-	NA	12.000000	13.3009259	18.583333	NA	cold	1995
chic	48.0	36.37500	15 1995-10-	NA	20.500000	10.2083333	12.218750	NA	cold	1995
chic	70.0	52.62500	14 1995-10-	NA	81.500000	29.3419887	36.328351	NA	cold	1995
chic	68.5	48.87500	13 1995-10-	NA	58.555556	24.3890902	49.804348	NA	cold	1995
chic	62.5	49.87500	12 1995-10- 11	NA	87.000000	11.6183575	51.020454	NA	cold	1995

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrendempca	at year
chic	57.0	44.37500	1995-10- 10	NA	63.000000	5.4597424	41.248206	NA cold	1995
chic	61.5	45.62500	1995-10- 09	NA	39.000000	12.8796296	36.093750	NA cold	1995
chic	52.5	46.87500	1995-10-	NA	22.500000	9.8981481	22.354167	NA cold	1995
chic	49.5	42.37500	08 1995-10-	NA	10.500000	5.7250000	13.583333	NA cold	1995
chic	57.5	51.25000	07 1995-10-	NA	26.125000	5.6976651	20.014946	NA cold	1995
chic	58.0	54.25000	06 1995-10-	NA	23.500000	16.2824074	17.865942	NA cold	1995
chic	58.0	50.37500	05 1995-10-	NA	37.000000	13.3745974	27.697917	NA cold	1995
chic	62.0	53.75000	04 1995-10-	NA	34.500000	11.2775765	37.395833	NA cold	1995
chic	64.0	54.50000	03 1995-10-	NA	53.000000	11.9907407	33.680556	NA cold	1995
chic	66.5	48.25000	02 1995-10-	NA	37.500000	26.0416667	13.277778	NA cold	1995
chic	75.0	55.25000	01 1995-09-	NA	77.250000	47.8703704	16.583333	NA cold	1995
chic	68.0	49.37500	30 1995-09-	NA	74.000000	29.4782609	39.279356	NA cold	1995
chic	67.0	46.87500	29 1995-09-	NA	87.500000	21.6481481	53.133333	NA cold	1995
chic	67.0	48.00000	28 1995-09-	NA	54.000000	17.8397746	40.398033	NA cold	1995
chic	60.0	43.12500	27 1995-09-	NA	59.500000	13.5980274	36.891667	NA cold	1995
chic	56.0	43.75000	26 1995-09-	NA	47.500000	11.6157407	39.308333	NA cold	1995
chic	49.5	37.62500	25 1995-09-	NA	22.333333	17.0277778	24.600000	NA cold	1995
chic	44.0	35.87500	24 1995-09-	NA	30.500000	12.1574074	23.233333	NA cold	1995
chic	44.0	27.75000	23 1995-09-	NA	15.000000	7.1123737	20.836667	NA cold	1995
chic	45.5	40.12500	22 1995-09-	NA		10.6157407		NA cold	1995
chic	55.0	48.37500	21 1995-09-	NA		8.6978663		NA cold	1995
chic	61.5	57.62500	20 1995-09-	NA		10.0539452		NA cold	1995
chic	56.0	48.00000	19 1995-09-	NA		9.4871014		NA cold	1995
			18		9.000000				
chic	56.5	42.37500	1995-09- 17	NA		17.7375000		NA cold	1995
chic	73.5	65.25000	1995-09- 16	NA		26.2708333		NA cold	1995
chic	65.5	55.50000	1995-09- 15	NA	35.500000	14.9724638	26.171377	NA cold	1995

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2	pm25detren	dempc	at year
chic	66.5	54.50000	1995-09- 14	NA	26.500000	20.0765810	19.869565	NA	cold	1995
chic	73.0	61.25000	1995-09- 13	NA	46.000000	25.2711957	26.459223	NA	cold	1995
chic	65.5	59.62500	1995-09- 12	NA	55.666667	16.4405797	46.858333	NA	cold	1995
chic	59.0	46.37500	1995-09- 11	NA	27.500000	16.7451087	31.000000	NA	cold	1995
chic	54.5	43.37500	1995-09- 10	NA	9.000000	24.4125000	10.933333	NA	cold	1995
chic	58.5	46.37500	1995-09-	NA	13.000000	23.3083333	17.566667	NA	cold	1995
chic	61.0	49.12500	09 1995-09-	NA	8.500000	24.7838768	13.176449	NA	cold	1995
chic	62.0	55.87500	08 1995-09-	NA	22.000000	16.5902339	18.481522	NA	cold	1995
chic	74.5	59.87500	07 1995-09-	NA	65.142857	36.3414855	36.571970	NA	cold	1995
chic	76.5	61.12500	06 1995-09-	NA	90.000000	28.5791667	52.119318	NA	cold	1995
chic	75.0	59.00000	05 1995-09-	NA	60.500000	47.0458333	36.406250	NA	cold	1995
chic	72.0	55.62500	04 1995-09-	NA	34.000000	34.2125000	26.489583	NA	cold	1995
chic	68.5	55.87500	03 1995-09-	NA	35.500000	19.9750000	31.250000	NA	cold	1995
chic	69.5	53.62500	02 1995-09-	NA	22.500000	20.5812582	23.950758	NA	cold	1995
chic	79.0	57.12500	01 1995-08-	NA	48.333333	35.4097826	21.926915	NA	cold	1995
chic	83.0	67.00000	31 1995-08-	NA	86.500000	39.1969203	31.291667	NA	hot	1995
chic	80.0	68.00000	30 1995-08-	NA	48.000000	17.9375000	34.379808	NA	cold	1995
chic	76.0	69.87500	29 1995-08-	NA	58.500000	14.8809783	35.180556	NA	cold	1995
chic	77.5	70.00000	28 1995-08-	NA	85.000000	41.5750000	22.055556	NA	cold	1995
chic	80.0	65.50000	27 1995-08-	NA	74.000000	42.4250000	33.847222	NA	cold	1995
chic	81.0	66.00000	26 1995-08-	NA	52.000000	32.0177536	23.838768	NA	hot	1995
chic	76.0	65.37500	25 1995-08-	NA	46.000000	23.9804607	28.212862	NA	cold	1995
chic	74.0	62.87500	24 1995-08-	NA	47.500000	19.8206522	32.986111	NA	cold	1995
chic	74.0	53.62500	23 1995-08-	NA	25.500000	19.1829710	20.627273	NA	cold	1995
chic	75.5	60.25000	22 1995-08-	NA	32.000000	22.0814394	36.678406	NA	cold	1995
chic	74.0	63.62500	21 1995-08- 20	NA	13.000000	26.1916667	14.239583	NA	cold	1995

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrend	tempcat	year
chic	81.0	71.12500	1995-08- 19	NA	32.222222	22.7756410	27.650000	NA	hot	1995
chic	81.0	71.87500	1995-08- 18	NA	33.500000	36.0864295	18.297464	NA	hot	1995
chic	81.5	73.37500	1995-08- 17	NA	34.500000	26.7538043	30.293149	NA	hot	1995
chic	84.0	72.87500	1995-08- 16	NA	45.000000	15.4136528	33.816667	NA	hot	1995
chic	78.0	72.75000	1995-08- 15	NA	30.000000	26.2679348	22.364361	NA	cold	1995
chic	87.0	72.12500	1995-08- 14	NA	55.000000	31.0724359	21.575000	NA	hot	1995
chic	87.0	74.75000	1995-08- 13	NA	48.222222	39.1990741	18.066667	NA	hot	1995
chic	86.5	74.75000	1995-08- 12	NA	58.500000	43.3943182	24.558333	NA	hot	1995
chic	82.0	72.75000	1995-08- 11	NA	55.500000	26.9659420	27.514493	NA	hot	1995
chic	80.0	70.87500	1995-08- 10	NA	38.000000	17.6492754	30.537319	NA	cold	1995
chic	75.0	69.00000	1995-08- 09	NA	49.000000	4.8981884	39.919170	NA	cold	1995
chic	79.5	71.75000	1995-08- 08	NA	57.500000	28.3109190	24.164912	NA	cold	1995
chic	79.5	70.50000	1995-08- 07	NA	37.666667	23.4394122	22.476087	NA	cold	1995
chic	78.0	68.87500	1995-08- 06	NA	26.000000	33.2129630	15.075000	NA	cold	1995
chic	76.5	69.12500	1995-08- 05	NA	36.000000	26.1018519	22.391667	NA	cold	1995
chic	77.0	69.75000	1995-08- 04	NA	39.000000	8.1221820	33.700000	NA	cold	1995
chic	75.0	72.25000	1995-08- 03	NA	34.000000	7.7307971	37.175033	NA	cold	1995
chic	74.0	71.37500	1995-08- 02	NA	28.000000	23.4036232	27.067029	NA	cold	1995
chic	75.0	65.37500	1995-08-	NA	23.777778	30.1847826	20.909091	NA	cold	1995
chic	84.5	68.25000	01 1995-07- 31	NA	82.000000	40.9083333	32.183333	NA	hot	1995
chic	83.5	72.12500	1995-07- 30	NA	43.500000	37.8632576	34.375000	NA	hot	1995
chic	82.5	69.00000	1995-07-	NA	40.500000	29.2958333	30.891667	NA	hot	1995
chic	80.5	63.12500	29 1995-07-	NA	30.000000	33.2177536	28.665580	NA	hot	1995
chic	80.5	67.37500	28 1995-07-	NA	38.000000	41.0702899	23.227277	NA	hot	1995
chic	77.0	68.00000	27 1995-07-	NA	32.777778	36.4245951	29.984058	NA	cold	1995
chic	81.5	64.50000	26 1995-07- 25	NA	43.500000	22.4875000	39.166667	NA	hot	1995

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2	pm25detren	dempc	at year
chic	79.0	68.25000	1995-07- 24	NA	44.000000	27.6414855	35.400000	NA	cold	1995
chic	76.0	67.00000	1995-07- 23	NA	23.000000	29.2500000	24.058333	NA	cold	1995
chic	76.0	68.50000	1995-07- 22	NA	39.000000	22.3291667	38.516667	NA	cold	1995
chic	74.0	56.00000	1995-07- 21	NA	34.000000	25.6844203	29.540580	NA	cold	1995
chic	73.5	67.62500	1995-07- 20	NA	41.333333	18.5403986	36.555073	NA	cold	1995
chic	75.5	57.87500	1995-07- 19	NA	44.000000	25.9170125	32.865909	NA	cold	1995
chic	74.0	54.75000	1995-07- 18	NA	39.000000	24.7146739	23.225000	NA	cold	1995
chic	78.5	55.25000	1995-07- 17	NA	33.000000	27.9666667	19.141667	NA	cold	1995
chic	83.0	67.75000	1995-07- 16	NA	29.000000	43.0458333	15.383333	NA	hot	1995
chic	86.0	69.00000	1995-07-	NA	51.000000	50.5508333	20.233333	NA	hot	1995
chic	91.5	75.62500	15 1995-07-	NA	54.500000	52.0039716	24.773551	NA	hot	1995
chic	92.0	76.37500	14 1995-07-	NA	92.500000	58.5495238	27.317754	NA	hot	1995
chic	84.5	73.12500	13 1995-07-	NA	77.500000	45.3083333	27.890787	NA	hot	1995
chic	79.0	64.62500	12 1995-07-	NA	56.000000	39.6371212	38.190151	NA	cold	1995
chic	73.5	63.00000	11 1995-07-	NA	52.500000	26.9246377	37.150000	NA	cold	1995
chic	73.0	60.87500	10 1995-07-	NA	37.000000	41.3000000	26.916667	NA	cold	1995
chic	70.5	54.25000	09 1995-07-	NA	36.750000	27.5708333	30.016667	NA	cold	1995
chic	70.5	55.62500	08 1995-07-	NA	42.000000	27.3125000	22.128261	NA	cold	1995
chic	72.0	54.00000	07 1995-07-	NA	27.500000	32.8094203	15.708333	NA	cold	1995
chic	75.0	63.87500	06 1995-07-	NA	58.500000	31.0822464	18.162220	NA	cold	1995
chic	75.5	69.50000	05 1995-07-	NA	43.000000	29.1458333	16.508333	NA	cold	1995
chic	71.0	57.50000	04 1995-07-	NA	51.500000	44.3910079	21.330303	NA	cold	1995
chic	63.5	49.37500	03 1995-07-	NA	27.666667	24.9291667	25.350000	NA	cold	1995
chic	65.5	47.75000	02 1995-07-	NA	18.000000	27.5875000	15.633333	NA	cold	1995
chic	71.5	51.12500	01 1995-06-	NA	46.000000	30.0062582	23.233333	NA	cold	1995
chic	77.0	65.25000	30 1995-06- 29	NA	43.000000	28.4794631	33.065283	NA	cold	1995

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2	pm25detren	tempca	t year
chic	74.0	65.25000	1995-06- 28	NA	54.500000	25.8855072	32.432312	NA	cold	1995
chic	72.5	67.37500	1995-06- 27	NA	40.500000	26.1965580	32.025000	NA	cold	1995
chic	75.5	62.62500	1995-06- 26	NA	47.111111	37.1329710	23.558333	NA	cold	1995
chic	75.5	63.75000	1995-06- 25	NA	57.000000	47.9541667	25.333333	NA	cold	1995
chic	77.5	62.37500	1995-06- 24	NA	75.500000	66.5875000	35.033333	NA	cold	1995
chic	79.5	55.75000	1995-06- 23	NA	65.000000	63.3750000	31.102536	NA	cold	1995
chic	80.0	62.50000	1995-06- 22	NA	66.000000	47.8577569	32.782971	NA	cold	1995
chic	78.0	61.75000	1995-06- 21	NA	53.000000	37.9911232	25.312121	NA	cold	1995
chic	85.0	63.75000	1995-06- 20	NA	58.111111	48.7802536	25.728623	NA	hot	1995
chic	82.5	65.25000	1995-06- 19	NA	61.000000	45.0050322	41.608333	NA	hot	1995
chic	82.0	63.37500	19 1995-06- 18	NA	57.500000	48.0583333	30.733333	NA	hot	1995
chic	77.5	61.62500	1995-06-	NA	77.500000	45.6458333	35.650000	NA	cold	1995
chic	76.5	54.87500	17 1995-06-	NA	88.500000	43.0009058	38.550000	NA	cold	1995
chic	72.0	53.25000	16 1995-06-	NA	79.500000	43.1182971	43.882816	NA	cold	1995
chic	74.0	52.00000	15 1995-06-	NA	61.250000	34.3807971	47.717424	NA	cold	1995
chic	67.5	45.75000	14 1995-06- 13	NA	58.000000	16.6514493	44.258333	NA	cold	1995
chic	61.0	41.12500	1995-06- 12	NA	24.000000	21.0460145	24.285870	NA	cold	1995
chic	59.0	44.87500	1995-06- 11	NA	17.500000	21.4583333	20.141667	NA	cold	1995
chic	67.5	51.00000	1995-06-	NA	35.000000	25.2000000	21.041667	NA	cold	1995
chic	59.0	51.75000	10 1995-06-	NA	42.000000	16.7827899	24.103788	NA	cold	1995
chic	53.5	45.00000	09 1995-06-	NA	18.333333	20.4116271	14.377273	NA	cold	1995
chic	71.5	59.00000	08 1995-06-	NA	36.500000	33.9130694	23.275758	NA	cold	1995
chic	74.0	64.62500	07 1995-06-	NA	72.500000	29.4706192	38.735000	NA	cold	1995
chic	67.5	56.87500	06 1995-06-	NA	46.500000	33.6802536	30.091667	NA	cold	1995
chic	67.0	53.75000	05 1995-06-	NA	34.000000	33.5048913	22.866667	NA	cold	1995
chic	67.0	57.25000	04 1995-06- 03	NA	41.500000	34.8416667	33.258333	NA	cold	1995

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrend	tempcat	year
chic	67.5	60.87500	1995-06- 02	NA	65.000000	14.9168478	49.002899	NA	cold	1995
chic	71.5	55.25000	1995-06- 01	NA	65.500000	29.9820652	44.726449	NA	cold	1995
chic	69.5	51.62500	1995-05- 31	NA	81.000000	27.7042918	48.053986	NA	cold	1995
chic	67.5	48.12500	1995-05- 30	NA	47.000000	20.5948068	38.972368	NA	cold	1995
chic	61.0	46.50000	1995-05- 29	NA	16.500000	23.7791667	17.466667	NA	cold	1995
chic	65.5	55.37500	1995-05- 28	NA	21.000000	27.9666667	11.716667	NA	cold	1995
chic	60.5	57.50000	1995-05- 27	NA	29.875000	22.5791667	18.350000	NA	cold	1995
chic	55.0	43.62500	1995-05- 26	NA	21.500000	22.5548913	24.291667	NA	cold	1995
chic	55.0	46.00000	1995-05- 25	NA	15.000000	17.8784420	17.504076	NA	cold	1995
chic	51.5	46.37500	1995-05- 24	NA	10.500000	22.6101449	17.177536	NA	cold	1995
chic	59.5	53.87500	1995-05- 23	NA	38.000000	21.6550725	32.768116	NA	cold	1995
chic	62.0	46.00000	1995-05- 22	NA	67.000000	26.1083333	38.559783	NA	cold	1995
chic	60.5	40.62500	1995-05- 21	NA	29.222222	27.7125000	22.158333	NA	cold	1995
chic	66.0	40.75000	1995-05- 20	NA	39.500000	26.9541667	19.075000	NA	cold	1995
chic	60.5	41.75000	1995-05- 19	NA	36.500000	20.9451087	35.125000	NA	cold	1995
chic	52.5	37.25000	1995-05- 18	NA	13.500000	19.8181159	23.075527	NA	cold	1995
chic	58.5	37.62500	1995-05- 17	NA	15.000000	21.9222826	19.511594	NA	cold	1995
chic	68.5	65.87500	1995-05- 16	NA	47.500000	24.1594697	34.918841	NA	cold	1995
chic	61.5	44.12500	1995-05-	NA	29.777778	21.6083333	38.691667	NA	cold	1995
chic	62.5	51.37500	15 1995-05- 14	NA	21.000000	29.6083333	12.033333	NA	cold	1995
chic	62.0	62.62500	1995-05- 13	NA	32.500000	23.8541667	21.058333	NA	cold	1995
chic	60.0	48.75000	1995-05-	NA	35.000000	25.9349638	31.721077	NA	cold	1995
chic	59.5	47.62500	12 1995-05-	NA	27.000000	18.4202899	30.600000	NA	$\operatorname{cold}$	1995
chic	51.0	49.00000	11 1995-05-	NA	32.000000	10.3813406	31.128200	NA	cold	1995
chic	61.5	54.62500	10 1995-05-	NA	43.777778	21.3648551	30.308333	NA	cold	1995
chic	57.5	42.75000	09 1995-05- 08	NA	41.500000	25.5641304	19.750000	NA	cold	1995

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detreno	tempcat	year
chic	62.5	46.75000	1995-05- 07	NA	44.000000	37.3041667	27.066667	NA	cold	1995
chic	56.0	37.62500	1995-05- 06	NA	43.000000	21.5166667	34.941667	NA	cold	1995
chic	55.0	40.62500	1995-05- 05	NA	48.500000	20.8371377	34.989079	NA	cold	1995
chic	52.5	45.87500	1995-05- 04	NA	35.500000	15.5143775	43.903274	NA	cold	1995
chic	49.5	32.12500	1995-05- 03	NA	32.777778	18.3666667	38.527083	NA	cold	1995
chic	50.5	31.75000	1995-05- 02	NA	16.000000	22.4458333	24.031250	NA	cold	1995
chic	45.5	37.25000	1995-05- 01	NA	13.000000	22.5751294	20.662202	NA	cold	1995
chic	44.5	36.87500	1995-04- 30	NA	7.500000	25.6916667	16.138393	NA	cold	1995
chic	49.5	34.87500	1995-04- 29	NA	28.500000	16.5333333	31.843750	NA	cold	1995
chic	53.0	38.62500	1995-04- 28	NA	31.500000	17.3489130	31.979167	NA	cold	1995
chic	47.5	36.50000	1995-04-	NA	18.333333	19.1827899	27.195076	NA	cold	1995
chic	50.0	50.25000	27 1995-04- 26	NA	34.000000	10.1533267	38.482749	NA	cold	1995
chic	47.0	35.87500	1995-04-	NA	30.000000	20.1088933	26.921377	NA	cold	1995
chic	47.5	39.75000	25 1995-04-	NA	44.500000	20.2924172	33.167929	NA	cold	1995
chic	45.0	32.37500	24 1995-04-	NA	19.000000	21.6458333	28.104167	NA	cold	1995
chic	51.0	35.12500	23 1995-04- 22	NA	19.500000	22.1916667	25.593750	NA	cold	1995
chic	46.5	41.37500	1995-04- 21	NA	29.222222	10.6159420	22.822917	NA	cold	1995
chic	44.0	44.75000	1995-04- 20	NA	27.500000	17.2801383	23.147398	NA	cold	1995
chic	47.5	34.37500	1995-04-	NA	17.500000	24.4914855	19.287138	NA	cold	1995
chic	61.0	42.00000	19 1995-04-	NA	47.500000	27.1163043	18.734601	NA	cold	1995
chic	50.5	35.12500	18 1995-04-	NA	33.000000	27.7750000	29.145833	NA	cold	1995
chic	51.5	39.37500	17 1995-04-	NA	37.000000	18.1000000	33.104167	NA	cold	1995
chic	46.5	36.37500	16 1995-04-	NA	26.111111	28.7875000	24.364583	NA	cold	1995
chic	42.5	29.87500	15 1995-04-	NA	12.500000	32.9583333	20.239583	NA	cold	1995
chic	49.0	29.62500	14 1995-04-	NA	21.000000	31.6199678	19.184783	NA	cold	1995
chic	39.5	34.25000	13 1995-04- 12	NA	14.000000	18.0458937	21.280344	NA	cold	1995

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2	pm25detren	dempca	t year
chic	49.5	48.25000	1995-04- 11	NA	36.500000	10.4646099	25.760417	NA	cold	1995
chic	36.5	32.12500	1995-04- 10	NA	16.000000	18.1988225	18.956975	NA	cold	1995
chic	37.5	24.37500	1995-04- 09	NA	13.111111	30.8928571	9.958333	NA	cold	1995
chic	43.0	36.37500	1995-04- 08	NA	40.000000	13.8072917	22.666667	NA	cold	1995
chic	42.5	35.12500	1995-04- 07	NA	37.500000	21.9519928	22.208333	NA	cold	1995
chic	52.0	28.62500	1995-04- 06	NA	42.000000	23.2971014	21.869565	NA	cold	1995
chic	34.5	22.75000	1995-04- 05	NA	37.500000	15.6354167	27.489583	NA	cold	1995
chic	33.0	1.37500	1995-04- 04	NA	23.000000	22.2604167	18.145833	NA	cold	1995
chic	55.0	39.00000	1995-04- 03	NA	24.333333	20.9321946	23.854167	NA	cold	1995
chic	44.0	27.50000	1995-04- 02	NA	18.000000	21.7500000	21.250000	NA	cold	1995
chic	37.0	26.75000	1995-04- 01	NA	23.000000	13.1607143	28.500000	NA	cold	1995
chic	36.5	29.87500	1995-03- 31	NA	25.500000	6.6727053	28.032156	NA	cold	1995
chic	40.5	29.50000	1995-03- 30	NA	21.500000	6.7916667	31.986413	NA	cold	1995
chic	40.0	33.00000	1995-03- 29	NA	28.000000	4.4722222	31.975379	NA	cold	1995
chic	41.0	37.62500	1995-03- 28	NA	21.222222	1.1316425	28.483902	NA	cold	1995
chic	41.5	36.25000	1995-03- 27	NA	22.000000	11.2361111	27.731061	NA	cold	1995
chic	43.5	25.37500	1995-03- 26	NA	27.500000	21.3888889	24.093750	NA	cold	1995
chic	42.0	22.50000	1995-03- 25	NA	24.500000	22.2916667	31.729167	NA	cold	1995
chic	37.0	22.37500	1995-03-	NA	16.500000	21.9184783	31.290179	NA	cold	1995
chic	36.0	28.75000	24 1995-03-	NA	10.000000	21.2192029	23.742754	NA	cold	1995
chic	39.0	31.75000	23 1995-03-	NA	14.777778	19.1338384	23.324405	NA	cold	1995
chic	43.5	30.12500	22 1995-03-	NA	22.000000	13.5972222	24.766667	NA	cold	1995
chic	50.5	39.12500	21 1995-03-	NA	34.500000	10.7934783	20.681069	NA	cold	1995
chic	50.0	42.25000	20 1995-03-	NA	56.500000	10.6388889	24.052083	NA	cold	1995
chic	49.0	40.50000	19 1995-03-	NA	31.500000	19.3750000	25.875000	NA	cold	1995
chic	42.5	33.50000	18 1995-03- 17	NA	21.500000	21.7487374	25.947917	NA	cold	1995

city	tmpd	$\operatorname{dewptp}$	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrend	tempcat	year
chic	54.0	41.00000	1995-03- 16	NA	44.222222	13.4698068	48.319129	NA	cold	1995
chic	59.0	43.37500	1995-03- 15	NA	65.000000	18.1419082	49.556238	NA	cold	1995
chic	61.0	44.37500	1995-03-	NA	67.500000	15.5000000	52.487689	NA	cold	1995
chic	61.5	44.25000	14 1995-03-	NA	56.000000	17.5609903	40.388587	NA	cold	1995
chic	58.5	44.25000	13 1995-03-	NA	31.500000	29.3055556	23.809028	NA	$\operatorname{cold}$	1995
chic	51.0	38.75000	12 1995-03-	NA	30.500000	27.5972222	28.695833	NA	cold	1995
chic	40.5	35.50000	11 1995-03-	NA	34.333333	13.4722222	29.046131	NA	cold	1995
chic	24.5	18.87500	10 1995-03-	NA	36.500000	9.9233092	39.157156	NA	cold	1995
chic	23.5	12.37500	09 1995-03-	NA	22.500000	17.6388889	28.937500	NA	cold	1995
chic	30.5	20.87500	08 1995-03-	NA	19.000000	7.7083333	30.531250	NA	cold	1995
chic	33.0	32.12500	07 1995-03-	NA	29.500000	10.8888889	26.843750	NA	cold	1995
chic	35.0	32.75000	06 1995-03-	NA	39.000000	4.5694444	27.458333	NA	cold	1995
chic	31.5	20.12500	05 1995-03-	NA	41.111111	10.2777778	38.510417	NA	cold	1995
chic	23.0	14.00000	04 1995-03-	NA	45.500000	7.7373188	41.074811	NA	cold	1995
chic	17.5	6.62500	03 1995-03-	NA	26.000000	7.1250000	36.642992	NA	cold	1995
chic	16.5	3.75000	02 1995-03-	NA	21.500000	11.7717391	24.307971	NA	cold	1995
chic	27.5	20.87500	01 1995-02-	NA	18.500000	15.7752525	26.373641	NA	cold	1995
chic	31.5	28.62500	28 1995-02-	NA	16.500000	15.1515700	23.786685	NA	cold	1995
chic	30.5	27.50000	27 1995-02-	NA	23.333333	13.0972222	19.614583	NA	cold	1995
chic	39.0	26.37500	26 1995-02-	NA	21.000000	12.0694444	24.093750	NA	cold	1995
chic	32.0	17.50000	25 1995-02-	NA	15.500000	15.3055556	26.770833	NA	cold	1995
chic	41.0	21.50000	24 1995-02-	NA	43.000000	13.2457729	28.050189	NA	cold	1995
chic	38.0	30.00000	23 1995-02-	NA	41.000000	3.5972222	31.239583	NA	cold	1995
chic	28.0	17.25000	22 1995-02-	NA	17.000000	18.3623188	23.991477	NA	cold	1995
chic	40.5	28.25000	21 1995-02-	NA	33.000000	9.9027778	27.541667	NA	cold	1995
chic	38.0	28.37500	20 1995-02- 19	NA	24.500000	13.6666667	23.302083	NA	cold	1995

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n <b>2</b> 3tmean2	no2tmean2p	om25detrendempca	t year
chic	42.5	27.00000	1995-02- 18	NA	42.500000	9.1250000	30.645833	NA cold	1995
chic	33.0	18.75000	1995-02- 17	NA	55.000000	4.2045455	39.675231	NA cold	1995
chic	25.0	18.25000	1995-02- 16	NA	36.500000	7.4740338	31.481102	NA cold	1995
chic	30.5	21.37500	1995-02- 15	NA	25.000000	3.7222222	24.197917	NA cold	1995
chic	18.5	11.37500	1995-02- 14	NA	39.285714	6.1817633	32.524868	NA cold	1995
chic	17.0	0.75000	1995-02- 13	NA	37.000000	8.9166667	28.989583	NA cold	1995
chic	7.5	2.37500	1995-02- 12	NA	22.500000	11.7222222	20.864583	NA cold	1995
chic	6.5	13.25000	1995-02- 11	NA	69.500000	20.1388889	13.843750	NA cold	1995
chic	26.5	4.87500	1995-02- 10	NA	38.000000	12.2916667	20.315670	NA cold	1995
chic	24.0	25.00000	1995-02- 09	NA	34.500000	4.6781401	29.151268	NA cold	1995
chic	12.0	1.50000	1995-02- 08	NA	25.555556	13.1250000	25.614583	NA cold	1995
chic	15.0	3.37500	1995-02- 07	NA	38.500000	9.5027174	28.781703	NA cold	1995
chic	11.0	0.00000	1995-02- 06	NA	22.000000	7.4375000	30.354167	NA cold	1995
chic	8.5	4.62500	1995-02- 05	NA	17.500000	18.3958333	19.916667	NA cold	1995
chic	20.0	3.50000	1995-02- 04	NA	17.000000	18.6875000	16.343750	NA cold	1995
chic	30.5	24.25000	1995-02- 03	NA	31.000000	8.0262681	28.362813	NA cold	1995
chic	33.5	26.62500	1995-02- 02	NA	16.44444	17.4375000	23.677083	NA cold	1995
chic	37.0	27.50000	1995-02- 01	NA	19.500000	9.7681159	27.489130	NA cold	1995
chic	30.5	30.37500	1995-01- 31	NA	32.000000	9.555556	26.546402	NA cold	1995
chic	24.0	19.12500	1995-01- 30	NA	47.000000	6.8573232	41.541667	NA cold	1995
chic	25.0	20.00000	1995-01- 29	NA	9.000000	22.2500000	18.052083	NA cold	1995
chic	28.5	16.00000	1995-01- 28	NA	17.000000	22.3611111	20.875000	NA cold	1995
chic	23.5	26.00000	1995-01-	NA	63.111111	4.1008454	45.310071	NA cold	1995
chic	18.0	13.25000	27 1995-01- 26	NA	58.000000	3.2246377	50.437500	NA cold	1995
chic	18.0	9.25000	1995-01-	NA	66.500000	1.6666667	52.446970	NA cold	1995
chic	15.0	6.75000	25 1995-01- 24	NA	45.000000	2.8143939	42.213809	NA cold	1995

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendempca	t year
chic	20.0	14.25000	1995-01- 23	NA	24.500000	3.7500000	33.156250	NA cold	1995
chic	20.0	16.50000	1995-01- 22	NA	19.000000	8.4722222	24.593750	NA cold	1995
chic	23.5	17.75000	1995-01- 21	NA	20.222222	8.9444444	18.395833	NA cold	1995
chic	30.0	20.12500	1995-01- 20	NA	16.500000	8.6950483	22.598526	NA cold	1995
chic	34.5	33.00000	1995-01- 19	NA	12.000000	6.1107268	17.997200	NA cold	1995
chic	35.5	22.62500	1995-01- 18	NA	24.500000	3.9027778	25.552083	NA cold	1995
chic	36.5	38.37500	1995-01- 17	NA	28.000000	0.9734300	23.110054	NA cold	1995
chic	34.0	29.37500	1995-01- 16	NA	16.000000	11.3194444	19.552083	NA cold	1995
chic	33.0	25.25000	1995-01- 15	NA	9.857143	9.2916667	15.640399	NA cold	1995
chic	37.0	32.75000	1995-01- 14	NA	10.500000	1.6250000	19.135417	NA cold	1995
chic	35.5	33.75000	1995-01- 13	NA	21.000000	0.8629227	27.260417	NA cold	1995
chic	42.0	37.75000	1995-01- 12	NA	29.000000	1.2101449	30.312500	NA cold	1995
chic	33.0	37.50000	1995-01- 11	NA	68.000000	0.5169082	37.770833	NA cold	1995
chic	23.5	24.50000	1995-01- 10	NA	45.500000	4.8834541	36.199275	NA cold	1995
chic	17.5	11.87500	1995-01- 09	NA	37.777778	4.7222222	38.479167	NA cold	1995
chic	12.0	3.25000	1995-01- 08	NA	36.500000	5.0833333	29.197917	NA cold	1995
chic	19.5	13.50000	1995-01- 07	NA	24.500000	5.0833333	28.187500	NA cold	1995
chic	22.5	22.00000	1995-01- 06	NA	32.000000	1.3725845	31.114583	NA cold	1995
chic	9.0	7.00000	1995-01-	NA	35.500000	5.0966184	29.370924	NA cold	1995
chic	3.0	7 50000	05 1995-01-	NA	27.000000	9.0000000	27.240489	NA cold	1995
chic	11.0	7.50000	04 1995-01-	NA	22.555556	9.1957071	25.055871	NA cold	1995
chic	14.5	$2.87500 \\ 10.50000$	03 1995-01-	NA	20.000000	12.7777778	21.239583	NA cold	1995
chic	19.5	5.62500	02 1995-01-	NA	22.500000	14.7020202	15.723214	NA cold	1995
chic	32.0	29.87500	01 1994-12-	NA	32.000000	1.2638889	25.922101	NA cold	1994
chic	32.0	24.87500	31 1994-12-	NA	34.000000	5.7222222	28.079293	NA cold	1994
chic	35.0	22.87500	30 1994-12- 29	NA	14.000000	18.8055556	17.516667	NA cold	1994

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendempca	t year
chic	38.0	30.12500	1994-12- 28	NA	16.142857	7.8260870	23.162879	NA cold	1994
chic	40.5	37.25000	1994-12- 27	NA	40.000000	3.0833333	31.569444	NA cold	1994
chic	36.0	33.25000	1994-12- 26	NA	34.500000	2.3333333	40.374634	NA cold	1994
chic	39.5	27.00000	1994-12- 25	NA	27.000000	6.8472222	32.411111	NA cold	1994
chic	33.5	28.87500	1994-12- 24	NA	22.000000	10.1250000	23.450000	NA cold	1994
chic	38.5	37.87500	1994-12- 23	NA	16.000000	8.2620773	24.474967	NA cold	1994
chic	39.5	36.75000	1994-12- 22	NA	69.875000	1.8888889	50.281539	NA cold	1994
chic	40.5	31.87500	1994-12- 21	NA	58.500000	0.9160628	44.295588	NA cold	1994
chic	38.0	33.62500	1994-12- 20	NA	33.500000	0.8174682	32.256818	NA cold	1994
chic	28.0	27.75000	1994-12- 19	NA	26.500000	3.3514493	29.600000	NA cold	1994
chic	29.5	22.12500	1994-12- 18	NA	19.000000	9.0972222	25.050000	NA cold	1994
chic	37.0	31.12500	1994-12- 17	NA	31.500000	3.4861111	27.408333	NA cold	1994
chic	36.5	36.00000	1994-12- 16	NA	41.000000	0.6944444	34.391667	NA cold	1994
chic	32.5	34.37500	1994-12- 15	NA	43.500000	0.3611111	30.454519	NA cold	1994
chic	27.5	25.12500	1994-12- 14	NA	36.000000	4.2364405	28.835145	NA cold	1994
chic	23.5	16.87500	1994-12- 13	NA	48.500000	0.4915459	33.342424	NA cold	1994
chic	21.5	18.25000	1994-12- 12	NA	NA	1.5694444	26.316667	NA cold	1994
chic	19.0	8.75000	1994-12- 11	NA	23.000000	8.1666667	25.141667	NA cold	1994
chic	27.0	15.87500	1994-12- 10	NA	31.000000	3.2916667	31.733333	NA cold	1994
chic	30.5	22.87500	1994-12- 09	NA	27.000000	1.6527778	29.523188	NA cold	1994
chic	30.0	27.50000	1994-12- 08	NA	18.000000	13.8194444	23.708333	NA cold	1994
chic	31.0	23.87500	1994-12-	NA	3.000000	18.6340580	20.729381	NA cold	1994
chic	35.0	33.12500	07 1994-12-	NA	8.500000	4.7260101	16.659848	NA cold	1994
chic	43.5	39.00000	06 1994-12-	NA	47.500000	0.1527778	27.203986	NA cold	1994
chic	48.5	47.75000	05 1994-12-	NA	43.000000	1.4444444	27.733333	NA cold	1994
chic	48.0	44.37500	04 1994-12-	NA	27.500000	4.3472222	26.800000	NA cold	1994
			03						

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendemp	cat year
chic	46.0	33.50000	1994-12- 02	NA	52.000000	8.6388889	30.916667	NA cold	1994
chic	42.0	29.50000	1994-12- 01	NA	75.500000	6.5694444	27.169400	NA cold	1994
chic	29.0	24.25000	1994-11- 30	NA	36.000000	2.9204545	27.334091	NA cold	1994
chic	29.5	22.62500	1994-11- 29	NA	25.000000	7.6250000	19.434524	NA cold	1994
chic	36.0	24.00000	1994-11- 28	NA	14.625000	12.4323671	12.297727	NA cold	1994
chic	47.5	44.37500	1994-11-	NA	22.000000	9.6111111	15.175000	NA cold	1994
chic	35.0	24.75000	27 1994-11-	NA	20.500000	18.1388889	17.383333	NA cold	1994
chic	39.0	16.50000	26 1994-11-	NA	17.000000	6.1388889	30.708333	NA cold	1994
chic	39.0	33.75000	25 1994-11-	NA	17.000000	9.7916667	19.633333	NA cold	1994
chic	36.0	23.12500	24 1994-11-	NA	38.000000	5.6250000	25.666667	NA cold	1994
chic	31.0	16.87500	23 1994-11-	NA	16.625000	10.5253623	20.934651	NA cold	1994
chic	43.0	28.25000	22 1994-11-	NA	17.500000	14.8285024	16.674275	NA cold	1994
chic	52.0	38.50000	21 1994-11-	NA	24.500000	6.6388889	25.841667	NA cold	1994
chic	38.0	31.62500	20 1994-11-	NA	45.000000	1.7916667	32.683333	NA cold	1994
chic	44.5	29.25000	19 1994-11-	NA	NA	9.3725845	18.373551	NA cold	1994
chic	44.0	44.12500	18 1994-11-	NA	42.000000	1.7741546	24.083333	NA cold	1994
chic	43.5	35.25000	17 1994-11-	NA	38.750000	10.1111111	31.608333	NA cold	1994
chic	41.5	34.12500	16 1994-11-	NA	18.000000	9.1111111	26.215260	NA cold	1994
chic	50.5	38.50000	15 1994-11-	NA	NA	5.5694444	17.941667	NA cold	1994
chic	58.0	56.25000	14 1994-11-	NA	24.000000	11.5694444	15.575000	NA cold	1994
chic	46.5	46.37500	13 1994-11-	NA	29.000000	3.0277778	23.300000	NA cold	1994
chic	46.0	30.75000	12 1994-11-	NA	30.500000	9.7638889	28.916667	NA cold	1994
chic	43.0	34.50000	11 1994-11-	NA	16.375000	23.0303030	20.833004	NA cold	1994
chic	47.0	33.00000	10 1994-11-	NA	10.000000	23.2868357	15.988570	NA cold	1994
chic	55.0	50.37500	09 1994-11-	NA	38.500000	4.2777778	30.050000	NA cold	1994
chic	46.5	39.00000	08 1994-11- 07	NA	19.000000	6.5833333	29.944697	NA cold	1994

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	ad3tmean2	no2tmean2p	om25detrend	tempcat	year
chic	48.0	35.37500	1994-11- 06	NA	13.500000	11.7916667	18.200000	NA	cold	1994
chic	54.0	55.12500	1994-11- 05	NA	11.000000	7.4861111	15.491667	NA	cold	1994
chic	58.5	55.62500	1994-11- 04	NA	16.125000	1.8931159	22.655383	NA	cold	1994
chic	60.5	62.12500	1994-11- 03	NA	63.000000	8.3194444	29.666667	NA	cold	1994
chic	51.0	35.75000	1994-11- 02	NA	59.000000	9.1805556	31.550000	NA	cold	1994
chic	44.5	32.00000	1994-11- 01	NA	24.000000	7.5911836	26.309190	NA	cold	1994
chic	45.5	39.12500	1994-10- 31	NA	7.500000	25.8020833	16.683333	NA	cold	1994
chic	48.5	43.37500	1994-10- 30	NA	39.000000	7.4270833	37.250000	NA	cold	1994
chic	57.0	40.87500	1994-10- 29	NA	41.875000	16.7604167	28.475000	NA	cold	1994
chic	54.0	34.25000	1994-10-	NA	193.000000	14.1834239	29.033333	NA	cold	1994
chic	46.0	34.25000	28 1994-10-	NA	77.500000	6.1055254	30.354620	NA	cold	1994
chic	42.0	30.75000	27 1994-10-	NA	35.000000	5.6816123	26.375000	NA	cold	1994
chic	43.0	30.12500	26 1994-10-	NA	24.000000	8.2710598	19.877841	NA	cold	1994
chic	47.0	27.62500	25 1994-10-	NA	33.500000	11.5288826	20.708333	NA	cold	1994
chic	52.0	35.50000	24 1994-10-	NA	21.125000	10.9531250	18.506667	NA	cold	1994
chic	58.5	45.87500	23 1994-10-	NA	54.500000	14.1145833	40.491667	NA	cold	1994
chic	56.5	45.37500	22 1994-10-	NA	104.000000	8.0018116	42.115909	NA	cold	1994
chic	57.0	46.87500	21 1994-10-	NA	33.000000	6.9759964	27.334552	NA	cold	1994
chic	64.5	47.37500	20 1994-10-	NA	25.000000	11.2892992	21.090152	NA	cold	1994
chic	65.0	60.12500	19 1994-10-	NA	48.500000	9.5678113	22.019203	NA	cold	1994
chic	69.5	54.87500	18 1994-10-	NA	39.285714	20.5187953	32.275000	NA	cold	1994
chic	66.0	54.87500	17 1994-10-	NA	38.000000	19.7500000	30.475000	NA	cold	1994
chic	58.0	53.25000	16 1994-10-	NA	45.000000	14.6666667	25.675000	NA	cold	1994
chic	58.5	51.87500	15 1994-10-	NA	46.500000	13.5738225	29.864526	NA	cold	1994
chic	55.5	49.87500	14 1994-10-	NA	53.500000	6.4062500	39.008333	NA	cold	1994
chic	51.5	47.75000	13 1994-10- 12	NA	48.000000	8.2185236	33.437846	NA	cold	1994

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	pm25detrendem	pcat year
chic	48.5	40.75000	1994-10- 11	NA	36.375000	11.9670002	32.336025	NA cold	1994
chic	46.0	31.75000	1994-10- 10	NA	NA	9.6510417	26.058333	NA cold	1994
chic	47.5	32.12500	1994-10- 09	NA	16.000000	10.1093750	20.250000	NA cold	1994
chic	56.0	47.12500	1994-10- 08	NA	20.000000	2.7760417	20.266667	NA cold	1994
chic	68.0	62.37500	1994-10- 07	NA	82.500000	30.0052083	26.094697	NA cold	1994
chic	62.0	49.87500	1994-10- 06	NA	42.000000	21.4218750	33.350000	NA cold	1994
chic	51.0	42.75000	1994-10- 05	NA	40.125000	5.5420166	31.900000	NA cold	1994
chic	53.5	44.75000	1994-10- 04	NA	27.000000	9.1486742	23.035498	NA cold	1994
chic	57.5	45.75000	1994-10- 03	NA	18.000000	22.6313406	19.723188	NA cold	1994
chic	57.0	41.50000	1994-10- 02	NA	12.500000	22.7291667	11.466667	NA cold	1994
chic	58.0	47.12500	1994-10-	NA	15.500000	20.5729167	18.391667	NA cold	1994
chic	67.5	56.50000	01 1994-09- 30	NA	63.000000	18.7916667	41.925000	NA cold	1994
chic	57.5	46.50000	1994-09-	NA	37.571429	6.3229167	31.758333	NA cold	1994
chic	57.0	43.75000	29 1994-09-	NA	34.000000	9.8156703	24.358333	NA cold	1994
chic	54.0	49.12500	28 1994-09-	NA	23.000000	5.5261652	17.733333	NA cold	1994
chic	54.5	51.37500	27 1994-09- 26	NA	25.000000	8.0511775	28.629545	NA cold	1994
chic	60.5	50.75000	1994-09- 25	NA	24.000000	16.1666667	29.975000	NA cold	1994
chic	63.5	61.37500	1994-09- 24	NA	33.000000	11.3489583	25.850000	NA cold	1994
chic	65.0	59.25000	1994-09-	NA	49.125000	11.7007212	34.410931	NA cold	1994
chic	66.5	59.62500	23 1994-09-	NA	61.500000	21.7431065	35.633333	NA cold	1994
chic	71.0	48.00000	22 1994-09-	NA	82.000000	30.4940476	48.477174	NA cold	1994
chic	71.5	53.00000	21 1994-09-	NA	80.500000	20.1358696	46.722101	NA cold	1994
chic	70.0	55.25000	20 1994-09-	NA	61.500000	15.5842803	43.616667	NA cold	1994
chic	67.0	43.12500	19 1994-09-	NA	28.000000	11.5364583	28.366667	NA cold	1994
chic	65.5	53.00000	18 1994-09-	NA	38.125000	9.2656250	24.391667	NA cold	1994
chic	74.0	56.87500	17 1994-09- 16	NA	77.000000	34.6822917	24.173452	NA cold	1994

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	ad3tmean2	no2tmean2p	om25detrendempca	t year
chic	80.5	60.62500	1994-09- 15	NA	119.500000	34.0184659	27.486905	NA hot	1994
chic	81.0	67.75000	1994-09- 14	NA	61.500000	27.9221014	31.251515	NA hot	1994
chic	77.0	62.25000	1994-09-	NA	73.000000	30.5624382	35.291667	NA cold	1994
chic	75.5	60.25000	13 1994-09-	NA	88.500000	28.3958333	46.258333	NA cold	1994
chic	74.5	64.87500	12 1994-09-	NA	44.125000	24.9114583	32.991667	NA cold	1994
chic	76.5	63.50000	11 1994-09-	NA	38.000000	25.7343750	36.725000	NA cold	1994
chic	72.0	63.12500	10 1994-09-	NA	46.000000	21.1927083	48.200000	NA cold	1994
chic	69.5	59.75000	09 1994-09-	NA	42.000000	9.2748065	38.861956	NA cold	1994
chic	65.0	51.75000	08 1994-09-	NA	56.000000	12.7708333	35.959783	NA cold	1994
chic	67.0	52.00000	07 1994-09-	NA	NA	14.5045290	28.918939	NA cold	1994
chic	61.5	60.37500	06 1994-09-	NA	39.625000	25.3854167	21.966667	NA cold	1994
chic	59.5	54.50000	05 1994-09-	NA	23.000000	22.2291667	29.416667	NA cold	1994
chic	62.0	53.87500	04 1994-09-	NA	37.500000	16.4583333	31.458333	NA cold	1994
chic	59.0	50.50000	03 1994-09-	NA	88.000000	7.6475420	38.360870	NA cold	1994
chic	59.0	46.37500	02 1994-09-	NA	14.500000	13.8906250	20.083333	NA cold	1994
chic	61.5	53.37500	01 1994-08-	NA	28.000000	13.6326490	22.682540	NA cold	1994
chic	64.0	61.62500	31 1994-08-	NA	39.571429	8.9353818	37.105676	NA cold	1994
chic	66.0	52.37500	30 1994-08-	NA		18.0813900		NA cold	1994
chic	67.5	54.12500	29 1994-08-	NA	36.000000			NA cold	1994
chic	77.0	68.12500	28 1994-08-	NA		33.7458333		NA cold	1994
chic	76.5	68.37500	27 1994-08-	NA	65.500000			NA cold	1994
chic	78.5	73.00000	26 1994-08-	NA	92.000000			NA cold	1994
			1994-08- 25 1994-08-		59.428571				
chic	77.5	70.37500	24	NA				NA cold	1994
chic	69.5	61.25000	1994-08- 23	NA	61.500000			NA cold	1994
chic	68.0	57.50000	1994-08- 22	NA	46.500000			NA cold	1994
chic	66.0	58.37500	1994-08- 21	NA	NA	19.2500000	15.062500	NA cold	1994

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrene	dempcat	year
chic	70.0	62.12500	1994-08- 20	NA	31.000000	30.8333333	18.131944	NA	cold	1994
chic	77.0	64.50000	1994-08- 19	NA	86.000000	36.3688406	34.247343	NA	cold	1994
chic	71.0	66.37500	1994-08-	NA	62.875000	23.6250000	45.620422	NA	cold	1994
chic	70.0	61.00000	18 1994-08-	NA	52.500000	26.9083333	44.806752	NA	cold	1994
chic	66.5	58.12500	17 1994-08-	NA	68.500000	19.5812888	40.183333	NA	cold	1994
chic	66.5	51.50000	16 1994-08-	NA	32.000000	14.7570455	29.796717	NA	cold	1994
chic	64.5	50.87500	15 1994-08-	NA	33.000000	19.3697917	18.691667	NA	cold	1994
chic	75.0	70.75000	14 1994-08-	NA	41.000000	23.1342593	23.825000	NA	cold	1994
chic	65.5	64.75000	13 1994-08-	NA	41.250000	16.1179677	34.125000	NA	cold	1994
chic	63.5	59.25000	12 1994-08-	NA	29.500000	23.4822464	26.196429	NA	cold	1994
chic	61.0	57.50000	11 1994-08-	NA	NA	6.5238636	33.583333	NA	cold	1994
chic	58.5	51.00000	10 1994-08-	NA	24.000000	19.0259058	15.038373	NA	cold	1994
chic	74.0	60.00000	09 1994-08-	NA	51.500000	29.1492754	24.722222	NA	cold	1994
chic	65.0	57.25000	08 1994-08-	NA	26.000000	31.0916667	31.191667	NA	cold	1994
chic	60.0	50.75000	07 1994-08-	NA	35.250000	19.9666667	29.266667	NA	cold	1994
chic	59.0	47.37500	06 1994-08-	NA	19.000000	18.7079875	14.008333	NA	cold	1994
chic	69.5	53.75000	05 1994-08-	NA	45.500000	20.3969203	24.486905	NA	cold	1994
chic	71.5	68.12500	04 1994-08-	NA	62.000000	22.3889657	34.576389	NA	cold	1994
chic	69.0	58.00000	03 1994-08-	NA	39.500000	26.0958333	18.316288	NA	cold	1994
chic	77.0	67.00000	02 1994-08-	NA	60.000000	34.2925725	31.076389	NA	cold	1994
chic	75.0	61.50000	01 1994-07-	NA	46.750000	32.4250000	24.319444	NA	cold	1994
chic	70.0	57.75000	31 1994-07-	NA	72.500000	27.9490741	39.574495	NA	cold	1994
chic	67.5	51.37500	30 1994-07-	NA	74.000000	16.9006776	35.684843	NA	cold	1994
chic	66.0	50.25000	29 1994-07-	NA	24.500000	13.3050725	20.474336	NA	cold	1994
chic	67.5	54.00000	28 1994-07-	NA	24.500000	13.6899704	18.569774	NA	cold	1994
chic	66.0	54.37500	27 1994-07- 26	NA	35.500000	15.7501812	28.983333	NA	cold	1994

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n <b>2</b> 3tmean2	no2tmean2	pm25detren	dempc	at year
chic	72.5	51.50000	1994-07- 25	NA	35.875000	15.4947464	24.842857	NA	cold	1994
chic	74.5	57.25000	1994-07- 24	NA	20.000000	22.7833333	18.358333	NA	cold	1994
chic	75.5	63.75000	1994-07- 23	NA	25.500000	21.2685185	21.083333	NA	cold	1994
chic	72.5	64.12500	1994-07- 22	NA	32.000000	13.1070652	22.384420	NA	cold	1994
chic	74.5	66.62500	1994-07- 21	NA	40.500000	17.8595158	26.000000	NA	cold	1994
chic	79.5	69.50000	1994-07-	NA	53.000000	26.6121212	29.111113	NA	cold	1994
chic	77.0	67.25000	20 1994-07-	NA	37.000000	21.4827899	30.578283	NA	cold	1994
chic	75.0	61.50000	19 1994-07-	NA	35.500000	21.3867424	31.238333	NA	cold	1994
chic	76.0	60.25000	18 1994-07-	NA	26.500000	27.9000000	24.766667	NA	cold	1994
chic	73.5	64.75000	17 1994-07-	NA	38.500000	28.8041667	34.989216	NA	cold	1994
chic	74.0	58.87500	16 1994-07-	NA	41.000000	22.5087235	25.783333	NA	cold	1994
chic	73.5	65.75000	15 1994-07-	NA	56.500000	29.0963745	26.780195	NA	cold	1994
chic	66.5	58.50000	14 1994-07-	NA	25.000000	16.6447262	20.631061	NA	cold	1994
chic	81.0	67.50000	13 1994-07-	NA	50.500000	35.1886775	26.389650	NA	hot	1994
chic	69.5	66.00000	12 1994-07-	NA	68.500000	24.7291667	23.495370	NA	cold	1994
chic	66.0	54.50000	11 1994-07-	NA	13.500000	20.1666667	10.944444	NA	cold	1994
chic	66.5	58.12500	10 1994-07-	NA	22.000000	13.9916667	12.055556	NA	cold	1994
chic	74.0	60.37500	09 1994-07-	NA	42.000000	21.7622036	18.659722	NA	cold	1994
chic	79.5	70.25000	08 1994-07-	NA	47.875000	18.3833333	35.250000	NA	cold	1994
chic	82.5	68.37500	07 1994-07-	NA	52.000000	26.0068987	32.840278	NA	hot	1994
chic	85.5	70.50000	06 1994-07-	NA	12.000000	35.6755051	25.638131	NA	hot	1994
chic	82.0	74.00000	05 1994-07-	NA	41.500000	38.3240741	15.666667	NA	hot	1994
chic	66.5	63.62500	04 1994-07-	NA	34.500000	28.2037037	18.763889	NA	cold	1994
chic	63.5	52.00000	03 1994-07-	NA	15.500000	17.4333333	14.673611	NA	cold	1994
chic	77.0	63.75000	02 1994-07-	NA	47.875000	33.7433300	32.459486	NA	cold	1994
chic	70.0	59.37500	01 1994-06- 30	NA	41.500000	15.5311594	31.486111	NA	cold	1994

city	tmpd	dewptp	date	pm25	pm10tmear	ad3tmean2	no2tmean2	pm25detren	dempc	at year
chic	70.5	58.87500	1994-06- 29	NA	37.000000	26.6397727	25.248957	NA	cold	1994
chic	74.5	59.50000	1994-06- 28	NA	51.500000	28.0973810	27.458333	NA	cold	1994
chic	69.5	54.00000	1994-06- 27	NA	33.500000	24.6596014	25.895290	NA	cold	1994
chic	68.5	59.75000	1994-06- 26	NA	41.000000	33.4460145	21.020833	NA	cold	1994
chic	70.5	61.00000	1994-06- 25	NA	31.500000	25.7875000	27.812500	NA	cold	1994
chic	63.5	54.00000	1994-06- 24	NA	27.500000	32.5845850	17.645833	NA	cold	1994
chic	67.5	62.62500	1994-06- 23	NA	39.000000	22.6447464	32.873106	NA	cold	1994
chic	73.5	48.00000	1994-06- 22	NA	47.500000	26.5375000	32.442797	NA	cold	1994
chic	74.0	53.00000	1994-06- 21	NA	37.000000	26.6914526	28.614734	NA	cold	1994
chic	78.0	72.00000	1994-06-	NA	88.000000	33.4025362	38.120581	NA	cold	1994
chic	75.5	63.62500	20 1994-06-	NA	35.857143	32.9166667	18.569444	NA	cold	1994
chic	82.0	64.25000	19 1994-06-	NA	71.500000	52.1784420	41.312500	NA	hot	1994
chic	81.5	65.37500	18 1994-06-	NA	106.500000	30.9458333	42.715909	NA	hot	1994
chic	84.0	65.00000	17 1994-06-	NA	86.500000	34.8702899	37.187802	NA	hot	1994
chic	86.0	66.37500	16 1994-06-	NA	90.000000	31.3559783	25.245581	NA	hot	1994
chic	80.0	70.00000	15 1994-06-	NA	55.000000	30.2427536	24.009964	NA	cold	1994
chic	78.0	66.87500	14 1994-06-	NA	36.125000	35.2936594	23.888889	NA	cold	1994
chic	72.5	58.12500	13 1994-06-	NA	25.000000	32.0250000	21.986111	NA	cold	1994
chic	67.0	56.00000	12 1994-06-	NA	53.500000	24.9750000	39.465278	NA	cold	1994
chic	61.5	40.87500	11 1994-06-	NA	53.000000	23.8268939	50.709596	NA	cold	1994
chic	56.0	33.87500	10 1994-06-	NA	37.500000	28.2365942	32.361111	NA	cold	1994
chic	55.5	39.62500	09 1994-06-	NA	29.000000	21.2123188	16.269406	NA	cold	1994
chic	68.5	49.25000	08 1994-06-	NA	61.000000	22.1956522	35.613731	NA	cold	1994
chic	77.0	62.12500	07 1994-06-	NA	80.000000	41.4225064	31.720987	NA	cold	1994
chic	71.0	60.00000	06 1994-06-	NA	88.000000	44.5708333	27.208333	NA	cold	1994
chic	61.0	39.75000	05 1994-06- 04	NA	43.500000	33.6500000	39.687500	NA	cold	1994

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2	$pm2\overline{5}detren$	dempca	at year
chic	57.0	40.75000	1994-06- 03	NA	59.000000	25.7440217	37.097222	NA	cold	1994
chic	55.0	27.50000	1994-06- 02	NA	18.500000	27.5966897	20.883929	NA	cold	1994
chic	56.0	34.25000	1994-06- 01	NA	28.875000	24.8087286	21.439696	NA	cold	1994
chic	75.0	40.50000	1994-05- 31	NA	53.500000	28.7820652	28.056159	NA	cold	1994
chic	77.0	59.37500	1994-05- 30	NA	55.000000	47.8113889	21.788095	NA	cold	1994
chic	69.5	48.75000	1994-05- 29	NA	48.000000	46.1916667	23.000000	NA	cold	1994
chic	63.0	46.00000	1994-05- 28	NA	43.500000	33.9416667	29.909722	NA	cold	1994
chic	51.0	33.87500	1994-05- 27	NA	34.000000	18.9862319	29.854167	NA	cold	1994
chic	49.0	38.00000	1994-05- 26	NA	15.875000	23.5983696	16.239268	NA	cold	1994
chic	65.5	58.00000	1994-05- 25	NA	34.000000	27.4766634	38.986742	NA	cold	1994
chic	66.5	60.87500	1994-05- 24	NA	45.500000	28.0062500	42.397464	NA	cold	1994
chic	68.5	54.12500	1994-05- 23	NA	54.000000	36.5717924	39.800000	NA	cold	1994
chic	73.0	49.75000	1994-05- 22	NA	70.500000	45.5375000	49.916667	NA	cold	1994
chic	68.0	45.62500	1994-05- 21	NA	86.500000	38.4708333	49.616667	NA	cold	1994
chic	59.5	42.75000	1994-05-	NA	54.875000	24.2390152	40.307576	NA	cold	1994
chic	54.0	37.75000	20 1994-05- 19	NA	26.500000	24.5369048	28.789683	NA	cold	1994
chic	50.5	29.87500	19 1994-05- 18	NA	17.500000	24.2236157	20.854057	NA	cold	1994
chic	48.5	29.25000	1994-05- 17	NA	11.500000	26.0652174	19.253568	NA	cold	1994
chic	50.5	36.12500	1994-05-	NA	13.500000	26.1342391	18.138889	NA	cold	1994
chic	62.5	43.25000	16 1994-05- 15	NA	22.500000	30.0125000	15.326389	NA	cold	1994
chic	60.5	60.12500	1994-05- 14	NA	43.250000	20.0625000	32.863225	NA	cold	1994
chic	59.5	31.00000	1994-05-	NA	59.000000	21.5233860	36.171799	NA	cold	1994
chic	52.0	34.87500	13 1994-05-	NA	28.500000	25.4003623	21.921086	NA	cold	1994
chic	62.5	42.50000	12 1994-05-	NA	72.000000	33.7458333	23.014630	NA	cold	1994
chic	56.5	35.37500	11 1994-05-	NA	63.500000	17.9650692	39.216540	NA	cold	1994
chic	61.5	30.50000	10 1994-05- 09	NA	39.500000	26.0038251	27.879529	NA	cold	1994

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detreno	tempcat	year
chic	53.5	39.00000	1994-05- 08	NA	26.857143	27.7314815	25.479167	NA	cold	1994
chic	46.0	38.87500	1994-05- 07	NA	18.500000	20.7962963	26.534722	NA	cold	1994
chic	45.5	31.87500	1994-05- 06	NA	15.500000	27.7208498	19.812500	NA	cold	1994
chic	57.5	40.00000	1994-05- 05	NA	60.500000	21.9102254	36.179567	NA	cold	1994
chic	51.0	36.50000	1994-05- 04	NA	75.500000	19.7129630	43.804046	NA	cold	1994
chic	49.0	26.00000	1994-05- 03	NA	47.000000	27.8447205	30.395698	NA	cold	1994
chic	51.0	28.25000	1994-05-	NA	33.375000	22.3283011	33.370040	NA	$\operatorname{cold}$	1994
chic	45.5	33.87500	02 1994-05- 01	NA	26.000000	25.4861111	22.243056	NA	cold	1994
chic	38.5	33.62500	1994-04-	NA	13.500000	20.3518519	16.605072	NA	$\operatorname{cold}$	1994
chic	47.5	33.75000	30 1994-04-	NA	24.500000	16.0123701	18.256944	NA	cold	1994
chic	41.5	43.37500	29 1994-04-	NA	20.000000	9.6256039	17.345960	NA	cold	1994
chic	53.5	31.12500	28 1994-04-	NA	24.000000	20.9855072	14.500992	NA	$\operatorname{cold}$	1994
chic	75.0	48.12500	27 1994-04-	NA	121.750000	28.2612721	23.161820	NA	cold	1994
chic	71.0	55.50000	26 1994-04-	NA	99.000000	34.5507246	27.444444	NA	cold	1994
chic	68.5	54.37500	25 1994-04-	NA	49.000000	47.9490741	20.520833	NA	cold	1994
chic	53.0	29.87500	24 1994-04- 23	NA	82.500000	29.1481481	32.062500	NA	$\operatorname{cold}$	1994
chic	45.5	21.00000	1994-04- 22	NA	71.000000	25.8433977	30.101389	NA	cold	1994
chic	48.5	20.75000	1994-04- 21	NA	27.000000	28.0529754	27.407005	NA	cold	1994
chic	51.0	29.62500	1994-04-	NA	42.750000	20.8128019	38.451389	NA	cold	1994
chic	58.0	23.12500	20 1994-04-	NA	40.500000	35.4716550	22.938022	NA	$\operatorname{cold}$	1994
chic	67.5	46.12500	19 1994-04-	NA	60.500000	33.3941224	31.111111	NA	cold	1994
chic	55.5	29.25000	18 1994-04-	NA	23.500000	26.8287037	25.868056	NA	$\operatorname{cold}$	1994
chic	52.5	28.12500	17 1994-04-	NA	31.000000	30.0879630	18.090278	NA	cold	1994
chic	57.5	35.37500	16 1994-04-	NA	36.000000	29.1431901	20.085317	NA	cold	1994
chic	57.0	50.00000	15 1994-04-	NA	37.000000	22.0808081	41.143088	NA	cold	1994
chic	46.5	42.37500	14 1994-04- 13	NA	22.500000	12.7870370	26.444444	NA	cold	1994

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	0m $25$ detrend	tempcat	year
chic	48.5	45.12500	1994-04- 12	NA	21.000000	14.4428341	27.347853	NA	cold	1994
chic	43.5	36.75000	1994-04- 11	NA	21.000000	24.2824074	23.892512	NA	cold	1994
chic	46.0	27.25000	1994-04-	NA	32.500000	35.9655797	15.458333	NA	cold	1994
chic	57.5	25.75000	10 1994-04- 09	NA	32.000000	24.2407407	28.069444	NA	cold	1994
chic	47.5	31.12500	1994-04-	NA	56.875000	21.1444518	34.878321	NA	cold	1994
chic	36.5	17.00000	08 1994-04-	NA	35.500000	16.3957327	35.041667	NA	$\operatorname{cold}$	1994
chic	31.0	21.37500	07 1994-04-	NA	13.500000	26.8420698	18.247565	NA	cold	1994
chic	40.5	21.00000	06 1994-04-	NA	14.000000	25.2905504	16.428030	NA	cold	1994
chic	47.0	33.12500	05 1994-04-	NA	131.000000	20.0795455	31.569444	NA	cold	1994
chic	42.0	18.00000	04 1994-04-	NA	21.500000	24.8750000	24.145833	NA	cold	1994
chic	55.0	30.12500	03 1994-04-	NA	46.250000	24.4270833	27.513889	NA	cold	1994
chic	51.5	29.87500	02 1994-04-	NA	65.000000	16.4635417	44.097222	NA	cold	1994
chic	40.0	23.87500	01 1994-03-	NA	41.000000	15.4941123	35.948232	NA	cold	1994
chic	33.5	21.25000	31 1994-03-	NA	42.500000	9.3936512	45.063543	NA	cold	1994
chic	36.0	24.25000	30 1994-03-	NA	30.000000	14.2083333	34.673803	NA	cold	1994
chic	38.0	28.37500	29 1994-03-	NA	26.000000	10.8551136	39.668561	NA	cold	1994
chic	43.0	31.50000	28 1994-03-	NA	33.875000	13.0000000	28.097222	NA	cold	1994
chic	39.0	33.75000	27 1994-03-	NA	70.500000	14.4062500	30.319444	NA	cold	1994
chic	36.5	22.00000	26 1994-03-	NA	82.000000	26.8174819	23.321256	NA	cold	1994
chic	49.0	24.62500	25 1994-03-	NA	69.500000	21.2717391	20.044192	NA	cold	1994
chic	61.0	45.50000	24 1994-03-	NA	60.000000	21.7812500	33.878472	NA	cold	1994
chic	53.5	36.50000	23 1994-03-	NA	39.000000	19.0539773	35.339277	NA	cold	1994
chic	48.0	27.87500	22 1994-03-	NA	32.625000	13.8229167	33.458333	NA	cold	1994
chic	49.5	39.87500	21 1994-03-	NA	43.000000	20.8437500	31.525000	NA	cold	1994
chic	38.0	29.87500	20 1994-03-	NA	82.500000	10.0625000	40.916667	NA	cold	1994
chic	34.0	24.12500	19 1994-03-	NA	38.000000	10.8079710	35.915476	NA	cold	1994
			18							

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrend	tempcat	year
chic	29.5	15.37500	1994-03- 17	NA	31.000000	11.7975543	38.496970	NA	cold	1994
chic	29.0	14.00000	1994-03- 16	NA	20.500000	22.0213274	24.984007	NA	cold	1994
chic	38.5	22.00000	1994-03- 15	NA	18.714286	16.9557395	24.011273	NA	cold	1994
chic	41.5	38.75000	1994-03- 14	NA	50.500000	6.7291667	35.041667	NA	cold	1994
chic	40.0	34.87500	1994-03- 13	NA	35.000000	8.2187500	34.423611	NA	cold	1994
chic	44.0	39.37500	1994-03- 12	NA	42.500000	14.0833333	34.770833	NA	cold	1994
chic	29.5	23.75000	1994-03- 11	NA	36.000000	23.1666667	30.076389	NA	cold	1994
chic	29.5	27.12500	1994-03- 10	NA	45.000000	10.0729167	36.097222	NA	cold	1994
chic	29.0	19.62500	1994-03- 09	NA	24.000000	15.3709239	24.885913	NA	$\operatorname{cold}$	1994
chic	31.0	14.00000	1994-03- 08	NA	26.000000	18.5767045	22.313296	NA	$\operatorname{cold}$	1994
chic	40.5	25.50000	1994-03- 07	NA	35.000000	12.4479167	29.338384	NA	cold	1994
chic	48.5	31.87500	1994-03- 06	NA	27.500000	11.5833333	31.319444	NA	$\operatorname{cold}$	1994
chic	40.0	34.50000	1994-03- 05	NA	42.500000	10.9861111	45.826389	NA	cold	1994
chic	43.0	30.85714	1994-03- 04	NA	39.000000	9.7119565	44.548611	NA	cold	1994
chic	30.5	32.00000	1994-03- 03	NA	68.750000	8.6508152	53.894845	NA	cold	1994
chic	23.5	22.00000	1994-03- 02	NA	32.000000	17.3229167	47.238768	NA	$\operatorname{cold}$	1994
chic	26.0	22.50000	1994-03- 01	NA	27.500000	22.7532115	32.813192	NA	cold	1994
chic	25.0	25.25000	1994-02- 28	NA	30.500000	9.8541667	48.625000	NA	cold	1994
chic	13.0	12.12500	1994-02- 27	NA	31.000000	12.3958333	42.277778	NA	cold	1994
chic	11.0	1.00000	1994-02- 26	NA	27.500000	10.3437500	35.548611	NA	$\operatorname{cold}$	1994
chic	19.5	14.25000	1994-02- 25	NA	32.285714	9.8428442	35.835749	NA	$\operatorname{cold}$	1994
chic	15.5	9.12500	1994-02- 24	NA	24.000000	12.1191123	35.704710	NA	$\operatorname{cold}$	1994
chic	22.5	17.75000	1994-02- 23	NA	8.000000	13.1250000	23.674874	NA	cold	1994
chic	27.0	22.62500	1994-02- 22	NA	18.000000	19.7083333	15.277778	NA	cold	1994
chic	33.0	24.87500	1994-02- 21	NA	22.000000	15.1875000	22.930556	NA	cold	1994
chic	46.0	33.00000	1994-02- 20	NA	22.000000	13.6770833	19.513889	NA	cold	1994

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2	pm25detrend	empca	at year
chic	55.5	53.37500	1994-02- 19	NA	26.250000	15.0208333	23.833333	NA o	cold	1994
chic	47.0	41.62500	1994-02- 18	NA	50.000000	13.2395833	44.645833	NA o	cold	1994
chic	42.5	36.62500	1994-02- 17	NA	43.500000	5.3333333	46.806818	NA o	cold	1994
chic	29.0	29.37500	1994-02- 16	NA	36.000000	7.1662138	44.667743	NA o	cold	1994
chic	33.5	24.75000	1994-02- 15	NA	29.000000	11.6112484	40.021245	NA o	cold	1994
chic	29.5	30.12500	1994-02-	NA	101.000000	7.7500000	44.013889	NA o	cold	1994
chic	20.5	13.37500	14 1994-02-	NA	33.875000	14.5937500	35.555556	NA o	cold	1994
chic	21.0	21.25000	13 1994-02-	NA	37.000000	4.2395833	41.826389	NA o	cold	1994
chic	12.5	15.50000	12 1994-02-	NA	35.000000	10.6875000	37.152778	NA o	cold	1994
chic	6.0	5.00000	11 1994-02-	NA	35.000000	10.6770833	38.976840	NA o	cold	1994
chic	6.5	-	10 1994-02-	NA	30.500000	9.4320652	33.210145	NA o	cold	1994
chic	15.5	3.50000 11.87500	09 1994-02-	NA	18.000000	17.5778986	21.617754	NA o	cold	1994
chic	11.5	6.37500	08 1994-02-	NA	22.375000	14.5729167	27.430556	NA o	cold	1994
chic	23.0	8.00000	07 1994-02-	NA	30.000000	13.3020833	34.458333	NA o	cold	1994
chic	19.5	7.25000	06 1994-02-	NA	25.500000	10.3854167	35.590278	NA o	cold	1994
chic	15.5	2.25000	05 1994-02-	NA	35.000000	10.7604167	35.229167	NA o	cold	1994
chic	9.5	8.12500	04 1994-02-	NA	35.500000	11.5965909	31.256944	NA o	cold	1994
chic	17.0	13.87500	03 1994-02-	NA	38.000000	9.3075181	30.417443	NA o	cold	1994
chic	1.5	3.00000	02 1994-02-	NA	34.375000	4.7638889	41.847222	NA o	cold	1994
chic	3.5	-	01 1994-01-	NA	32.000000	7.2940705	37.288559	NA o	cold	1994
chic	16.0	7.50000 11.62500	31 1994-01-	NA	11.000000	19.1666667	17.468750	NA o	cold	1994
chic	23.0	19.25000	30 1994-01-	NA	16.500000	7.4458333	31.658333	NA o	cold	1994
chic	29.0	21.62500	29 1994-01-	NA	23.000000	2.4148551	32.034722	NA o	cold	1994
chic	26.5	32.37500	28 1994-01-	NA	25.000000	2.1865942	30.853865	NA o	cold	1994
chic	23.5	17.37500	27 1994-01-	NA	14.250000	18.2574405	20.673309	NA o	cold	1994
chic	31.0	27.12500	26 1994-01- 25	NA	20.000000	8.5579710	25.031401	NA o	cold	1994

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendempcat	year
chic	34.0	29.50000	1994-01- 24	NA	28.500000	4.8165761	30.104167	NA cold	1994
chic	36.0	33.00000	1994-01- 23	NA	23.000000	5.9583333	25.590278	NA cold	1994
chic	24.5	23.75000	1994-01- 22	NA	48.000000	3.5416667	48.097222	NA cold	1994
chic	8.0	14.00000	1994-01- 21	NA	38.000000	4.1979167	39.720328	NA cold	1994
chic	2.5	4.62500	1994-01- 20	NA	43.125000	2.7594697	48.875000	NA cold	1994
chic	-8.0	2.37500	1994-01- 19	NA	24.500000	4.8645833	36.597963	NA cold	1994
chic	-16.0	25.62500	1994-01-	NA	27.000000	14.6562500	22.102355	NA cold	1994
chic	-0.5	16.25000	18 1994-01- 17	NA	39.000000	10.2771739	26.574879	NA cold	1994
chic	-3.5	3.25000	1994-01- 16	NA	22.000000	3.5000000	31.881944	NA cold	1994
chic	-10.5	-	1994-01-	NA	36.000000	12.0104167	24.701389	NA cold	1994
chic	-4.0	23.12500	15 1994-01-	NA	36.125000	11.9071558	28.047403	NA cold	1994
chic	13.5	17.87500 2.50000	14 1994-01-	NA	43.000000	4.9888258	33.018308	NA cold	1994
chic	25.5	25.62500	13 1994-01-	NA	33.500000	4.4510870	32.264191	NA cold	1994
chic	28.5	19.25000	12 1994-01-	NA	28.000000	9.0208333	26.558657	NA cold	1994
chic	26.0	30.12500	11 1994-01-	NA	27.000000	2.3854167	29.840909	NA cold	1994
chic	8.0	8.75000	10 1994-01- 09	NA	35.500000	3.3750000	43.027778	NA cold	1994
chic	1.0	2.75000	1994-01- 08	NA	24.857143	6.8125000	26.458333	NA cold	1994
chic	12.0	-	1994-01- 07	NA	24.000000	5.4375000	28.131944	NA cold	1994
chic	29.5	8.62500 $25.37500$	1994-01-	NA	23.000000	3.5801630	26.480072	NA cold	1994
chic	18.5	20.50000	06 1994-01-	NA	25.500000	7.2774621	26.827267	NA cold	1994
chic	26.0	18.25000	05 1994-01-	NA	33.500000	10.8396739	24.812026	NA cold	1994
chic	29.5	24.87500	04 1994-01-	NA	16.000000	9.1770833	22.519324	NA cold	1994
chic	30.0	22.50000	03 1994-01-	NA	13.750000	15.6875000	19.555556	NA cold	1994
chic	35.0	26.87500	02 1994-01-	NA	13.500000	9.6111111	19.097222	NA cold	1994
chic	32.0	27.87500	01 1993-12-	NA	19.500000	3.4861111	28.208333	NA cold	1993
chic	14.0	15.87500	31 1993-12- 30	NA	44.000000	6.0631313	28.807359	NA cold	1993
			30						

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendempca	t year
chic	16.5	2.37500	1993-12- 29	NA	59.000000	8.5907738	24.777778	NA cold	1993
chic	13.5	10.37500	1993-12- 28	NA	46.000000	2.8532197	38.107680	NA cold	1993
chic	13.5	1.37500	1993-12- 27	NA	44.000000	4.6875000	33.416667	NA cold	1993
chic	9.0	5.75000	1993-12- 26	NA	42.500000	10.5520833	26.158333	NA cold	1993
chic	11.5	5.12500	1993-12- 25	NA	26.000000	14.2604167	18.944444	NA cold	1993
chic	15.0	7.75000	1993-12- 24	NA	18.000000	5.6875000	22.854167	NA cold	1993
chic	21.5	13.12500	1993-12- 23	NA	31.500000	5.0000000	25.888889	NA cold	1993
chic	24.5	16.12500	1993-12- 22	NA	25.000000	1.9252717	27.483825	NA cold	1993
chic	27.0	21.50000	1993-12- 21	NA	20.375000	2.6358696	21.973018	NA cold	1993
chic	32.5	23.75000	1993-12- 20	NA	21.500000	3.9166667	23.979167	NA cold	1993
chic	35.0	31.37500	1993-12- 19	NA	14.500000	3.0520833	20.729167	NA cold	1993
chic	38.0	29.75000	1993-12- 18	NA	16.500000	2.8854167	23.000000	NA cold	1993
chic	38.5	38.50000	1993-12- 17	NA	16.000000	0.4270833	23.923611	NA cold	1993
chic	36.5	32.00000	1993-12- 16	NA	18.000000	9.2291667	19.501812	NA cold	1993
chic	42.5	35.00000	1993-12- 15	NA	7.571429	14.9850543	20.495773	NA cold	1993
chic	41.0	32.37500	1993-12- 14	NA	23.500000	2.5206439	31.350049	NA cold	1993
chic	41.0	25.50000	1993-12- 13	NA	24.500000	2.2604167	30.125000	NA cold	1993
chic	30.5	22.00000	1993-12- 12	NA	19.000000	4.0833333	25.965278	NA cold	1993
chic	25.5	18.25000	1993-12- 11	NA	17.500000	8.5833333	25.576389	NA cold	1993
chic	37.5	18.62500	1993-12- 10	NA	34.500000	6.2708333	21.155797	NA cold	1993
chic	42.0	45.50000	1993-12- 09	NA	36.250000	2.6598485	29.480072	NA cold	1993
chic	34.0	29.12500	1993-12- 08	NA	37.500000	1.7742424	24.966414	NA cold	1993
chic	30.5	26.50000	1993-12- 07	NA	36.000000	2.7750000	30.227183	NA cold	1993
chic	34.5	24.37500	1993-12- 06	NA	21.500000	3.5666667	21.691667	NA cold	1993
chic	37.0	34.87500	1993-12- 05	NA	23.500000	4.3083333	27.250000	NA cold	1993
chic	39.0	34.25000	1993-12- 04	NA	19.500000	6.6453030	19.133333	NA cold	1993

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n <b>2</b> 3tmean2	no2tmean2p	om25detrene	tempca	t year
chic	36.0	38.87500	1993-12- 03	NA	44.000000	3.2083333	33.777174	NA	cold	1993
chic	41.5	33.75000	1993-12- 02	NA	34.000000	7.1471014	27.854167	NA	cold	1993
chic	36.5	30.62500	1993-12- 01	NA	35.000000	2.9289526	31.307367	NA	cold	1993
chic	29.5	23.87500	1993-11- 30	NA	40.000000	3.7000000	33.065657	NA	cold	1993
chic	27.0	19.37500	1993-11- 29	NA	35.000000	6.0750000	28.847222	NA	cold	1993
chic	31.0	20.87500	1993-11- 28	NA	25.000000	10.3583333	22.715278	NA	cold	1993
chic	25.5	24.00000	1993-11- 27	NA	20.428571	7.6166667	27.395833	NA	cold	1993
chic	31.5	16.87500	1993-11- 26	NA	15.500000	5.1916667	20.930556	NA	cold	1993
chic	39.5	40.37500	1993-11- 25	NA	20.000000	12.4000000	15.520833	NA	cold	1993
chic	42.5	37.37500	1993-11- 24	NA	48.500000	6.9637681	18.189614	NA	cold	1993
chic	46.5	36.25000	1993-11- 23	NA	27.000000	2.4562112	35.581522	NA	cold	1993
chic	45.5	36.87500	1993-11- 22	NA	48.500000	3.1750000	32.791667	NA	cold	1993
chic	43.5	32.25000	1993-11- 21	NA	17.125000	10.9333333	20.775000	NA	cold	1993
chic	31.5	27.25000	1993-11-	NA	21.000000	8.8000000	22.716667	NA	cold	1993
chic	39.0	16.50000	20 1993-11-	NA	31.000000	8.5000000	20.737121	NA	cold	1993
chic	37.5	39.62500	19 1993-11-	NA	43.000000	4.5316667	30.199708	NA	cold	1993
chic	37.5	33.12500	18 1993-11-	NA	24.000000	8.9981884	21.417545	NA	cold	1993
chic	40.5	37.37500	17 1993-11-	NA	42.000000	5.2906522	23.104084	NA	cold	1993
chic	41.0	34.87500	16 1993-11-	NA	17.571429	4.6583333	25.153288	NA	cold	1993
chic	44.5	42.75000	15 1993-11-	NA	11.500000	6.6333333	14.666667	NA	cold	1993
chic	54.5	42.62500	14 1993-11-	NA	21.500000	11.7500000	19.825000	NA	cold	1993
chic	41.0	43.37500	13 1993-11-	NA	51.500000	10.0312500	25.275884	NA	cold	1993
chic	46.0	35.00000	12 1993-11-	NA	67.000000	9.3333333	36.354167	NA	cold	1993
chic	40.0	32.00000	11 1993-11-	NA	56.500000	3.2975543	38.701389	NA	cold	1993
chic	39.0	33.00000	10 1993-11-	NA	47.428571	3.9516018	33.806376	NA	cold	1993
chic	38.5	28.62500	09 1993-11- 08	NA	65.500000	3.7333333	28.540761	NA	cold	1993

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n <b>2</b> 3tmean2	no2tmean2pi	m25detrendemp	ocat year
chic	28.5	22.50000	1993-11- 07	NA	36.500000	9.7666667	18.076389	NA cold	1993
chic	27.0	16.75000	1993-11- 06	NA	17.500000	12.3500000	18.527778	NA cold	1993
chic	39.0	31.62500	1993-11- 05	NA	25.000000	3.6583333	18.880411	NA cold	1993
chic	51.5	46.87500	1993-11- 04	NA	36.000000	7.1689394	26.617624	NA cold	1993
chic	45.0	37.12500	1993-11- 03	NA	36.428571	4.5572464	26.298611	NA cold	1993
chic	41.5	38.75000	1993-11- 02	NA	51.500000	3.1182148	28.797714	NA cold	1993
chic	35.5	23.12500	1993-11- 01	NA	48.000000	5.8460145	31.590580	NA cold	1993
chic	33.5	21.87500	1993-10- 31	NA	16.500000	11.8125000	20.925000	NA cold	1993
chic	34.5	28.50000	1993-10- 30	NA	21.000000	11.1938725	20.958333	NA cold	1993
chic	35.0	20.75000	1993-10- 29	NA	39.500000	10.9721014	18.693332	NA cold	1993
chic	46.0	33.00000	1993-10- 28	NA	47.125000	8.3981578	22.648359	NA cold	1993
chic	40.5	29.12500	1993-10- 27	NA	36.500000	8.2216667	23.187500	NA cold	1993
chic	54.0	40.00000	1993-10- 26	NA	55.000000	7.5487813	25.967172	NA cold	1993
chic	57.0	39.87500	1993-10- 25	NA	81.000000	9.1778986	42.319444	NA cold	1993
chic	58.5	40.37500	1993-10- 24	NA	32.000000	15.7708333	33.319444	NA cold	1993
chic	53.0	42.87500	1993-10- 23	NA	45.000000	13.8541667	34.527778	NA cold	1993
chic	45.5	32.62500	1993-10- 22	NA	40.750000	5.9416667	37.731151	NA cold	1993
chic	46.5	27.37500	1993-10- 21	NA	27.000000	11.7460145	18.486111	NA cold	1993
chic	55.0	53.50000	1993-10- 20	NA	39.000000	1.1443511	25.915404	NA cold	1993
chic	55.5	50.50000	1993-10- 19	NA	37.000000	6.5556159	25.969386	NA cold	1993
chic	49.5	48.00000	1993-10- 18	NA	70.500000	7.0436594	43.862511	NA cold	1993
chic	52.5	45.37500	1993-10- 17	NA	15.500000	17.6125000	19.029315	NA cold	1993
chic	58.0	55.00000	1993-10- 16	NA	30.750000	9.1291667	27.153080	NA cold	1993
chic	61.0	55.00000	1993-10- 15	NA	58.000000	14.2620365	38.235507	NA cold	1993
chic	50.5	42.75000	1993-10- 14	NA	69.500000	5.3501812	35.309037	NA cold	1993
chic	40.5	33.25000	1993-10- 13	NA	41.500000	11.4708724	28.917641	NA cold	1993

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmean	n@3tmean2	no2tmean2p	om25detrender	npcat year
chic	46.5	35.87500	1993-10- 12	NA	24.000000	10.8409420	21.888768	NA col	d 1993
chic	44.5	37.62500	1993-10- 11	NA	87.000000	10.9416667	30.139493	NA col	d 1993
chic	41.5	32.25000	1993-10- 10	NA	18.428571	9.5958333	25.769928	NA col	d 1993
chic	40.5	27.50000	1993-10- 09	NA	7.500000	19.9675926	10.263768	NA col	d 1993
chic	62.5	51.75000	1993-10- 08	NA	82.500000	24.4547101	31.329710	NA col	d 1993
chic	70.0	56.50000	1993-10- 07	NA	91.500000	26.6460145	34.983333	NA col	d 1993
chic	61.0	56.12500	1993-10- 06	NA	45.000000	18.9572464	29.656243	NA col	d 1993
chic	49.0	40.37500	1993-10- 05	NA	57.000000	7.2540942	37.211353	NA col	d 1993
chic	50.5	40.50000	1993-10- 04	NA	23.500000	13.7075828	19.326667	NA col	d 1993
chic	52.0	47.00000	1993-10-	NA	33.000000	19.7875000	13.250000	NA col	d 1993
chic	45.0	25.12500	03 1993-10-	NA	30.500000	12.5916667	21.523359	NA col	d 1993
chic	56.5	36.87500	02 1993-10-	NA	37.000000	15.9300725	21.560826	NA col	d 1993
chic	46.5	39.75000	01 1993-09-	NA	45.000000	11.1924172	22.668780	NA col	d 1993
chic	46.5	37.50000	30 1993-09-	NA	31.000000	3.5954545	21.619394	NA col	d 1993
chic	51.5	39.75000	29 1993-09-	NA	25.750000	7.2977602	23.267754	NA col	d 1993
chic	49.5	39.37500	28 1993-09-	NA	30.000000	5.2327441	18.093750	NA col	d 1993
chic	59.0	53.37500	27 1993-09-	NA	26.000000	18.9120370	21.500000	NA col	d 1993
chic	56.5	54.87500	26 1993-09-	NA	33.500000	9.7728070	21.364583	NA col	d 1993
chic	53.5	47.37500	25 1993-09-	NA	50.000000	8.2206522	33.958333	NA col	d 1993
chic	54.5	45.75000	24 1993-09-	NA	24.500000	8.5541667	19.249242	NA col	d 1993
chic	65.0	63.12500	23 1993-09-	NA	33.250000	6.3972050	27.163087	NA col	d 1993
chic	57.0	53.62500	22 1993-09-	NA	31.500000	6.6268775	20.957071	NA col	d 1993
chic	61.0	61.37500	21 1993-09-	NA	44.500000	8.6125000	28.930556	NA col	d 1993
chic	59.0	53.87500	20 1993-09-	NA	26.000000	20.5375000	14.083333	NA col	d 1993
chic	59.5	53.87500	19 1993-09-	NA	39.000000	9.9458333	26.625000	NA col	d 1993
chic	60.5	47.75000	18 1993-09- 17	NA	36.000000	10.6083333	33.914855	NA col	d 1993

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	${ m m}25{ m detrendempc}$	at year
chic	55.0	49.25000	1993-09- 16	NA	29.875000	4.4994048	24.270833	NA cold	1993
chic	53.0	45.50000	1993-09- 15	NA	15.000000	7.4208333	16.983333	NA cold	1993
chic	62.0	53.25000	1993-09- 14	NA	23.000000	7.8304348	14.628877	NA cold	1993
chic	73.5	70.00000	1993-09- 13	NA	36.000000	29.2501812	22.075000	NA cold	1993
chic	70.5	64.12500	1993-09- 12	NA	44.500000	33.6791667	13.925000	NA cold	1993
chic	55.0	49.50000	1993-09- 11	NA	40.500000	12.6125000	22.266667	NA cold	1993
chic	55.5	40.37500	1993-09-	NA	34.285714	12.6507576	20.990278	NA cold	1993
chic	64.5	54.62500	10 1993-09-	NA	40.000000	14.0847497	20.726010	NA cold	1993
chic	64.0	52.50000	09 1993-09-	NA	38.000000	11.5538043	31.594697	NA cold	1993
chic	62.5	51.62500	08 1993-09-	NA	65.000000	11.1795455	33.091667	NA cold	1993
chic	59.5	47.25000	07 1993-09-	NA	18.000000	12.4208333	14.975000	NA cold	1993
chic	67.0	60.12500	06 1993-09-	NA	18.000000	12.3333333	15.808333	NA cold	1993
chic	64.0	59.50000	05 1993-09-	NA	24.000000	13.0375000	17.541667	NA cold	1993
chic	66.0	58.62500	04 1993-09-	NA	36.000000	12.0500000	21.230374	NA cold	1993
chic	67.0	69.75000	03 1993-09-	NA	36.000000	2.7121706	25.368056	NA cold	1993
chic	64.5	56.12500	02 1993-09-	NA	31.500000	16.8591874	31.441468	NA cold	1993
chic	64.0	52.37500	01 1993-08-	NA	24.000000	15.5011905	19.695048	NA cold	1993
chic	79.0	72.37500	31 1993-08-	NA	78.000000	25.7924431	22.755478	NA cold	1993
chic	71.0	69.87500	30 1993-08-	NA	26.285714	19.9916667	18.930556	NA cold	1993
chic	72.0	61.25000	29 1993-08-	NA	14.000000	19.2608696	12.506944	NA cold	1993
chic	81.5	71.62500	28 1993-08-	NA	85.500000	30.5262821	24.065217	NA hot	1993
chic	84.0	74.00000	27 1993-08-	NA	66.500000	24.2098485	31.784722	NA hot	1993
chic	79.0	72.37500	26 1993-08-	NA	52.000000	24.6742424	34.880682	NA cold	1993
chic	77.0	68.37500	25 1993-08-	NA	40.000000	19.4242424	25.112864	NA cold	1993
chic	80.0	71.50000	24 1993-08-	NA	55.250000	30.3715909	22.344907	NA cold	1993
chic	70.0	64.75000	23 1993-08- 22	NA	26.500000	22.2583333	18.958333	NA cold	1993

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	pm25detrendempca	t year
chic	71.5	61.75000	1993-08- 21	NA	20.000000	20.9500000	12.270833	NA cold	1993
chic	71.5	61.62500	1993-08- 20	NA	28.000000	19.0284420	20.423611	NA cold	1993
chic	78.0	72.37500	1993-08- 19	NA	57.500000	12.9125000	36.639520	NA cold	1993
chic	76.5	69.62500	1993-08- 18	NA	56.000000	37.8836957	30.311308	NA cold	1993
chic	75.0	69.00000	1993-08- 17	NA	40.285714	38.7960950	18.655303	NA cold	1993
chic	76.0	68.87500	1993-08- 16	NA	41.000000	20.5368357	28.152778	NA cold	1993
chic	74.0	71.62500	1993-08- 15	NA	52.500000	19.9000000	30.138889	NA cold	1993
chic	77.0	67.37500	1993-08- 14	NA	83.500000	32.0882576	34.885101	NA cold	1993
chic	77.0	70.25000	1993-08- 13	NA	71.000000	38.8621739	28.704980	NA cold	1993
chic	76.0	71.75000	1993-08- 12	NA	59.000000	24.4883564	28.176389	NA cold	1993
chic	76.5	70.25000	1993-08- 11	NA	79.250000	33.6243083	37.703788	NA cold	1993
chic	77.0	70.62500	1993-08- 10	NA	67.500000	26.2540415	26.756159	NA cold	1993
chic	68.0	66.25000	1993-08- 09	NA	55.000000	19.9250000	31.800000	NA cold	1993
chic	68.5	59.87500	1993-08- 08	NA	37.500000	35.9445652	30.291667	NA cold	1993
chic	65.0	59.25000	1993-08- 07	NA	26.000000	22.9291667	22.800000	NA cold	1993
chic	66.0	51.75000	1993-08- 06	NA	32.000000	15.4938406	22.537879	NA cold	1993
chic	63.0	57.50000	1993-08- 05	NA	36.875000	13.6126812	26.466667	NA cold	1993
chic	63.5	49.00000	1993-08- 04	NA	38.500000	15.6845356	19.437500	NA cold	1993
chic	70.5	55.87500	1993-08-	NA	42.500000	15.5728261	19.423611	NA cold	1993
chic	68.5	57.12500	03 1993-08-	NA	42.500000	15.9000000	20.531944	NA cold	1993
chic	75.5	63.00000	02 1993-08-	NA	26.500000	27.5583333	13.598128	NA cold	1993
chic	72.0	68.12500	01 1993-07-	NA	46.000000	24.4583333	26.861111	NA cold	1993
chic	69.5	59.62500	31 1993-07-	NA	31.625000	19.0258235	23.002525	NA cold	1993
chic	72.0	60.87500	30 1993-07-	NA	34.000000	17.9174078	17.273853	NA cold	1993
chic	76.5	62.00000	29 1993-07-	NA	51.000000	25.8407867	16.401389	NA cold	1993
chic	78.5	78.12500	28 1993-07- 27	NA	66.000000	24.4192029	26.477273	NA cold	1993

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	m25detrende	mpcat year
chic	76.0	66.12500	1993-07- 26	NA	33.000000	20.5818841	20.951389	NA co	old 1993
chic	79.5	73.75000	1993-07- 25	NA	36.000000	29.7083333	15.909722	NA co	old 1993
chic	77.5	71.25000	1993-07- 24	NA	46.500000	24.2186594	27.451169	NA co	old 1993
chic	72.5	65.75000	1993-07- 23	NA	57.000000	26.1639493	28.435414	NA co	old 1993
chic	66.0	54.87500	1993-07- 22	NA	24.000000	20.5943841	16.548611	NA co	old 1993
chic	69.0	55.12500	1993-07- 21	NA	29.000000	17.4902174	18.907828	NA co	old 1993
chic	71.5	59.00000	1993-07- 20	NA	33.000000	21.9233484	22.378157	NA co	old 1993
chic	76.0	65.00000	1993-07- 19	NA	43.000000	28.8250000	21.826389	NA co	old 1993
chic	79.0	72.75000	1993-07- 18	NA	38.625000	25.0556818	24.118056	NA co	old 1993
chic	74.5	71.00000	1993-07- 17	NA	60.000000	29.7750000	23.034722	NA co	old 1993
chic	72.5	64.87500	1993-07- 16	NA	47.000000	34.9458333	24.515399	NA co	old 1993
chic	69.5	55.25000	1993-07- 15	NA	15.000000	30.5229167	17.055556	NA co	old 1993
chic	70.0	58.37500	1993-07- 14	NA	NA	27.9927536	27.013889	NA co	old 1993
chic	71.0	67.75000	1993-07- 13	NA	40.000000	30.1625000	26.598333	NA co	old 1993
chic	72.0	56.50000	1993-07- 12	NA	28.285714	26.5750000	23.358333	NA co	old 1993
chic	73.5	68.50000	1993-07- 11	NA	29.000000	24.4083333	20.816667	NA co	old 1993
chic	78.5	70.12500	1993-07- 10	NA	25.000000	20.8791667	29.400000	NA co	old 1993
chic	81.0	68.12500	1993-07- 09	NA	NA	23.5853261	23.233333	NA ho	ot 1993
chic	79.5	74.50000	1993-07- 08	NA	47.000000	23.9311594	25.363043	NA co	old 1993
chic	75.0	69.12500	1993-07- 07	NA	31.000000	17.3366977	28.416667	NA co	old 1993
chic	73.5	66.87500	1993-07- 06	NA	23.750000	25.1070652	24.499369	NA co	old 1993
chic	81.0	71.00000	1993-07- 05	NA	NA	33.6541667	10.937500	NA ho	ot 1993
chic	81.5	70.00000	1993-07- 04	NA	70.000000	29.3541667	15.666667	NA ho	ot 1993
chic	79.0	73.50000	1993-07- 03	NA	NA	26.7083333	30.590278	NA co	old 1993
chic	73.0	71.50000	1993-07- 02	NA	NA	11.8518939	37.633838	NA co	old 1993
chic	68.5	63.75000	1993-07- 01	NA	36.000000	10.0480072	29.243659	NA co	old 1993

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrend	tempcat	year
chic	64.0	60.50000	1993-06- 30	NA	33.250000	16.4796066	21.772865	NA	cold	1993
chic	64.5	56.87500	1993-06- 29	NA	24.000000	22.1983747	23.790687	NA	cold	1993
chic	65.5	52.37500	1993-06- 28	NA	19.000000	18.6049431	23.563095	NA	cold	1993
chic	74.5	62.00000	1993-06- 27	NA	27.000000	26.4791667	20.072917	NA	cold	1993
chic	70.5	62.25000	1993-06- 26	NA	35.000000	20.2441667	23.888889	NA	cold	1993
chic	71.5	55.00000	1993-06-	NA	34.000000	16.7433136	25.752345	NA	cold	1993
chic	78.5	67.87500	25 1993-06-	NA	49.875000	31.0643939	27.381944	NA	cold	1993
chic	71.5	67.37500	24 1993-06-	NA	59.000000	38.0438406	26.814916	NA	cold	1993
chic	72.0	56.25000	23 1993-06-	NA	47.000000	25.8967391	38.609127	NA	cold	1993
chic	70.5	62.62500	22 1993-06-	NA	30.000000	15.7244674	29.016204	NA	cold	1993
chic	69.5	61.75000	21 1993-06-	NA	18.000000	25.0694444	14.691667	NA	cold	1993
chic	70.5	69.00000	20 1993-06-	NA	28.000000	25.9537037	25.093750	NA	cold	1993
chic	69.5	60.87500	19 1993-06-	NA	32.500000	30.4458333	27.250000	NA	cold	1993
chic	78.5	69.75000	18 1993-06-	NA	62.000000	44.1802536	29.585870	NA	cold	1993
chic	63.5	59.37500	17 1993-06-	NA	NA	28.2992260	26.013225	NA	cold	1993
chic	62.5	50.25000	16 1993-06-	NA	33.000000	19.8937681	19.601087	NA	cold	1993
chic	72.0	54.12500	15 1993-06-	NA	43.000000	25.7684524	25.555952	NA	cold	1993
chic	70.5	67.62500	14 1993-06-	NA	52.000000	32.6458333	28.500000	NA	cold	1993
chic	67.0	57.00000	13 1993-06-	NA	40.571429	35.7208333	26.966667	NA	cold	1993
chic	68.0	57.75000	12 1993-06-	NA	36.000000	35.5093478	33.729167	NA	cold	1993
chic	68.5	61.87500	11 1993-06-	NA	63.000000	24.6500000	36.159722	NA	cold	1993
chic	71.0	57.75000	10 1993-06-	NA	34.000000	26.8257576	18.293561	NA	cold	1993
chic	72.0	67.37500	09 1993-06-	NA	25.000000	13.4642256	30.505462	NA	cold	1993
chic	64.0	65.12500	08 1993-06-	NA	36.000000	6.1296212	33.868056	NA	cold	1993
chic	61.0	53.37500	07 1993-06-	NA	31.625000	26.4125000	22.472222	NA	cold	1993
chic	58.5	46.00000	06 1993-06- 05	NA	23.000000	22.8875000	25.652778	NA	cold	1993

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmear	ad3tmean2	no2tmean2p	om25detrendempca	t year
chic	49.5	46.75000	1993-06- 04	NA	19.500000	17.8911232	17.566943	NA cold	1993
chic	50.5	44.37500	1993-06- 03	NA	31.500000	19.8540679	23.819444	NA cold	1993
chic	54.5	51.62500	1993-06- 02	NA	32.000000	19.1234848	28.194664	NA cold	1993
chic	51.0	44.50000	1993-06- 01	NA	31.000000	14.1727273	26.022096	NA cold	1993
chic	53.5	42.00000	1993-05- 31	NA	11.500000	26.0370370	10.319444	NA cold	1993
chic	58.5	64.25000	1993-05-	NA	28.000000	16.2500000	23.076389	NA cold	1993
chic	51.0	44.12500	30 1993-05-	NA	16.000000	23.4629630	14.034722	NA cold	1993
chic	57.0	44.12500	29 1993-05-	NA	92.500000	18.6224638	20.211988	NA cold	1993
chic	65.0	49.37500	28 1993-05-	NA	107.000000	26.0112319	31.147041	NA cold	1993
chic	61.5	47.00000	27 1993-05-	NA	50.000000	19.6416667	33.611111	NA cold	1993
chic	58.5	45.00000	26 1993-05-	NA	28.000000	16.6827734	26.664526	NA cold	1993
chic	60.0	49.25000	25 1993-05-	NA	34.000000	19.5721014	12.409722	NA cold	1993
chic	63.5	65.00000	24 1993-05-	NA	20.000000	29.8833333	15.180556	NA cold	1993
chic	60.5	55.37500	23 1993-05-	NA	43.000000	27.1458333	30.534722	NA cold	1993
chic	56.0	37.00000	22 1993-05-	NA	53.000000	17.1538043	36.979167	NA cold	1993
chic	50.5	36.00000	21 1993-05-	NA	61.500000	10.7178571	34.156566	NA cold	1993
chic	49.5	38.00000	20 1993-05-	NA	24.625000	17.0335145	24.452295	NA cold	1993
chic	54.5	41.12500	19 1993-05-	NA	51.000000	18.8254529	27.685579	NA cold	1993
chic	52.0	34.87500	18 1993-05-	NA	30.500000	17.1579710	30.262255	NA cold	1993
chic	56.0	36.62500	17 1993-05-	NA	44.500000	28.2916667	21.319444	NA cold	1993
chic	62.0	37.87500	16 1993-05-	NA	73.500000	28.8125000	19.652778	NA cold	1993
chic	61.0	49.00000	15 1993-05-	NA	52.000000	24.3202899	27.707882	NA cold	1993
chic	48.5	33.75000	14 1993-05-	NA	23.125000	16.9920290	17.555556	NA cold	1993
chic	62.5	32.37500	13 1993-05-	NA	50.500000	21.4507905	24.145574	NA cold	1993
chic	63.5	45.62500	12 1993-05-	NA	37.500000	28.3630508	28.667298	NA cold	1993
chic	75.0	59.12500	11 1993-05-	NA	72.000000	36.1708333	35.180556	NA cold	1993
			10						5

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	pm25detrend	tempcat	year
chic	74.5	57.12500	1993-05- 09	NA	59.000000	36.9583333	29.097222	NA	cold	1993
chic	72.5	51.25000	1993-05- 08	NA	52.000000	44.3009259	28.215278	NA	cold	1993
chic	66.5	48.75000	1993-05- 07	NA	60.375000	33.6874144	42.745833	NA	cold	1993
chic	62.5	48.62500	1993-05- 06	NA	71.500000	15.6750842	48.282119	NA	cold	1993
chic	61.0	54.50000	1993-05- 05	NA	53.500000	12.8896166	37.206349	NA	cold	1993
chic	60.5	56.50000	1993-05- 04	NA	34.000000	16.2316462	34.496404	NA	cold	1993
chic	61.5	57.75000	1993-05- 03	NA	31.500000	20.0703071	27.121291	NA	cold	1993
chic	61.0	59.50000	1993-05- 02	NA	31.000000	25.1472222	25.604167	NA	cold	1993
chic	59.0	48.75000	1993-05- 01	NA	35.000000	30.7268519	22.326389	NA	cold	1993
chic	57.0	38.25000	1993-04- 30	NA	42.500000	12.1064815	36.868056	NA	cold	1993
chic	52.5	49.00000	1993-04- 29	NA	48.500000	7.5201105	38.163345	NA	cold	1993
chic	64.5	48.75000	1993-04- 28	NA	46.000000	21.0408615	33.756944	NA	cold	1993
chic	49.5	46.87500	1993-04- 27	NA	67.000000	21.3657407	25.908213	NA	cold	1993
chic	40.0	29.37500	1993-04- 26	NA	18.500000	21.3110269	17.627553	NA	cold	1993
chic	50.0	38.12500	1993-04- 25	NA	18.000000	31.0925926	15.750000	NA	cold	1993
chic	64.5	46.37500	1993-04- 24	NA	100.000000	34.1851852	15.465278	NA	cold	1993
chic	52.5	41.37500	1993-04- 23	NA	63.500000	24.6382484	40.133838	NA	cold	1993
chic	48.0	25.37500	1993-04- 22	NA	63.500000	18.2182540	41.152778	NA	cold	1993
chic	42.0	19.37500	1993-04- 21	NA	43.500000	20.2952188	31.155697	NA	cold	1993
chic	38.0	27.87500	1993-04- 20	NA	28.000000	24.2445652	18.457071	NA	cold	1993
chic	51.0	50.75000	1993-04- 19	NA	30.875000	14.7175926	33.416667	NA	cold	1993
chic	50.5	46.00000	1993-04- 18	NA	28.000000	29.7731481	22.673611	NA	cold	1993
chic	43.5	37.37500	1993-04-	NA	37.000000	23.5231481	25.930556	NA	cold	1993
chic	38.0	32.37500	17 1993-04- 16	NA	24.000000	16.8240741	22.888889	NA	cold	1993
chic	43.5	42.00000	1993-04-	NA	22.500000	10.4394985	29.124008	NA	cold	1993
chic	44.5	42.75000	15 1993-04- 14	NA	41.000000	18.6226577	27.149456	NA	cold	1993

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrender	npcat year
chic	39.5	29.12500	1993-04- 13	NA	31.428571	25.2692139	22.841540	NA col	d 1993
chic	41.0	31.00000	1993-04- 12	NA	20.000000	27.9364478	18.180556	NA col	d 1993
chic	43.5	34.25000	1993-04- 11	NA	15.000000	19.8333333	15.743056	NA col	d 1993
chic	46.0	32.25000	1993-04- 10	NA	26.500000	22.1388889	24.937500	NA col	d 1993
chic	48.5	35.12500	1993-04- 09	NA	35.000000	20.2129630	25.611111	NA col	d 1993
chic	55.5	52.75000	1993-04- 08	NA	45.500000	14.3041282	32.318182	NA col	d 1993
chic	47.5	43.50000	1993-04- 07	NA	57.250000	15.9351486	33.365036	NA col	d 1993
chic	40.0	32.25000	1993-04- 06	NA	34.000000	21.5108696	31.069444	NA col	d 1993
chic	36.5	30.37500	1993-04- 05	NA	32.000000	21.0946055	23.902778	NA col	d 1993
chic	31.5	27.12500	1993-04- 04	NA	32.500000	23.8703704	27.861111	NA col	d 1993
chic	33.5	25.00000	1993-04- 03	NA	24.500000	17.7175926	33.937500	NA col	d 1993
chic	31.0	19.62500	1993-04- 02	NA	41.000000	18.8820451	29.449907	NA col	d 1993
chic	31.0	27.12500	1993-04- 01	NA	11.625000	26.9351852	15.086310	NA col	d 1993
chic	44.0	36.25000	1993-03- 31	NA	31.500000	21.8365385	21.987103	NA col	d 1993
chic	50.0	45.62500	1993-03- 30	NA	41.500000	24.2620773	41.421196	NA col	d 1993
chic	50.0	33.25000	1993-03- 29	NA	40.000000	23.6527778	41.844807	NA col	d 1993
chic	41.5	33.50000	1993-03- 28	NA	17.000000	27.6944444	27.611111	NA col	d 1993
chic	37.5	33.75000	1993-03- 27	NA	19.000000	29.0833333	23.430556	NA col	d 1993
chic	39.0	35.00000	1993-03- 26	NA	33.375000	24.7874396	27.711655	NA col	d 1993
chic	40.0	37.25000	1993-03- 25	NA	36.500000	8.6920290	26.769841	NA col	d 1993
chic	38.0	37.25000	1993-03- 24	NA	33.000000	5.9166667	28.910564	NA col	d 1993
chic	39.5	38.50000	1993-03- 23	NA	27.000000	7.0039683	29.065355	NA col	d 1993
chic	35.0	35.00000	1993-03- 22	NA	26.500000	17.5996377	24.281401	NA col	d 1993
chic	35.0	31.25000	1993-03- 21	NA	42.000000	12.3888889	30.201389	NA col	d 1993
chic	35.0	32.00000	1993-03- 20	NA	40.571429	4.1177536	27.790761	NA col	d 1993
chic	29.5	30.37500	1993-03- 19	NA	29.000000	8.1224747	29.447691	NA col	d 1993

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2	pm25detren	dempca	t year
chic	23.0	15.87500	1993-03- 18	NA	10.000000	26.4381313	23.357049	NA	cold	1993
chic	21.5	6.00000	1993-03- 17	NA	26.000000	26.3376068	19.491667	NA	cold	1993
chic	37.5	30.25000	1993-03- 16	NA	24.000000	17.3750000	27.022947	NA	cold	1993
chic	30.5	30.12500	1993-03- 15	NA	85.000000	16.7708333	31.486111	NA	cold	1993
chic	14.5	2.75000	1993-03- 14	NA	24.875000	15.8888889	23.937500	NA	cold	1993
chic	17.0	1.50000	1993-03- 13	NA	43.000000	17.4583333	22.708333	NA	cold	1993
chic	22.0	12.50000	1993-03- 12	NA	48.000000	11.5921717	35.888889	NA	cold	1993
chic	26.0	21.50000	1993-03- 11	NA	35.000000	9.5138889	28.062500	NA	cold	1993
chic	32.5	27.37500	1993-03- 10	NA	22.500000	7.4053030	30.028968	NA	cold	1993
chic	36.5	26.87500	1993-03-	NA	26.000000	19.3055556	23.604167	NA	cold	1993
chic	38.0	27.87500	09 1993-03-	NA	24.625000	10.5000000	24.755682	NA	cold	1993
chic	34.0	33.00000	08 1993-03-	NA	27.000000	10.3125000	24.812500	NA	cold	1993
chic	36.0	29.12500	07 1993-03-	NA	20.000000	9.5416667	38.618056	NA	cold	1993
chic	34.5	18.75000	06 1993-03-	NA	36.000000	16.9556159	31.128568	NA	cold	1993
chic	34.5	29.87500	05 1993-03-	NA	20.500000	30.3333333	20.312500	NA	cold	1993
chic	38.5	32.25000	04 1993-03-	NA	27.000000	31.3659420	31.632071	NA	cold	1993
chic	38.5	34.12500	03 1993-03-	NA	52.000000	8.2182540	47.176587	NA	cold	1993
chic	34.5	31.62500	02 1993-03-	NA	47.000000	23.6944444	43.209038	NA	cold	1993
chic	20.0	19.62500	01 1993-02-	NA	44.500000	28.444444	46.232488	NA	cold	1993
chic	19.0	13.62500	28 1993-02-	NA	52.500000	10.3611111	48.901389	NA	cold	1993
chic	22.0	12.75000	27 1993-02-	NA	16.500000	18.5132850	30.334678	NA	cold	1993
chic	10.0	15.50000	26 1993-02-	NA	37.000000	12.4166667	35.233440	NA	cold	1993
chic	5.0	-	25 1993-02-	NA	39.750000	9.1148990	35.112374	NA	cold	1993
chic	12.0	$1.87500 \\ 2.75000$	24 1993-02-	NA	36.500000	11.9861111	30.125000	NA	cold	1993
chic	22.0	18.00000	23 1993-02-	NA	18.500000	12.8194444	32.944979	NA	cold	1993
chic	29.0	26.87500	22 1993-02- 21	NA	23.000000	11.3750000	24.050000	NA	cold	1993

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	pm25detrendempca	t year
chic	25.5	23.75000	1993-02- 20	NA	44.500000	13.1388889	39.658333	NA cold	1993
chic	15.0	16.62500	1993-02- 19	NA	66.500000	9.3888889	39.246032	NA cold	1993
chic	7.5	4.87500	1993-02-	NA	27.750000	13.8756039	25.609058	NA cold	1993
chic	10.5	-	18 1993-02-	NA	39.000000	15.7638889	23.984848	NA cold	1993
chic	25.5	5.00000 13.37500	17 1993-02-	NA	22.000000	15.4154040	27.038333	NA cold	1993
chic	24.5	18.75000	16 1993-02-	NA	37.000000	9.8750000	28.444444	NA cold	1993
chic	27.0	20.37500	15 1993-02-	NA	23.000000	17.6666667	18.44444	NA cold	1993
chic	28.5	26.62500	14 1993-02-	NA	11.000000	7.5000000	26.208333	NA cold	1993
chic	29.0	27.25000	13 1993-02-	NA	20.375000	13.9055556	19.110000	NA cold	1993
chic	32.0	25.62500	12 1993-02-	NA	16.500000	14.4583333	15.575000	NA cold	1993
chic	35.0	32.37500	11 1993-02-	NA	20.000000	6.8550725	22.660804	NA cold	1993
chic	32.5	33.37500	10 1993-02-	NA	40.500000	1.0492424	26.394895	NA cold	1993
chic	30.0	21.25000	09 1993-02-	NA	11.500000	15.6805556	18.471230	NA cold	1993
chic	32.0	30.00000	08 1993-02-	NA	26.500000	6.8055556	21.451389	NA cold	1993
chic	29.0	21.37500	07 1993-02-	NA	12.375000	17.4861111	17.263889	NA cold	1993
chic	36.5	29.25000	06 1993-02-	NA	74.500000	7.8586957	36.236045	NA cold	1993
chic	38.0	22.50000	05 1993-02-	NA	96.500000	7.2916667	43.349781	NA cold	1993
chic	35.5	24.87500	04 1993-02-	NA	64.000000	3.0997475	39.545787	NA cold	1993
chic	28.5	17.00000	03 1993-02-	NA		7.2125604		NA cold	1993
chic	30.5	18.00000	02 1993-02-	NA		20.6944444		NA cold	1993
			01 1993-01-	NA NA		13.2083333			
chic	38.5	30.75000	31					NA cold	1993
chic	25.5	14.25000	1993-01- 30	NA		14.3888889		NA cold	1993
chic	15.5	4.00000	1993-01- 29	NA		11.7500000		NA cold	1993
chic	30.5	21.37500	1993-01- 28	NA		7.2350427		NA cold	1993
chic	31.5	25.25000	1993-01- 27	NA	31.500000	7.7312802	29.664827	NA cold	1993
chic	30.0	30.00000	1993-01- 26	NA	52.500000	6.5772947	27.176449	NA cold	1993

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendempc	at year
chic	23.0	11.62500	1993-01- 25	NA	29.875000	7.7500000	30.077083	NA cold	1993
chic	28.5	14.00000	1993-01- 24	NA	26.000000	16.5277778	14.885417	NA cold	1993
chic	36.5	31.62500	1993-01- 23	NA	20.000000	9.5972222	24.145833	NA cold	1993
chic	34.0	26.12500	1993-01- 22	NA	24.500000	5.9444444	28.281250	NA cold	1993
chic	35.5	34.00000	1993-01-	NA	19.000000	0.6527778	27.002841	NA cold	1993
chic	27.0	31.62500	21 1993-01-	NA	41.500000	4.3888889	33.197464	NA cold	1993
chic	18.5	13.50000	20 1993-01-	NA	49.571429	6.0289855	43.205435	NA cold	1993
chic	18.0	15.25000	19 1993-01-	NA	51.000000	8.0555556	34.408333	NA cold	1993
chic	20.5	5.00000	18 1993-01-	NA	22.000000	17.5972222	22.258333	NA cold	1993
chic	22.0	27.62500	17 1993-01-	NA	25.500000	3.2361111	33.025000	NA cold	1993
chic	18.0	14.50000	16 1993-01-	NA	31.500000	5.7815657	31.814394	NA cold	1993
chic	21.5	20.25000	15 1993-01-	NA	12.500000	4.0241546	37.076812	NA cold	1993
chic	27.5	21.25000	14 1993-01-	NA	20.875000	3.0492424	29.516667	NA cold	1993
chic	30.5	33.00000	13 1993-01-	NA	32.000000	1.5277778	27.104348	NA cold	1993
chic	26.5	23.25000	12 1993-01-	NA	14.500000	12.8194444	22.508333	NA cold	1993
chic	24.5	22.37500	11 1993-01-	NA	8.000000	24.1666667	13.283333	NA cold	1993
chic	24.5	20.25000	10 1993-01-	NA	3.000000	24.9583333	11.658333	NA cold	1993
chic	21.5	17.87500	09 1993-01-	NA	14.000000	14.2506039	25.600000	NA cold	1993
chic	24.5	20.62500	08 1993-01-	NA	19.875000	1.6900527	27.083333	NA cold	1993
chic	21.5	16.50000	07 1993-01-	NA	34.000000	1.7777778	26.718182	NA cold	1993
chic	27.5	21.50000	06 1993-01-	NA	12.000000	0.9532828	22.087088	NA cold	1993
chic	38.5	32.50000	05 1993-01-	NA	17.000000	0.8333333	18.166667	NA cold	1993
chic	40.5	44.87500	04 1993-01-	NA	21.500000	0.5277778	19.825000	NA cold	1993
chic	25.0	28.25000	03 1993-01-	NA	17.500000	1.5416667	23.808333	NA cold	1993
chic	14.0	9.37500	02 1993-01-	NA	18.142857	4.3055556	22.608333	NA cold	1993
chic	26.0	11.00000	01 1992-12- 31	NA	44.000000	2.0833333	17.558333	NA cold	1992

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmean	n@3tmean2	no2tmean2p	m25detrend	tempcat	year
chic	45.5	43.62500	1992-12- 30	NA	43.000000	2.0000000	20.392172	NA	cold	1992
chic	41.5	42.12500	1992-12- 29	NA	43.000000	2.0000000	21.177451	NA	cold	1992
chic	38.5	36.62500	1992-12- 28	NA	36.000000	2.0000000	22.497727	NA	cold	1992
chic	30.5	25.37500	1992-12- 27	NA	31.000000	4.4305556	24.766667	NA	cold	1992
chic	14.5	3.25000	1992-12- 26	NA	27.142857	7.2222222	23.916667	NA	cold	1992
chic	18.0	1.75000	1992-12-	NA	75.000000	14.2222222	12.375000	NA	cold	1992
chic	10.0	7.75000	25 1992-12-	NA	39.000000	6.8194444	21.908333	NA	cold	1992
chic	21.5	5.25000	24 1992-12-	NA	53.000000	4.5314010	24.325362	NA	cold	1992
chic	33.0	30.12500	23 1992-12-	NA	44.500000	2.0000000	31.813636	NA	cold	1992
chic	26.0	25.50000	22 1992-12-	NA	46.500000	2.2500000	28.893841	NA	cold	1992
chic	19.5	11.75000	21 1992-12-	NA	23.875000	7.0972222	21.433333	NA	cold	1992
chic	31.0	26.25000	20 1992-12-	NA	32.000000	2.5416667	22.441667	NA	cold	1992
chic	30.0	27.12500	19 1992-12-	NA	30.500000	2.4027778	22.608333	NA	cold	1992
chic	30.5	20.12500	18 1992-12-	NA	36.000000	3.0000000	24.158333	NA	cold	1992
chic	37.5	29.62500	17 1992-12-	NA	26.000000	2.6666667	20.537500	NA	cold	1992
chic	44.0	45.50000	16 1992-12-	NA	28.000000	3.2866162	27.065942	NA	cold	1992
chic	29.5	30.75000	15 1992-12-	NA	37.285714	2.6044686	27.940476	NA	cold	1992
chic	32.0	31.00000	14 1992-12-	NA	26.000000	9.0833333	20.133333	NA	cold	1992
chic	32.0	30.25000	13 1992-12-	NA	32.000000	8.5972222	27.033333	NA	cold	1992
chic	33.0	30.37500	12 1992-12-	NA	32.500000	2.0000000	29.916667	NA	cold	1992
chic	32.0	29.37500	11 1992-12-	NA	47.500000	2.0434783	30.658333	NA	cold	1992
chic	27.5	27.62500	10 1992-12-	NA	42.000000	3.2536232	27.333333	NA	cold	1992
chic	26.5	21.62500	09 1992-12-	NA	32.000000	6.5883838	29.179928	NA	cold	1992
chic	27.0	21.12500	08 1992-12-	NA	36.500000	5.0138889	27.158333	NA	cold	1992
chic	23.0	25.75000	07 1992-12-	NA	23.500000	2.7361111	25.691667	NA	cold	1992
chic	19.5	9.25000	06 1992-12- 05	NA	25.000000	7.5694444	25.975000	NA	cold	1992

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrendemp	ocat year
chic	25.5	11.87500	1992-12- 04	NA	48.000000	7.1805556	24.198913	NA cold	1992
chic	28.0	23.37500	1992-12-	NA	21.000000	6.5067523	26.841667	NA cold	1992
chic	32.5	19.87500	03 1992-12- 02	NA	21.428571	7.1998792	22.583333	NA cold	1992
chic	32.0	28.00000	1992-12- 01	NA	18.000000	3.6944444	23.150000	NA cold	1992
chic	33.5	25.25000	1992-11- 30	NA	53.000000	4.1884058	21.833333	NA cold	1992
chic	35.0	30.87500	1992-11- 29	NA	28.000000	6.3194444	23.100000	NA cold	1992
chic	30.0	25.62500	1992-11- 28	NA	32.500000	4.9027778	24.241667	NA cold	1992
chic	29.5	24.12500	1992-11- 27	NA	30.500000	5.5694444	23.625000	NA cold	1992
chic	36.5	26.00000	1992-11- 26	NA	11.714286	7.6944444	13.566667	NA cold	1992
chic	43.5	42.50000	1992-11-	NA	37.500000	2.4166667	18.746739	NA cold	1992
chic	39.5	37.87500	25 1992-11-	NA	26.000000	3.6712121	23.966667	NA cold	1992
chic	38.0	36.37500	24 1992-11-	NA	34.500000	3.7500000	26.529529	NA cold	1992
chic	41.0	39.50000	23 1992-11-	NA	11.500000	11.8333333	3 12.383333	NA cold	1992
chic	48.5	40.37500	22 1992-11-	NA	20.500000	5.3750000	15.125000	NA cold	1992
chic	52.0	44.50000	21 1992-11-	NA	32.857143	6.2083333	32.075000	NA cold	1992
chic	40.5	37.12500	20 1992-11-	NA	33.500000	7.7171717	24.470690	NA cold	1992
chic	39.0	34.25000	19 1992-11-	NA	28.500000	9.0845411	19.987500	NA cold	1992
chic	38.5	32.75000	18 1992-11-	NA	42.500000	3.7777778	25.696667	NA cold	1992
chic	36.5	37.37500	17 1992-11-	NA	33.000000	3.7500000	28.408333	NA cold	1992
chic	29.0	21.62500	16 1992-11-	NA	27.000000	7.5416667	22.258333	NA cold	1992
chic	28.0	16.87500	15 1992-11-	NA	18.714286	7.6666667	21.850000	NA cold	1992
chic	30.5	20.87500	14 1992-11-	NA	27.500000	11.7500000	20.700000	NA cold	1992
chic	40.0	27.62500	13 1992-11-	NA	NA	6.8409091	21.129381	NA cold	1992
chic	44.5	39.37500	12 1992-11-	NA	24.000000	6.2083333	19.833333	NA cold	1992
chic	49.5	51.00000	11 1992-11-	NA	37.000000	5.3333333	26.891667	NA cold	1992
chic	48.0	41.62500	10 1992-11- 09	NA	32.000000	7.2083333	26.687500	NA cold	1992

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	$25\overline{\text{detrend}}$	tempcat	year
chic	38.0	35.12500	1992-11- 08	NA	27.125000	4.1041667	22.822917	NA	cold	1992
chic	34.0	30.87500	1992-11- 07	NA	27.500000	5.6000000	28.770833	NA	cold	1992
chic	34.0	21.75000	1992-11- 06	NA	21.000000	4.7735507	29.645833	NA	cold	1992
chic	32.5	22.50000	1992-11- 05	NA	26.000000	4.3257576	27.244231	NA	cold	1992
chic	35.5	28.75000	1992-11- 04	NA	13.000000	5.1934289	21.593939	NA	cold	1992
chic	37.0	35.00000	1992-11-	NA	15.000000	5.8645833	25.241667	NA	cold	1992
chic	48.0	35.75000	03 1992-11-	NA	11.714286	3.4605978	18.000000	NA	cold	1992
chic	45.5	44.12500	02 1992-11-	NA	30.000000	12.1145833	15.150000	NA	cold	1992
chic	44.0	35.87500	01 1992-10-	NA	18.000000	13.5509259	20.833333	NA	cold	1992
chic	45.0	37.87500	31 1992-10-	NA	24.500000	13.3611111	20.033333	NA	cold	1992
chic	45.0	37.12500	30 1992-10-	NA	30.000000	14.5253623	20.317029	NA	cold	1992
chic	50.5	34.75000	29 1992-10-	NA	119.000000	7.9973650	40.455435	NA	cold	1992
chic	46.5	35.75000	28 1992-10-	NA	77.428571	6.1851852	45.059554	NA	cold	1992
chic	49.0	38.12500	27 1992-10-	NA	40.500000	15.2401369	26.141667	NA	cold	1992
chic	49.0	43.12500	26 1992-10-	NA	37.000000	12.1944444	29.925000	NA o	cold	1992
chic	51.0	42.50000	25 1992-10-	NA	30.500000	17.5885417	22.516667	NA	cold	1992
chic	67.0	56.87500	24 1992-10-	NA	129.000000	17.2592844	35.675000	NA	cold	1992
chic	57.5	57.87500	23 1992-10-	NA	63.000000	11.8659555	41.165382	NA	cold	1992
chic	47.0	40.25000	22 1992-10-	NA	43.250000	9.9302811	25.076252	NA	cold	1992
chic	45.5	42.37500	21 1992-10-	NA	41.000000	9.7786195	25.368478	NA	cold	1992
chic	33.0	20.00000	20 1992-10-	NA	30.000000	9.2962963	33.641667	NA	cold	1992
chic	35.0	18.12500	19 1992-10-	NA	37.000000	15.7638889	20.408333	NA	cold	1992
chic	38.5	29.37500	18 1992-10-	NA	32.500000	8.9629630	28.191667	NA o	cold	1992
chic	40.5	27.50000	17 1992-10-	NA	31.500000	6.7962963	19.920833	NA o	cold	1992
chic	50.0	49.37500	16 1992-10-	NA	19.000000	4.8630888	20.436232	NA o	cold	1992
chic	55.5	49.00000	15 1992-10- 14	NA	44.500000	9.9874339	30.807576	NA	cold	1992

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrend	tempca	t year
chic	47.0	38.25000	1992-10- 13	NA	64.000000	9.3085017	30.580303	NA	cold	1992
chic	53.5	28.62500	1992-10- 12	NA	57.000000	14.9861111	26.072917	NA	cold	1992
chic	51.5	36.37500	12 1992-10- 11	NA	59.500000	13.4722222	22.760417	NA	cold	1992
chic	51.5	41.75000	1992-10- 10	NA	50.000000	11.9120370	24.531250	NA	cold	1992
chic	49.0	45.75000	1992-10- 09	NA	19.285714	7.1649832	18.458333	NA	cold	1992
chic	57.5	41.00000	1992-10- 08	NA	46.000000	16.3357488	25.582971	NA	cold	1992
chic	58.0	52.00000	1992-10- 07	NA	87.000000	19.6596399	38.310870	NA	cold	1992
chic	53.0	45.50000	1992-10- 06	NA	72.000000	11.1418350	38.144862	NA	cold	1992
chic	53.0	41.87500	1992-10- 05	NA	23.000000	15.4583333	23.469048	NA	cold	1992
chic	59.0	46.50000	1992-10- 04	NA	30.500000	23.6527778	13.883333	NA	cold	1992
chic	66.0	52.62500	1992-10- 03	NA	40.857143	29.6712963	28.637319	NA	cold	1992
chic	63.5	53.62500	1992-10- 02	NA	86.000000	21.4043881	42.696485	NA	cold	1992
chic	58.5	48.00000	1992-10-	NA	89.500000	15.5253623	48.046377	NA	cold	1992
chic	53.5	43.12500	01 1992-09-	NA	95.500000	11.8079710	48.361153	NA	cold	1992
chic	49.5	38.50000	30 1992-09-	NA	76.500000	8.7325634	37.902141	NA	cold	1992
chic	49.5	36.75000	29 1992-09-	NA	37.500000	12.0332880	26.808333	NA	cold	1992
chic	59.0	43.12500	28 1992-09-	NA	18.125000	13.7031250	19.500000	NA	cold	1992
chic	63.0	60.00000	27 1992-09-	NA	28.000000	14.5625000	25.008333	NA	cold	1992
chic	59.5	53.75000	26 1992-09-	NA	53.500000	16.3389946	35.408333	NA	cold	1992
chic	53.5	41.25000	25 1992-09-	NA	36.500000	15.1979167	27.886111	NA	cold	1992
chic	49.5	39.37500	24 1992-09-	NA	25.000000	12.9270833	23.393182	NA	cold	1992
chic	51.5	39.25000	23 1992-09-	NA	37.000000	12.1795743	20.206977	NA	cold	1992
chic	64.0	62.50000	22 1992-09-	NA	36.142857	6.3088768	26.116667	NA	cold	1992
chic	59.0	56.37500	21 1992-09-	NA	27.000000	18.1145833	24.941667	NA	cold	1992
chic	53.5	42.37500	20 1992-09-	NA	30.500000	13.9596561	28.650000	NA	cold	1992
chic	62.0	44.50000	19 1992-09- 18	NA	41.500000	19.2435222	21.690476	NA	cold	1992

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	0 m25 detrend	empcat	year
chic	71.5	66.62500	1992-09- 17	NA	66.000000	20.7419485	32.653623	NA o	cold	1992
chic	77.0	65.25000	1992-09- 16	NA	103.500000	33.7055153	25.985145	NA o	cold	1992
chic	76.5	69.12500	1992-09-	NA	44.857143	19.9551127	34.818182	NA o	cold	1992
chic	72.5	70.00000	15 1992-09-	NA	69.500000	23.6620370	35.316667	NA o	cold	1992
chic	67.5	56.25000	14 1992-09-	NA	50.000000	33.4074074	23.575000	NA o	cold	1992
chic	62.0	51.00000	13 1992-09-	NA	39.000000	20.7222222	30.108333	NA o	cold	1992
chic	58.0	51.62500	12 1992-09-	NA	38.500000	10.1141304	24.728030	NA o	cold	1992
chic	60.0	48.75000	11 1992-09-	NA	41.500000	11.0179879	17.479167	NA o	cold	1992
chic	63.0	62.87500	10 1992-09-	NA	18.750000	6.3256844	29.427070	NA o	cold	1992
chic	64.0	48.12500	09 1992-09-	NA	54.000000	16.5157295	19.051630	NA o	cold	1992
chic	73.5	65.50000	08 1992-09-	NA	34.500000	31.5335145	22.766667	NA o	cold	1992
chic	75.0	66.75000	07 1992-09-	NA	36.000000	27.8802083	18.545833	NA o	cold	1992
chic	70.5	65.75000	06 1992-09-	NA	34.500000	23.3593750	21.183333	NA o	cold	1992
chic	65.5	57.62500	05 1992-09-	NA	33.000000	19.2175926	33.710507	NA o	cold	1992
chic	67.5	51.12500	04 1992-09-	NA	32.285714	16.3750915	25.167391	NA o	cold	1992
chic	70.0	66.50000	03 1992-09-	NA	56.000000	16.8967391	25.284420	NA o	cold	1992
chic	63.0	58.25000	02 1992-09-	NA	63.000000	16.6111111	30.570455	NA o	cold	1992
chic	63.5	51.75000	01 1992-08-	NA	38.000000	12.8101852	24.700000	NA o	cold	1992
chic	66.0	51.37500	31 1992-08-	NA	31.000000	22.1203704	11.358333	NA o	cold	1992
chic	65.0	59.25000	30 1992-08-	NA	51.500000	23.3703704	21.675000	NA o	cold	1992
chic	59.5	48.50000	29 1992-08-	NA	22.750000	11.5670107	21.250379	NA o	cold	1992
chic	59.5	54.87500	28 1992-08-	NA	31.000000	8.4612795	14.697727	NA o	cold	1992
chic	66.5	60.37500	27 1992-08-	NA		12.1758658			cold	1992
chic	79.0	67.75000	26 1992-08-	NA		23.9583333			cold	1992
chic	78.5	68.12500	25 1992-08-	NA		20.6833187			cold	1992
chic	75.0	66.12500	24 1992-08-	NA		30.5740741			cold	1992
CHIC	79.0	00.12000	1992-08-	INA	99.900000	50.5740741	44.00UUUU	INA (	oid	1992

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detren	dempca	t year
chic	67.0	61.87500	1992-08- 22	NA	56.000000	33.5462963	38.516667	NA	cold	1992
chic	64.5	54.12500	1992-08- 21	NA	76.500000	23.3305153	41.591343	NA	cold	1992
chic	62.0	46.37500	1992-08- 20	NA	63.000000	15.5722625	24.325000	NA	cold	1992
chic	63.0	50.50000	1992-08- 19	NA	18.000000	15.1904187	19.800774	NA	cold	1992
chic	66.0	61.00000	1992-08- 18	NA	56.500000	21.9605475	30.875000	NA	cold	1992
chic	63.0	51.12500	1992-08- 17	NA	82.000000	22.5092593	41.375000	NA	cold	1992
chic	63.0	48.87500	1992-08- 16	NA	24.285714	26.2962963	21.025000	NA	cold	1992
chic	62.0	48.75000	1992-08- 15	NA	13.000000	26.8888889	13.854167	NA	cold	1992
chic	61.0	46.37500	1992-08- 14	NA	26.000000	17.2292673	21.308333	NA	cold	1992
chic	60.5	50.12500	1992-08- 13	NA	22.500000	19.1508198	17.457413	NA	cold	1992
chic	62.0	56.75000	1992-08-	NA	26.000000	10.3691077	22.745833	NA	cold	1992
chic	70.0	52.37500	12 1992-08-	NA	26.000000	23.4866052	21.575873	NA	cold	1992
chic	79.0	58.37500	11 1992-08- 10	NA	33.250000	23.2708333	17.027778	NA	cold	1992
chic	80.0	77.25000	1992-08- 09	NA	46.000000	28.2604167	19.923611	NA	cold	1992
chic	75.5	68.50000	1992-08- 08	NA	45.000000	32.4427083	19.236111	NA	cold	1992
chic	68.5	69.37500	1992-08- 07	NA	61.500000	30.3716238	30.138889	NA	cold	1992
chic	67.5	56.87500	1992-08- 06	NA	28.000000	30.3643378	26.273864	NA	cold	1992
chic	63.0	49.75000	1992-08- 05	NA	24.000000	22.3870974	17.948480	NA	cold	1992
chic	62.5	50.12500	1992-08-	NA	22.500000	13.2962963	18.103080	NA	cold	1992
chic	65.5	57.25000	04 1992-08-	NA	34.000000	11.6376812	27.119242	NA	cold	1992
chic	69.0	62.50000	03 1992-08-	NA	23.000000	22.8055556	21.358333	NA	cold	1992
chic	68.0	57.37500	02 1992-08-	NA	NA	23.6203704	21.137500	NA	cold	1992
chic	67.0	51.50000	01 1992-07-	NA	19.000000	20.4134461	21.048214	NA	cold	1992
chic	61.5	62.75000	31 1992-07-	NA	17.000000	13.4907407	17.845833	NA	cold	1992
chic	66.5	55.25000	30 1992-07-	NA	23.125000	14.4122383	17.147694	NA	cold	1992
chic	71.5	67.12500	29 1992-07- 28	NA	42.000000	20.5984300	27.650000	NA	cold	1992

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detren	dempcat	year
chic	71.5	57.62500	1992-07- 27	NA	29.000000	17.2003968	24.737500	NA	cold	1992
chic	74.0	64.12500	1992-07- 26	NA	35.000000	20.2916667	20.779167	NA	cold	1992
chic	67.5	70.62500	1992-07- 25	NA	33.000000	18.1435185	28.875000	NA	cold	1992
chic	67.0	60.87500	1992-07- 24	NA	24.000000	26.9297138	21.240476	NA	cold	1992
chic	62.5	58.00000	1992-07- 23	NA	29.000000	20.1201691	19.775000	NA	cold	1992
chic	63.5	60.12500	1992-07- 22	NA	29.000000	18.8892915	21.339150	NA	cold	1992
chic	62.0	48.75000	1992-07-	NA	7.000000	20.7447665	12.631159	NA	cold	1992
chic	68.0	59.37500	21 1992-07-	NA	18.000000	18.9472625	19.999242	NA	cold	1992
chic	72.5	67.87500	20 1992-07-	NA	24.000000	26.6435185	22.033333	NA	cold	1992
chic	68.0	62.62500	19 1992-07-	NA	23.000000	17.3935185	21.620833	NA	cold	1992
chic	74.0	61.87500	18 1992-07-	NA	28.000000	17.7500000	26.125000	NA	cold	1992
chic	68.0	66.87500	17 1992-07-	NA	41.000000	13.3979469	35.372727	NA	cold	1992
chic	68.0	51.87500	16 1992-07-	NA	19.000000	23.5387205	19.446443	NA	cold	1992
chic	65.0	60.12500	15 1992-07-	NA	11.000000	18.6648099	18.716667	NA	cold	1992
chic	69.5	68.75000	14 1992-07-	NA	14.000000	20.7349034	22.164493	NA	cold	1992
chic	73.5	71.62500	13 1992-07-	NA	25.000000	19.0468750	16.760417	NA	cold	1992
chic	73.0	64.50000	12 1992-07-	NA	31.625000	25.9120370	29.125000	NA	cold	1992
chic	76.5	60.25000	11 1992-07-	NA	32.000000	24.1034622	30.325000	NA	cold	1992
chic	74.0	64.62500	10 1992-07-	NA	32.000000	13.8949275	33.066667	NA	cold	1992
chic	79.5	68.25000	09 1992-07-	NA	66.000000	29.1580113	23.409211	NA	cold	1992
chic	67.5	64.62500	08 1992-07-	NA	59.000000	19.0673401	28.441667	NA	cold	1992
chic	66.0	49.00000	07 1992-07-	NA	NA	18.7339884	20.687879	NA	cold	1992
chic	68.5	52.12500	06 1992-07-	NA	19.714286	21.5781250	17.083333	NA	cold	1992
chic	71.0	62.00000	05 1992-07-	NA	24.000000	29.5312500	18.333333	NA	cold	1992
chic	67.0	55.37500	04 1992-07-	NA	24.000000	19.1041667	16.483333	NA	cold	1992
chic	77.0	65.62500	03 1992-07-	NA	79.000000	22.1914983	32.668478	NA	cold	1992
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city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2j	pm25detren	dempc	at year
chic	74.5	64.62500	1992-07- 01	NA	75.000000	50.8287037	37.975000	NA	cold	1992
chic	66.5	52.50000	1992-06- 30	NA	18.000000	29.0138889	20.408333	NA	cold	1992
chic	71.5	54.25000	1992-06- 29	NA	53.500000	33.4093837	31.865476	NA	cold	1992
chic	62.0	49.00000	1992-06- 28	NA	38.000000	25.1197917	36.658333	NA	cold	1992
chic	58.0	35.37500	1992-06- 27	NA	17.000000	21.5937500	15.591667	NA	cold	1992
chic	61.5	52.37500	1992-06- 26	NA	41.000000	26.1209340	24.732246	NA	cold	1992
chic	64.0	57.50000	1992-06- 25	NA	50.000000	23.8234702	34.505303	NA	cold	1992
chic	62.5	51.25000	1992-06- 24	NA	40.000000	31.9844276	29.803809	NA	cold	1992
chic	66.0	52.25000	1992-06- 23	NA	48.142857	31.1379630	35.350000	NA	cold	1992
chic	52.5	43.00000	1992-06- 22	NA	62.000000	13.6607143	35.841667	NA	cold	1992
chic	49.0	33.37500	1992-06-	NA	9.000000	20.6822917	13.675000	NA	cold	1992
chic	51.5	38.50000	21 1992-06-	NA	2.000000	20.4928977	11.012121	NA	cold	1992
chic	59.5	47.12500	20 1992-06-	NA	NA	19.2288647	14.175000	NA	cold	1992
chic	73.0	59.12500	19 1992-06-	NA	42.000000	27.6248297	24.811759	NA	cold	1992
chic	75.5	62.75000	18 1992-06-	NA	72.285714	27.7550725	24.667754	NA	cold	1992
chic	75.5	62.00000	17 1992-06-	NA	76.000000	44.3906250	24.071146	NA	cold	1992
chic	71.0	54.37500	16 1992-06-	NA	45.000000	33.0303442	23.694565	NA	cold	1992
chic	75.5	61.00000	15 1992-06-	NA	45.000000	41.2447917	23.391667	NA	cold	1992
chic	73.5	52.12500	14 1992-06-	NA	61.000000	45.3281250	49.575000	NA	cold	1992
chic	69.0	45.75000	13 1992-06-	NA	35.000000	40.7231571	42.414130	NA	cold	1992
chic	67.0	47.25000	12 1992-06-	NA	41.857143	27.0556418	38.266667	NA	cold	1992
chic	64.0	42.50000	11 1992-06-	NA	27.000000	28.0512599	31.868297	NA	cold	1992
chic	65.0	43.87500	10 1992-06-	NA	18.000000	26.0276268	20.358333	NA	cold	1992
chic	62.0	47.75000	09 1992-06-	NA	19.000000	22.9479167	25.445833	NA	cold	1992
chic	66.5	44.50000	08 1992-06-	NA	19.000000	33.3958333	18.483333	NA	cold	1992
chic	67.5	56.62500	07 1992-06- 06	NA	53.000000	33.1093750	36.166667	NA	cold	1992

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2	pm25detren	dempo	cat year
chic	67.5	58.37500	1992-06- 05	NA	53.714286	32.2926136	34.132143	NA	cold	1992
chic	65.5	60.75000	1992-06- 04	NA	51.000000	24.6718750	34.140476	NA	cold	1992
chic	65.0	48.25000	1992-06- 03	NA	55.000000	42.6927083	36.607246	NA	cold	1992
chic	61.5	40.25000	1992-06- 02	NA	21.000000	22.3935688	32.640909	NA	cold	1992
chic	59.0	45.50000	1992-06-	NA	43.000000	22.9470109	42.683333	NA	cold	1992
chic	60.0	39.75000	01 1992-05-	NA	42.000000	36.1250000	39.825000	NA	cold	1992
chic	58.0	42.37500	31 1992-05-	NA	33.625000	40.7015306	29.575000	NA	cold	1992
chic	55.0	33.75000	30 1992-05-	NA	56.000000	32.3768116	33.348485	NA	cold	1992
chic	50.5	31.37500	29 1992-05-	NA	70.000000	22.4479167	40.576197	NA	cold	1992
chic	48.0	24.62500	28 1992-05-	NA	38.000000	16.5625000	32.575000	NA	cold	1992
chic	44.0	29.37500	27 1992-05-	NA	18.000000	25.2335389	25.081341	NA	cold	1992
chic	41.0	32.75000	26 1992-05-	NA	NA	29.1309524	14.266667	NA	cold	1992
chic	40.5	30.62500	25 1992-05-	NA	10.875000	29.2440476	9.962500	NA	cold	1992
chic	55.0	36.12500	24 1992-05-	NA	54.000000	19.0064700	14.529167	NA	cold	1992
chic	73.5	64.12500	23 1992-05-	NA	83.000000	24.7776680	34.583333	NA	cold	1992
chic	71.0	60.50000	22 1992-05-	NA	92.000000	33.6017992	43.004545	NA	cold	1992
chic	67.0	51.12500	21 1992-05-	NA	NA	36.1385870	40.437987	NA	cold	1992
chic	57.5	44.12500	20 1992-05-	NA	38.000000	22.1046196	33.574621	NA	cold	1992
chic	52.0	43.50000	19 1992-05-	NA	21.125000	21.8757440	17.330616	NA	cold	1992
chic	67.5	48.62500	18 1992-05-	NA	35.000000	35.0238095	16.953125	NA	cold	1992
chic	73.0	60.25000	17 1992-05-	NA	67.000000	41.3571429	30.812500	NA	cold	1992
chic	60.5	48.87500	16 1992-05-	NA	81.000000	18.7237319	38.108333	NA	cold	1992
chic	54.0	46.00000	15 1992-05-	NA	19.000000	13.5031379	28.609848	NA	cold	1992
chic	55.0	36.87500	14 1992-05-	NA	NA	22.9789402	18.975000	NA	cold	1992
chic	69.0	61.50000	13 1992-05-	NA	47.571429	26.4166667	28.781522	NA	cold	1992
chic	72.0	56.37500	12 1992-05- 11	NA	84.000000	33.7580287	26.235507	NA	cold	1992

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	m cm25 detrende	empcat	year
chic	65.5	48.50000	1992-05- 10	NA	53.000000	41.3593750	25.866667	NA c	old	1992
chic	58.5	48.25000	1992-05- 09	NA	49.000000	45.6093750	29.700000	NA c	old	1992
chic	56.0	28.00000	1992-05- 08	NA	65.000000	35.0000000	49.777136	NA c	old	1992
chic	52.0	24.75000	1992-05- 07	NA	100.000000	21.7422360	41.423188	NA c	old	1992
chic	44.5	21.25000	1992-05- 06	NA	31.857143	21.3403680	27.504167	NA c	old	1992
chic	43.5	23.12500	1992-05-	NA	56.000000	31.3052721	17.303954	NA c	old	1992
chic	44.0	29.87500	05 1992-05-	NA	23.500000	19.3870874	22.494318	NA c	old	1992
chic	48.5	34.87500	04 1992-05-	NA	34.500000	18.0952381	15.505208	NA c	old	1992
chic	64.0	32.50000	03 1992-05-	NA	67.000000	27.5833333	20.500000	NA c	old	1992
chic	64.5	52.50000	02 1992-05-	NA	141.000000	32.9173460	25.358333	NA c	old	1992
chic	49.5	42.12500	01 1992-04-	NA	55.375000	15.1370018	29.309912	NA c	old	1992
chic	58.5	51.62500	30 1992-04-	NA	52.500000	16.4055707	31.028080	NA c	old	1992
chic	44.0	29.50000	29 1992-04-	NA	55.000000	18.0939764	41.552083	NA c	old	1992
chic	40.5	26.25000	28 1992-04-	NA	20.000000	24.4785779	17.051954	NA c	old	1992
chic	46.5	36.50000	27 1992-04-	NA	11.500000	19.5178571	14.066123	NA c	old	1992
chic	43.5	33.62500	26 1992-04-	NA	14.000000	17.3630952	21.958333	NA c	old	1992
chic	44.5	37.62500	25 1992-04-	NA	33.571429	8.5214461	27.854167	NA c	old	1992
chic	48.5	42.75000	24 1992-04-	NA	40.500000	7.9802989	33.349206	NA c	old	1992
chic	43.0	30.87500	23 1992-04-	NA	37.000000	17.5453869	21.234848	NA c	old	1992
chic	48.0	36.50000	22 1992-04-	NA	34.500000	12.9316604	16.638134	NA c	old	1992
chic	66.0	58.25000	21 1992-04-	NA	22.500000	21.5833333	18.973958	NA c	old	1992
chic	65.5	59.75000	20 1992-04-	NA	24.000000	23.7395833	18.333333	NA c	old	1992
chic	51.0	58.12500	19 1992-04-	NA	40.500000	10.4531250	25.625000	NA c	old	1992
chic	41.5	38.75000	18 1992-04-	NA	23.000000	22.9218750	24.541667	NA c	old	1992
chic	53.0	40.25000	17 1992-04-	NA	26.000000	17.2395833	28.182292	NA c	old	1992
chic	48.5	50.37500	16 1992-04-	NA	53.000000	10.2738095	31.979167	NA c	old	1992
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city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	$0 \text{m} 25 \overline{\text{detren}}$	dempcat	year
chic	42.0	31.87500	1992-04- 14	NA	44.500000	9.7651721	26.128478	NA	cold	1992
chic	38.0	28.62500	1992-04- 13	NA	32.000000	15.9185606	22.418561	NA	cold	1992
chic	37.0	19.00000	1992-04- 12	NA	14.857143	32.0572917	13.816667	NA	cold	1992
chic	49.5	36.37500	1992-04- 11	NA	18.000000	17.1510417	26.675000	NA	cold	1992
chic	57.5	57.37500	1992-04- 10	NA	45.000000	19.9838574	31.738106	NA	cold	1992
chic	48.0	36.00000	1992-04- 09	NA	37.000000	26.9226985	28.316403	NA	cold	1992
chic	50.5	28.12500	1992-04- 08	NA	53.000000	19.3726326	37.683333	NA	cold	1992
chic	52.0	38.50000	1992-04- 07	NA	76.500000	14.4962121	40.706250	NA	cold	1992
chic	49.5	31.87500	1992-04- 06	NA	42.125000	17.8437500	37.802083	NA	cold	1992
chic	38.5	23.25000	1992-04- 05	NA	29.000000	20.9062500	32.055556	NA	cold	1992
chic	36.5	22.12500	1992-04- 04	NA	20.000000	26.9375000	25.041667	NA	cold	1992
chic	38.0	31.87500	1992-04- 03	NA	45.500000	13.4895833	31.472222	NA	cold	1992
chic	31.5	19.50000	1992-04- 02	NA	32.000000	18.5161713	29.972222	NA	cold	1992
chic	33.5	25.25000	1992-04- 01	NA	20.000000	23.2253472	24.388889	NA	cold	1992
chic	41.5	27.00000	1992-03- 31	NA	35.375000	16.6666667	34.536232	NA	cold	1992
chic	42.0	29.50000	1992-03- 30	NA	34.000000	20.4791667	32.871732	NA	cold	1992
chic	39.5	37.75000	1992-03- 29	NA	25.000000	27.2708333	24.388889	NA	cold	1992
chic	36.0	31.25000	1992-03- 28	NA	39.500000	18.0208333	42.347222	NA	cold	1992
chic	34.0	26.00000	1992-03- 27	NA	26.500000	23.8333333	27.125000	NA	cold	1992
chic	41.5	26.87500	1992-03- 26	NA	46.500000	15.8333333	28.066177	NA	cold	1992
chic	44.5	32.37500	1992-03- 25	NA	40.750000	12.1875000	31.697917	NA	cold	1992
chic	43.0	34.25000	1992-03- 24	NA	58.000000	16.5958333	37.094697	NA	cold	1992
chic	30.5	23.12500	1992-03-	NA	54.000000	13.4375000	48.930706	NA	cold	1992
chic	27.5	14.12500	23 1992-03- 22	NA	19.500000	25.5208333	25.635417	NA	cold	1992
chic	30.5	31.12500	1992-03-	NA	33.000000	29.5416667	27.427083	NA	cold	1992
chic	35.0	21.12500	21 1992-03- 20	NA	40.000000	15.8333333	35.103220	NA	cold	1992

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmean	n@3tmean2	no2tmean2j	pm25detrend	empcat year
chic	36.0	22.75000	1992-03- 19	NA	24.000000	28.7626812	29.672619	NA c	old 1992
chic	34.0	22.00000	1992-03- 18	NA	20.500000	26.5416667	21.203283	NA c	old 1992
chic	38.0	24.00000	1992-03-	NA	26.500000	21.3333333	23.541667	NA c	old 1992
chic	34.5	36.87500	17 1992-03-	NA	28.500000	12.1969697	30.611111	NA c	old 1992
chic	29.0	17.00000	16 1992-03-	NA	28.500000	18.9375000	31.333333	NA c	old 1992
chic	29.0	19.75000	15 1992-03-	NA	27.000000	19.7916667	28.652778	NA c	old 1992
chic	25.5	21.87500	14 1992-03-	NA	33.750000	17.7500000	29.791667	NA c	old 1992
chic	22.5	12.37500	13 1992-03-	NA	31.500000	18.0833333	30.229167	NA c	old 1992
chic	19.5	16.00000	12 1992-03-	NA	34.000000	21.1875000	26.916667	NA c	old 1992
chic	20.5	11.00000	11 1992-03-	NA	32.500000	23.0208333	22.107708	NA c	old 1992
chic	44.0	31.37500	10 1992-03-	NA	34.000000	14.4583333	26.020833	NA c	old 1992
chic	52.5	50.37500	09 1992-03-	NA	27.500000	9.0000000	24.472222	NA c	old 1992
chic	48.0	48.00000	08 1992-03-	NA	43.714286	3.5416667	28.152778	NA c	old 1992
chic	55.5	52.12500	07 1992-03-	NA	50.000000	8.1250000	32.708333	NA c	old 1992
chic	53.0	53.75000	06 1992-03-	NA	99.000000	6.8333333	41.430556	NA c	old 1992
chic	49.0	40.75000	05 1992-03-	NA	77.000000	8.7500000	35.074811	NA c	old 1992
chic	38.0	38.12500	04 1992-03-	NA		6.8958333			old 1992
chic	45.5	37.87500	03 1992-03-	NA		11.3541667			old 1992
chic	54.0	41.12500	02 1992-03-	NA		18.4166667			old 1992
			01			22.7083333			
chic	30.0	25.12500	1992-02- 29	NA					old 1992
chic	39.5	26.62500	1992-02- 28	NA		13.4583333			old 1992
chic	39.5	34.12500	1992-02- 27	NA		7.9772727			old 1992
chic	33.5	31.37500	1992-02- 26	NA		13.4791667			old 1992
chic	33.5	27.25000	1992-02- 25	NA	36.500000	11.3049242	25.981061	NA c	old 1992
chic	36.0	34.12500	1992-02- 24	NA	38.125000	10.4791667	25.833333	NA c	old 1992
chic	37.0	36.87500	1992-02- 23	NA	35.000000	17.6666667	21.260417	NA c	old 1992

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrene	tempcat	year
chic	42.0	33.87500	1992-02- 22	NA	30.000000	10.8333333	24.208333	NA	cold	1992
chic	31.5	27.37500	1992-02- 21	NA	25.000000	14.7481061	27.451136	NA	cold	1992
chic	39.5	34.50000	1992-02- 20	NA	37.000000	9.8809524	23.875000	NA	cold	1992
chic	37.5	32.87500	1992-02- 19	NA	26.000000	5.6837945	27.843750	NA	cold	1992
chic	40.5	42.37500	1992-02- 18	NA	37.857143	3.6979167	24.928571	NA	cold	1992
chic	37.5	36.37500	1992-02- 17	NA	36.000000	9.4583333	22.583333	NA	cold	1992
chic	34.0	34.62500	1992-02- 16	NA	26.000000	7.0000000	20.041667	NA	cold	1992
chic	35.0	33.62500	1992-02- 15	NA	25.500000	3.7083333	22.885417	NA	cold	1992
chic	33.0	32.50000	1992-02- 14	NA	31.500000	6.3625000	21.504735	NA	cold	1992
chic	30.0	30.50000	1992-02- 13	NA	37.500000	2.2083333	23.549366	NA	cold	1992
chic	23.5	18.37500	1992-02-	NA	31.375000	13.8958333	20.614583	NA	cold	1992
chic	27.0	12.50000	12 1992-02- 11	NA	19.000000	10.5208333	20.114583	NA	cold	1992
chic	31.0	33.00000	1992-02- 10	NA	78.000000	3.2083333	24.083333	NA	cold	1992
chic	17.5	11.50000	1992-02- 09	NA	43.500000	7.5208333	23.614583	NA	cold	1992
chic	18.5	4.62500	1992-02- 08	NA	25.000000	13.2291667	14.885417	NA	cold	1992
chic	28.0	17.37500	1992-02- 07	NA	34.500000	10.7291667	20.779438	NA	cold	1992
chic	34.5	30.37500	1992-02- 06	NA	37.000000	5.4166667	24.701705	NA	cold	1992
chic	32.5	30.25000	1992-02- 05	NA	23.000000	7.9791667	26.281250	NA	cold	1992
chic	36.0	25.37500	1992-02- 04	NA	26.500000	9.1666667	20.333333	NA	cold	1992
chic	43.5	43.00000	1992-02- 03	NA	82.500000	2.5833333	40.895833	NA	cold	1992
chic	37.5	33.50000	1992-02- 02	NA	23.500000	4.4166667	27.531250	NA	cold	1992
chic	30.5	22.62500	1992-02-	NA	41.500000	16.3125000	22.473958	NA	cold	1992
chic	32.0	22.37500	01 1992-01-	NA	20.125000	9.8541667	21.219656	NA	cold	1992
chic	33.5	34.37500	31 1992-01- 30	NA	40.500000	2.2916667	27.135417	NA	cold	1992
chic	30.0	31.50000	1992-01-	NA	46.500000	6.1875000	22.260417	NA	cold	1992
chic	29.5	25.75000	29 1992-01- 28	NA	41.000000	5.4166667	30.712862	NA	cold	1992

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrende	mpcat year
chic	30.0	25.87500	1992-01- 27	NA	45.500000	3.7083333	25.739583	NA co	ld 1992
chic	19.5	23.12500	1992-01- 26	NA	29.000000	7.7708333	28.430556	NA co	ld 1992
chic	25.0	20.50000	1992-01- 25	NA	24.750000	7.2291667	23.597222	NA co	ld 1992
chic	18.5	7.25000	1992-01- 24	NA	65.000000	11.8958333	20.611111	NA co	ld 1992
chic	28.5	15.87500	1992-01- 23	NA	50.000000	8.5952381	16.222222	NA co	ld 1992
chic	35.5	36.87500	1992-01- 22	NA	34.000000	4.3333333	28.500000	NA co	ld 1992
chic	33.5	33.00000	1992-01- 21	NA	44.000000	4.5000000	30.797078	NA co	ld 1992
chic	24.0	20.50000	1992-01- 20	NA	42.000000	6.3333333	25.875000	NA co	ld 1992
chic	14.5	23.37500	1992-01- 19	NA	27.500000	7.2291667	26.805556	NA co	ld 1992
chic	5.5	7.25000	19 1992-01- 18	NA	NA	11.6250000	22.200634	NA co	ld 1992
chic	21.0	3.25000	1992-01- 17	NA	34.500000	11.1666667	18.072917	NA co	ld 1992
chic	7.5	15.00000	1992-01- 16	NA	39.000000	7.8143939	24.224784	NA co	ld 1992
chic	6.0	- 0.69500	1992-01-	NA	38.000000	8.2518939	24.614583	NA co	ld 1992
chic	20.5	$9.62500 \\ 10.50000$	15 1992-01-	NA	24.000000	11.5625000	21.927083	NA co	ld 1992
chic	32.5	30.75000	14 1992-01-	NA	18.125000	6.7708333	17.343750	NA co	ld 1992
chic	36.5	38.12500	13 1992-01-	NA	23.000000	7.4166667	18.479167	NA co	ld 1992
chic	36.0	34.87500	12 1992-01-	NA	25.000000	4.9791667	20.552083	NA co	ld 1992
chic	30.0	23.12500	11 1992-01-	NA	32.000000	4.4782609	19.343750	NA co	ld 1992
chic	38.0	33.62500	10 1992-01-	NA	33.500000	2.0000000	14.178030	NA co	ld 1992
chic	38.5	40.87500	09 1992-01-	NA	26.500000	3.3750000	21.708333	NA co	ld 1992
chic	34.5	31.50000	08 1992-01-	NA	41.428571	2.4791667	23.460598	NA co	ld 1992
chic	35.0	33.12500	07 1992-01-	NA	30.000000	3.0416667	19.475000	NA co	ld 1992
chic	35.0	32.37500	06 1992-01-	NA	25.500000	8.0000000	16.645833	NA co	ld 1992
chic	35.0	32.50000	05 1992-01-	NA	22.000000	6.1250000	19.416667	NA co	ld 1992
chic	38.5	34.87500	04 1992-01-	NA	32.000000	2.1250000	24.607008	NA co	ld 1992
chic	39.5	41.87500	03 1992-01- 02	NA	31.000000	2.4166667	24.822917	NA co	ld 1992

city	tmpd	dewptp	date	pm25	pm10tmean	n@3tmean2	no2tmean2p	$ m m25 detrendem_{ m I}$	ocat year
chic	33.5	32.62500	1992-01- 01	NA	33.428571	5.4583333	19.697917	NA cold	1992
chic	33.0	28.00000	1991-12- 31	NA	21.000000	6.0969203	18.226234	NA cold	1991
chic	34.0	28.50000	1991-12- 30	NA	29.000000	5.0458333	21.153409	NA cold	1991
chic	32.5	27.62500	1991-12- 29	NA	42.000000	3.7291667	14.739583	NA cold	1991
chic	35.0	34.00000	1991-12- 28	NA	27.000000	7.4375000	15.250000	NA cold	1991
chic	35.5	32.00000	1991-12- 27	NA	31.000000	9.1875000	14.225392	NA cold	1991
chic	35.5	32.37500	1991-12- 26	NA	33.000000	4.1041667	22.201389	NA cold	1991
chic	30.0	28.75000	1991-12- 25	NA	39.000000	3.3125000	25.444444	NA cold	1991
chic	30.0	26.37500	1991-12- 24	NA	29.000000	4.5416667	21.777778	NA cold	1991
chic	30.5	18.62500	1991-12- 23	NA	22.000000	6.2916667	20.166982	NA cold	1991
chic	32.5	34.50000	1991-12- 22	NA	11.500000	3.2500000	14.504386	NA cold	1991
chic	31.0	27.25000	1991-12- 21	NA	20.000000	2.0000000	18.107639	NA cold	1991
chic	32.5	32.87500	1991-12-	NA	29.375000	2.1250000	20.132479	NA cold	1991
chic	19.0	15.62500	20 1991-12-	NA	37.000000	3.8125000	30.991667	NA cold	1991
chic	15.5	4.75000	19 1991-12-	NA	31.000000	8.7500000	17.583929	NA cold	1991
chic	28.5	12.37500	18 1991-12-	NA	46.000000	7.5208333	18.568452	NA cold	1991
chic	21.0	24.37500	17 1991-12-	NA	27.500000	4.8541667	21.079230	NA cold	1991
chic	18.0	1.50000	16 1991-12-	NA	26.000000	12.0625000	13.336806	NA cold	1991
chic	29.0	11.87500	15 1991-12-	NA	36.750000	13.8333333	10.462121	NA cold	1991
chic	37.5	35.25000	14 1991-12-	NA	41.000000	2.8750000	22.541667	NA cold	1991
chic	49.0	50.25000	13 1991-12-	NA	27.000000	3.8541667	19.095833	NA cold	1991
chic	40.0	34.75000	12 1991-12-	NA	28.000000	3.4375000	22.667435	NA cold	1991
chic	38.5	36.37500	11 1991-12-	NA	25.500000	3.3125000	21.496843	NA cold	1991
chic	35.5	32.00000	10 1991-12-	NA	42.000000	4.0000000	23.937500	NA cold	1991
chic	49.0	45.50000	09 1991-12-	NA	24.285714	6.2708333	17.319444	NA cold	1991
chic	44.0	46.37500	08 1991-12- 07	NA	20.000000	4.8750000	21.812500	NA cold	1991

		dewptp	date	pm25	pm10tmea	nø3tmean2	no2tmean2p	om25detrendempca	t year
chic	24.0	30.62500	1991-12- 06	NA	33.500000	5.5833333	25.613763	NA cold	1991
chic	20.5	19.00000	1991-12- 05	NA	23.000000	5.2146739	23.692331	NA cold	1991
chic	8.0	1.00000	1991-12- 04	NA	35.000000	8.1458333	20.131313	NA cold	1991
chic	22.0	12.37500	1991-12- 03	NA	22.000000	8.4375000	19.619003	NA cold	1991
chic	30.5	30.00000	1991-12- 02	NA	16.625000	11.3541667	16.939916	NA cold	1991
chic	27.0	13.37500	1991-12- 01	NA	19.000000	5.8958333	15.513889	NA cold	1991
chic	43.5	25.75000	1991-11- 30	NA	19.000000	14.0000000	10.608333	NA cold	1991
chic	49.0	53.50000	1991-11- 29	NA	NA	10.7291667	20.179167	NA cold	1991
chic	36.0	36.75000	1991-11- 28	NA	10.000000	11.7291667	16.641667	NA cold	1991
chic	38.5	33.00000	1991-11- 27	NA	35.000000	6.7246377	17.983333	NA cold	1991
chic	23.0	21.12500	1991-11- 26	NA	37.375000	3.5625000	28.688669	NA cold	1991
chic	17.5	10.12500	1991-11- 25	NA	27.000000	6.4285714	23.290152	NA cold	1991
chic	23.0	16.50000	1991-11-	NA	33.000000	15.1041667	12.427083	NA cold	1991
chic	34.5	19.62500	24 1991-11-	NA	20.000000	6.2500000	16.385417	NA cold	1991
chic	43.5	40.62500	23 1991-11- 22	NA	45.500000	2.3333333	33.593750	NA cold	1991
chic	40.0	33.12500	1991-11- 21	NA	NA	4.1875000	42.639689	NA cold	1991
chic	40.5	32.25000	1991-11- 20	NA	21.875000	5.5416667	22.166667	NA cold	1991
chic	57.0	48.75000	1991-11- 19	NA	28.000000	9.2083333	22.340476	NA cold	1991
chic	57.0	57.62500	1991-11-	NA	36.000000	8.7916667	21.925000	NA cold	1991
chic	42.5	39.25000	18 1991-11-	NA	NA	12.2916667	17.633333	NA cold	1991
chic	41.0	33.37500	17 1991-11-	NA	28.500000	19.2708333	13.937500	NA cold	1991
chic	50.0	42.00000	16 1991-11-	NA	38.000000	9.4166667	23.547414	NA cold	1991
chic	48.0	51.62500	15 1991-11-	NA	36.000000	3.8750000	27.636957	NA cold	1991
chic	45.5	38.62500	14 1991-11-	NA	28.000000	3.8541667	25.662500	NA cold	1991
chic	35.0	32.00000	13 1991-11-	NA	39.500000	2.8750000	20.747115	NA cold	1991
chic	34.5	33.12500	12 1991-11- 11	NA	NA	2.1666667	24.320833	NA cold	1991

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	5m25detren	demp	cat year
chic	33.0	27.25000	1991-11- 10	NA	45.000000	3.4166667	35.575000	NA	cold	1991
chic	26.0	18.12500	1991-11-	NA	7.000000	6.4672619	32.825000	NA	cold	1991
chic	22.0	7.87500	09 1991-11-	NA	39.250000	5.0208333	31.208333	NA	cold	1991
chic	20.0	_	08 1991-11-	NA	30.000000	6.4583333	22.967879	NA	cold	1991
chic	28.5	$\begin{array}{c} 1.62500 \\ 6.25000 \end{array}$	07 1991-11-	NA	35.000000	11.5208333	18.975362	NA	cold	1991
chic	28.0	26.37500	06 1991-11-	NA	26.000000	5.3469203	23.133333	NA	cold	1991
chic	18.5	9.62500	05 1991-11-	NA	45.500000	11.4791667	17.087500	NA	cold	1991
chic	18.5	16.75000	04 1991-11-	NA	17.000000	16.0625000	8.475000	NA	cold	1991
chic	25.0	10.37500	03 1991-11-	NA	23.000000	18.7708333	7.916667	NA	cold	1991
chic	43.5	28.00000	02 1991-11-	NA	NA	10.2916667	15.689773	NA	cold	1991
chic	48.0	49.87500	01 1991-10-	NA	NA		13.383333	NA	cold	1991
chic	46.5	38.12500	31 1991-10-	NA	8.000000		10.260985	NA	cold	1991
chic	63.5	60.25000	30 1991-10-	NA	39.000000		19.870833	NA	cold	1991
			29							
chic	55.0	53.62500	1991-10- 28	NA	2.000000		13.051786	NA	cold	1991
chic	50.0	51.00000	1991-10- 27	NA	10.000000	8.0312500	7.158333	NA	cold	1991
chic	50.5	46.87500	1991-10- 26	NA	20.000000	9.0625000	11.191667	NA	cold	1991
chic	58.5	48.12500	1991-10- 25	NA	16.000000	5.7343750	11.662500	NA	cold	1991
chic	68.0	63.62500	1991-10- 24	NA	25.000000	9.2652308	15.264389	NA	cold	1991
chic	66.5	60.75000	1991-10- 23	NA	61.500000	19.3931472	21.327381	NA	cold	1991
chic	64.0	47.00000	1991-10- 22	NA	46.000000	24.9475644	27.062500	NA	cold	1991
chic	50.5	44.00000	1991-10-	NA	46.000000	14.8935185	26.486111	NA	cold	1991
chic	41.5	25.50000	21 1991-10-	NA	20.000000	11.8842593	23.031250	NA	cold	1991
chic	38.0	24.50000	20 1991-10-	NA	27.500000	13.2962963	16.607639	NA	cold	1991
chic	44.5	36.25000	19 1991-10-	NA	26.000000	14.9987374	14.236427	NA	cold	1991
chic	61.5	40.62500	18 1991-10-	NA	78.500000	15.1859903	21.127306	NA	cold	1991
chic	45.5	33.87500	17 1991-10- 16	NA	37.000000	9.7916667	24.465278	NA	cold	1991

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	pm25detrendempca	t year
chic	41.5	24.00000	1991-10- 15	NA	27.625000	5.9810606	15.882095	NA cold	1991
chic	50.5	34.37500	1991-10- 14	NA	NA	6.1018519	12.427083	NA cold	1991
chic	46.0	37.25000	1991-10- 13	NA	17.500000	13.1574074	15.850379	NA cold	1991
chic	48.5	38.50000	1991-10- 12	NA	25.000000	14.3564815	15.267361	NA cold	1991
chic	56.0	38.00000	1991-10- 11	NA	38.000000	11.3148148	29.819444	NA cold	1991
chic	53.5	42.37500	1991-10-	NA	63.000000	14.0224185	30.263033	NA cold	1991
chic	61.5	46.87500	10 1991-10-	NA	51.428571	17.1594203	32.995567	NA cold	1991
chic	62.5	47.00000	09 1991-10-	NA	29.000000	22.9154589	20.155495	NA cold	1991
chic	45.0	33.62500	08 1991-10-	NA	28.500000	8.4575465	18.265701	NA cold	1991
chic	44.0	33.00000	07 1991-10-	NA	16.000000	10.3958333	10.266265	NA cold	1991
chic	48.0	31.25000	06 1991-10-	NA	19.000000	16.7916667	9.270833	NA cold	1991
chic	56.0	54.87500	05 1991-10-	NA	15.000000	15.3645833	17.009615	NA cold	1991
chic	62.5	53.37500	04 1991-10-	NA	31.375000	16.6247331	20.353311	NA cold	1991
chic	69.0	60.25000	03 1991-10-	NA	47.000000	19.6429894	27.821759	NA cold	1991
chic	59.0	47.37500	02 1991-10-	NA	60.000000	15.9343800	26.242109	NA cold	1991
chic	67.5	50.25000	01 1991-09-	NA	76.000000	26.6382275	24.611111	NA cold	1991
chic	53.5	46.00000	30 1991-09-	NA	32.000000	20.5000000	22.805556	NA cold	1991
chic	49.5	35.75000	29 1991-09-	NA	16.000000	15.3657407	23.423611	NA cold	1991
chic	46.5	35.37500	28 1991-09-	NA	33.625000	8.9385522	28.660353	NA cold	1991
chic	50.5	29.62500	27 1991-09-	NA	40.000000	11.1276167	18.904672	NA cold	1991
chic	54.0	40.75000	26 1991-09-	NA	36.000000	8.1322464	22.581124	NA cold	1991
chic	48.0	43.25000	25 1991-09-	NA	28.000000	5.6664654	28.229167	NA cold	1991
chic	53.5	38.75000	24 1991-09-	NA	32.000000	9.7494163	17.643382	NA cold	1991
chic	58.5	52.37500	23 1991-09-	NA	25.000000	18.7261905	20.819444	NA cold	1991
chic	54.5	35.00000	22 1991-09-	NA	34.000000	19.6250000	30.902778	NA cold	1991
chic	47.5	35.62500	21 1991-09- 20	NA	28.000000	11.8666243	28.105114	NA cold	1991

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2	pm25detren	tempca	t year
chic	47.0	29.37500	1991-09- 19	NA	38.000000	12.6296296	16.666667	NA	cold	1991
chic	56.5	35.00000	1991-09- 18	NA	42.000000	13.9624094	13.945451	NA	cold	1991
chic	63.5	49.50000	1991-09- 17	NA	40.500000	11.3802083	24.925694	NA	cold	1991
chic	69.0	50.62500	1991-09- 16	NA	43.000000	18.1197917	18.071212	NA	cold	1991
chic	81.5	68.75000	1991-09- 15	NA	34.285714	22.2135417	16.869792	NA	hot	1991
chic	79.0	68.87500	1991-09- 14	NA	33.000000	17.4531250	25.812500	NA	cold	1991
chic	73.5	65.62500	1991-09- 13	NA	53.500000	24.5989583	29.625000	NA	cold	1991
chic	70.5	65.75000	1991-09- 12	NA	34.000000	19.5132850	28.766667	NA	cold	1991
chic	67.5	56.62500	1991-09- 11	NA	21.000000	18.2282243	13.678355	NA	cold	1991
chic	73.5	61.25000	1991-09- 10	NA	15.000000	20.6875000	17.482639	NA	cold	1991
chic	82.0	66.25000	1991-09- 09	NA	50.625000	26.7552083	19.288194	NA	hot	1991
chic	76.5	53.50000	1991-09- 08	NA	41.000000	38.0104167	26.538194	NA	cold	1991
chic	75.5	54.62500	1991-09- 07	NA	63.500000	31.0792572	40.722222	NA	cold	1991
chic	70.0	54.12500	1991-09- 06	NA	19.000000	24.5364583	43.989583	NA	cold	1991
chic	66.0	51.50000	1991-09-	NA	62.000000	19.2225150	35.222371	NA	cold	1991
chic	67.0	52.25000	05 1991-09- 04	NA	13.000000	21.3327295	18.278684	NA	cold	1991
chic	77.0	66.37500	1991-09- 03	NA	34.750000	15.4635417	28.659407	NA	cold	1991
chic	73.5	60.37500	1991-09- 02	NA	NA	31.1190476	22.840278	NA	cold	1991
chic	66.5	59.25000	1991-09-	NA	24.500000	29.9479167	12.520833	NA	cold	1991
chic	71.5	60.12500	01 1991-08-	NA	29.000000	21.4062500	15.879167	NA	cold	1991
chic	79.0	71.25000	31 1991-08-	NA	47.500000	16.9722222	38.177234	NA	cold	1991
chic	82.5	69.75000	30 1991-08-	NA	73.000000	31.3333333	33.757891	NA	hot	1991
chic	81.5	67.00000	29 1991-08-	NA	69.857143	31.7638889	34.105429	NA	hot	1991
chic	81.0	66.25000	28 1991-08-	NA	42.000000	28.0271164	25.481159	NA	hot	1991
chic	80.0	61.00000	27 1991-08-	NA	80.500000	43.0511900	35.922727	NA	cold	1991
chic	81.0	65.12500	26 1991-08- 25	NA	62.000000	52.7864332	24.970833	NA	hot	1991

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrend	tempcat	year
chic	75.5	62.62500	1991-08- 24	NA	43.500000	40.3014706	22.437500	NA	cold	1991
chic	70.5	57.75000	1991-08- 23	NA	18.000000	22.5720246	20.390152	NA	cold	1991
chic	78.0	58.37500	1991-08- 22	NA	42.000000	31.5925926	27.906250	NA	cold	1991
chic	68.5	57.87500	1991-08- 21	NA	48.000000	22.7091385	28.986413	NA	cold	1991
chic	67.0	54.00000	1991-08- 20	NA	25.500000	18.7527778	15.521329	NA	cold	1991
chic	64.5	59.37500	1991-08- 19	NA	18.000000	17.5202020	11.962500	NA	cold	1991
chic	74.0	60.50000	1991-08- 18	NA	34.500000	26.0231481	17.491667	NA	cold	1991
chic	75.0	61.87500	1991-08- 17	NA	35.000000	30.6296296	18.819444	NA	cold	1991
chic	76.5	61.75000	1991-08- 16	NA	58.500000	33.9629630	35.698370	NA	cold	1991
chic	77.0	61.62500	1991-08- 15	NA	63.000000	30.9512882	32.950442	NA	cold	1991
chic	71.5	52.62500	1991-08- 14	NA	65.000000	28.7954545	44.432881	NA	cold	1991
chic	70.5	54.00000	1991-08- 13	NA	31.000000	27.9590456	24.745581	NA	cold	1991
chic	67.5	57.87500	1991-08- 12	NA	36.500000	24.5185185	27.351389	NA	cold	1991
chic	68.0	47.75000	1991-08- 11	NA	28.000000	28.1805556	25.253472	NA	cold	1991
chic	70.0	53.37500	1991-08- 10	NA	24.500000	23.4440236	21.045139	NA	cold	1991
chic	69.5	54.37500	1991-08- 09	NA	15.000000	29.2586554	16.142740	NA	cold	1991
chic	67.5	61.87500	1991-08- 08	NA	32.500000	27.7153113	24.330177	NA	cold	1991
chic	72.5	63.37500	1991-08- 07	NA	42.000000	26.3287037	34.290942	NA	cold	1991
chic	71.5	57.12500	1991-08- 06	NA	39.500000	31.3750000	23.558333	NA	cold	1991
chic	68.0	50.12500	1991-08- 05	NA	NA	27.8606902	18.512500	NA	cold	1991
chic	69.0	51.00000	1991-08- 04	NA	14.285714	22.4490741	12.927083	NA	cold	1991
chic	71.0	61.87500	1991-08- 03	NA	15.000000	30.7592593	17.364583	NA	cold	1991
chic	83.5	65.75000	1991-08-	NA	131.000000	39.5185185	55.489583	NA	hot	1991
chic	78.5	52.12500	02 1991-08-	NA	NA	34.3333333	40.067659	NA	cold	1991
chic	75.5	62.62500	01 1991-07-	NA	64.500000	35.6207200	33.136905	NA	cold	1991
chic	66.5	54.62500	31 1991-07- 30	NA	27.000000	26.1712963	22.883333	NA	cold	1991

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2	pm25detren	dempc	at year
chic	70.0	57.00000	1991-07- 29	NA	38.375000	34.9861111	25.411364	NA	cold	1991
chic	73.5	59.00000	1991-07- 28	NA	NA	41.6510417	18.125000	NA	cold	1991
chic	66.5	54.12500	1991-07- 27	NA	18.500000	29.5411932	17.741667	NA	cold	1991
chic	66.0	51.62500	1991-07- 26	NA	24.500000	24.4494048	20.275000	NA	cold	1991
chic	68.0	52.25000	1991-07- 25	NA	16.000000	23.2526042	16.458333	NA	cold	1991
chic	70.5	53.12500	1991-07- 24	NA	51.000000	25.5197011	26.802381	NA	cold	1991
chic	74.5	51.62500	1991-07- 23	NA	30.000000	31.0742814	19.223007	NA	cold	1991
chic	88.0	71.25000	1991-07- 22	NA	70.000000	34.8578077	24.551226	NA	hot	1991
chic	83.0	71.75000	1991-07- 21	NA	54.000000	48.2713033	22.246528	NA	hot	1991
chic	85.0	65.25000	1991-07-	NA	49.000000	52.7857143	16.694444	NA	hot	1991
chic	85.5	65.50000	20 1991-07-	NA	85.500000	58.0455044	27.463284	NA	hot	1991
chic	83.0	63.62500	19 1991-07-	NA	76.000000	52.9114583	26.986111	NA	hot	1991
chic	78.5	66.25000	18 1991-07-	NA	83.000000	50.3958333	32.156250	NA	cold	1991
chic	76.0	58.75000	17 1991-07-	NA	57.000000	40.5364583	36.470328	NA	cold	1991
chic	70.5	54.12500	16 1991-07-	NA	50.500000	31.0520833	24.788194	NA	cold	1991
chic	69.5	54.75000	15 1991-07-	NA	NA	24.9739583	9.163345	NA	cold	1991
chic	72.0	59.87500	14 1991-07-	NA	22.500000	31.8645833	12.197917	NA	cold	1991
chic	79.0	65.12500	13 1991-07-	NA	58.000000	34.7117301	18.619634	NA	cold	1991
chic	76.0	64.37500	12 1991-07-	NA	44.500000	42.2160326	22.236477	NA	cold	1991
chic	70.5	55.50000	11 1991-07-	NA	22.000000	35.4947917	25.709596	NA	cold	1991
chic	71.5	55.00000	10 1991-07-	NA	38.000000	23.9678442	21.376578	NA	cold	1991
chic	71.0	56.62500	09 1991-07-	NA	NA	30.9463315	11.485615	NA	cold	1991
chic	80.0	68.12500	08 1991-07-	NA	37.500000	39.6770833	16.225000	NA	cold	1991
chic	81.0	69.62500	07 1991-07-	NA	32.000000	40.6093750	25.037500	NA	hot	1991
chic	75.5	63.37500	06 1991-07-	NA	35.625000	31.3906250	24.544318	NA	cold	1991
chic	73.0	61.25000	05 1991-07- 04	NA	NA	24.9934330	17.591667	NA	cold	1991

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2	25 detren	$\overline{\text{dempc}}$	at year
chic	78.5	66.25000	1991-07- 03	NA	61.500000	24.1388134	28.375000	NA	cold	1991
chic	82.0	61.75000	1991-07- 02	NA	34.000000	31.3563113	31.446920	NA	hot	1991
chic	81.0	69.00000	1991-07- 01	NA	69.000000	31.7843526	25.539069	NA	hot	1991
chic	74.0	64.12500	1991-06- 30	NA	NA	34.1614583	11.186012	NA	cold	1991
chic	84.0	69.12500	1991-06- 29	NA	51.500000	42.9114583	20.484954	NA	hot	1991
chic	79.5	65.12500	1991-06- 28	NA	49.000000	43.0885417	23.197917	NA	cold	1991
chic	81.5	62.62500	1991-06- 27	NA	95.000000	48.6875000	19.607143	NA	hot	1991
chic	78.5	66.62500	1991-06- 26	NA	96.000000	49.6781250	28.889583	NA	cold	1991
chic	71.5	53.87500	1991-06- 25	NA	52.500000	53.8711504	25.473214	NA	cold	1991
chic	69.0	50.00000	1991-06- 24	NA	33.000000	40.2961957	19.471726	NA	cold	1991
chic	68.0	53.12500	1991-06- 23	NA	16.625000	31.8906250	6.385417	NA	cold	1991
chic	64.5	56.25000	1991-06- 22	NA	18.000000	21.4614583	6.804167	NA	cold	1991
chic	78.0	62.00000	1991-06- 21	NA	85.000000	45.8333333	39.733333	NA	cold	1991
chic	78.5	60.25000	1991-06- 20	NA	60.000000	63.1041667	25.173611	NA	cold	1991
chic	72.5	58.12500	1991-06- 19	NA	43.000000	51.9062500	30.142292	NA	cold	1991
chic	71.0	55.75000	19 1991-06- 18	NA	33.000000	45.1093750	23.510101	NA	cold	1991
chic	69.0	50.75000	1991-06- 17	NA	30.500000	28.2153533	21.923485	NA	cold	1991
chic	69.5	53.50000	1991-06- 16	NA	21.000000	33.0681612	10.512500	NA	cold	1991
chic	77.5	65.75000	1991-06- 15	NA	33.500000	38.1354167	11.425000	NA	cold	1991
chic	83.0	65.37500	1991-06- 14	NA	42.000000	42.7656250	17.293841	NA	hot	1991
chic	73.5	64.87500	1991-06-	NA	52.500000	41.7334692	15.866667	NA	cold	1991
chic	71.5	58.37500	13 1991-06-	NA	25.000000	22.5781250	27.814286	NA	cold	1991
chic	73.0	60.75000	12 1991-06-	NA	38.125000	25.7395833	29.586667	NA	cold	1991
chic	75.0	59.87500	11 1991-06-	NA	86.000000	42.6666667	24.857143	NA	cold	1991
chic	72.5	53.87500	10 1991-06-	NA	59.500000	48.1145833	29.991667	NA	cold	1991
chic	67.5	49.12500	09 1991-06- 08	NA	48.000000	33.7968750	25.150000	NA	cold	1991

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrend	tempcat	year
chic	65.5	48.25000	1991-06- 07	NA	45.000000	29.0364583	20.821212	NA	cold	1991
chic	62.0	45.12500	1991-06- 06	NA	26.000000	27.2511322	16.985476	NA	cold	1991
chic	61.0	46.62500	1991-06- 05	NA	22.571429	25.8293190	12.708686	NA	cold	1991
chic	61.5	48.50000	1991-06- 04	NA	16.000000	32.0624588	8.579724	NA	cold	1991
chic	69.0	56.50000	1991-06- 03	NA	31.500000	35.6051136	18.156250	NA	cold	1991
chic	72.5	63.25000	1991-06- 02	NA	48.000000	38.4642857	23.762500	NA	cold	1991
chic	74.5	66.12500	1991-06- 01	NA	41.000000	34.0208333	29.454861	NA	cold	1991
chic	77.5	67.75000	1991-05- 31	NA	48.000000	25.9649004	26.200442	NA	cold	1991
chic	77.5	66.37500	1991-05- 30	NA	36.625000	30.4599185	20.756944	NA	cold	1991
chic	79.0	67.37500	1991-05- 29	NA	44.000000	29.3541667	30.871162	NA	cold	1991
chic	80.5	67.87500	1991-05- 28	NA	98.000000	28.0216097	30.292717	NA	hot	1991
chic	77.5	69.37500	1991-05- 27	NA	NA	32.8511905	19.725694	NA	cold	1991
chic	76.0	67.75000	1991-05- 26	NA	29.500000	28.5512422	14.138889	NA	cold	1991
chic	67.0	58.62500	1991-05- 25	NA	26.000000	15.0973465	21.246528	NA	cold	1991
chic	77.5	64.50000	1991-05- 24	NA	34.714286	28.0104167	20.449179	NA	cold	1991
chic	74.0	67.50000	1991-05- 23	NA	37.000000	18.1107955	21.819234	NA	cold	1991
chic	74.5	66.87500	1991-05- 22	NA	63.000000	13.3091033	31.309343	NA	cold	1991
chic	68.5	62.87500	1991-05- 21	NA	93.000000	35.1500947	31.149306	NA	cold	1991
chic	60.5	53.00000	1991-05- 20	NA	42.000000	29.7453463	30.895960	NA	cold	1991
chic	54.5	38.62500	1991-05- 19	NA	16.000000	28.8095238	12.000000	NA	cold	1991
chic	50.0	44.25000	1991-05- 18	NA	24.375000	17.9940476	10.187500	NA	cold	1991
chic	60.0	46.37500	1991-05- 17	NA	32.000000	16.1500947	17.854167	NA	cold	1991
chic	73.5	65.50000	1991-05-	NA	88.500000	22.6979167	48.212500	NA	cold	1991
chic	72.5	57.25000	16 1991-05- 15	NA	85.000000	35.1294643	38.959410	NA	cold	1991
chic	74.0	56.37500	1991-05-	NA	70.000000	22.9495342	39.286411	NA	cold	1991
chic	76.0	64.50000	14 1991-05- 13	NA	80.000000	32.1596320	38.796429	NA	cold	1991

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrend	tempcat	year
chic	74.5	62.75000	1991-05- 12	NA	45.000000	28.6309524	24.020833	NA	cold	1991
chic	70.5	64.75000	1991-05- 11	NA	59.000000	31.3095238	30.571710	NA	cold	1991
chic	65.0	55.00000	1991-05- 10	NA	71.000000	29.4057736	30.761364	NA	cold	1991
chic	62.0	52.37500	1991-05- 09	NA	46.000000	30.3333333	28.125000	NA	cold	1991
chic	55.0	51.00000	1991-05- 08	NA	47.000000	19.0654762	24.847826	NA	cold	1991
chic	53.0	38.37500	1991-05- 07	NA	27.000000	26.0476190	17.327525	NA	cold	1991
chic	45.0	35.50000	1991-05- 06	NA	22.125000	19.4090909	13.460246	NA	cold	1991
chic	56.0	51.25000	1991-05- 05	NA	26.000000	20.0059524	17.575694	NA	cold	1991
chic	52.0	41.00000	1991-05- 04	NA	29.500000	16.5952381	18.003472	NA	$\operatorname{cold}$	1991
chic	46.5	37.37500	1991-05- 03	NA	9.000000	21.4648033	15.829299	NA	cold	1991
chic	55.0	35.12500	1991-05- 02	NA	59.500000	25.6374459	20.215694	NA	cold	1991
chic	52.5	34.87500	1991-05- 01	NA	42.000000	21.1669255	16.790278	NA	cold	1991
chic	57.5	39.62500	1991-04- 30	NA	36.857143	24.4510870	12.871528	NA	cold	1991
chic	64.0	55.50000	1991-04- 29	NA	20.000000	20.6428571	16.036706	NA	cold	1991
chic	64.5	55.87500	1991-04- 28	NA	36.000000	15.1467391	17.902778	NA	cold	1991
chic	64.5	61.00000	1991-04- 27	NA	40.000000	12.0052083	19.673611	NA	cold	1991
chic	59.5	47.87500	1991-04- 26	NA	72.500000	27.8414502	28.106944	NA	$\operatorname{cold}$	1991
chic	53.5	37.87500	1991-04- 25	NA	NA	26.0714286	29.503562	NA	cold	1991
chic	50.5	28.37500	1991-04- 24	NA	35.375000	18.2321429	24.825126	NA	cold	1991
chic	50.0	38.50000	1991-04- 23	NA	32.000000	20.0324675	19.018218	NA	cold	1991
chic	48.0	30.62500	1991-04- 22	NA	45.500000	23.0680272	29.742559	NA	cold	1991
chic	44.5	20.37500	1991-04- 21	NA	15.000000	30.3667184	11.857639	NA	cold	1991
chic	40.5	31.62500	1991-04-	NA	14.000000	30.6130952	9.451389	NA	cold	1991
chic	46.5	36.62500	20 1991-04-	NA	22.000000	25.9746377	12.787892	NA	cold	1991
chic	46.0	37.50000	19 1991-04-	NA	30.000000	25.5708874	15.742262	NA	cold	1991
chic	47.5	33.12500	18 1991-04- 17	NA	17.000000	20.6682900	20.884849	NA	cold	1991

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	m25detrendempc	at year
chic	53.0	42.00000	1991-04- 16	NA	NA	19.7094156	28.335366	NA cold	1991
chic	53.0	38.87500	1991-04- 15	NA	27.000000	26.5923913	14.141304	NA cold	1991
chic	58.5	50.12500	1991-04- 14	NA	12.500000	18.3809524	12.070833	NA cold	1991
chic	45.5	44.12500	1991-04- 13	NA	25.000000	12.9642857	15.423611	NA cold	1991
chic	44.0	32.37500	1991-04- 12	NA	27.285714	19.6895485	15.323232	NA cold	1991
chic	38.0	28.62500	1991-04- 11	NA	15.000000	23.3806612	16.972222	NA cold	1991
chic	43.5	28.87500	1991-04- 10	NA	18.000000	28.5781250	14.170139	NA cold	1991
chic	44.0	38.12500	1991-04- 09	NA	13.000000	10.4780506	12.316512	NA cold	1991
chic	65.5	58.50000	1991-04- 08	NA	44.500000	15.4126812	16.859524	NA cold	1991
chic	69.0	60.25000	1991-04- 07	NA	28.000000	26.2500000	11.395833	NA cold	1991
chic	70.0	47.25000	1991-04- 06	NA	33.750000	38.6648551	14.689236	NA cold	1991
chic	60.0	50.37500	1991-04- 05	NA	41.000000	25.1738173	27.296998	NA cold	1991
chic	52.5	52.25000	1991-04- 04	NA	35.000000	15.0688776	27.944697	NA cold	1991
chic	51.0	34.87500	1991-04- 03	NA	48.000000	17.9642857	22.762500	NA cold	1991
chic	39.0	24.00000	1991-04- 02	NA	28.000000	19.8257861	26.025000	NA cold	1991
chic	41.0	23.87500	1991-04- 01	NA	NA	23.7176178	19.654167	NA cold	1991
chic	43.5	33.50000	1991-03- 31	NA	26.285714	23.4821860	17.666667	NA cold	1991
chic	33.0	17.37500	1991-03- 30	NA	21.000000	25.5833333	17.541667	NA cold	1991
chic	30.5	17.87500	1991-03- 29	NA	14.500000	28.5208333	10.550000	NA cold	1991
chic	42.0	29.62500	1991-03- 28	NA	28.000000	24.6575405	10.428571	NA cold	1991
chic	56.0	43.25000	1991-03- 27	NA	72.000000	15.6865079	15.281250	NA cold	1991
chic	63.0	63.50000	1991-03- 26	NA	31.000000	22.1151369	25.243056	NA cold	1991
chic	49.0	39.00000	1991-03- 25	NA	40.571429	9.3750000	36.229469	NA cold	1991
chic	45.0	34.50000	1991-03- 24	NA	21.000000	17.7500000	13.138889	NA cold	1991
chic	47.0	32.87500	1991-03- 23	NA	21.000000	21.4166667	8.899306	NA cold	1991
chic	55.0	55.25000	1991-03- 22	NA	17.000000	18.4166667	21.381944	NA cold	1991

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrende	empcat year
chic	60.0	51.62500	1991-03- 21	NA	63.000000	25.0434783	29.568182	NA co	old 1991
chic	47.5	44.87500	1991-03- 20	NA	33.000000	18.6521739	32.847222	NA co	old 1991
chic	44.0	38.00000	1991-03- 19	NA	43.714286	12.9166667	28.777503	NA co	old 1991
chic	42.5	35.87500	1991-03- 18	NA	51.000000	15.0733696	24.676932	NA co	old 1991
chic	39.0	39.25000	1991-03- 17	NA	33.500000	10.5000000	25.409722	NA co	old 1991
chic	39.0	28.75000	1991-03- 16	NA	26.000000	22.5000000	29.993056	NA co	old 1991
chic	34.0	26.50000	1991-03- 15	NA	25.000000	17.0000000	23.822285	NA co	old 1991
chic	34.5	26.50000	1991-03- 14	NA	11.000000	26.7500000	13.812500	NA co	old 1991
chic	32.5	23.50000	1991-03- 13	NA	15.000000	25.6666667	12.434028	NA co	old 1991
chic	32.0	24.50000	1991-03- 12	NA	33.000000	16.2083333	15.513573	NA co	old 1991
chic	40.0	28.37500	1991-03- 11	NA	57.500000	17.9583333	18.722222	NA co	old 1991
chic	34.5	23.25000	1991-03- 10	NA	40.000000	20.3333333	17.743056	NA co	old 1991
chic	33.5	23.00000	1991-03- 09	NA	38.500000	18.7083333	13.302083	NA co	old 1991
chic	32.5	28.00000	1991-03- 08	NA	NA	12.2083333	31.350694	NA co	old 1991
chic	28.0	11.00000	1991-03- 07	NA	22.142857	17.5833333	20.152778	NA co	old 1991
chic	39.5	20.12500	1991-03- 06	NA	35.000000	15.1666667	14.382936	NA co	old 1991
chic	39.0	31.75000	1991-03- 05	NA	53.000000	6.8750000	27.310606	NA co	old 1991
chic	31.0	20.75000	1991-03- 04	NA	30.000000	10.6666667	25.638889	NA co	old 1991
chic	25.5	18.50000	1991-03- 03	NA	15.000000	21.3750000	9.840278	NA co	old 1991
chic	37.5	22.25000	1991-03- 02	NA	26.000000	17.3750000	11.836806	NA co	old 1991
chic	48.0	46.50000	1991-03- 01	NA	29.571429	21.5000000	25.921086	NA co	old 1991
chic	39.0	30.62500	1991-02-	NA	40.000000	13.3333333	25.984492	NA co	old 1991
chic	23.5	19.50000	28 1991-02-	NA	37.000000	14.7500000	22.263889	NA co	old 1991
chic	19.0	16.12500	27 1991-02-	NA	41.000000	13.9583333	25.236111	NA co	old 1991
chic	21.0	7.50000	26 1991-02-	NA	25.000000	17.4166667	18.958333	NA co	old 1991
chic	28.5	13.00000	25 1991-02- 24	NA	26.000000	14.9583333	14.336806	NA co	old 1991

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2	pm25detrendempc	at year
chic	26.5	18.50000	1991-02- 23	NA	22.875000	20.8333333	16.819444	NA cold	1991
chic	34.5	14.50000	1991-02- 22	NA	27.000000	19.0833333	14.617740	NA cold	1991
chic	47.0	40.37500	1991-02- 21	NA	46.000000	10.6666667	23.642512	NA cold	1991
chic	36.5	30.37500	1991-02- 20	NA	36.500000	16.3750000	18.834575	NA cold	1991
chic	35.5	23.62500	1991-02- 19	NA	NA	10.8750000	14.559028	NA cold	1991
chic	38.5	38.37500	1991-02- 18	NA	39.000000	8.2916667	18.037121	NA cold	1991
chic	35.0	29.25000	1991-02- 17	NA	29.375000	15.5000000	18.869565	NA cold	1991
chic	16.0	17.12500	1991-02- 16	NA	23.000000	12.5833333	16.364583	NA cold	1991
chic	8.5	6.25000	1991-02- 15	NA	39.500000	22.1666667	12.237939	NA cold	1991
chic	22.0	13.62500	1991-02- 14	NA	35.000000	16.0833333	17.283611	NA cold	1991
chic	32.5	26.75000	1991-02- 13	NA	37.000000	8.4583333	23.506944	NA cold	1991
chic	24.5	17.87500	1991-02- 12	NA	35.000000	8.0000000	27.715278	NA cold	1991
chic	22.0	5.12500	1991-02- 11	NA	24.000000	18.3750000	16.891606	NA cold	1991
chic	30.0	9.25000	1991-02- 10	NA	33.000000	18.4166667	15.281250	NA cold	1991
chic	37.5	30.12500	1991-02- 09	NA	35.500000	8.8333333	23.888889	NA cold	1991
chic	34.0	31.00000	1991-02- 08	NA	42.000000	6.5833333	24.444444	NA cold	1991
chic	32.5	29.50000	1991-02- 07	NA	28.000000	8.3333333	25.013889	NA cold	1991
chic	35.5	32.87500	1991-02- 06	NA	39.000000	15.3333333	18.517857	NA cold	1991
chic	39.0	34.37500	1991-02-	NA	47.250000	13.0416667	28.597619	NA cold	1991
chic	44.0	38.00000	05 1991-02-	NA	32.000000	12.5833333	28.055556	NA cold	1991
chic	42.5	30.12500	04 1991-02-	NA	39.000000	16.6666667	31.625000	NA cold	1991
chic	39.0	30.50000	03 1991-02-	NA	NA	12.0416667	29.597222	NA cold	1991
chic	29.0	27.50000	02 1991-02-	NA	52.500000	7.9166667	30.486111	NA cold	1991
chic	17.0	8.87500	01 1991-01-	NA	40.000000	14.6666667	21.780033	NA cold	1991
chic	15.0	6.62500	31 1991-01-	NA	42.125000	11.9583333	26.264493	NA cold	1991
chic	19.0	12.62500	30 1991-01- 29	NA	12.000000	20.4166667	23.550000	NA cold	1991

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2	pm25detrendempca	t year
chic	25.5	19.75000	1991-01- 28	NA	54.000000	12.2083333	31.426087	NA cold	1991
chic	22.0	17.00000	1991-01- 27	NA	25.000000	12.7083333	23.008333	NA cold	1991
chic	15.5	9.25000	1991-01- 26	NA	41.000000	12.5416667	22.191667	NA cold	1991
chic	7.5	2.37500	1991-01- 25	NA	55.000000	9.9166667	32.636580	NA cold	1991
chic	9.0	5.75000	1991-01- 24	NA	34.750000	13.9166667	26.574621	NA cold	1991
chic	21.5	5.75000	1991-01- 23	NA	34.000000	14.1666667	15.030303	NA cold	1991
chic	11.0	12.00000	1991-01- 22	NA	55.000000	7.8750000	26.291667	NA cold	1991
chic	10.5	1 50000	1991-01-	NA	27.000000	20.2916667	19.875000	NA cold	1991
chic	26.5	1.50000 18.62500	21 1991-01-	NA	25.000000	18.7916667	17.966667	NA cold	1991
chic	36.5	29.62500	20 1991-01-	NA	19.000000	14.5000000	24.072917	NA cold	1991
chic	21.5	24.00000	19 1991-01-	NA	33.428571	9.4166667	25.655303	NA cold	1991
chic	26.0	18.75000	18 1991-01-	NA	34.000000	12.3333333	19.332931	NA cold	1991
chic	31.0	25.75000	17 1991-01-	NA	31.500000	10.9583333	21.731129	NA cold	1991
chic	30.5	31.62500	16 1991-01-	NA	46.000000	4.6666667	30.881944	NA cold	1991
chic	31.5	27.12500	15 1991-01-	NA	44.500000	7.7083333	27.758152	NA cold	1991
chic	24.5	26.87500	14 1991-01- 13	NA	33.000000	10.7083333	20.944444	NA cold	1991
chic	25.5	22.00000	1991-01-	NA	23.000000	9.1666667	22.708333	NA cold	1991
chic	29.5	26.62500	12 1991-01- 11	NA	24.000000	8.6250000	17.697718	NA cold	1991
chic	22.0	26.12500	1991-01-	NA	35.500000	10.1250000	23.478535	NA cold	1991
chic	24.0	18.00000	10 1991-01- 09	NA	37.000000	4.7916667	22.935516	NA cold	1991
chic	25.5	27.37500	1991-01- 08	NA	28.500000	11.2916667	24.282738	NA cold	1991
chic	21.5	17.50000	1991-01-	NA	NA	22.0000000	19.851537	NA cold	1991
chic	20.5	13.62500	07 1991-01-	NA	27.000000	14.6250000	22.632738	NA cold	1991
chic	25.5	21.62500	06 1991-01-	NA	NA	3.9583333	24.250000	NA cold	1991
chic	14.0	11.50000	05 1991-01-	NA	43.000000	6.8750000	26.783081	NA cold	1991
chic	6.5	0.50000	04 1991-01- 03	NA	NA	9.2500000	23.015530	NA cold	1991

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendempca	t year
chic	16.0	6.62500	1991-01- 02	NA	NA	9.8750000	24.272879	NA cold	1991
chic	20.5	19.00000	1991-01- 01	NA	NA	11.0769231	18.966667	NA cold	1991
chic	8.0	5.00000	1990-12- 31	NA	26.250000	11.7732843	17.360975	NA cold	1990
chic	15.0	2.62500	1990-12- 30	NA	NA	12.1041667	10.236111	NA cold	1990
chic	33.5	30.00000	1990-12- 29	NA	12.500000	3.6250000	12.951389	NA cold	1990
chic	31.0	30.87500	1990-12- 28	NA	28.000000	2.7916667	22.010743	NA cold	1990
chic	17.5	16.75000	1990-12- 27	NA	18.000000	11.4583333	26.708694	NA cold	1990
chic	3.5	6.50000	1990-12- 26	NA	NA	11.8333333	21.792723	NA cold	1990
chic	14.5	7.87500	1990-12- 25	NA	20.428571	13.8750000	11.725694	NA cold	1990
chic	8.0	7.75000	1990-12- 24	NA	NA	14.4166667	12.645833	NA cold	1990
chic	7.0	3.75000	1990-12- 23	NA	40.000000	17.4166667	12.949405	NA cold	1990
chic	17.0	0.75000	1990-12- 22	NA	24.000000	9.8333333	14.386905	NA cold	1990
chic	38.0	38.62500	1990-12- 21	NA	29.500000	3.4166667	19.880952	NA cold	1990
chic	40.0	42.25000	1990-12- 20	NA	25.000000	6.6666667	20.804607	NA cold	1990
chic	31.0	27.00000	1990-12- 19	NA	28.333333	6.5000000	20.453204	NA cold	1990
chic	34.0	27.00000	1990-12- 18	NA	24.500000	5.3750000	12.472364	NA cold	1990
chic	36.5	36.25000	1990-12- 17	NA	16.000000	3.1250000	14.784632	NA cold	1990
chic	34.5	28.87500	1990-12- 16	NA	22.500000	11.7500000	13.523810	NA cold	1990
chic	39.5	32.00000	1990-12- 15	NA	18.000000	4.0000000	14.595238	NA cold	1990
chic	30.5	26.37500	1990-12- 14	NA	19.500000	11.2173913	20.389997	NA cold	1990
chic	30.5	18.25000	1990-12- 13	NA	16.571429	15.2083333	15.821759	NA cold	1990
chic	45.5	35.87500	1990-12- 12	NA	35.000000	14.2941176	23.839869	NA cold	1990
chic	44.0	40.37500	1990-12- 11	NA	33.000000	7.9565217	31.505736	NA cold	1990
chic	39.5	29.75000	1990-12- 10	NA	24.500000	11.4166667	27.716766	NA cold	1990
chic	43.0	31.00000	1990-12- 09	NA	28.000000	6.4166667	24.000000	NA cold	1990
chic	37.0	29.12500	1990-12- 08	NA	32.500000	3.7500000	24.658333	NA cold	1990

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendempca	t year
chic	31.0	27.75000	1990-12- 07	NA	28.857143	4.2173913	24.773737	NA cold	1990
chic	29.5	16.12500	1990-12- 06	NA	30.500000	8.1250000	24.715278	NA cold	1990
chic	28.5	29.37500	1990-12- 05	NA	27.000000	5.5416667	27.125000	NA cold	1990
chic	22.0	13.25000	1990-12- 04	NA	24.000000	18.7083333	19.591502	NA cold	1990
chic	33.0	25.75000	1990-12- 03	NA	24.000000	14.8750000	12.844697	NA cold	1990
chic	33.0	24.62500	1990-12- 02	NA	14.000000	19.2500000	11.841667	NA cold	1990
chic	40.5	28.12500	1990-12- 01	NA	19.000000	8.8333333	20.125000	NA cold	1990
chic	41.0	29.87500	1990-11- 30	NA	21.500000	9.6250000	21.858333	NA cold	1990
chic	31.5	23.62500	1990-11- 29	NA	31.000000	5.2500000	21.758333	NA cold	1990
chic	39.5	22.12500	1990-11- 28	NA	17.000000	8.9545455	15.066288	NA cold	1990
chic	61.0	57.62500	1990-11- 27	NA	12.000000	6.5000000	22.154762	NA cold	1990
chic	53.0	58.50000	1990-11- 26	NA	NA	8.0000000	19.895833	NA cold	1990
chic	44.5	28.62500	1990-11- 25	NA	26.625000	11.9583333	14.212500	NA cold	1990
chic	42.0	30.00000	1990-11- 24	NA	NA	3.8333333	20.591667	NA cold	1990
chic	42.0	17.37500	1990-11- 23	NA	18.000000	15.4166667	11.638636	NA cold	1990
chic	43.5	32.25000	1990-11- 22	NA	27.500000	8.1666667	16.687500	NA cold	1990
chic	59.5	53.25000	1990-11- 21	NA	35.000000	11.0416667	22.336806	NA cold	1990
chic	44.5	42.25000	1990-11- 20	NA	48.000000	6.2083333	32.360119	NA cold	1990
chic	44.0	38.50000	1990-11- 19	NA	58.571429	3.0833333	27.663812	NA cold	1990
chic	45.5	33.12500	1990-11- 18	NA	31.000000	8.1250000	26.533333	NA cold	1990
chic	42.0	29.62500	1990-11- 17	NA	25.000000	10.2083333	23.487500	NA cold	1990
chic	47.5	32.00000	1990-11- 16	NA	38.000000	13.3750000	19.394571	NA cold	1990
chic	61.0	49.50000	1990-11-	NA	47.000000	26.0416667	25.678075	NA cold	1990
chic	51.0	38.50000	15 1990-11- 14	NA	40.500000	5.9166667	30.977226	NA cold	1990
chic	38.0	29.87500	1990-11-	NA	43.250000	7.8333333	27.085639	NA cold	1990
chic	38.0	17.12500	13 1990-11- 12	NA	NA	9.9583333	23.079861	NA cold	1990

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	m25detrendempcat	year
chic	37.5	28.87500	1990-11- 11	NA	20.000000	7.1250000	20.291667	NA cold	1990
chic	40.5	22.00000	1990-11- 10	NA	27.000000	7.7500000	17.361111	NA cold	1990
chic	37.0	33.00000	1990-11- 09	NA	29.000000	2.1250000	19.180556	NA cold	1990
chic	31.5	27.00000	1990-11- 08	NA	33.500000	3.3333333	23.841334	NA cold	1990
chic	34.0	20.37500	1990-11-	NA	26.714286	10.2916667	14.727336	NA cold	1990
chic	36.5	35.00000	07 1990-11-	NA	24.000000	5.2500000	18.553571	NA cold	1990
chic	39.5	32.62500	06 1990-11-	NA	9.000000	16.3333333	10.201994	NA cold	1990
chic	42.0	38.50000	05 1990-11-	NA	4.000000	19.6666667	7.350000	NA cold	1990
chic	59.5	51.12500	04 1990-11-	NA	44.000000	19.2083333	22.263889	NA cold	1990
chic	65.5	52.37500	03 1990-11-	NA	49.500000	26.5416667	27.980676	NA cold	1990
chic	60.0	44.12500	02 1990-11-	NA	60.428571	23.0416667	29.623188	NA cold	1990
chic	58.0	49.62500	01 1990-10-	NA	63.500000	10.2857143	41.683717	NA cold	1990
chic	60.0	48.87500	31 1990-10-	NA	58.000000	16.7673395	31.951389	NA cold	1990
chic	45.5	30.62500	30 1990-10-	NA	29.500000	7.7142857	24.482639	NA cold	1990
chic	41.0	28.62500	29 1990-10-	NA	17.000000	12.9166667	14.854167	NA cold	1990
chic	52.5	33.00000	28 1990-10- 27	NA	51.000000	13.6369048	14.878472	NA cold	1990
chic	41.0	31.12500	1990-10- 26	NA	45.625000	6.2313665	27.047675	NA cold	1990
chic	40.0	31.75000	1990-10- 25	NA	22.000000	9.7797619	19.250000	NA cold	1990
chic	46.5	33.50000	1990-10-	NA	36.000000	9.0613354	21.383929	NA cold	1990
chic	46.5	37.62500	24 1990-10-	NA	49.000000	6.7343074	32.386670	NA cold	1990
chic	43.5	33.87500	23 1990-10-	NA	47.000000	8.4047619	24.833721	NA cold	1990
chic	49.0	37.00000	22 1990-10-	NA	25.000000	15.5535714	13.488095	NA cold	1990
chic	54.5	36.00000	21 1990-10-	NA	26.625000	13.8750000	21.349915	NA cold	1990
chic	40.5	32.87500	20 1990-10-	NA	21.000000	7.9285714	21.467885	NA cold	1990
chic	43.0	28.87500	19 1990-10-	NA	16.500000	13.5595238	8.327252	NA cold	1990
chic	65.0	55.37500	18 1990-10-	NA	45.000000	34.6726190	17.565476	NA cold	1990
			17						

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendemp	ocat year
chic	56.0	52.25000	1990-10- 16	NA	27.000000	13.2440476	26.627976	NA cold	1990
chic	51.0	40.62500	1990-10- 15	NA	30.500000	5.0195578	21.789441	NA cold	1990
chic	53.5	48.50000	1990-10- 14	NA	25.857143	18.3214286	20.589286	NA cold	1990
chic	52.0	45.37500	1990-10- 13	NA	50.500000	14.8392857	30.982143	NA cold	1990
chic	48.5	42.12500	1990-10- 12	NA	65.000000	9.6262940	41.480590	NA cold	1990
chic	46.5	35.87500	1990-10-	NA	46.500000	9.4216486	28.239130	NA cold	1990
chic	41.5	35.25000	11 1990-10-	NA	10.000000	11.2440476	11.947360	NA cold	1990
chic	47.0	43.50000	10 1990-10- 09	NA	NA	20.1283644	10.336310	NA cold	1990
chic	50.5	46.75000	1990-10-	NA	8.000000	13.0238095	9.726190	NA cold	1990
chic	55.0	48.50000	08 1990-10-	NA	5.500000	20.2380952	6.726172	NA cold	1990
chic	75.0	56.37500	07 1990-10-	NA	39.000000	34.9464286	15.423137	NA cold	1990
chic	68.5	55.00000	06 1990-10-	NA	29.000000	24.3452381	21.010359	NA cold	1990
chic	57.5	40.50000	05 1990-10-	NA	32.000000	10.2678571	18.399660	NA cold	1990
chic	67.0	58.12500	04 1990-10-	NA	28.500000	21.6568323	21.453487	NA cold	1990
chic	56.5	41.12500	03 1990-10-	NA	47.750000	15.4671325	34.520526	NA cold	1990
chic	57.0	38.25000	02 1990-10-	NA	43.500000	9.4800725	26.854814	NA cold	1990
chic	52.5	40.25000	01 1990-09-	NA	17.000000	11.7440476	14.177976	NA cold	1990
chic	58.5	51.12500	30 1990-09-	NA	12.500000	15.2738095	10.381944	NA cold	1990
chic	61.0	54.12500	29 1990-09-	NA	48.000000	18.1815908	26.439218	NA cold	1990
chic	65.5	51.75000	28 1990-09-	NA	45.500000	19.6007493	40.898026	NA cold	1990
chic	67.5	52.62500	27 1990-09-	NA	46.875000	14.6785714	31.351732	NA cold	1990
chic	67.0	51.75000	26 1990-09-	NA	42.000000	20.9642857	25.738095	NA cold	1990
chic	53.5	38.50000	25 1990-09-	NA	34.000000	16.8979592	24.854437	NA cold	1990
chic	50.5	35.25000	24 1990-09-	NA	17.500000	15.3273810	16.111111	NA cold	1990
chic	56.5	42.25000	23 1990-09-	NA	21.000000	9.0476190	17.843750	NA cold	1990
chic	62.0	46.62500	22 1990-09- 21	NA	26.000000	10.5535714	29.527778	NA cold	1990

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2	pm25detrene	tempca	t year
chic	59.5	50.75000	1990-09- 20	NA	37.428571	17.2822176	30.337407	NA	cold	1990
chic	57.5	50.50000	1990-09- 19	NA	28.000000	5.5066288	19.921433	NA	cold	1990
chic	55.5	49.87500	1990-09- 18	NA	17.000000	11.8961730	28.154374	NA	cold	1990
chic	56.0	46.25000	1990-09- 17	NA	19.000000	17.7500000	17.892857	NA	cold	1990
chic	57.0	47.50000	1990-09- 16	NA	10.500000	20.3645833	11.820833	NA	cold	1990
chic	63.0	54.00000	1990-09- 15	NA	23.500000	15.2968750	18.491071	NA	cold	1990
chic	65.5	54.62500	1990-09- 14	NA	38.625000	15.2864583	15.576441	NA	cold	1990
chic	74.5	65.62500	1990-09- 13	NA	69.500000	25.1390399	39.066259	NA	cold	1990
chic	74.5	64.50000	1990-09- 12	NA	94.000000	28.3810688	42.130952	NA	cold	1990
chic	74.0	67.87500	1990-09-	NA	58.500000	30.3722826	22.125129	NA	cold	1990
chic	75.5	68.37500	11 1990-09-	NA	69.000000	36.1736111	34.218795	NA	cold	1990
chic	73.0	65.75000	10 1990-09-	NA	43.000000	22.6979167	26.473214	NA	cold	1990
chic	72.0	64.62500	09 1990-09-	NA	41.000000	19.7447917	17.431548	NA	cold	1990
chic	72.0	63.25000	08 1990-09-	NA	13.500000	28.5781250	14.495942	NA	cold	1990
chic	83.0	70.50000	07 1990-09-	NA	56.500000	30.6738095	31.047619	NA	hot	1990
chic	77.0	69.12500	06 1990-09-	NA	52.000000	30.8928571	25.943182	NA	cold	1990
chic	79.0	73.37500	05 1990-09-	NA	84.000000	28.5654762	29.381121	NA	cold	1990
chic	71.0	60.87500	04 1990-09-	NA	23.500000	22.8571429	23.027778	NA	cold	1990
chic	73.0	61.25000	03 1990-09-	NA	34.166667	24.2410714	21.437500	NA	cold	1990
chic	78.0	69.12500	02 1990-09-	NA	64.000000	39.8802083	34.777778	NA	cold	1990
chic	70.0	60.75000	01 1990-08-	NA	58.000000	50.6388889	46.194444	NA	cold	1990
chic	69.0	53.87500	31 1990-08-	NA	25.500000	40.9166667	30.166667	NA	cold	1990
chic	75.5	57.87500	30 1990-08-	NA	36.000000	29.4863807	21.707477	NA	cold	1990
chic	82.5	70.50000	29 1990-08-	NA	53.500000	33.4047619	22.595833	NA	hot	1990
chic	82.5	75.87500	28 1990-08-	NA	90.285714	36.3097826	22.996683	NA	hot	1990
chic	78.5	73.25000	27 1990-08- 26	NA	82.000000	42.1190476	18.766455	NA	cold	1990

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrende	empcat	year
chic	76.5	69.75000	1990-08- 25	NA	50.000000	29.7497736	25.069444	NA c	old	1990
chic	75.0	67.12500	1990-08- 24	NA	28.000000	25.9180254	28.451389	NA c	old	1990
chic	70.5	64.25000	1990-08- 23	NA	39.000000	24.1517210	20.280770	NA c	old	1990
chic	69.0	63.25000	1990-08- 22	NA	21.500000	24.9314182	13.732639	NA c	old	1990
chic	68.0	66.25000	1990-08- 21	NA	18.500000	9.8333333	11.780110	NA c	old	1990
chic	71.5	69.37500	1990-08- 20	NA	16.000000	12.1406250	13.810606	NA c	old	1990
chic	75.5	68.50000	1990-08- 19	NA	18.500000	31.4375000	7.735119	NA c	old	1990
chic	80.5	75.25000	1990-08- 18	NA	25.000000	35.1614583	18.988095	NA h	ot	1990
chic	72.0	71.00000	1990-08- 17	NA	40.500000	15.0833333	22.753364	NA c	old	1990
chic	73.0	68.62500	1990-08- 16	NA	55.000000	30.9642857	23.191558	NA c	old	1990
chic	74.5	66.75000	1990-08- 15	NA	54.285714	28.4107143	20.538691	NA c	old	1990
chic	65.5	62.12500	1990-08- 14	NA	26.000000	17.1834239	21.779796	NA c	old	1990
chic	63.0	51.37500	1990-08- 13	NA	20.500000	17.1960565	13.273552	NA c	old	1990
chic	68.5	64.25000	1990-08- 12	NA	29.000000	31.2291667	22.812500	NA c	old	1990
chic	73.0	65.37500	1990-08- 11	NA	60.500000	48.1458333	21.114583	NA c	old	1990
chic	72.0	63.62500	1990-08- 10	NA	45.000000	38.1458333	42.395833	NA c	old	1990
chic	69.0	56.50000	1990-08- 09	NA	55.857143	33.7916667	38.496212	NA c	old	1990
chic	69.0	56.00000	1990-08- 08	NA	48.500000	21.4490166	36.179113	NA c	old	1990
chic	63.5	54.50000	1990-08- 07	NA	38.000000	19.7537879	24.015847	NA c	old	1990
chic	61.0	49.62500	1990-08- 06	NA	9.500000	17.3671875	10.600298	NA c	old	1990
chic	68.5	57.75000	1990-08- 05	NA	13.000000	20.0451389	11.267857	NA c	old	1990
chic	76.5	66.00000	1990-08- 04	NA	19.000000	28.8958333	28.666667	NA c	old	1990
chic	75.5	69.37500	1990-08-	NA	66.000000	38.2696687	30.567177	NA c	old	1990
chic	69.0	57.37500	03 1990-08- 02	NA	38.000000	31.1622024	30.434524	NA c	old	1990
chic	63.5	57.62500	1990-08-	NA	42.000000	23.1309524	22.557065	NA c	old	1990
chic	62.0	49.62500	01 1990-07- 31	NA	14.500000	18.9055707	11.766810	NA c	old	1990

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrendemp	cat year
chic	69.5	58.12500	1990-07- 30	NA	23.000000	18.5758929	10.316249	NA cold	1990
chic	79.5	70.37500	1990-07- 29	NA	55.000000	33.1562500	13.559524	NA cold	1990
chic	79.0	70.50000	1990-07- 28	NA	87.750000	51.0833333	21.339286	NA cold	1990
chic	74.5	65.75000	1990-07- 27	NA	74.000000	47.5416667	30.035714	NA cold	1990
chic	75.5	62.50000	1990-07-	NA	51.000000	31.2620389	30.907468	NA cold	1990
chic	72.0	63.00000	26 1990-07-	NA	37.500000	24.8831198	32.579099	NA cold	1990
chic	69.5	61.50000	25 1990-07-	NA	48.000000	18.6197917	34.357483	NA cold	1990
chic	68.5	57.75000	24 1990-07-	NA	36.500000	20.2110919	26.303258	NA cold	1990
chic	68.5	61.00000	23 1990-07-	NA	15.375000	29.3750000	12.035714	NA cold	1990
chic	69.5	57.87500	22 1990-07-	NA	24.000000	23.6242560	21.122024	NA cold	1990
chic	68.0	63.25000	21 1990-07-	NA	20.000000	19.5520833	22.897998	NA cold	1990
chic	77.5	68.00000	20 1990-07-	NA	47.500000	18.4901316	26.910714	NA cold	1990
chic	78.5	67.62500	19 1990-07-	NA	47.000000	26.3803282	29.241071	NA cold	1990
chic	78.0	63.75000	18 1990-07-	NA	41.000000	41.4218750	25.167831	NA cold	1990
chic	70.5	68.50000	17 1990-07-	NA	32.250000	27.1086957	25.846014	NA cold	1990
chic	65.0	62.12500	16 1990-07-	NA	29.000000	16.0677083	22.458333	NA cold	1990
chic	62.0	58.75000	15 1990-07-	NA	28.000000	17.2080270	15.122024	NA cold	1990
chic	62.5	53.62500	14 1990-07-	NA	13.000000	22.9739583	13.714286	NA cold	1990
chic	66.0	54.62500	13 1990-07-	NA	18.000000	24.4627193	11.504816	NA cold	1990
chic	67.0	54.87500	12 1990-07-	NA	17.000000	28.3072917	15.128517	NA cold	1990
chic	70.5	61.62500	11 1990-07-	NA	37.500000	23.7755888	27.036859	NA cold	1990
chic	81.0	64.00000	10 1990-07-	NA	38.500000	37.3697917	22.283252	NA hot	1990
chic	83.5	70.62500	09 1990-07-	NA	53.000000	45.2500000	14.961806	NA hot	1990
chic	67.0	57.37500	08 1990-07-	NA	28.000000	31.7291667	19.225694	NA cold	1990
chic	63.0	50.12500	07 1990-07-	NA	16.000000	21.2667572	11.829861	NA cold	1990
chic	73.5	55.25000	06 1990-07- 05	NA	33.000000	29.0260417	17.532382	NA cold	1990

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrende	mpcat year
chic	86.5	73.37500	1990-07- 04	NA	60.625000	52.2291667	12.816789	NA ho	ot 1990
chic	77.0	71.75000	1990-07- 03	NA	51.500000	47.4022974	28.624303	NA co	old 1990
chic	69.5	61.25000	1990-07- 02	NA	36.000000	29.0285326	25.829861	NA co	ld 1990
chic	66.5	55.50000	1990-07- 01	NA	18.000000	20.7135417	11.256944	NA co	ld 1990
chic	80.0	70.37500	1990-06- 30	NA	40.000000	35.3281250	24.381944	NA co	ld 1990
chic	73.5	69.12500	1990-06- 29	NA	21.500000	33.5354167	27.320350	NA co	old 1990
chic	72.5	68.12500	1990-06- 28	NA	52.375000	29.3489583	32.902929	NA co	ld 1990
chic	74.5	55.62500	1990-06- 27	NA	43.000000	30.7291667	32.912563	NA co	ld 1990
chic	75.5	69.37500	1990-06- 26	NA	42.000000	29.9338235	29.974508	NA co	ld 1990
chic	69.5	58.50000	1990-06- 25	NA	37.000000	23.5208333	30.632842	NA co	ld 1990
chic	64.0	45.75000	1990-06- 24	NA	27.000000	23.2500000	18.135417	NA co	ld 1990
chic	65.0	54.87500	1990-06- 23	NA	28.500000	18.9791667	9.333333	NA co	ld 1990
chic	66.5	57.12500	1990-06- 22	NA	24.571429	20.2812500	18.977959	NA co	ld 1990
chic	72.0	62.75000	1990-06- 21	NA	41.500000	19.4360795	26.902943	NA co	old 1990
chic	69.0	63.87500	1990-06- 20	NA	32.000000	21.5208333	26.152778	NA co	old 1990
chic	63.0	52.87500	1990-06- 19	NA	31.500000	19.3286397	20.478261	NA co	old 1990
chic	71.0	55.87500	1990-06- 18	NA	34.000000	33.8009511	12.604861	NA co	ld 1990
chic	78.5	71.37500	1990-06- 17	NA	37.500000	41.7187500	8.930060	NA co	old 1990
chic	74.0	68.87500	1990-06-	NA	54.875000	35.3645833	29.697917	NA co	old 1990
chic	71.0	57.87500	16 1990-06-	NA	40.500000	35.6954257	29.458829	NA co	old 1990
chic	71.0	61.50000	15 1990-06- 14	NA	27.000000	32.2699275	21.806263	NA co	old 1990
chic	81.5	69.00000	1990-06-	NA	60.000000	48.7223011	23.750000	NA ho	ot 1990
chic	78.0	62.50000	13 1990-06-	NA	92.000000	46.6278409	24.644626	NA co	old 1990
chic	65.5	55.37500	12 1990-06-	NA	41.500000	30.4062500	32.868056	NA co	old 1990
chic	64.5	50.75000	11 1990-06-	NA	17.875000	31.8593750	15.989583	NA co	old 1990
chic	72.5	55.00000	10 1990-06- 09	NA	33.500000	32.3802083	20.135417	NA co	old 1990

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	pm25detrend	tempcat	year
chic	70.0	63.87500	1990-06- 08	NA	51.000000	19.4300272	30.607076	NA	cold	1990
chic	65.5	53.87500	1990-06- 07	NA	46.500000	23.6444129	32.475694	NA	cold	1990
chic	69.0	48.87500	1990-06- 06	NA	50.000000	20.3778409	30.368687	NA	cold	1990
chic	53.0	51.37500	1990-06- 05	NA	38.000000	14.0112607	34.449517	NA	cold	1990
chic	53.0	30.62500	1990-06- 04	NA	25.285714	22.7154768	17.919570	NA	cold	1990
chic	61.0	41.50000	1990-06-	NA	103.000000	25.8430060	7.572313	NA	cold	1990
chic	74.5	55.62500	03 1990-06-	NA	85.000000	30.5052083	15.027778	NA	cold	1990
chic	74.0	65.62500	02 1990-06-	NA	59.000000	36.8697917	31.070449	NA	cold	1990
chic	57.5	41.12500	01 1990-05-	NA	68.000000	28.5939078	39.108586	NA	cold	1990
chic	53.5	33.37500	31 1990-05-	NA	41.000000	30.2343750	23.732649	NA	cold	1990
chic	55.0	29.37500	30 1990-05-	NA	28.875000	30.6116395	13.456263	NA	cold	1990
chic	62.5	44.25000	29 1990-05-	NA	28.000000	40.8072917	14.223214	NA	cold	1990
chic	63.0	46.00000	28 1990-05-	NA	41.000000	50.4166667	18.351191	NA	cold	1990
chic	59.5	51.37500	27 1990-05-	NA	46.500000	39.3120471	19.386905	NA	cold	1990
chic	56.5	56.25000	26 1990-05-	NA	39.000000	26.4177989	30.136128	NA	cold	1990
chic	61.5	50.00000	25 1990-05-	NA	47.000000	30.9958004	40.011905	NA	cold	1990
chic	57.0	50.12500	24 1990-05-	NA	52.625000	22.0389493	38.378586	NA	cold	1990
chic	52.5	40.75000	23 1990-05-	NA	18.500000	22.9424819	23.106061	NA	cold	1990
chic	52.5	41.50000	22 1990-05-	NA	15.000000	21.1145833	14.210921	NA	cold	1990
chic	54.5	46.12500	21 1990-05-	NA	17.000000	21.1145833	12.557143	NA	cold	1990
chic	62.5	63.00000	20 1990-05-	NA	25.000000	27.8593750	25.680556	NA	cold	1990
chic	60.5	43.62500	19 1990-05-	NA	60.000000	32.1225091	22.150794	NA	cold	1990
chic	56.0	41.62500	18 1990-05-	NA	71.000000	28.2552083	11.229167	NA	cold	1990
chic	66.5	57.25000	17 1990-05-	NA	26.500000	24.8910985	21.063889	NA	cold	1990
chic	55.5	54.00000	16 1990-05-	NA	51.500000	15.5449811	27.200560	NA	cold	1990
chic	56.5	59.12500	15 1990-05- 14	NA	27.500000	23.4732143	29.572619	NA	cold	1990

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	m cm25 detrence	tempcat	year
chic	54.5	43.00000	1990-05- 13	NA	33.000000	43.6822917	14.629167	NA	cold	1990
chic	50.5	48.00000	1990-05- 12	NA	26.500000	27.2812500	21.839209	NA	$\operatorname{cold}$	1990
chic	49.5	36.25000	1990-05- 11	NA	32.250000	24.3593750	32.536616	NA	cold	1990
chic	43.5	36.75000	1990-05- 10	NA	17.000000	18.3802083	12.699405	NA	cold	1990
chic	62.5	56.87500	1990-05- 09	NA	80.000000	30.6502193	24.555556	NA	$\operatorname{cold}$	1990
chic	70.5	55.75000	1990-05-	NA	63.000000	44.7321429	18.606710	NA	$\operatorname{cold}$	1990
chic	62.5	48.87500	08 1990-05-	NA	49.000000	34.3876812	24.443237	NA	cold	1990
chic	52.5	44.50000	07 1990-05- 06	NA	26.000000	24.7656250	27.659864	NA	$\operatorname{cold}$	1990
chic	51.0	45.12500	1990-05- 05	NA	34.125000	33.4427083	24.470238	NA	$\operatorname{cold}$	1990
chic	46.5	41.62500	1990-05-	NA	21.500000	33.7708333	17.542749	NA	cold	1990
chic	51.5	44.50000	04 1990-05-	NA	55.000000	22.8333333	28.829710	NA	$\operatorname{cold}$	1990
chic	54.0	33.62500	03 1990-05-	NA	61.500000	23.8750000	34.251553	NA	$\operatorname{cold}$	1990
chic	52.0	26.00000	02 1990-05-	NA	55.000000	26.1469979	23.863672	NA	$\operatorname{cold}$	1990
chic	55.0	31.25000	01 1990-04-	NA	47.000000	15.7916667	21.783550	NA	cold	1990
chic	58.5	51.00000	30 1990-04-	NA	33.142857	16.8273810	15.854167	NA	cold	1990
chic	61.0	48.75000	29 1990-04-	NA	26.000000	24.9464286	17.800595	NA	cold	1990
chic	73.5	56.12500	28 1990-04-	NA	61.000000	35.5238095	24.586735	NA	$\operatorname{cold}$	1990
chic	75.0	57.00000	27 1990-04-	NA	53.000000	31.3214286	20.835910	NA	cold	1990
chic	76.5	61.00000	26 1990-04-	NA	58.000000	25.1488095	26.612013	NA	cold	1990
chic	76.5	56.87500	25 1990-04-	NA	41.500000	29.3750000	25.393892	NA	cold	1990
chic	65.5	58.37500	24 1990-04-	NA	50.125000	29.7797619	42.222222	NA	$\operatorname{cold}$	1990
chic	55.5	44.75000	23 1990-04-	NA	95.000000	24.6904762	43.869048	NA	cold	1990
chic	55.5	39.12500	22 1990-04-	NA	28.000000	17.8988095	26.285714	NA	cold	1990
chic	56.0	56.87500	21 1990-04-	NA	29.500000	7.2409656	32.649940	NA	cold	1990
chic	49.5	45.75000	20 1990-04-	NA	40.000000	18.9802632	31.670455	NA	cold	1990
chic	41.5	22.12500	19 1990-04- 18	NA	30.000000	21.7968426	34.812771	NA	cold	1990

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	0 m25 detrend	empcat	year
chic	39.0	20.37500	1990-04- 17	NA	25.750000	26.2782091	21.002200	NA o	cold	1990
chic	48.0	39.87500	1990-04- 16	NA	NA	21.4254658	31.083333	NA o	cold	1990
chic	48.5	32.75000	1990-04- 15	NA	37.000000	24.6964286	22.180556	NA o	cold	1990
chic	48.5	36.37500	1990-04- 14	NA	32.000000	21.6428571	23.944444	NA o	cold	1990
chic	41.5	41.62500	1990-04- 13	NA	32.000000	16.1845238	33.680556	NA o	cold	1990
chic	35.0	23.62500	1990-04- 12	NA	28.500000	18.8750000	28.168245	NA o	cold	1990
chic	36.0	17.50000	1990-04- 11	NA	25.428571	18.9979296	24.398809	NA o	cold	1990
chic	41.5	22.25000	1990-04- 10	NA	23.000000	20.0476190	23.508023	NA o	cold	1990
chic	51.0	44.12500	1990-04- 09	NA	36.000000	17.6562500	32.768892	NA o	cold	1990
chic	46.0	30.37500	1990-04- 08	NA	28.000000	21.3630952	31.904762	NA o	cold	1990
chic	33.5	16.50000	1990-04- 07	NA	23.000000	18.2023810	26.913691	NA o	cold	1990
chic	31.0	17.12500	1990-04- 06	NA	37.500000	17.4345238	27.318452	NA o	cold	1990
chic	38.0	16.62500	1990-04- 05	NA	29.625000	18.0476190	26.120748	NA o	cold	1990
chic	43.0	37.00000	1990-04- 04	NA	46.000000	11.7029221	40.327381	NA o	cold	1990
chic	41.5	27.25000	1990-04- 03	NA	27.000000	21.9166667	23.171372	NA o	cold	1990
chic	38.0	29.87500	1990-04- 02	NA	17.500000	16.9702381	15.132143	NA o	cold	1990
chic	48.0	43.00000	1990-04- 01	NA	34.000000	14.9583333	27.002976	NA o	cold	1990
chic	41.5	41.50000	1990-03- 31	NA	57.000000	17.3281250	29.140625	NA o	cold	1990
chic	41.5	35.75000	1990-03- 30	NA	38.000000	19.5449811	24.705348	NA o	cold	1990
chic	41.5	40.37500	1990-03- 29	NA	39.000000	13.1904762	27.604167	NA o	cold	1990
chic	41.5	25.75000	1990-03- 28	NA	41.000000	16.5923316	41.567708	NA o	cold	1990
chic	35.5	21.37500	1990-03- 27	NA	58.000000	13.5286797	42.348958	NA o	cold	1990
chic	33.0	20.50000	1990-03- 26	NA	19.000000	22.9702381	22.181839	NA o	cold	1990
chic	34.5	22.37500	1990-03- 25	NA	26.000000	22.2656250	18.083333	NA o	cold	1990
chic	31.0	15.37500	1990-03- 24	NA	25.625000	24.6145833	20.203125	NA o	cold	1990
chic	31.0	9.12500	1990-03- 23	NA	28.000000	28.7297390	16.142992	NA o	cold	1990

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendempca	t year
chic	45.0	37.12500	1990-03- 22	NA	36.000000	19.0666667	27.218750	NA cold	1990
chic	47.5	34.50000	1990-03- 21	NA	44.000000	20.3020833	31.395154	NA cold	1990
chic	33.0	24.50000	1990-03- 20	NA	35.000000	14.7979798	31.562405	NA cold	1990
chic	26.5	11.00000	1990-03- 19	NA	27.500000	21.8095238	18.555999	NA cold	1990
chic	36.0	22.50000	1990-03- 18	NA	16.285714	29.5416667	11.372396	NA cold	1990
chic	41.0	26.25000	1990-03- 17	NA	26.000000	31.2083333	9.856771	NA cold	1990
chic	51.0	35.75000	1990-03- 16	NA	28.000000	26.6250000	21.169196	NA cold	1990
chic	57.5	39.12500	1990-03- 15	NA	20.500000	23.9166667	22.854167	NA cold	1990
chic	65.0	55.75000	1990-03- 14	NA	27.000000	20.8333333	25.153341	NA cold	1990
chic	67.0	61.37500	1990-03- 13	NA	28.500000	11.8888889	24.863122	NA cold	1990
chic	70.5	56.62500	1990-03- 12	NA	26.857143	25.8750000	16.840368	NA cold	1990
chic	57.5	61.12500	1990-03- 11	NA	26.500000	16.7083333	21.833333	NA cold	1990
chic	51.0	45.62500	1990-03- 10	NA	36.000000	6.2916667	29.761905	NA cold	1990
chic	46.0	43.37500	1990-03- 09	NA	33.000000	9.9583333	27.461466	NA cold	1990
chic	40.5	46.62500	1990-03- 08	NA	29.000000	8.3636364	31.005855	NA cold	1990
chic	29.5	21.75000	1990-03- 07	NA	41.500000	24.2916667	26.784400	NA cold	1990
chic	29.0	13.75000	1990-03- 06	NA	28.333333	32.2500000	17.006168	NA cold	1990
chic	33.0	26.62500	1990-03- 05	NA	24.500000	22.0416667	20.694792	NA cold	1990
chic	30.5	22.62500	1990-03- 04	NA	33.000000	16.0416667	29.031250	NA cold	1990
chic	29.0	9.00000	1990-03- 03	NA	20.500000	26.1666667	18.855729	NA cold	1990
chic	39.5	28.25000	1990-03- 02	NA	44.000000	13.6666667	27.999337	NA cold	1990
chic	30.5	25.25000	1990-03- 01	NA	35.000000	15.4583333	30.645833	NA cold	1990
chic	24.5	12.62500	1990-02-	NA	31.500000	19.6666667	30.244339	NA cold	1990
chic	32.5	14.50000	28 1990-02- 27	NA	34.000000	16.8333333	28.327536	NA cold	1990
chic	23.0	22.00000	1990-02-	NA	25.000000	11.3750000	27.511732	NA cold	1990
chic	11.0	2.62500	26 1990-02- 25	NA	23.500000	23.5000000	19.288691	NA cold	1990

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	pm25detrendempca	t year
chic	21.0	2.50000	1990-02- 24	NA	75.000000	29.1250000	11.471354	NA cold	1990
chic	32.5	25.75000	1990-02- 23	NA	19.000000	21.0416667	26.718750	NA cold	1990
chic	36.0	32.00000	1990-02- 22	NA	23.000000	11.9166667	28.320749	NA cold	1990
chic	34.0	30.12500	1990-02- 21	NA	30.500000	7.1250000	40.127936	NA cold	1990
chic	20.5	15.50000	1990-02- 20	NA	53.000000	8.4761905	44.859046	NA cold	1990
chic	24.0	6.87500	1990-02- 19	NA	30.500000	22.2916667	26.692708	NA cold	1990
chic	32.0	26.37500	1990-02- 18	NA	28.000000	20.1666667	21.595238	NA cold	1990
chic	21.0	14.75000	1990-02- 17	NA	22.000000	16.2916667	26.506944	NA cold	1990
chic	27.5	15.62500	1990-02- 16	NA	23.500000	17.2916667	21.535486	NA cold	1990
chic	29.5	29.00000	1990-02- 15	NA	22.500000	22.7500000	16.353074	NA cold	1990
chic	27.0	25.00000	1990-02- 14	NA	14.000000	28.9166667	12.095342	NA cold	1990
chic	41.0	23.50000	1990-02- 13	NA	NA	20.8750000	17.000710	NA cold	1990
chic	38.5	40.37500	1990-02- 12	NA	36.000000	7.4166667	28.328125	NA cold	1990
chic	28.5	20.12500	1990-02- 11	NA	29.500000	15.8750000	24.666667	NA cold	1990
chic	32.0	24.75000	1990-02- 10	NA	23.375000	12.5000000	25.890625	NA cold	1990
chic	41.5	22.37500	1990-02- 09	NA	40.000000	17.5416667	21.541667	NA cold	1990
chic	50.0	47.62500	1990-02- 08	NA	31.000000	21.2500000	24.596875	NA cold	1990
chic	37.0	37.25000	1990-02- 07	NA	36.500000	5.4583333	24.379386	NA cold	1990
chic	38.5	36.62500	1990-02- 06	NA	31.500000	2.5000000	28.570340	NA cold	1990
chic	41.5	36.75000	1990-02- 05	NA	24.000000	8.5416667	24.763258	NA cold	1990
chic	34.0	28.50000	1990-02- 04	NA	20.875000	20.0416667	19.268229	NA cold	1990
chic	33.0	31.00000	1990-02- 03	NA	25.500000	7.8750000	21.026042	NA cold	1990
chic	30.0	25.87500	1990-02- 02	NA	32.000000	20.8333333	17.099977	NA cold	1990
chic	41.0	31.75000	1990-02- 01	NA	32.000000	14.9583333	21.696331	NA cold	1990
chic	30.5	33.87500	1990-01- 31	NA	35.000000	8.4583333	28.289025	NA cold	1990
chic	34.5	21.37500	1990-01- 30	NA	28.500000	9.0869565	21.586215	NA cold	1990

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	m25detrendempc	at year
chic	34.0	17.50000	1990-01- 29	NA	50.125000	3.2916667	41.353039	NA cold	1990
chic	30.5	18.12500	1990-01- 28	NA	27.000000	7.0416667	21.036458	NA cold	1990
chic	37.5	19.50000	1990-01- 27	NA	25.000000	17.0000000	16.510417	NA cold	1990
chic	25.5	27.75000	1990-01- 26	NA	30.000000	8.5000000	27.309524	NA cold	1990
chic	30.5	20.00000	1990-01- 25	NA	22.000000	11.0555556	17.508117	NA cold	1990
chic	40.0	31.87500	1990-01- 24	NA	18.500000	7.7916667	20.299479	NA cold	1990
chic	39.5	38.37500	1990-01- 23	NA	34.250000	7.7916667	26.346354	NA cold	1990
chic	36.5	30.62500	1990-01- 22	NA	19.500000	5.3125000	21.304564	NA cold	1990
chic	30.0	27.62500	1990-01- 21	NA	16.000000	7.4375000	14.377604	NA cold	1990
chic	35.5	34.00000	1990-01- 20	NA	31.500000	4.7916667	20.739583	NA cold	1990
chic	30.5	22.87500	1990-01- 19	NA	48.000000	9.9583333	27.612798	NA cold	1990
chic	32.0	22.50000	1990-01- 18	NA	37.000000	12.0416667	16.605161	NA cold	1990
chic	45.0	37.12500	1990-01- 17	NA	27.000000	12.4583333	19.167572	NA cold	1990
chic	47.5	52.12500	1990-01- 16	NA	NA	3.0833333	29.306386	NA cold	1990
chic	41.0	31.12500	1990-01- 15	NA	44.000000	4.5416667	31.848958	NA cold	1990
chic	36.5	27.00000	1990-01- 14	NA	23.000000	6.1250000	21.151042	NA cold	1990
chic	23.0	18.37500	1990-01- 13	NA	18.000000	7.2500000	19.635417	NA cold	1990
chic	26.0	10.50000	1990-01- 12	NA	55.000000	20.0833333	13.197917	NA cold	1990
chic	38.0	21.62500	1990-01- 11	NA	104.625000	17.8750000	12.424479	NA cold	1990
chic	32.5	29.12500	1990-01- 10	NA	28.000000	7.0416667	15.611526	NA cold	1990
chic	38.0	31.12500	1990-01- 09	NA	30.000000	9.2916667	23.113765	NA cold	1990
chic	37.0	33.62500	1990-01- 08	NA	28.000000	6.1250000	29.550858	NA cold	1990
chic	35.0	30.37500	1990-01- 07	NA	27.000000	6.4583333	23.069941	NA cold	1990
chic	30.0	25.00000	1990-01- 06	NA	42.500000	7.9166667	24.541667	NA cold	1990
chic	29.5	27.62500	1990-01- 05	NA	35.142857	4.4583333	27.156250	NA cold	1990
chic	36.0	23.50000	1990-01- 04	NA	23.500000	8.2500000	22.404356	NA cold	1990

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendempcat	year
chic	39.0	39.75000	1990-01- 03	NA	37.000000	5.7916667	24.549242	NA cold	1990
chic	33.0	28.75000	1990-01- 02	NA	NA	6.5416667	21.511905	NA cold	1990
chic	27.5	19.75000	1990-01- 01	NA	NA	16.4166667	11.330729	NA cold	1990
chic	30.5	24.62500	1989-12- 31	NA	42.000000	7.4583333	19.114583	NA cold	1989
chic	32.5	32.00000	1989-12- 30	NA	38.000000	2.1666667	27.156250	NA cold	1989
chic	34.5	30.62500	1989-12- 29	NA	40.000000	5.7500000	27.099432	NA cold	1989
chic	27.0	32.00000	1989-12- 28	NA	20.000000	5.5833333	30.918964	NA cold	1989
chic	20.5	20.00000	1989-12- 27	NA	34.000000	12.2500000	21.996280	NA cold	1989
chic	12.0	3.25000	1989-12- 26	NA	NA	15.9583333	22.921082	NA cold	1989
chic	24.5	26.75000	1989-12- 25	NA	NA	13.2083333	17.906250	NA cold	1989
chic	5.0	7.50000	1989-12- 24	NA	25.166667	8.2916667	25.166667	NA cold	1989
chic	-1.0	9.37500	1989-12- 23	NA	38.000000	5.2500000	30.135417	NA cold	1989
chic	-4.5	11.87500	1989-12- 22	NA	49.000000	9.4166667	29.416667	NA cold	1989
chic	-6.5	23.00000	1989-12- 21	NA	49.000000	16.6666667	19.500000	NA cold	1989
chic	0.0	2.87500	1989-12- 20	NA	22.500000	10.5000000	25.826746	NA cold	1989
chic	7.5	3.62500	1989-12- 19	NA	39.000000	9.0416667	30.132843	NA cold	1989
chic	9.5	2.62500	1989-12- 18	NA	43.875000	6.0833333	29.406250	NA cold	1989
chic	9.5	2.62500	1989-12- 17	NA	31.000000	6.3333333	26.182292	NA cold	1989
chic	2.5	4.50000	1989-12- 16	NA	33.000000	7.9583333	25.708333	NA cold	1989
chic	3.5	2.62500	1989-12- 15	NA	45.500000	8.8750000	26.696875	NA cold	1989
chic	8.0	6.87500	1989-12- 14	NA	34.000000	5.4583333	24.205228	NA cold	1989
chic	13.0	14.37500	1989-12- 13	NA	43.000000	6.2916667	34.157835	NA cold	1989
chic	11.0	0.50000	1989-12- 12	NA	38.714286	8.2916667	27.794508	NA cold	1989
chic	19.5	6.50000	1989-12- 11	NA	35.000000	11.5416667	24.668252	NA cold	1989
chic	31.0	22.87500	1989-12- 10	NA	26.000000	13.2500000	16.921875	NA cold	1989
chic	28.5	19.62500	1989-12- 09	NA	30.500000	5.2083333	29.041667	NA cold	1989

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendempca	t year
chic	21.5	13.62500	1989-12- 08	NA	37.500000	17.5416667	31.167655	NA cold	1989
chic	17.0	2.62500	1989-12- 07	NA	32.000000	16.7916667	25.821558	NA cold	1989
chic	29.0	7.25000	1989-12- 06	NA	24.250000	13.6666667	19.158535	NA cold	1989
chic	39.5	31.87500	1989-12- 05	NA	38.000000	2.3333333	26.708333	NA cold	1989
chic	33.5	24.62500	1989-12- 04	NA	31.000000	5.0416667	21.088068	NA cold	1989
chic	20.0	5.00000	1989-12- 03	NA	14.000000	20.2500000	14.385417	NA cold	1989
chic	29.0	9.00000	1989-12- 02	NA	52.000000	16.1250000	12.375000	NA cold	1989
chic	38.0	28.00000	1989-12- 01	NA	49.000000	5.3750000	31.767857	NA cold	1989
chic	34.0	25.12500	1989-11- 30	NA	32.500000	6.0833333	25.412341	NA cold	1989
chic	20.5	14.75000	1989-11- 29	NA	20.000000	9.1250000	19.629261	NA cold	1989
chic	28.5	12.62500	1989-11- 28	NA	25.500000	19.0000000	15.461222	NA cold	1989
chic	51.0	42.37500	1989-11- 27	NA	NA	6.7916667	23.865845	NA cold	1989
chic	38.5	29.00000	1989-11- 26	NA	23.000000	4.6666667	30.875000	NA cold	1989
chic	44.0	35.00000	1989-11- 25	NA	31.500000	6.3750000	21.572917	NA cold	1989
chic	27.5	24.37500	1989-11- 24	NA	29.285714	6.6250000	24.791667	NA cold	1989
chic	18.5	16.87500	1989-11- 23	NA	29.000000	10.2500000	20.705729	NA cold	1989
chic	26.5	21.25000	1989-11- 22	NA	24.000000	10.1666667	29.410229	NA cold	1989
chic	30.0	19.62500	1989-11- 21	NA	29.000000	18.6666667	22.294203	NA cold	1989
chic	45.5	19.50000	1989-11- 20	NA	43.500000	12.4375000	16.005952	NA cold	1989
chic	37.0	30.00000	1989-11- 19	NA	25.500000	9.9583333	21.026786	NA cold	1989
chic	21.0	11.75000	1989-11- 18	NA	21.571429	10.2291667	15.738095	NA cold	1989
chic	24.5	19.75000	1989-11-	NA	34.500000	9.8333333	15.439878	NA cold	1989
chic	26.0	11.37500	17 1989-11-	NA	11.000000	15.6250000	13.012309	NA cold	1989
chic	40.5	32.87500	16 1989-11-	NA	15.000000	3.444444	14.952863	NA cold	1989
chic	54.0	45.00000	15 1989-11-	NA	26.500000	7.8333333	17.030419	NA cold	1989
chic	59.0	53.00000	14 1989-11- 13	NA	NA	22.8333333	24.981291	NA cold	1989

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n <b>2</b> 3tmean2	no2tmean2p	m25detrendempca	year
chic	38.5	30.37500	1989-11- 12	NA	19.000000	9.5833333	18.768750	NA cold	1989
chic	46.5	30.12500	1989-11- 11	NA	28.000000	6.0833333	18.305556	NA cold	1989
chic	38.0	28.12500	1989-11- 10	NA	25.000000	7.9583333	12.925595	NA cold	1989
chic	39.5	35.50000	1989-11- 09	NA	20.000000	8.4583333	15.607481	NA cold	1989
chic	45.0	35.00000	1989-11- 08	NA	26.000000	5.9166667	21.005303	NA cold	1989
chic	45.5	39.62500	1989-11- 07	NA	28.000000	7.5416667	25.023398	NA cold	1989
chic	45.5	37.75000	1989-11- 06	NA	26.250000	6.3913043	17.196482	NA cold	1989
chic	54.0	50.00000	1989-11- 05	NA	35.500000	18.8333333	18.161458	NA cold	1989
chic	46.5	29.75000	1989-11- 04	NA	27.500000	8.2916667	20.973958	NA cold	1989
chic	31.0	25.75000	1989-11- 03	NA	27.000000	5.9583333	24.200284	NA cold	1989
chic	35.0	24.12500	1989-11- 02	NA	25.000000	8.8333333	17.281114	NA cold	1989
chic	43.0	34.75000	1989-11- 01	NA	32.000000	5.3750000	26.617898	NA cold	1989
chic	45.5	31.12500	1989-10- 31	NA	24.000000	4.7500000	16.715744	NA cold	1989
chic	65.0	52.50000	1989-10- 30	NA	42.000000	19.1845238	30.531250	NA cold	1989
chic	64.5	49.87500	1989-10- 29	NA	44.500000	25.5654762	35.979167	NA cold	1989
chic	63.5	41.50000	1989-10- 28	NA	52.500000	19.1964286	45.802083	NA cold	1989
chic	62.5	42.87500	1989-10- 27	NA	66.500000	18.0535714	56.230072	NA cold	1989
chic	62.5	50.12500	1989-10- 26	NA	64.000000	18.5564182	50.670996	NA cold	1989
chic	65.5	55.75000	1989-10- 25	NA	52.625000	15.4166667	42.884502	NA cold	1989
chic	64.0	57.87500	1989-10- 24	NA	47.500000	11.7857790	43.156446	NA cold	1989
chic	58.5	54.50000	1989-10- 23	NA	40.000000	10.0357143	45.357143	NA cold	1989
chic	48.0	38.75000	1989-10- 22	NA	20.500000	10.8750000	34.708333	NA cold	1989
chic	46.0	37.00000	1989-10- 21	NA	29.000000	11.7321429	24.627976	NA cold	1989
chic	37.0	34.25000	1989-10- 20	NA	19.000000	9.0515010	23.918737	NA cold	1989
chic	36.0	33.00000	1989-10- 19	NA	9.375000	21.1371636	15.049172	NA cold	1989
chic	36.0	29.87500	1989-10- 18	NA	13.500000	23.4285714	15.984849	NA cold	1989

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2	pm25detrendempca	t year
chic	43.0	31.62500	1989-10- 17	NA	9.500000	17.7007576	13.030324	NA cold	1989
chic	58.5	44.12500	1989-10- 16	NA	27.000000	19.5357143	15.908659	NA cold	1989
chic	70.5	53.50000	1989-10- 15	NA	47.500000	29.1354167	26.223958	NA cold	1989
chic	69.5	55.62500	1989-10- 14	NA	62.000000	23.7916667	48.359375	NA cold	1989
chic	62.5	45.75000	1989-10- 13	NA	91.875000	11.0416667	59.515625	NA cold	1989
chic	61.0	47.12500	1989-10- 12	NA	58.000000	18.4791667	32.621686	NA cold	1989
chic	59.0	39.62500	1989-10- 11	NA	52.000000	18.7395833	27.953125	NA cold	1989
chic	51.0	39.62500	1989-10- 10	NA	39.000000	12.6302083	23.859860	NA cold	1989
chic	45.5	37.37500	1989-10- 09	NA	NA	14.4270833	28.119792	NA cold	1989
chic	44.0	32.37500	1989-10- 08	NA	22.500000	14.3593750	21.195312	NA cold	1989
chic	45.0	33.37500	1989-10- 07	NA	23.857143	11.4375000	20.406250	NA cold	1989
chic	51.5	36.00000	1989-10- 06	NA	25.000000	11.6995265	19.678883	NA cold	1989
chic	52.5	55.25000	1989-10- 05	NA	46.000000	5.8925070	35.338542	NA cold	1989
chic	47.0	29.37500	1989-10- 04	NA	69.000000	10.5999053	33.345833	NA cold	1989
chic	44.5	24.87500	1989-10- 03	NA	41.500000	12.2031250	22.480881	NA cold	1989
chic	56.5	38.75000	1989-10- 02	NA	54.500000	8.2031250	15.070833	NA cold	1989
chic	65.5	59.62500	1989-10- 01	NA	51.714286	19.3511905	31.119792	NA cold	1989
chic	60.0	52.62500	1989-09- 30	NA	45.000000	25.3452381	34.062500	NA cold	1989
chic	59.5	47.62500	1989-09-	NA	37.000000	19.1302083	26.140625	NA cold	1989
chic	58.0	39.50000	29 1989-09-	NA	53.000000	16.4046649	36.627976	NA cold	1989
chic	51.0	38.75000	28 1989-09-	NA	41.000000	16.9895833	33.281629	NA cold	1989
chic	51.5	39.62500	27 1989-09-	NA	24.000000	19.5104167	16.692595	NA cold	1989
chic	54.5	43.12500	26 1989-09-	NA	46.625000	15.8125000	31.523263	NA cold	1989
chic	48.0	36.75000	25 1989-09-	NA	24.000000	12.8541667	24.095238	NA cold	1989
chic	45.5	31.62500	24 1989-09-	NA	35.000000	17.0625000	13.351562	NA cold	1989
chic	61.5	44.75000	23 1989-09- 22	NA	115.000000	25.1979167	31.972633	NA cold	1989

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrendempca	t year
chic	66.0	58.00000	1989-09- 21	NA	76.000000	25.3958333	46.408268	NA cold	1989
chic	65.5	56.87500	1989-09- 20	NA	61.000000	27.3645833	43.975379	NA cold	1989
chic	65.0	55.50000	1989-09- 19	NA	47.500000	23.7050866	41.935033	NA cold	1989
chic	65.0	55.75000	1989-09- 18	NA	49.000000	31.7423469	44.815641	NA cold	1989
chic	63.5	54.12500	1989-09- 17	NA	51.000000	26.8273810	33.036458	NA cold	1989
chic	59.5	51.87500	1989-09- 16	NA	33.000000	22.8281250	28.169271	NA cold	1989
chic	57.5	49.12500	1989-09- 15	NA	NA	23.6576705	22.674953	NA cold	1989
chic	58.0	51.37500	1989-09- 14	NA	15.000000	21.6927083	16.773438	NA cold	1989
chic	56.5	50.50000	1989-09- 13	NA	14.000000	20.5534420	19.217957	NA cold	1989
chic	60.5	45.62500	1989-09- 12	NA	32.000000	18.8667037	21.208704	NA cold	1989
chic	65.0	57.12500	1989-09- 11	NA	40.000000	16.4375000	31.209280	NA cold	1989
chic	63.0	51.25000	1989-09- 10	NA	23.000000	16.7291667	14.429688	NA cold	1989
chic	68.0	60.50000	1989-09- 09	NA	NA	19.1250000	16.375000	NA cold	1989
chic	76.5	69.00000	1989-09- 08	NA	38.000000	17.5416667	29.098011	NA cold	1989
chic	74.5	71.75000	1989-09- 07	NA	57.142857	19.6809330	34.247218	NA cold	1989
chic	71.5	69.87500	1989-09- 06	NA	43.000000	15.4531250	30.396307	NA cold	1989
chic	70.0	66.62500	1989-09- 05	NA	NA	25.8906250	39.236640	NA cold	1989
chic	68.0	62.25000	1989-09- 04	NA	37.000000	28.7187500	21.976562	NA cold	1989
chic	65.0	53.50000	1989-09- 03	NA	23.000000	22.4947917	20.755208	NA cold	1989
chic	64.0	50.50000	1989-09- 02	NA	15.000000	24.0885417	14.822917	NA cold	1989
chic	71.0	61.87500	1989-09- 01	NA	21.875000	26.9270833	18.184508	NA cold	1989
chic	72.5	67.62500	1989-08- 31	NA	35.000000	19.1822917	31.488095	NA cold	1989
chic	70.5	58.87500	1989-08- 30	NA	54.000000	20.8645833	30.901042	NA cold	1989
chic	75.0	60.75000	1989-08- 29	NA	50.000000	16.7343750	22.375947	NA cold	1989
chic	77.0	70.75000	1989-08- 28	NA	49.000000	20.1197917	28.637153	NA cold	1989
chic	74.5	69.25000	1989-08- 27	NA	50.000000	35.8072917	30.450521	NA cold	1989

chic chic chic	71.5 70.0 70.0	66.12500 58.25000	1989-08- 26	NA	49.285714	22 2002222	27 700520	TA T A	1.1	1000
		58.25000			10.200111	33.2083333	51.198532	NA	cold	1989
chic	70.0		1989-08- 25	NA	NA	31.7836792	20.432292	NA	cold	1989
		61.50000	1989-08- 24	NA	37.000000	32.0291667	14.976326	NA	cold	1989
chic	70.5	63.00000	1989-08- 23	NA	25.000000	28.1051136	19.040483	NA	cold	1989
chic	77.5	72.12500	1989-08- 22	NA	31.000000	18.9051178	25.196237	NA	cold	1989
chic	74.0	65.50000	1989-08- 21	NA	59.000000	27.8750000	32.084754	NA	cold	1989
chic	74.5	61.12500	1989-08- 20	NA	37.571429	30.3863636	14.437500	NA	cold	1989
chic	67.5	60.87500	1989-08- 19	NA	NA	36.1267361	27.572917	NA	cold	1989
chic	66.5	53.87500	1989-08- 18	NA	NA	26.8630394	25.552083	NA	cold	1989
chic	66.0	55.87500	1989-08- 17	NA	34.000000	24.6390399	24.461458	NA	cold	1989
chic	66.5	56.62500	1989-08- 16	NA	NA	24.0667614	24.439062	NA	cold	1989
chic	69.0	61.62500	1989-08- 15	NA	18.000000	20.8740530	21.213194	NA	cold	1989
chic	71.0	63.25000	1989-08- 14	NA	58.375000	22.9237939	32.130952	NA	cold	1989
chic	71.0	62.50000	1989-08- 13	NA	53.000000	35.2604167	32.130208	NA	cold	1989
chic	72.0	60.00000	1989-08- 12	NA	86.000000	28.3072917	44.255208	NA	cold	1989
chic	70.5	62.25000	1989-08- 11	NA	96.000000	31.1191878	55.905215	NA	cold	1989
chic	72.5	62.37500	1989-08- 10	NA	50.000000	27.4490132	41.193277	NA	cold	1989
chic	70.5	58.75000	1989-08- 09	NA	47.000000	21.5803571	39.669950	NA	cold	1989
chic	65.0	57.12500	1989-08- 08	NA	50.500000	16.7261905	27.067857	NA	cold	1989
chic	62.0	50.25000	1989-08- 07	NA	29.000000	23.3392857	24.750000	NA	cold	1989
chic	63.0	48.75000	1989-08- 06	NA	25.000000	21.7361111	16.181548	NA	cold	1989
chic	77.0	66.00000	1989-08- 05	NA	38.000000	38.1250000	20.600000	NA	cold	1989
chic	81.0	77.00000	1989-08- 04	NA	64.000000	29.9948207	19.411458	NA	hot	1989
chic	79.5	72.62500	1989-08- 03	NA	52.000000	27.7656250	24.544837	NA	cold	1989
chic	74.0	66.62500	1989-08- 02	NA	74.625000	35.4218750	44.781250	NA	cold	1989
chic	72.5	60.12500	1989-08- 01	NA	48.000000	51.7239583	33.779624	NA	cold	1989

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	m cm25 detrend	tempcat	year
chic	71.0	60.50000	1989-07- 31	NA	69.000000	57.3072917	22.440104	NA	cold	1989
chic	71.5	61.00000	1989-07- 30	NA	46.000000	44.9114583	11.157986	NA	cold	1989
chic	69.0	67.00000	1989-07- 29	NA	29.000000	41.8593750	22.302083	NA	cold	1989
chic	67.5	57.50000	1989-07- 28	NA	37.500000	30.7447917	13.877232	NA	cold	1989
chic	82.5	66.75000	1989-07- 27	NA	43.000000	33.2653894	22.014699	NA	hot	1989
chic	79.5	72.37500	1989-07- 26	NA	61.000000	20.7049366	34.765625	NA	cold	1989
chic	78.5	73.87500	1989-07- 25	NA	55.000000	39.7708333	47.690632	NA	cold	1989
chic	77.0	68.75000	1989-07- 24	NA	77.000000	43.4009662	34.942708	NA	cold	1989
chic	74.5	65.12500	1989-07- 23	NA	54.000000	38.3842593	28.257812	NA	cold	1989
chic	74.0	63.75000	1989-07- 22	NA	39.000000	36.4629630	26.234375	NA	cold	1989
chic	69.0	64.37500	1989-07- 21	NA	41.500000	33.2037037	22.000000	NA	cold	1989
chic	67.5	61.37500	1989-07- 20	NA	26.000000	31.4907407	12.909935	NA	cold	1989
chic	67.5	65.12500	1989-07- 19	NA	47.000000	39.1399136	23.270442	NA	cold	1989
chic	70.0	60.75000	1989-07- 18	NA	56.000000	36.1599327	35.933114	NA	cold	1989
chic	71.0	54.87500	1989-07- 17	NA	68.000000	28.6607143	49.435096	NA	cold	1989
chic	72.5	48.87500	1989-07- 16	NA	32.000000	36.1419173	25.357143	NA	cold	1989
chic	71.0	49.62500	1989-07- 15	NA	30.000000	25.7083333	22.827381	NA	cold	1989
chic	68.0	45.62500	1989-07- 14	NA	12.000000	23.0553543	19.071429	NA	cold	1989
chic	69.0	50.12500	1989-07- 13	NA	21.000000	27.0740741	19.029601	NA	cold	1989
chic	71.0	62.12500	1989-07- 12	NA	NA	26.3240741	23.802795	NA	cold	1989
chic	76.0	64.50000	1989-07- 11	NA	NA	28.1481481	29.728316	NA	cold	1989
chic	86.5	61.37500	1989-07- 10	NA	43.000000	46.5972222	21.520833	NA	hot	1989
chic	83.0	68.25000	1989-07- 09	NA	57.750000	51.6203704	17.500000	NA	hot	1989
chic	75.0	65.62500	1989-07- 08	NA	50.000000	33.444444	31.011905	NA	cold	1989
chic	78.5	53.50000	1989-07- 07	NA	56.000000	32.7301587	30.464286	NA	cold	1989
chic	79.0	63.25000	1989-07- 06	NA	85.000000	48.0277778	43.898438	NA	cold	1989

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n <b>2</b> 3tmean2	no2tmean2p	om25detrendempca	t year
chic	75.5	62.12500	1989-07- 05	NA	59.000000	40.4074074	24.896861	NA cold	1989
chic	75.0	50.50000	1989-07- 04	NA	NA	35.1990741	23.815476	NA cold	1989
chic	74.0	59.00000	1989-07- 03	NA	57.285714	40.6269493	29.604959	NA cold	1989
chic	73.5	66.25000	1989-07- 02	NA	65.000000	47.3650794	32.291667	NA cold	1989
chic	72.5	54.50000	1989-07- 01	NA	NA	52.1754202	43.463542	NA cold	1989
chic	65.5	52.12500	1989-06-	NA	NA	32.8541667	39.770833	NA cold	1989
chic	61.0	48.62500	30 1989-06- 29	NA	28.000000	23.0620471	19.692142	NA cold	1989
chic	64.5	46.25000	1989-06- 28	NA	33.000000	20.5937500	22.972335	NA cold	1989
chic	70.5	64.75000	1989-06- 27	NA	51.428571	21.0649586	38.831813	NA cold	1989
chic	77.5	64.00000	1989-06- 26	NA	89.000000	32.4107143	34.561368	NA cold	1989
chic	73.0	61.50000	1989-06-	NA	53.000000	34.2785714	28.421875	NA cold	1989
chic	75.0	59.37500	25 1989-06-	NA	NA	35.4574830	21.880208	NA cold	1989
chic	79.0	68.00000	24 1989-06-	NA	NA	37.0714286	33.287817	NA cold	1989
chic	79.0	64.37500	23 1989-06-	NA	NA	47.6897998	34.139752	NA cold	1989
chic	69.0	56.37500	22 1989-06-	NA	57.428571	59.7272727	31.734420	NA cold	1989
chic	68.5	60.87500	21 1989-06-	NA	28.000000	49.6128472	23.752841	NA cold	1989
chic	71.0	62.87500	20 1989-06-	NA	26.000000	39.2457386	32.267890	NA cold	1989
chic	72.5	62.25000	19 1989-06-	NA	NA	32.8579545	23.989583	NA cold	1989
chic	65.5	47.62500	18 1989-06-	NA	43.000000	28.7438447	26.091146	NA cold	1989
chic	61.0	46.75000	17 1989-06-	NA	35.000000	14.6659873	22.341146	NA cold	1989
chic	54.5	50.87500	16 1989-06-	NA	27.714286	13.6884470	17.178646	NA cold	1989
chic	64.0	52.37500	15 1989-06-	NA	NA	30.8865901	28.597545	NA cold	1989
chic	66.5	58.75000	14 1989-06-	NA	45.000000	27.4881629	32.325614	NA cold	1989
chic	66.0	62.75000	13 1989-06-	NA	43.000000	23.6562500	32.299851	NA cold	1989
chic	60.0	50.50000	12 1989-06-	NA	35.000000	27.1927083	28.031250	NA cold	1989
chic	58.5	43.75000	11 1989-06- 10	NA	NA	21.0000000	13.846354	NA cold	1989

city	tmpd	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2	pm25detrenden	npcat year
chic	61.0	46.87500	1989-06- 09	NA	38.750000	23.2723214	16.614583	NA col	d 1989
chic	73.0	57.87500	1989-06- 08	NA	NA	43.9285714	32.883163	NA col	d 1989
chic	71.5	55.62500	1989-06- 07	NA	89.000000	41.5553977	38.564182	NA col	d 1989
chic	71.0	51.50000	1989-06- 06	NA	NA	31.7445652	37.759740	NA col	d 1989
chic	66.0	47.75000	1989-06- 05	NA	79.000000	26.0000000	47.054422	NA col	d 1989
chic	62.5	49.50000	1989-06- 04	NA	NA	27.7380952	24.324405	NA col	d 1989
chic	56.5	51.62500	1989-06- 03	NA	29.000000	21.8095238	30.148809	NA col	d 1989
chic	67.5	52.50000	1989-06- 02	NA	NA	29.6250000	30.962474	NA col	d 1989
chic	68.5	63.37500	1989-06- 01	NA	28.000000	15.0260417	32.051989	NA col	d 1989
chic	75.0	66.50000	1989-05- 31	NA	NA	26.3734149	27.027497	NA col	d 1989
chic	73.5	67.25000	1989-05- 30	NA	25.000000	39.2528409	24.504735	NA col	d 1989
chic	67.5	68.25000	1989-05- 29	NA	NA	39.0451389	20.273809	NA col	d 1989
chic	57.0	39.62500	1989-05-	NA	33.000000	31.2362689	26.572917	NA col	d 1989
chic	56.0	39.62500	28 1989-05-	NA	34.000000	26.1927083	18.997396	NA col	d 1989
chic	62.0	40.12500	27 1989-05-	NA	NA	25.3372790	21.017203	NA col	d 1989
chic	67.5	60.87500	26 1989-05- 25	NA	33.000000	26.3035038	35.524943	NA col	d 1989
chic	75.0	65.50000	1989-05-	NA	NA	43.5929677	30.211180	NA col	d 1989
chic	69.0	42.87500	24 1989-05-	NA	68.000000	37.8125000	43.731794	NA col	d 1989
chic	63.0	49.62500	23 1989-05-	NA	65.250000	29.5115489	41.171463	NA col	d 1989
chic	64.5	44.75000	22 1989-05-	NA	47.000000	33.5937500	30.791667	NA col	d 1989
chic	64.0	38.62500	21 1989-05-	NA	NA	26.6510417	24.109375	NA col	d 1989
chic	65.5	61.75000	20 1989-05-	NA	35.000000	30.0364583	33.068452	NA col	d 1989
chic	68.0	51.62500	19 1989-05-	NA	99.000000	37.1689312	42.635681	NA col	d 1989
chic	63.5	45.37500	18 1989-05-	NA	98.000000	47.1192094	44.950634	NA col	d 1989
chic	59.0	44.50000	17 1989-05-	NA	79.875000	35.6324013	51.115530	NA col	d 1989
chic	56.0	43.75000	16 1989-05- 15	NA	NA	27.6829945	42.913542	NA col	d 1989

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrendempo	eat year
chic	55.5	41.37500	1989-05- 14	NA	65.000000	32.5654762	24.479167	NA cold	1989
chic	52.0	43.25000	1989-05- 13	NA	17.000000	30.4067460	17.739583	NA cold	1989
chic	51.5	36.75000	1989-05- 12	NA	NA	28.5654762	24.345170	NA cold	1989
chic	48.0	20.25000	1989-05- 11	NA	NA	33.7142857	21.791152	NA cold	1989
chic	49.5	23.50000	1989-05- 10	NA	27.000000	35.7142857	19.708807	NA cold	1989
chic	50.5	25.37500	1989-05- 09	NA	20.000000	33.8993742	20.221875	NA cold	1989
chic	50.5	40.75000	1989-05-	NA	NA	25.3214286	36.127145	NA cold	1989
chic	43.0	35.75000	08 1989-05- 07	NA	NA	18.2395833	17.247024	NA cold	1989
chic	35.5	24.75000	1989-05-	NA	33.000000	20.3333333	16.303571	NA cold	1989
chic	50.5	19.87500	06 1989-05-	NA	NA	30.9404762	17.119906	NA cold	1989
chic	55.5	49.75000	05 1989-05-	NA	46.250000	25.1884058	36.691169	NA cold	1989
chic	53.5	32.62500	04 1989-05-	NA	NA	24.7729861	32.222917	NA cold	1989
chic	45.0	37.50000	03 1989-05-	NA	26.000000	26.2521645	24.768643	NA cold	1989
chic	47.5	33.25000	02 1989-05-	NA	24.000000	32.0833333	23.185012	NA cold	1989
chic	50.0	35.50000	01 1989-04-	NA	NA	34.5892857	16.276042	NA cold	1989
chic	55.5	42.00000	30 1989-04-	NA	NA	19.6250000	25.786458	NA cold	1989
chic	49.5	42.00000	29 1989-04-	NA	39.714286	18.0773810	30.135417	NA cold	1989
chic	54.0	43.00000	28 1989-04-	NA	69.000000	34.6488095	33.197917	NA cold	1989
chic	58.0	45.25000	27 1989-04-	NA	NA	45.6166667	30.468006	NA cold	1989
chic	62.5	52.37500	26 1989-04-	NA	NA	36.3695652	36.867113	NA cold	1989
chic	55.5	41.37500	25 1989-04-	NA	74.000000	32.2716837	41.500045	NA cold	1989
chic	50.5	31.37500	24 1989-04-	NA	61.000000	33.4739583	21.828125	NA cold	1989
chic	52.0	34.25000	23 1989-04-	NA	44.375000	30.5520833	28.020833	NA cold	1989
chic	53.0	36.12500	22 1989-04-	NA	49.000000	31.4940476	32.758831	NA cold	1989
chic	54.0	38.00000	21 1989-04-	NA	69.000000	27.0153162	39.613839	NA cold	1989
chic	43.5	19.25000	20 1989-04- 19	NA	56.000000	18.8333333	41.239130	NA cold	1989

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrenden	npcat year
chic	39.5	35.50000	1989-04- 18	NA	49.000000	16.9464286	36.173897	NA col	d 1989
chic	48.5	31.87500	1989-04- 17	NA	23.000000	30.9223602	23.834651	NA col	d 1989
chic	57.0	49.25000	1989-04- 16	NA	46.125000	26.8333333	34.947917	NA col	d 1989
chic	48.5	30.50000	1989-04- 15	NA	54.000000	25.5238095	39.182292	NA col	d 1989
chic	52.0	33.00000	1989-04- 14	NA	39.000000	26.3273810	32.288826	NA col	d 1989
chic	41.0	19.37500	1989-04- 13	NA	49.000000	21.7981293	38.743195	NA col	d 1989
chic	43.0	26.87500	1989-04- 12	NA	31.000000	27.0295031	28.369318	NA col	d 1989
chic	37.0	28.87500	1989-04- 11	NA	44.000000	23.2857143	26.154830	NA col	d 1989
chic	28.5	20.87500	1989-04- 10	NA	29.375000	16.5362319	26.289773	NA col	d 1989
chic	29.5	13.37500	1989-04- 09	NA	NA	27.6979167	10.464286	NA col	d 1989
chic	38.0	15.62500	1989-04- 08	NA	35.000000	24.1369048	22.117188	NA col	d 1989
chic	40.0	27.75000	1989-04- 07	NA	42.000000	22.1964286	26.520833	NA col	d 1989
chic	41.5	24.62500	1989-04- 06	NA	50.000000	19.6091393	31.648438	NA col	d 1989
chic	41.0	35.50000	1989-04- 05	NA	33.000000	19.3571429	26.593786	NA col	d 1989
chic	51.0	34.62500	1989-04- 04	NA	32.625000	18.8260870	25.619630	NA col	d 1989
chic	47.0	47.25000	1989-04- 03	NA	NA	13.2083333	33.152433	NA col	d 1989
chic	46.5	44.62500	1989-04- 02	NA	NA	22.1250000	25.177083	NA col	d 1989
chic	36.5	33.87500	1989-04- 01	NA	23.000000	23.1250000	28.447917	NA col	d 1989
chic	35.5	22.50000	1989-03- 31	NA	32.000000	25.8437500	20.675000	NA col	d 1989
chic	42.0	33.00000	1989-03- 30	NA	34.000000	17.4916667	23.254836	NA col	d 1989
chic	44.0	31.00000	1989-03- 29	NA	15.000000	27.0411905	17.922101	NA col	d 1989
chic	60.5	56.50000	1989-03-	NA	28.000000	12.8611111	22.358058	NA col	d 1989
chic	66.5	58.75000	28 1989-03-	NA	22.000000	17.5791667	25.310606	NA col	d 1989
chic	55.5	54.75000	27 1989-03-	NA	NA	35.3750000	30.815444	NA col	d 1989
chic	49.0	34.87500	26 1989-03-	NA	41.000000	23.4166667	26.890625	NA col	d 1989
chic	48.5	36.25000	25 1989-03- 24	NA	40.000000	11.3750000	42.343750	NA col	d 1989

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2	pm25detrendempca	t year
chic	41.5	25.25000	1989-03- 23	NA	58.428571	12.5416667	43.283333	NA cold	1989
chic	32.0	22.75000	1989-03- 22	NA	27.000000	12.0416667	42.647254	NA cold	1989
chic	28.5	11.75000	1989-03- 21	NA	22.000000	24.4166667	27.664062	NA cold	1989
chic	32.5	22.62500	1989-03- 20	NA	31.000000	22.2272727	30.658356	NA cold	1989
chic	26.0	26.50000	1989-03- 19	NA	NA	16.6666667	32.765625	NA cold	1989
chic	24.5	17.37500	1989-03- 18	NA	23.000000	26.8333333	22.921875	NA cold	1989
chic	32.0	28.87500	1989-03- 17	NA	19.500000	26.9583333	20.910069	NA cold	1989
chic	35.5	27.25000	1989-03- 16	NA	36.000000	12.3333333	31.843750	NA cold	1989
chic	33.5	16.00000	1989-03- 15	NA	NA	18.4583333	23.247056	NA cold	1989
chic	47.0	47.50000	1989-03- 14	NA	NA	8.0833333	40.225835	NA cold	1989
chic	42.5	36.25000	1989-03- 13	NA	43.000000	13.6363636	37.919508	NA cold	1989
chic	35.0	29.25000	1989-03- 12	NA	30.000000	36.2727273	20.083333	NA cold	1989
chic	46.0	31.50000	1989-03- 11	NA	73.333333	2.0000000	35.383333	NA cold	1989
chic	42.5	32.50000	1989-03- 10	NA	NA	13.4166667	46.658333	NA cold	1989
chic	34.0	26.12500	1989-03- 09	NA	77.000000	8.5416667	50.260160	NA cold	1989
chic	26.5	18.62500	1989-03- 08	NA	68.000000	9.8750000	40.875000	NA cold	1989
chic	23.0	10.75000	1989-03- 07	NA	41.000000	29.2916667	18.471354	NA cold	1989
chic	26.0	14.62500	1989-03- 06	NA	20.000000	33.3750000	12.715672	NA cold	1989
chic	21.5	17.00000	1989-03- 05	NA	13.625000	26.3750000	10.411458	NA cold	1989
chic	34.5	24.37500	1989-03- 04	NA	30.000000	7.2083333	23.521280	NA cold	1989
chic	32.0	32.12500	1989-03- 03	NA	NA	11.3333333	26.479167	NA cold	1989
chic	21.5	20.00000	1989-03- 02	NA	32.000000	16.6666667	28.958333	NA cold	1989
chic	17.0	8.75000	1989-03- 01	NA	NA	20.0588235	24.312555	NA cold	1989
chic	23.0	8.50000	1989-02- 28	NA	57.000000	18.0416667	28.443750	NA cold	1989
chic	18.5	10.75000	1989-02- 27	NA	33.714286	15.0714286	29.361134	NA cold	1989
chic	28.5	15.87500	1989-02- 26	NA	NA	28.7500000	17.974896	NA cold	1989

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	pm25detrendempcat	year
chic	27.5	27.75000	1989-02- 25	NA	NA	15.2500000	37.916667	NA cold	1989
chic	13.0	9.12500	1989-02- 24	NA	61.000000	12.7083333	42.183333	NA cold	1989
chic	13.5	10.25000	1989-02- 23	NA	37.000000	13.3333333	29.148592	NA cold	1989
chic	17.0	1.62500	1989-02- 22	NA	56.000000	21.3750000	25.635426	NA cold	1989
chic	26.0	17.25000	1989-02- 21	NA	43.750000	19.9583333	33.241300	NA cold	1989
chic	27.0	25.25000	1989-02- 20	NA	NA	16.9583333	33.077381	NA cold	1989
chic	28.0	19.12500	1989-02- 19	NA	NA	12.2916667	32.321429	NA cold	1989
chic	22.0	20.87500	1989-02- 18	NA	23.000000	16.9166667	30.636905	NA cold	1989
chic	17.5	14.62500	1989-02- 17	NA	13.000000	14.6250000	30.630952	NA cold	1989
chic	17.5	1.87500	1989-02- 16	NA	25.000000	11.4761905	31.580782	NA cold	1989
chic	27.5	13.12500	1989-02- 15	NA		8.6250000		NA cold	1989
chic	27.5	20.75000	1989-02- 14	NA	52.000000	19.2916667		NA cold	1989
chic	32.0	31.12500	1989-02- 13	NA	NA	7.8750000		NA cold	1989
chic	26.5	16.87500	1989-02- 12	NA	26.000000	15.0416667		NA cold	1989
chic	24.0	19.12500	1989-02- 11	NA	33.000000	15.4166667		NA cold	1989
chic	15.0	12.37500	1989-02- 10	NA	36.000000	14.3750000		NA cold	1989
chic	7.0	3.50000	1989-02- 09	NA	34.857143	16.2727273		NA cold	1989
chic	11.5	3.75000	1989-02- 08	NA		17.0000000		NA cold	1989
chic	12.0	9.12500	1989-02- 07	NA		14.7500000		NA cold	1989
chic	2.0	0.25000	1989-02- 06	NA		12.0000000		NA cold	1989
chic	9.0	5.25000	1989-02- 05	NA	NA	6.0833333		NA cold	1989
chic	4.5	2.00000	1989-02- 04	NA		6.5882353		NA cold	1989
chic	14.5	2.50000	1989-02- 03	NA		11.3888889		NA cold	1989
chic	25.5	20.37500	1989-02- 02	NA		16.0416667		NA cold	1989
chic	40.5	21.87500	1989-02- 01	NA		19.0000000		NA cold	1989
chic	52.5	44.12500	1989-01- 31	NA	NA	9.8333333	24.047279	NA cold	1989

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendempca	t year
chic	40.5	35.50000	1989-01- 30	NA	NA	7.7916667	20.877944	NA cold	1989
chic	40.0	37.75000	1989-01- 29	NA	NA	3.5000000	20.546875	NA cold	1989
chic	42.0	31.87500	1989-01- 28	NA	27.125000	6.5833333	26.140625	NA cold	1989
chic	37.0	30.75000	1989-01- 27	NA	25.000000	7.5000000	26.568213	NA cold	1989
chic	34.0	23.62500	1989-01- 26	NA	37.000000	8.2500000	21.831245	NA cold	1989
chic	42.5	42.25000	1989-01- 25	NA	36.000000	5.4166667	24.188466	NA cold	1989
chic	38.0	34.12500	1989-01- 24	NA	45.000000	6.2272727	27.774715	NA cold	1989
chic	41.5	32.62500	1989-01- 23	NA	17.000000	4.9166667	33.184453	NA cold	1989
chic	40.0	25.75000	1989-01- 22	NA	22.875000	8.7500000	23.321429	NA cold	1989
chic	26.5	19.75000	1989-01- 21	NA	27.000000	8.3750000	28.190476	NA cold	1989
chic	28.5	11.62500	1989-01- 20	NA	NA	15.6250000	19.156250	NA cold	1989
chic	38.0	30.12500	1989-01- 19	NA	NA	11.2083333	22.241745	NA cold	1989
chic	37.5	27.87500	1989-01- 18	NA	NA	9.6956522	21.457860	NA cold	1989
chic	37.0	29.12500	1989-01- 17	NA	24.000000	6.9583333	24.775023	NA cold	1989
chic	31.5	26.62500	1989-01- 16	NA	27.142857	6.2500000	19.886905	NA cold	1989
chic	29.5	23.87500	1989-01- 15	NA	NA	7.6666667	15.029762	NA cold	1989
chic	26.5	26.12500	1989-01- 14	NA	20.000000	3.5833333	23.327381	NA cold	1989
chic	26.0	17.62500	1989-01- 13	NA	NA	6.4285714	27.541667	NA cold	1989
chic	31.5	15.87500	1989-01- 12	NA	NA	9.0000000	23.716486	NA cold	1989
chic	34.5	37.37500	1989-01- 11	NA	31.000000	8.5000000	25.424716	NA cold	1989
chic	31.5	21.37500	1989-01- 10	NA	37.428571	4.8666667	26.239394	NA cold	1989
chic	16.5	14.62500	1989-01- 09	NA	52.000000	13.4666667	20.080350	NA cold	1989
chic	15.0	1.50000	1989-01- 08	NA	NA	17.9583333	9.580729	NA cold	1989
chic	40.0	39.62500	1989-01- 07	NA	NA	2.8750000	25.794271	NA cold	1989
chic	35.0	32.37500	1989-01- 06	NA	27.000000	2.0000000	30.708333	NA cold	1989
chic	29.5	31.87500	1989-01- 05	NA	20.000000	3.1250000	33.144907	NA cold	1989

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendempcat	year
chic	19.0	15.87500	1989-01- 04	NA	43.400000	5.1250000	30.972661	NA cold	1989
chic	23.0	15.75000	1989-01- 03	NA	NA	7.8750000	22.615942	NA cold	1989
chic	22.0	10.87500	1989-01- 02	NA	28.000000	11.3333333	18.328125	NA cold	1989
chic	26.5	26.87500	1989-01- 01	NA	66.000000	9.3913043	33.131567	NA cold	1989
chic	26.0	27.00000	1988-12- 31	NA	61.000000	2.7500000	44.666667	NA cold	1988
chic	24.5	21.87500	1988-12-	NA	NA	5.6666667	35.900000	NA cold	1988
chic	13.5	12.62500	30 1988-12- 29	NA	29.666667	6.9473684	30.285673	NA cold	1988
chic	14.5	6.87500	1988-12- 28	NA	17.000000	13.1250000	23.037879	NA cold	1988
chic	27.5	14.12500	1988-12- 27	NA	27.000000	4.5000000	21.346435	NA cold	1988
chic	27.0	29.87500	1988-12- 26	NA	NA	9.0000000	23.785714	NA cold	1988
chic	23.0	16.62500	1988-12- 25	NA	NA	10.0833333	13.776656	NA cold	1988
chic	33.5	26.50000	1988-12- 24	NA	NA	4.5416667	24.803571	NA cold	1988
chic	41.0	26.75000	1988-12- 23	NA	23.000000	11.5652174	19.952381	NA cold	1988
chic	36.0	38.75000	1988-12-	NA	NA	4.2916667	23.353520	NA cold	1988
chic	33.0	22.50000	22 1988-12-	NA	NA	10.5000000	22.507846	NA cold	1988
chic	44.5	27.00000	21 1988-12- 20	NA	NA	12.6086957	16.398809	NA cold	1988
chic	39.0	32.25000	1988-12- 19	NA	NA	10.7916667	27.424784	NA cold	1988
chic	22.0	21.87500	19 1988-12- 18	NA	39.000000	4.8750000	24.250000	NA cold	1988
chic	16.0	7.00000	1988-12-	NA	25.400000	7.5416667	22.172619	NA cold	1988
chic	10.5	12.12500	17 1988-12- 16	NA	35.000000	6.5416667	26.809524	NA cold	1988
chic	18.0	- 0.75000	1988-12- 15	NA	NA	14.3500000	20.410102	NA cold	1988
chic	37.5	$0.75000 \\ 24.87500$	1988-12-	NA	NA	5.9166667	21.726191	NA cold	1988
chic	34.5	28.62500	14 1988-12-	NA	48.000000	5.3333333	26.555788	NA cold	1988
chic	18.5	19.37500	13 1988-12-	NA	29.000000	6.2500000	29.968168	NA cold	1988
chic	11.0	6.12500	12 1988-12-	NA	30.000000	7.0833333	23.927536	NA cold	1988
chic	18.5	2.12500	11 1988-12- 10	NA	NA	8.9166667	23.380952	NA cold	1988

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrendempca	t year
chic	21.5	14.25000	1988-12- 09	NA	37.000000	6.4166667	24.369048	NA cold	1988
chic	27.0	11.25000	1988-12- 08	NA	40.000000	9.6666667	27.553571	NA cold	1988
chic	35.0	20.00000	1988-12- 07	NA	30.000000	6.6458333	25.661458	NA cold	1988
chic	42.0	34.87500	1988-12- 06	NA	40.000000	5.0000000	30.234375	NA cold	1988
chic	38.5	31.25000	1988-12- 05	NA	39.000000	3.8750000	23.238163	NA cold	1988
chic	32.5	23.25000	1988-12- 04	NA	23.000000	8.9166667	23.174479	NA cold	1988
chic	43.0	26.00000	1988-12- 03	NA	NA	9.2916667	21.880952	NA cold	1988
chic	34.0	32.50000	1988-12- 02	NA	29.000000	4.5833333	27.057065	NA cold	1988
chic	23.5	16.37500	1988-12- 01	NA	27.000000	8.2083333	22.111580	NA cold	1988
chic	30.5	23.87500	1988-11- 30	NA	22.000000	4.6250000	18.131341	NA cold	1988
chic	33.5	31.37500	1988-11- 29	NA	26.200000	7.1250000	24.430157	NA cold	1988
chic	28.0	21.87500	1988-11- 28	NA	6.000000	7.8333333	18.642083	NA cold	1988
chic	37.0	25.00000	1988-11- 27	NA	9.000000	14.9583333	8.270833	NA cold	1988
chic	54.0	51.25000	1988-11- 26	NA	13.000000	11.9166667	24.002604	NA cold	1988
chic	49.0	44.37500	1988-11- 25	NA	28.000000	13.0416667	35.718750	NA cold	1988
chic	46.5	35.00000	1988-11- 24	NA	22.000000	7.7916667	30.739583	NA cold	1988
chic	41.5	35.50000	1988-11- 23	NA	39.000000	3.4166667	31.905461	NA cold	1988
chic	34.5	28.12500	1988-11- 22	NA	31.000000	4.7500000	27.928125	NA cold	1988
chic	33.0	23.37500	1988-11- 21	NA	21.000000	5.4166667	26.420846	NA cold	1988
chic	36.5	28.12500	1988-11- 20	NA	21.000000	6.2500000	17.339725	NA cold	1988
chic	44.0	40.12500	1988-11- 19	NA	14.000000	2.3750000	27.343750	NA cold	1988
chic	43.5	30.12500	1988-11- 18	NA	9.000000	2.7083333	34.699905	NA cold	1988
chic	38.5	28.12500	1988-11- 17	NA	24.200000	10.2916667	23.708333	NA cold	1988
chic	48.0	24.25000	1988-11- 16	NA	23.000000	11.6250000	11.895221	NA cold	1988
chic	56.0	60.37500	1988-11- 15	NA	NA	2.9166667	25.966097	NA cold	1988
chic	47.5	34.50000	1988-11- 14	NA	NA	5.0833333	34.232661	NA cold	1988

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendempca	t year
chic	45.0	40.87500	1988-11- 13	NA	12.000000	10.5833333	16.845238	NA cold	1988
chic	41.5	44.00000	1988-11- 12	NA	15.000000	4.5416667	22.666667	NA cold	1988
chic	39.5	29.25000	1988-11- 11	NA	23.200000	8.9583333	23.127976	NA cold	1988
chic	42.5	30.62500	1988-11- 10	NA	15.000000	7.0416667	18.827381	NA cold	1988
chic	43.5	46.00000	1988-11- 09	NA	25.000000	2.3750000	29.333051	NA cold	1988
chic	42.0	36.87500	1988-11- 08	NA	40.000000	4.5416667	26.088542	NA cold	1988
chic	39.0	38.00000	1988-11- 07	NA	12.000000	5.8695652	23.990818	NA cold	1988
chic	33.5	30.62500	1988-11- 06	NA	NA	13.6250000	11.812500	NA cold	1988
chic	41.5	36.12500	1988-11- 05	NA	15.600000	2.7916667	13.997024	NA cold	1988
chic	52.5	51.50000	1988-11- 04	NA	28.000000	2.6470588	33.837121	NA cold	1988
chic	50.5	50.62500	1988-11- 03	NA	34.000000	3.3750000	36.061458	NA cold	1988
chic	43.5	35.75000	1988-11- 02	NA	28.000000	12.2068603	30.771212	NA cold	1988
chic	40.0	28.00000	1988-11- 01	NA	35.000000	12.5572917	22.751235	NA cold	1988
chic	39.0	27.62500	1988-10- 31	NA	36.000000	9.5200893	34.022321	NA cold	1988
chic	33.0	25.87500	1988-10- 30	NA	26.000000	10.5416667	29.012002	NA cold	1988
chic	33.5	12.75000	1988-10- 29	NA	28.000000	13.1250000	26.465580	NA cold	1988
chic	37.0	21.00000	1988-10- 28	NA	39.000000	13.5208333	19.648438	NA cold	1988
chic	45.0	40.87500	1988-10- 27	NA	NA	9.8437500	26.767187	NA cold	1988
chic	36.5	26.00000	1988-10-	NA	34.000000	7.0520833	24.903302	NA cold	1988
chic	35.0	22.12500	26 1988-10-	NA	34.000000	8.5989583	23.323596	NA cold	1988
chic	33.5	27.12500	25 1988-10-	NA	27.400000	7.1202857	16.566319	NA cold	1988
chic	43.5	30.62500	24 1988-10-	NA	30.000000	10.2500000	15.610119	NA cold	1988
chic	42.0	32.50000	23 1988-10-	NA	32.000000	10.2656250	20.755952	NA cold	1988
chic	46.5	39.00000	22 1988-10-	NA	31.000000	6.9270833	21.369048	NA cold	1988
chic	42.0	37.87500	21 1988-10-	NA	24.000000	6.6250000	28.053571	NA cold	1988
chic	43.5	32.25000	20 1988-10- 19	NA	28.000000	11.5705904	21.758172	NA cold	1988

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	pm25detrendempca	year
chic	49.5	36.37500	1988-10- 18	NA	23.600000	11.1977814	18.823374	NA cold	1988
chic	53.0	55.12500	1988-10- 17	NA	NA	4.9166667	28.869048	NA cold	1988
chic	62.5	47.87500	1988-10- 16	NA	43.000000	26.0595238	21.145833	NA cold	1988
chic	66.5	52.00000	1988-10- 15	NA	51.000000	35.0357143	25.453416	NA cold	1988
chic	58.0	42.25000	1988-10- 14	NA	59.000000	18.2291667	37.372412	NA cold	1988
chic	39.5	23.87500	1988-10- 13	NA	NA	11.5275298	34.629329	NA cold	1988
chic	39.0	24.37500	1988-10- 12	NA	28.600000	14.5156250	23.563665	NA cold	1988
chic	42.5	26.12500	1988-10- 11	NA	48.000000	13.4940476	19.420327	NA cold	1988
chic	58.0	34.62500	1988-10- 10	NA	39.000000	20.7500000	17.321429	NA cold	1988
chic	54.5	47.50000	1988-10- 09	NA	NA	11.9404762	32.085145	NA cold	1988
chic	52.0	41.12500	1988-10- 08	NA	56.000000	12.6190476	36.348958	NA cold	1988
chic	47.5	33.00000	1988-10- 07	NA	NA	11.8630952	38.265625	NA cold	1988
chic	43.5	32.75000	1988-10- 06	NA	33.333333	9.6428571	27.538393	NA cold	1988
chic	43.0	32.25000	1988-10- 05	NA	30.000000	10.6024845	19.033514	NA cold	1988
chic	43.0	30.25000	1988-10- 04	NA	33.000000	11.7202381	15.961310	NA cold	1988
chic	53.5	38.12500	1988-10- 03	NA	NA	9.3627451	22.947917	NA cold	1988
chic	56.5	45.00000	1988-10- 02	NA	22.000000	19.6510417	17.700521	NA cold	1988
chic	62.0	56.87500	1988-10- 01	NA	12.000000	10.555556	25.547619	NA cold	1988
chic	68.5	60.75000	1988-09- 30	NA	51.000000	12.7291667	37.405118	NA cold	1988
chic	67.5	56.87500	1988-09- 29	NA	NA	17.4947917	39.308475	NA cold	1988
chic	61.5	51.62500	1988-09- 28	NA	NA	17.5208333	19.273438	NA cold	1988
chic	71.0	56.37500	1988-09-	NA	NA	27.0079365	32.686688	NA cold	1988
chic	64.5	45.87500	27 1988-09-	NA	NA	34.8988095	46.051242	NA cold	1988
chic	61.5	48.25000	26 1988-09-	NA	NA	23.7855114	39.398809	NA cold	1988
chic	56.5	42.87500	25 1988-09-	NA	49.000000	15.4739583	29.601191	NA cold	1988
chic	60.0	42.12500	24 1988-09- 23	NA	NA	19.1754982	23.000000	NA cold	1988

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrendempca	t year
chic	70.0	66.25000	1988-09- 22	NA	NA	17.4828928	33.468591	NA cold	1988
chic	58.5	49.75000	1988-09- 21	NA	NA	9.3244048	23.845934	NA cold	1988
chic	60.0	47.25000	1988-09- 20	NA	34.000000	13.8715278	12.135385	NA cold	1988
chic	67.0	51.25000	1988-09- 19	NA	26.000000	17.0833333	19.109375	NA cold	1988
chic	76.5	62.37500	1988-09- 18	NA	43.400000	19.7604167	19.992527	NA cold	1988
chic	78.0	61.75000	1988-09- 17	NA	NA	25.2395833	24.885417	NA cold	1988
chic	65.5	59.75000	1988-09- 16	NA	55.000000	15.3854167	36.647491	NA cold	1988
chic	64.5	50.37500	1988-09- 15	NA	38.000000	19.5826540	21.497396	NA cold	1988
chic	66.0	48.87500	1988-09- 14	NA	58.000000	23.7844298	30.752629	NA cold	1988
chic	63.0	46.87500	1988-09- 13	NA	58.000000	15.2260417	25.072834	NA cold	1988
chic	75.5	64.75000	1988-09- 12	NA	33.333333	18.6770833	23.536458	NA cold	1988
chic	71.0	62.37500	1988-09- 11	NA	NA	30.2239583	33.981431	NA cold	1988
chic	67.5	39.75000	1988-09- 10	NA	77.000000	19.2656250	51.447917	NA cold	1988
chic	66.0	34.75000	1988-09- 09	NA	66.000000	17.4062500	40.382378	NA cold	1988
chic	70.0	47.12500	1988-09- 08	NA	54.000000	35.6718750	38.283755	NA cold	1988
chic	60.5	37.62500	1988-09- 07	NA	33.000000	27.4531250	35.282609	NA cold	1988
chic	55.0	39.62500	1988-09- 06	NA	30.750000	15.9114583	30.125000	NA cold	1988
chic	54.0	38.00000	1988-09- 05	NA	NA	24.2023810	12.413690	NA cold	1988
chic	63.0	52.37500	1988-09- 04	NA	28.000000	33.7678571	12.511905	NA cold	1988
chic	72.0	53.62500	1988-09- 03	NA	38.000000	32.6562500	22.760417	NA cold	1988
chic	73.0	57.87500	1988-09- 02	NA	65.000000	34.3349185	47.387455	NA cold	1988
chic	72.0	52.50000	1988-09- 01	NA	48.000000	36.8593750	44.351393	NA cold	1988
chic	70.5	49.00000	1988-08-	NA	47.400000	30.8906250	37.807446	NA cold	1988
chic	63.0	49.37500	31 1988-08- 30	NA	37.000000	20.1770833	36.426501	NA cold	1988
chic	60.0	49.00000	1988-08-	NA	29.000000	19.8677083	28.050595	NA cold	1988
chic	64.0	41.87500	29 1988-08- 28	NA	89.000000	22.0000000	19.359375	NA cold	1988

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	pm25detrendemp	cat year
chic	65.0	60.12500	1988-08- 27	NA	NA	11.1666667	33.408967	NA cold	1988
chic	66.0	45.37500	1988-08- 26	NA	41.000000	16.5104167	24.988008	NA cold	1988
chic	69.5	42.62500	1988-08- 25	NA	50.400000	21.3854167	23.851191	NA cold	1988
chic	71.0	52.37500	1988-08- 24	NA	89.000000	21.7968750	26.347799	NA cold	1988
chic	75.0	55.37500	1988-08- 23	NA	47.000000	32.7083333	19.994792	NA cold	1988
chic	70.0	59.75000	1988-08- 22	NA	39.000000	24.6927083	29.989583	NA cold	1988
chic	70.5	54.87500	1988-08- 21	NA	NA	27.2291667	22.604846	NA cold	1988
chic	73.0	62.12500	1988-08- 20	NA	31.000000	37.1145833	20.342799	NA cold	1988
chic	71.5	62.87500	1988-08- 19	NA	28.750000	14.9270833	17.886285	NA cold	1988
chic	80.5	68.37500	1988-08- 18	NA	63.000000	34.6972373	22.805952	NA hot	1988
chic	88.0	66.37500	1988-08- 17	NA	71.000000	39.3123971	23.505208	NA hot	1988
chic	86.0	73.12500	1988-08- 16	NA	69.000000	34.3906250	34.386572	NA hot	1988
chic	84.0	70.50000	1988-08- 15	NA	32.000000	38.5979864	24.906567	NA hot	1988
chic	83.0	76.62500	1988-08- 14	NA	NA	40.3489583	13.351190	NA hot	1988
chic	83.5	73.62500	1988-08- 13	NA	70.200000	35.9218750	22.171262	NA hot	1988
chic	83.5	69.62500	1988-08- 12	NA	66.000000	26.6093750	35.062500	NA hot	1988
chic	82.0	73.37500	1988-08- 11	NA	NA	28.4675325	31.126701	NA hot	1988
chic	76.5	72.00000	1988-08- 10	NA	36.000000	30.4791667	34.997619	NA cold	1988
chic	79.0	73.00000	1988-08- 09	NA	68.000000	30.9166667	34.123551	NA cold	1988
chic	84.0	70.75000	1988-08- 08	NA	67.000000	53.9670139	23.277868	NA hot	1988
chic	78.0	53.62500	1988-08- 07	NA	38.333333	41.8834135	28.630390	NA cold	1988
chic	76.5	51.75000	1988-08- 06	NA	NA	36.5625000	30.473214	NA cold	1988
chic	76.5	60.12500	1988-08- 05	NA	64.000000	36.5052083	23.125000	NA cold	1988
chic	87.0	71.50000	1988-08- 04	NA	66.000000	42.1845562	30.262390	NA hot	1988
chic	88.0	67.37500	1988-08- 03	NA	65.000000	40.6417572	27.739583	NA hot	1988
chic	89.5	70.37500	1988-08- 02	NA	67.000000	49.8494867	25.919730	NA hot	1988

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmean	n@3tmean2	no2tmean2p	0 m $25$ detrend	tempcat	year
chic	89.0	71.12500	1988-08- 01	NA	67.200000	44.1499094	25.963089	NA	hot	1988
chic	79.0	62.75000	1988-07- 31	NA	NA	42.3645833	23.854367	NA	cold	1988
chic	82.5	68.87500	1988-07- 30	NA	40.000000	48.2083333	23.151042	NA	hot	1988
chic	83.0	68.50000	1988-07- 29	NA	73.000000	59.5416667	28.183300	NA	hot	1988
chic	84.0	62.50000	1988-07- 28	NA	68.000000	49.0989583	30.944048	NA	hot	1988
chic	76.0	60.37500	1988-07- 27	NA	59.000000	32.3353714	31.333333	NA	cold	1988
chic	73.5	55.75000	1988-07- 26	NA	22.000000	23.0104167	15.630952	NA	cold	1988
chic	75.5	64.75000	1988-07- 25	NA	39.000000	38.9597538	24.762269	NA	cold	1988
chic	75.5	57.37500	1988-07- 24	NA	54.000000	35.9322917	27.782738	NA	cold	1988
chic	72.0	59.50000	1988-07- 23	NA	28.000000	27.5729167	21.401786	NA	cold	1988
chic	71.0	59.12500	1988-07- 22	NA	15.000000	26.6770833	19.305736	NA	cold	1988
chic	71.5	61.12500	1988-07- 21	NA	32.000000	25.0572917	28.563923	NA	cold	1988
chic	74.0	63.87500	1988-07- 20	NA	33.500000	27.1639493	24.102614	NA	cold	1988
chic	75.0	58.37500	1988-07- 19	NA	35.000000	26.0208333	26.169913	NA	cold	1988
chic	71.5	66.25000	1988-07- 18	NA	NA	23.1927083	31.624900	NA	cold	1988
chic	78.0	61.00000	1988-07- 17	NA	22.000000	30.4843750	18.960938	NA	cold	1988
chic	85.0	69.62500	1988-07- 16	NA	53.000000	37.7291667	21.854167	NA	hot	1988
chic	86.5	70.50000	1988-07- 15	NA	78.000000	41.9620098	34.799720	NA	hot	1988
chic	87.0	57.75000	1988-07- 14	NA	62.000000	45.9257246	25.979798	NA	hot	1988
chic	80.0	65.87500	1988-07- 13	NA	50.000000	32.6093750	22.851786	NA	cold	1988
chic	71.5	60.37500	1988-07- 12	NA	14.000000	27.5416667	21.947205	NA	cold	1988
chic	76.5	57.50000	1988-07- 11	NA	42.000000	34.8729620	24.445911	NA	cold	1988
chic	75.5	64.62500	1988-07-	NA	NA	41.4226190	21.700521	NA	cold	1988
chic	82.5	57.25000	10 1988-07-	NA	85.000000	49.0260417	38.491071	NA	hot	1988
chic	83.0	59.87500	09 1988-07-	NA	106.800000	48.8906250	44.497024	NA	hot	1988
chic	85.0	58.37500	08 1988-07- 07	NA	116.000000	58.8864254	46.273421	NA	hot	1988

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detren	dempca	at year
chic	82.5	60.62500	1988-07- 06	NA	116.000000	55.0861185	62.479984	NA	hot	1988
chic	79.5	56.75000	1988-07- 05	NA	NA	57.7484149	51.448681	NA	cold	1988
chic	73.0	49.87500	1988-07- 04	NA	51.000000	47.0758605	38.056603	NA	cold	1988
chic	69.5	47.87500	1988-07- 03	NA	NA	38.3802083	32.494048	NA	cold	1988
chic	65.0	44.37500	1988-07- 02	NA	26.600000	22.5312500	21.625000	NA	cold	1988
chic	66.0	47.37500	1988-07- 01	NA	19.000000	22.7656250	20.863095	NA	cold	1988
chic	61.5	46.12500	1988-06- 30	NA	11.000000	23.6197917	13.523810	NA	cold	1988
chic	63.0	44.37500	1988-06- 29	NA	17.000000	26.9821429	14.285455	NA	cold	1988
chic	72.5	58.50000	1988-06- 28	NA	NA	36.0189951	25.195323	NA	cold	1988
chic	64.0	42.87500	1988-06- 27	NA	21.000000	18.4293155	19.049320	NA	cold	1988
chic	63.5	44.87500	1988-06- 26	NA	20.600000	25.4166667	7.872024	NA	cold	1988
chic	84.5	57.50000	1988-06- 25	NA	NA	59.0677083	15.276786	NA	hot	1988
chic	77.5	63.25000	1988-06- 24	NA	NA	36.0260417	31.673654	NA	cold	1988
chic	70.0	50.75000	1988-06- 23	NA	26.000000	28.8452381	16.159170	NA	cold	1988
chic	82.5	67.25000	1988-06- 22	NA	84.000000	54.6411732	19.838095	NA	hot	1988
chic	86.5	66.12500	1988-06- 21	NA	81.000000	52.8759058	33.124188	NA	hot	1988
chic	88.5	70.25000	1988-06- 20	NA	88.000000	61.6770833	25.640269	NA	hot	1988
chic	82.0	55.87500	1988-06- 19	NA	NA	59.1250000	20.114583	NA	hot	1988
chic	74.5	52.87500	1988-06- 18	NA	55.000000	41.2313988	38.978940	NA	cold	1988
chic	68.5	53.25000	1988-06- 17	NA	46.000000	32.3281250	31.212121	NA	cold	1988
chic	71.0	47.12500	1988-06- 16	NA	39.000000	28.7023810	19.099297	NA	cold	1988
chic	81.5	53.62500	1988-06- 15	NA	78.000000	47.4427083	23.693759	NA	hot	1988
chic	82.0	53.62500	1988-06-	NA	88.250000	54.1083333	26.758356	NA	hot	1988
chic	78.0	48.50000	14 1988-06- 13	NA	75.000000	49.3565958	33.522367	NA	cold	1988
chic	72.0	48.25000	1988-06- 12	NA	50.000000	47.6822917	30.968750	NA	cold	1988
chic	67.0	41.62500	1988-06- 11	NA	50.000000	34.1488095	29.848958	NA	cold	1988

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2	pm25detrendem $pm25$	ocat year
chic	56.0	34.62500	1988-06- 10	NA	30.000000	26.1190476	25.774621	NA cold	1988
chic	56.0	32.37500	1988-06- 09	NA	NA	31.6834886	13.687364	NA cold	1988
chic	63.0	46.12500	1988-06- 08	NA	70.800000	31.0178571	26.315279	NA cold	1988
chic	79.0	51.12500	1988-06- 07	NA	139.000000	54.1785714	34.679770	NA cold	1988
chic	78.0	48.75000	1988-06- 06	NA	NA	50.4365942	26.053942	NA cold	1988
chic	73.0	49.12500	1988-06- 05	NA	68.000000	44.5238095	20.000000	NA cold	1988
chic	62.5	40.50000	1988-06- 04	NA	54.000000	24.4209184	23.860679	NA cold	1988
chic	58.5	37.50000	1988-06- 03	NA	28.000000	26.7763975	14.300725	NA cold	1988
chic	63.0	47.00000	1988-06- 02	NA	46.600000	31.1420068	17.333929	NA cold	1988
chic	76.5	54.00000	1988-06-	NA	142.000000	49.2016807	44.596639	NA cold	1988
chic	76.0	52.75000	01 1988-05-	NA	148.000000	50.9047619	39.352176	NA cold	1988
chic	75.5	52.00000	31 1988-05-	NA	75.000000	52.7500000	24.091636	NA cold	1988
chic	74.0	51.87500	30 1988-05-	NA	NA	46.5892857	26.588029	NA cold	1988
chic	73.0	49.75000	29 1988-05-	NA	NA	41.7559524	29.535714	NA cold	1988
chic	69.5	45.37500	28 1988-05-	NA	63.750000	41.5714286	27.336309	NA cold	1988
chic	60.5	42.37500	27 1988-05-	NA	52.000000	27.8690476	26.029390	NA cold	1988
chic	48.5	35.50000	26 1988-05-	NA	25.000000	24.0773810	18.548913	NA cold	1988
chic	53.0	28.00000	25 1988-05-	NA	26.000000	32.2948413	10.751894	NA cold	1988
chic	53.5	52.25000	24 1988-05-	NA	43.000000	19.9880952	18.720083	NA cold	1988
chic	66.0	53.62500	23 1988-05-	NA	NA	41.3888889	13.420833	NA cold	1988
chic	64.5	50.25000	22 1988-05-	NA	48.250000	41.4702381	25.908333	NA cold	1988
chic	63.0	51.75000	21 1988-05-	NA	63.000000	29.4624741	27.585859	NA cold	1988
chic	60.0	36.62500	20 1988-05-	NA	43.000000	30.5238095	23.405248	NA cold	1988
chic	55.0	44.87500	19 1988-05-	NA	35.000000	27.6726190	16.979070	NA cold	1988
chic	52.0	34.37500	18 1988-05-	NA	29.000000	26.8700828	12.298810	NA cold	1988
chic	55.5	40.25000	17 1988-05- 16	NA	NA	23.8750000	13.097222	NA cold	1988

city	tmpd	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrend	empcat y	year
chic	71.0	54.12500	1988-05- 15	NA	61.600000	35.8928571	14.829175	NA c	old 1	1988
chic	60.0	39.87500	1988-05- 14	NA	60.000000	28.4535714	21.669643	NA c	old 1	1988
chic	58.0	33.62500	1988-05- 13	NA	30.000000	30.0357143	14.563350	NA c	old 1	1988
chic	67.0	52.50000	1988-05- 12	NA	55.000000	33.7638889	29.003633	NA c	old 1	1988
chic	60.5	41.25000	1988-05- 11	NA	59.000000	24.5500000	31.017495	NA c	old 1	1988
chic	57.0	49.50000	1988-05-	NA	36.000000	19.1416667	22.024057	NA c	old 1	1988
chic	56.0	52.62500	10 1988-05-	NA	28.000000	25.7013889	12.833333	NA c	old 1	1988
chic	67.5	53.25000	09 1988-05-	NA	365.000000	48.8055556	12.249547	NA c	old 1	1988
chic	62.0	40.87500	08 1988-05-	NA	83.000000	34.0625000	27.145833	NA c	old 1	1988
chic	61.5	38.12500	07 1988-05-	NA	60.000000	26.4692029	29.361693	NA c	old 1	1988
chic	54.5	34.87500	06 1988-05-	NA	53.000000	28.1089976	26.427872	NA c	old 1	1988
chic	52.5	31.87500	05 1988-05-	NA	48.000000	33.4387077	26.079543	NA c	old 1	1988
chic	56.5	39.12500	04 1988-05-	NA	46.000000	35.2916667	26.319414	NA c	old 1	1988
chic	57.0	27.75000	03 1988-05-	NA	50.000000	35.3214286	31.283114	NA c	old 1	1988
chic	53.0	29.62500	02 1988-05-	NA	33.000000	32.2738095	32.911458	NA c	old 1	1988
chic	54.0	26.50000	01 1988-04-	NA	33.000000	22.9583333	35.923296	NA c	old 1	1988
chic	49.0	25.37500	30 1988-04-	NA	48.000000	22.3460884	31.223214	NA c	old 1	1988
chic	48.5	28.37500	29 1988-04-	NA	33.000000	26.3157350	19.777656	NA c	old 1	1988
chic	39.5	34.62500	28 1988-04-	NA	16.800000	24.9591097	10.976902	NA c	old 1	1988
chic	48.5	35.87500	27 1988-04-	NA	19.000000	22.3831522	21.613095	NA c	old 1	1988
chic	54.0	36.37500	26 1988-04-	NA	44.000000	21.5357143	28.177197	NA c	old 1	1988
chic	45.0	30.12500	25 1988-04-	NA	34.000000	24.8869048	17.963542	NA c	old 1	1988
chic	44.0	34.37500	24 1988-04-	NA	44.000000	21.3154762	15.732639	NA c	old 1	1988
chic	45.5	30.37500	23 1988-04-	NA	51.000000	25.5595238	21.323661	NA c	old 1	1988
chic	37.0	28.75000	22 1988-04-	NA	35.600000	18.4940476	39.934290	NA c	old 1	1988
chic	45.5	35.25000	21 1988-04- 20	NA	52.000000	20.9940476	33.296875	NA c	old 1	1988

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrendempca	t year
chic	40.5	14.75000	1988-04- 19	NA	52.000000	21.7738095	31.804688	NA cold	1988
chic	42.5	17.87500	1988-04- 18	NA	41.000000	30.1011905	19.442708	NA cold	1988
chic	59.0	37.87500	1988-04- 17	NA	76.000000	39.0000000	16.380208	NA cold	1988
chic	47.5	27.50000	1988-04- 16	NA	43.000000	21.7738095	25.684896	NA cold	1988
chic	41.5	25.50000	1988-04- 15	NA	27.000000	24.1123387	21.036092	NA cold	1988
chic	43.0	28.87500	1988-04- 14	NA	25.000000	26.0561224	19.623718	NA cold	1988
chic	53.0	38.50000	1988-04- 13	NA	NA	28.5833333	35.814589	NA cold	1988
chic	47.5	23.25000	1988-04- 12	NA	38.000000	27.6904762	20.755952	NA cold	1988
chic	46.0	22.87500	1988-04- 11	NA	31.000000	28.8732993	11.940901	NA cold	1988
chic	43.0	33.75000	1988-04- 10	NA	35.000000	17.4642857	16.663194	NA cold	1988
chic	52.5	37.75000	1988-04- 09	NA	53.750000	19.9464286	33.437500	NA cold	1988
chic	51.5	28.75000	1988-04- 08	NA	32.000000	18.8750000	38.178571	NA cold	1988
chic	50.0	25.25000	1988-04- 07	NA	32.000000	23.4373706	22.819180	NA cold	1988
chic	50.0	28.75000	1988-04- 06	NA	18.000000	31.2678571	11.883605	NA cold	1988
chic	69.5	57.50000	1988-04- 05	NA	42.000000	30.6666667	26.653125	NA cold	1988
chic	57.5	51.62500	1988-04- 04	NA	NA	27.4663561	23.115424	NA cold	1988
chic	53.5	44.12500	1988-04- 03	NA	20.166667	22.6666667	20.782143	NA cold	1988
chic	54.0	56.62500	1988-04- 02	NA	40.000000	9.4107143	21.702381	NA cold	1988
chic	42.0	34.25000	1988-04- 01	NA	30.000000	37.8260870	23.333333	NA cold	1988
chic	42.0	32.00000	1988-03- 31	NA	43.000000	17.0178571	32.191667	NA cold	1988
chic	40.5	27.25000	1988-03- 30	NA	33.000000	18.6369048	25.262578	NA cold	1988
chic	45.5	35.75000	1988-03- 29	NA	29.000000	13.5654762	23.291667	NA cold	1988
chic	48.5	42.62500	1988-03- 28	NA	31.000000	9.6190476	31.729167	NA cold	1988
chic	40.0	28.25000	1988-03- 27	NA	55.000000	22.6388889	15.500000	NA cold	1988
chic	39.0	18.50000	1988-03- 26	NA	59.000000	20.3969298	12.273246	NA cold	1988
chic	53.0	35.50000	1988-03- 25	NA	25.000000	22.0024155	16.995833	NA cold	1988

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrende	mpcat year
chic	56.5	54.75000	1988-03- 24	NA	52.000000	24.2896825	30.023979	NA co	ld 1988
chic	56.0	36.25000	1988-03- 23	NA	84.000000	30.3888889	24.815909	NA co	ld 1988
chic	46.5	35.00000	1988-03- 22	NA	59.666667	18.8055556	26.064312	NA co	ld 1988
chic	30.0	15.75000	1988-03- 21	NA	24.000000	36.5625000	16.662500	NA co	ld 1988
chic	28.5	15.00000	1988-03- 20	NA	8.000000	35.3541667	12.125000	NA co	ld 1988
chic	32.0	29.50000	1988-03- 19	NA	30.000000	22.0833333	18.654167	NA co	ld 1988
chic	34.5	17.37500	1988-03- 18	NA	47.000000	17.3125000	21.675000	NA co	ld 1988
chic	34.0	26.00000	1988-03- 17	NA	NA	11.8541667	27.483333	NA co	ld 1988
chic	32.5	23.50000	1988-03- 16	NA	27.833333	19.9583333	21.863095	NA co	ld 1988
chic	23.5	19.50000	1988-03- 15	NA	37.000000	21.7083333	19.515530	NA co	ld 1988
chic	24.0	17.50000	1988-03- 14	NA	27.000000	26.1250000	15.423333	NA co	ld 1988
chic	26.5	17.62500	1988-03- 13	NA	NA	27.1250000	7.733333	NA co	ld 1988
chic	43.0	28.25000	1988-03- 12	NA	23.000000	22.5416667	12.145833	NA co	ld 1988
chic	46.5	35.12500	1988-03- 11	NA	36.000000	10.5833333	32.836905	NA co	ld 1988
chic	38.0	21.37500	1988-03- 10	NA	44.000000	22.0416667	35.458333	NA co	ld 1988
chic	34.0	27.62500	1988-03- 09	NA	NA	18.5416667	21.890625	NA co	ld 1988
chic	48.5	42.75000	1988-03- 08	NA	NA	15.9565217	27.222222	NA co	ld 1988
chic	42.0	40.00000	1988-03- 07	NA	58.000000	11.2916667	29.625000	NA co	ld 1988
chic	36.0	32.50000	1988-03- 06	NA	NA	18.3750000	29.208333	NA co	ld 1988
chic	31.0	19.25000	1988-03- 05	NA	40.000000	11.8333333	44.027778	NA co	ld 1988
chic	28.5	16.25000	1988-03- 04	NA	24.200000	34.2916667	20.513889	NA co	ld 1988
chic	27.0	17.00000	1988-03- 03	NA	17.000000	37.3750000	13.806818	NA co	ld 1988
chic	35.5	24.37500	1988-03- 02	NA	33.000000	28.2083333	18.718750	NA co	ld 1988
chic	41.0	29.37500	1988-03- 01	NA	30.000000	25.7083333	22.611568	NA co	ld 1988
chic	39.5	26.37500	1988-02-	NA	29.000000	17.0000000	27.780208	NA co	ld 1988
chic	34.5	31.62500	29 1988-02- 28	NA	54.000000	19.2916667	28.236111	NA co	ld 1988

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmean	n@3tmean2	no2tmean2	m pm25 detrendempo	cat year
chic	32.0	22.75000	1988-02- 27	NA	25.666667	37.3750000	17.986111	NA cold	1988
chic	39.5	29.62500	1988-02- 26	NA	54.000000	15.0833333	28.625000	NA cold	1988
chic	20.5	9.75000	1988-02- 25	NA	NA	15.0000000	25.986111	NA cold	1988
chic	22.0	7.87500	1988-02- 24	NA	65.000000	22.2500000	24.922348	NA cold	1988
chic	27.0	13.00000	1988-02- 23	NA	44.000000	23.0000000	13.645833	NA cold	1988
chic	40.0	29.00000	1988-02- 22	NA	23.000000	17.3541667	16.796875	NA cold	1988
chic	16.5	20.12500	1988-02- 21	NA	23.333333	17.8333333	21.489583	NA cold	1988
chic	21.5	2.62500	1988-02- 20	NA	37.000000	24.2916667	14.348958	NA cold	1988
chic	32.0	29.37500	1988-02- 19	NA	77.000000	8.6666667	49.018939	NA cold	1988
chic	31.5	27.00000	1988-02- 18	NA	62.000000	9.2500000	44.310606	NA cold	1988
chic	31.0	23.12500	1988-02- 17	NA	60.000000	9.9583333	39.709368	NA cold	1988
chic	26.5	27.12500	1988-02- 16	NA	34.000000	6.4166667	29.487500	NA cold	1988
chic	26.0	11.87500	1988-02- 15	NA	29.000000	20.6666667	20.625000	NA cold	1988
chic	27.5	38.62500	1988-02- 14	NA	NA	9.8333333	30.766667	NA cold	1988
chic	7.0	3.50000	1988-02- 13	NA	42.000000	13.0833333	37.966667	NA cold	1988
chic	9.0	0.25000	1988-02- 12	NA	44.000000	20.3750000	26.800000	NA cold	1988
chic	16.0	9.00000	1988-02- 11	NA	28.000000	28.0416667	17.062500	NA cold	1988
chic	16.0	17.62500	1988-02- 10	NA	36.000000	24.8750000	29.183333	NA cold	1988
chic	17.5	7.12500	1988-02- 09	NA	38.800000	12.6666667	31.241667	NA cold	1988
chic	14.5	16.25000	1988-02- 08	NA	43.000000	12.4166667	29.954762	NA cold	1988
chic	16.5	8.37500	1988-02- 07	NA	32.000000	20.3750000	15.733333	NA cold	1988
chic	3.0	3.12500	1988-02- 06	NA	39.000000	19.8333333	13.854167	NA cold	1988
chic	4.0	10.75000	1988-02- 05	NA	37.000000	18.2083333	16.566667	NA cold	1988
chic	16.5	6.62500	1988-02- 04	NA	52.000000	13.6250000	25.327536	NA cold	1988
chic	24.0	20.12500	1988-02- 03	NA	36.000000	13.2916667	28.466667	NA cold	1988
chic	22.5	17.75000	1988-02- 02	NA	23.000000	29.0833333	16.725000	NA cold	1988

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendempca	t year
chic	28.0	21.37500	1988-02- 01	NA	13.000000	24.1250000	16.515909	NA cold	1988
chic	46.0	31.87500	1988-01- 31	NA	42.000000	19.1250000	13.845833	NA cold	1988
chic	50.5	47.50000	1988-01- 30	NA	23.000000	26.5416667	15.466667	NA cold	1988
chic	35.5	40.50000	1988-01- 29	NA	37.000000	13.4583333	33.374848	NA cold	1988
chic	21.5	19.25000	1988-01- 28	NA	46.000000	9.3333333	31.377536	NA cold	1988
chic	7.0	11.25000	1988-01- 27	NA	51.000000	7.3043478	33.983788	NA cold	1988
chic	9.0	- 0.50000	1988-01-	NA	45.000000	6.8750000	27.124729	NA cold	1988
chic	14.5	0.50000	26 1988-01-	NA	34.000000	6.7083333	18.766667	NA cold	1988
chic	24.5	2.75000 17.00000	25 1988-01-	NA	26.000000	7.5000000	16.037500	NA cold	1988
chic	21.0	25.75000	24 1988-01-	NA	23.000000	7.0000000	17.495833	NA cold	1988
chic	27.0	23.62500	23 1988-01-	NA	27.166667	6.6250000	19.928114	NA cold	1988
chic	28.5	21.12500	22 1988-01-	NA	20.000000	16.2291667	21.358333	NA cold	1988
chic	34.0	27.37500	21 1988-01-	NA	23.500000	6.5069444	21.038044	NA cold	1988
chic	35.5	34.62500	20 1988-01-	NA	39.000000	13.1250000	23.518182	NA cold	1988
chic	33.5	32.37500	19 1988-01-	NA	NA	8.7171053	28.923810	NA cold	1988
chic	37.0	32.25000	18 1988-01-	NA	26.000000	6.3541667	24.820833	NA cold	1988
chic	39.0	29.25000	17 1988-01-	NA	32.000000	14.1458333	19.229167	NA cold	1988
chic	28.0	22.75000	16 1988-01-	NA	28.000000	4.2291667	24.600000	NA cold	1988
chic	11.0	9.37500	15 1988-01-	NA	46.000000	3.4583333	32.825000	NA cold	1988
chic	12.0	- 0.27500	14 1988-01-	NA	51.000000	13.8541667	21.423485	NA cold	1988
chic	28.5	$0.37500 \\ 15.50000$	13 1988-01-	NA	43.000000	16.9375000	16.528623	NA cold	1988
chic	24.0	22.25000	12 1988-01-	NA	39.000000	6.4791667	25.883333	NA cold	1988
chic	1.5	1 69500	11 1988-01-	NA	36.333333	6.9166667	31.175000	NA cold	1988
chic	0.5	1.62500	10 1988-01-	NA	48.000000	7.3958333	26.450000	NA cold	1988
chic	8.5	$12.25000 \\ 2.75000$	09 1988-01-	NA	87.000000	4.6594203	42.885041	NA cold	1988
chic	3.0	1.87500	08 1988-01- 07	NA	74.000000	2.5208333	52.100000	NA cold	1988

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendempcat	year
chic	-5.5	-	1988-01-	NA	75.000000	7.1458333	27.665942	NA cold	1988
chic	-6.5	15.12500	06 1988-01-	NA	24.000000	13.1666667	17.220833	NA cold	1988
CIIIC	0.0	15.75000	05	1111	21.000000	10.1000001	11.220000	1111 0014	1000
chic	5.0	15 05500	1988-01-	NA	26.000000	18.2113095	12.665714	NA cold	1988
chic	24.5	15.87500 16.75000	04 1988-01- 03	NA	25.000000	8.6458333	21.722222	NA cold	1988
chic	15.0	15.37500	1988-01- 02	NA	NA	7.8125000	25.736111	NA cold	1988
chic	3.5	2 62500	1988-01-	NA	NA	19.9583333	14.138889	NA cold	1988
chic	23.5	3.62500 $7.25000$	01 1987-12- 31	NA	21.000000	16.0833333	16.770833	NA cold	1987
chic	25.5	27.62500	1987-12- 30	NA	NA	4.3458333	31.690657	NA cold	1987
chic	24.5	20.25000	1987-12- 29	NA	20.666667	19.4166667	23.804924	NA cold	1987
chic	33.5	30.75000	1987-12- 28	NA	NA	18.2291667	15.641667	NA cold	1987
chic	29.0	28.37500	1987-12- 27	NA	45.000000	10.0416667	26.691667	NA cold	1987
chic	27.5	23.75000	1987-12- 26	NA	NA	18.6250000	17.391667	NA cold	1987
chic	33.0	25.50000	1987-12- 25	NA	16.000000	15.1458333	11.133333	NA cold	1987
chic	41.0	39.75000	1987-12- 24	NA	NA	2.3958333	21.675000	NA cold	1987
chic	35.5	31.25000	1987-12- 23	NA	36.000000	3.5000000	24.966667	NA cold	1987
chic	35.0	29.12500	1987-12- 22	NA	NA	2.7391304	29.456522	NA cold	1987
chic	33.0	26.12500	1987-12- 21	NA	NA	6.8750000	21.953804	NA cold	1987
chic	34.0	21.25000	1987-12- 20	NA	25.000000	9.8125000	15.675000	NA cold	1987
chic	34.0	35.00000	1987-12- 19	NA	21.500000	2.3958333	21.945833	NA cold	1987
chic	23.0	25.75000	1987-12- 18	NA	36.000000	2.8704710	22.741667	NA cold	1987
chic	20.5	11.75000	1987-12- 17	NA	27.200000	8.0869565	23.483333	NA cold	1987
chic	27.5	16.62500	1987-12- 16	NA	36.000000	12.0833333	11.262500	NA cold	1987
chic	31.0	24.25000	1987-12- 15	NA	19.000000	9.0526316	11.124123	NA cold	1987
chic	30.0	27.50000	1987-12- 14	NA	43.000000	13.0000000	24.991667	NA cold	1987
chic	31.5	23.50000	1987-12- 13	NA	34.000000	13.1666667	13.295833	NA cold	1987
chic	35.0	23.75000	1987-12- 12	NA	29.000000	11.0416667	9.204167	NA cold	1987

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n <b>2</b> 3tmean2	no2tmean2p	om25detrendempcat	year
chic	41.0	33.62500	1987-12- 11	NA	23.000000	2.5833333	23.375000	NA cold	1987
chic	38.0	31.12500	1987-12- 10	NA	32.000000	7.2500000	17.917935	NA cold	1987
chic	49.5	34.37500	1987-12- 09	NA	21.000000	9.0416667	12.475000	NA cold	1987
chic	46.5	49.50000	1987-12- 08	NA	28.000000	2.9583333	22.649638	NA cold	1987
chic	38.5	36.25000	1987-12- 07	NA	25.000000	6.4166667	21.766667	NA cold	1987
chic	31.5	29.00000	1987-12- 06	NA	22.000000	15.2916667	21.966667	NA cold	1987
chic	27.0	24.62500	1987-12- 05	NA	24.666667	13.8750000	24.675000	NA cold	1987
chic	27.0	19.62500	1987-12- 04	NA	35.000000	12.5416667	21.457576	NA cold	1987
chic	30.5	26.25000	1987-12- 03	NA	30.000000	6.6250000	19.433333	NA cold	1987
chic	30.0	26.37500	1987-12- 02	NA	23.000000	9.2500000	15.241667	NA cold	1987
chic	32.0	24.12500	1987-12- 01	NA	28.000000	13.4782609	16.891667	NA cold	1987
chic	37.0	35.50000	1987-11- 30	NA	NA	4.1666667	13.620833	NA cold	1987
chic	39.0	34.62500	1987-11- 29	NA	12.142857	2.1250000	11.645833	NA cold	1987
chic	47.0	45.50000	1987-11- 28	NA	NA	4.4583333	17.491667	NA cold	1987
chic	40.5	39.50000	1987-11- 27	NA	NA	11.0000000	13.041667	NA cold	1987
chic	40.0	35.87500	1987-11- 26	NA	15.000000	23.5833333	7.866667	NA cold	1987
chic	40.0	36.87500	1987-11- 25	NA	10.000000	13.1250000	14.988561	NA cold	1987
chic	39.5	39.37500	1987-11- 24	NA	52.000000	8.8333333	14.596491	NA cold	1987
chic	43.5	31.75000	1987-11- 23	NA	30.333333	8.7727273	12.654167	NA cold	1987
chic	42.0	28.75000	1987-11- 22	NA	NA	11.3333333	18.966667	NA cold	1987
chic	25.5	11.50000	1987-11- 21	NA	27.000000	11.2916667	23.741667	NA cold	1987
chic	27.5	10.37500	1987-11- 20	NA	34.000000	25.0416667	13.951894	NA cold	1987
chic	37.5	26.00000	1987-11-	NA	29.000000	10.8333333	20.044643	NA cold	1987
chic	38.0	29.25000	19 1987-11- 18	NA	NA	10.3478261	15.733360	NA cold	1987
chic	50.0	35.37500	1987-11-	NA	18.333333	12.7083333	10.677989	NA cold	1987
chic	56.0	56.00000	17 1987-11- 16	NA	34.000000	17.6666667	30.385417	NA cold	1987

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	pm25detrendempca	t year
chic	50.5	32.00000	1987-11- 15	NA	51.000000	19.2500000	36.916667	NA cold	1987
chic	47.0	31.12500	1987-11- 14	NA	18.000000	9.8750000	28.666667	NA cold	1987
chic	48.5	31.37500	1987-11- 13	NA	55.000000	2.8750000	29.825181	NA cold	1987
chic	43.5	31.12500	1987-11- 12	NA	47.000000	7.0000000	31.238678	NA cold	1987
chic	35.0	23.75000	1987-11- 11	NA	31.285714	7.9583333	27.569444	NA cold	1987
chic	34.0	24.87500	1987-11- 10	NA	12.000000	27.7500000	25.354167	NA cold	1987
chic	35.0	18.50000	1987-11- 09	NA	18.000000	25.6666667	24.619792	NA cold	1987
chic	49.5	41.75000	1987-11- 08	NA	66.000000	23.2916667	25.416667	NA cold	1987
chic	45.5	29.50000	1987-11- 07	NA	46.000000	2.7500000	31.687500	NA cold	1987
chic	39.5	25.75000	1987-11- 06	NA	43.000000	9.5000000	27.254167	NA cold	1987
chic	40.5	19.87500	1987-11- 05	NA	25.500000	20.1666667	19.131439	NA cold	1987
chic	56.5	38.25000	1987-11- 04	NA	47.000000	19.1666667	19.041604	NA cold	1987
chic	66.0	49.87500	1987-11- 03	NA	NA	29.4583333	32.503788	NA cold	1987
chic	64.0	56.62500	1987-11- 02	NA	46.000000	11.5508658	35.236111	NA cold	1987
chic	58.0	58.50000	1987-11- 01	NA	30.000000	9.7445652	30.340278	NA cold	1987
chic	52.0	49.37500	1987-10- 31	NA	60.000000	12.5714286	22.510417	NA cold	1987
chic	54.5	42.87500	1987-10- 30	NA	50.666667	16.9345238	31.461806	NA cold	1987
chic	44.5	37.75000	1987-10- 29	NA	48.000000	7.2569444	33.360205	NA cold	1987
chic	38.5	28.87500	1987-10- 28	NA	31.000000	5.0713364	24.832054	NA cold	1987
chic	44.5	34.50000	1987-10- 27	NA	31.000000	10.1757246	19.588068	NA cold	1987
chic	44.5	45.37500	1987-10- 26	NA	33.000000	5.0714286	27.041667	NA cold	1987
chic	42.0	31.12500	1987-10- 25	NA	NA	11.1250000	23.892361	NA cold	1987
chic	38.5	33.50000	1987-10- 24	NA	28.400000	7.5357143	23.812500	NA cold	1987
chic	39.0	31.12500	1987-10- 23	NA	50.000000	8.3148810	25.238636	NA cold	1987
chic	43.0	34.25000	1987-10- 22	NA	25.000000	6.7532468	23.254227	NA cold	1987
chic	37.0	33.25000	1987-10- 21	NA	20.500000	6.4679487	14.982639	NA cold	1987

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	m cm25 detrende	empcat year
chic	45.5	32.37500	1987-10- 20	NA	24.000000	15.2810990	17.855655	NA co	old 1987
chic	49.5	40.25000	1987-10- 19	NA	11.000000	18.8690476	22.225694	NA co	old 1987
chic	53.5	43.75000	1987-10- 18	NA	26.857143	15.9702381	23.086806	NA co	old 1987
chic	48.0	42.12500	1987-10- 17	NA	19.000000	9.2202381	11.263889	NA co	old 1987
chic	62.5	55.12500	1987-10- 16	NA	58.000000	28.5654762	35.803571	NA co	old 1987
chic	63.0	36.00000	1987-10- 15	NA	52.000000	24.4475932	43.208333	NA co	old 1987
chic	55.5	38.12500	1987-10- 14	NA	41.000000	10.7985934	40.230676	NA co	old 1987
chic	49.5	33.37500	1987-10- 13	NA	NA	15.1156093	40.270652	NA co	old 1987
chic	42.5	30.37500	1987-10- 12	NA	41.500000	12.4146825	39.048611	NA co	old 1987
chic	39.0	25.50000	1987-10- 11	NA	32.000000	14.6333333	23.298611	NA co	old 1987
chic	42.5	32.62500	1987-10- 10	NA	28.000000	8.7380952	21.152778	NA co	old 1987
chic	53.5	31.25000	1987-10- 09	NA	38.000000	11.5636646	19.609028	NA co	old 1987
chic	41.5	26.87500	1987-10- 08	NA	41.000000	10.5181159	27.595833	NA co	old 1987
chic	39.5	26.87500	1987-10- 07	NA	36.000000	13.3154762	13.863587	NA co	old 1987
chic	45.5	38.00000	1987-10- 06	NA	24.166667	6.9729437	9.258333	NA co	old 1987
chic	60.0	41.25000	1987-10- 05	NA	48.000000	14.8130952	18.313333	NA co	old 1987
chic	52.0	30.75000	1987-10- 04	NA	50.000000	19.1488095	19.566667	NA co	old 1987
chic	42.5	29.87500	1987-10- 03	NA	52.000000	15.3928571	19.545833	NA co	old 1987
chic	47.0	32.25000	1987-10- 02	NA	52.000000	15.0282091	9.966848	NA co	old 1987
chic	55.5	46.37500	1987-10- 01	NA	44.000000	17.3035714	20.962500	NA co	old 1987
chic	55.0	35.62500	1987-09- 30	NA	26.800000	10.9097222	18.558333	NA co	old 1987
chic	61.5	52.37500	1987-09- 29	NA	34.000000	12.7321429	16.118452	NA co	old 1987
chic	69.0	61.12500	1987-09-	NA	57.000000	30.0178571	33.758333	NA co	old 1987
chic	75.5	54.00000	28 1987-09- 27	NA	49.000000	27.5476190	30.091667	NA co	old 1987
chic	65.0	53.37500	1987-09-	NA	42.000000	22.4940476	35.895833	NA co	old 1987
chic	56.5	43.00000	26 1987-09- 25	NA	55.000000	14.0178571	30.210145	NA co	old 1987

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrende	empcat	year
chic	59.5	46.25000	1987-09- 24	NA	23.000000	16.1309524	16.267361	NA co	old	1987
chic	63.0	51.00000	1987-09- 23	NA	38.000000	13.1369048	20.427083	NA co	old	1987
chic	61.0	52.50000	1987-09- 22	NA	NA	7.2639752	15.906813	NA co	old	1987
chic	55.5	54.75000	1987-09- 21	NA	29.000000	4.9523810	16.641667	NA co	old	1987
chic	57.0	50.87500	1987-09- 20	NA	NA	7.4047619	11.820833	NA co	old	1987
chic	61.0	50.25000	1987-09- 19	NA	NA	12.6428571	16.395833	NA co	old	1987
chic	63.5	60.37500	1987-09- 18	NA	25.250000	6.8928571	17.644886	NA co	old	1987
chic	67.5	64.25000	1987-09- 17	NA	30.000000	13.5238095	18.876263	NA co	old	1987
chic	69.0	66.87500	1987-09- 16	NA	33.000000	10.2047101	25.618056	NA co	old	1987
chic	72.0	66.00000	1987-09- 15	NA	NA	15.4347826	28.386171	NA co	old	1987
chic	61.5	58.00000	1987-09- 14	NA	NA	18.8958333	27.961806	NA co	old	1987
chic	59.0	53.25000	1987-09- 13	NA	NA	12.3593750	21.166667	NA co	old	1987
chic	68.0	50.37500	1987-09- 12	NA	33.500000	15.8125000	23.503472	NA co	old	1987
chic	69.0	57.00000	1987-09- 11	NA	NA	22.4402174	31.030797	NA co	old	1987
chic	67.5	57.75000	1987-09- 10	NA	NA	26.5052083	27.686896	NA co	old	1987
chic	68.5	56.12500	1987-09- 09	NA	NA	18.8333333	22.885417	NA co	old	1987
chic	72.0	63.50000	1987-09- 08	NA	NA	25.4010417	31.868056	NA co	old	1987
chic	70.5	65.62500	1987-09- 07	NA	NA	22.7869112	21.312500	NA co	old	1987
chic	75.0	66.25000	1987-09- 06	NA	60.666667	38.1979167	32.510417	NA co	old	1987
chic	73.0	57.37500	1987-09- 05	NA	NA	46.0572917	36.465278	NA co	old	1987
chic	69.0	59.12500	1987-09- 04	NA	NA	31.3385417	37.317235	NA co	old	1987
chic	60.5	49.25000	1987-09- 03	NA	24.000000	20.3020833	22.481064	NA co	old	1987
chic	61.5	50.12500	1987-09- 02	NA	17.000000	21.1614583	15.746528	NA co	old	1987
chic	64.0	49.50000	1987-09- 01	NA	38.500000	17.9322917	22.520833	NA co	old	1987
chic	62.0	46.50000	1987-08- 31	NA	25.000000	15.9218750	18.118293	NA co	old	1987
chic	72.0	59.62500	1987-08- 30	NA	35.000000	22.6227355	16.859409	NA co	old	1987

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrendemp	cat year
chic	65.5	57.00000	1987-08- 29	NA	NA	18.1562500	26.399306	NA cold	1987
chic	63.5	54.62500	1987-08- 28	NA	32.000000	21.9427083	22.045833	NA cold	1987
chic	63.5	61.37500	1987-08- 27	NA	20.000000	13.7187500	19.690025	NA cold	1987
chic	62.0	63.25000	1987-08- 26	NA	50.000000	8.2075216	22.983333	NA cold	1987
chic	59.0	58.00000	1987-08- 25	NA	36.000000	6.6656250	30.631944	NA cold	1987
chic	61.5	51.37500	1987-08- 24	NA	43.000000	12.5949836	21.585417	NA cold	1987
chic	63.0	49.00000	1987-08- 23	NA	24.000000	17.7278080	14.427778	NA cold	1987
chic	71.5	54.62500	1987-08- 22	NA	32.000000	23.8645833	12.909722	NA cold	1987
chic	76.0	72.50000	1987-08- 21	NA	43.000000	37.9427083	20.905934	NA cold	1987
chic	70.0	62.62500	1987-08- 20	NA	49.000000	30.5187500	26.729167	NA cold	1987
chic	70.0	56.75000	1987-08- 19	NA	31.666667	18.3888889	23.345644	NA cold	1987
chic	69.5	64.25000	1987-08- 18	NA	48.000000	14.0587798	31.393720	NA cold	1987
chic	73.5	60.25000	1987-08- 17	NA	39.000000	26.6763393	14.927083	NA cold	1987
chic	80.0	73.87500	1987-08- 16	NA	44.500000	32.2729592	9.338294	NA cold	1987
chic	79.5	75.87500	1987-08- 15	NA	41.000000	33.3750000	13.159269	NA cold	1987
chic	74.0	74.62500	1987-08- 14	NA	49.500000	24.2328431	18.595734	NA cold	1987
chic	75.5	69.50000	1987-08- 13	NA	63.400000	36.1979167	36.482186	NA cold	1987
chic	76.0	63.62500	1987-08- 12	NA	80.000000	37.0885417	33.645833	NA cold	1987
chic	74.5	61.87500	1987-08- 11	NA	41.000000	33.8437500	25.666667	NA cold	1987
chic	71.0	63.12500	1987-08- 10	NA	24.000000	29.4107143	20.023809	NA cold	1987
chic	72.5	64.12500	1987-08- 09	NA	29.000000	26.7552083	10.305556	NA cold	1987
chic	73.5	73.62500	1987-08- 08	NA	56.000000	23.0312500	24.600694	NA cold	1987
chic	79.5	67.37500	1987-08- 07	NA	51.285714	45.3229167	27.652778	NA cold	1987
chic	72.0	62.12500	1987-08- 06	NA	50.000000	29.5766446	32.699206	NA cold	1987
chic	72.0	55.75000	1987-08- 05	NA	15.000000	20.2916667	12.784722	NA cold	1987
chic	75.0	60.62500	1987-08- 04	NA	21.000000	20.5492788	14.288194	NA cold	1987

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detren	dempca	t year
chic	83.0	68.62500	1987-08- 03	NA	54.000000	30.9745671	29.805556	NA	hot	1987
chic	86.0	73.87500	1987-08- 02	NA	46.000000	46.6547619	15.486111	NA	hot	1987
chic	87.0	75.25000	1987-08- 01	NA	57.571429	40.2321429	21.694444	NA	hot	1987
chic	80.5	75.75000	1987-07- 31	NA	48.000000	38.4171843	28.429499	NA	hot	1987
chic	79.5	72.37500	1987-07- 30	NA	75.000000	50.3690476	27.391667	NA	cold	1987
chic	78.0	70.25000	1987-07- 29	NA	25.000000	25.0290116	33.510714	NA	cold	1987
chic	72.5	63.25000	1987-07- 28	NA	37.000000	20.2678571	29.615909	NA	cold	1987
chic	71.0	62.62500	1987-07- 27	NA	32.000000	15.7738095	30.754167	NA	cold	1987
chic	78.5	66.25000	1987-07- 26	NA	29.500000	27.7738095	20.004167	NA	cold	1987
chic	84.5	71.12500	1987-07-	NA	53.000000	43.8154762	22.654167	NA	hot	1987
chic	83.0	71.25000	25 1987-07-	NA	79.000000	35.6902174	23.213225	NA	hot	1987
chic	82.0	70.00000	24 1987-07-	NA	117.000000	59.1562500	25.981061	NA	hot	1987
chic	80.5	69.62500	23 1987-07-	NA	98.000000	45.2827381	36.354167	NA	hot	1987
chic	81.0	71.25000	22 1987-07-	NA	58.000000	58.1679121	36.628011	NA	hot	1987
chic	81.5	67.62500	21 1987-07-	NA	65.428571	40.4989583	18.458333	NA	hot	1987
chic	84.5	73.62500	20 1987-07-	NA	72.000000	47.0520833	13.371528	NA	hot	1987
chic	79.5	68.37500	19 1987-07-	NA	51.000000	47.7916667	19.190972	NA	cold	1987
chic	78.0	67.00000	18 1987-07-	NA	39.000000	42.8727679	25.000992	NA	cold	1987
chic	65.5	58.62500	17 1987-07-	NA	28.000000	31.5208333	19.961422	NA	cold	1987
chic	63.0	54.37500	16 1987-07-	NA	17.000000	23.1822917	20.879103	NA	cold	1987
chic	67.0	53.00000	15 1987-07-	NA	21.400000	21.8638393	20.562500	NA	cold	1987
chic	64.5	58.75000	14 1987-07-	NA	33.000000	9.6912202	18.666667	NA	cold	1987
chic	79.5	65.50000	13 1987-07-	NA	47.000000	29.6406250	13.017361	NA	cold	1987
chic	80.0	73.50000	12 1987-07-	NA	79.000000	29.1250000	16.548611	NA	cold	1987
chic	80.0	67.62500	11 1987-07-	NA	33.000000	23.3802083	21.625000	NA	cold	1987
chic	80.5	67.62500	10 1987-07- 09	NA	31.000000	24.9479167	20.157828	NA	hot	1987

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n <b>2</b> 3tmean2	no2tmean2p	om25detreno	tempcat	year
chic	80.5	69.25000	1987-07- 08	NA	38.000000	30.8516757	23.014795	NA	hot	1987
chic	80.0	69.12500	1987-07- 07	NA	NA	34.3426178	23.083333	NA	cold	1987
chic	80.0	69.00000	1987-07- 06	NA	33.000000	31.1118421	22.660221	NA	cold	1987
chic	72.5	69.12500	1987-07- 05	NA	NA	22.6302083	16.260417	NA	cold	1987
chic	72.5	59.50000	1987-07- 04	NA	24.000000	31.8958333	13.871528	NA	cold	1987
chic	77.5	60.37500	1987-07- 03	NA	48.000000	42.9166667	18.784722	NA	cold	1987
chic	71.0	60.25000	1987-07- 02	NA	45.500000	36.2670455	27.246112	NA	cold	1987
chic	68.5	60.62500	1987-07- 01	NA	22.000000	32.2968750	20.018579	NA	cold	1987
chic	70.5	63.00000	1987-06- 30	NA	43.000000	18.4687500	28.152778	NA	cold	1987
chic	72.5	66.00000	1987-06- 29	NA	43.000000	27.7812500	24.575000	NA	cold	1987
chic	72.0	53.62500	1987-06- 28	NA	34.000000	31.9637681	15.935326	NA	cold	1987
chic	64.5	48.25000	1987-06- 27	NA	36.000000	21.6197917	15.802083	NA	cold	1987
chic	69.0	50.75000	1987-06- 26	NA	31.800000	20.4687500	20.697917	NA	cold	1987
chic	70.5	62.00000	1987-06- 25	NA	53.000000	33.8786580	29.284906	NA	cold	1987
chic	76.0	65.75000	1987-06- 24	NA	63.000000	49.0802083	42.871221	NA	cold	1987
chic	72.5	57.75000	1987-06- 23	NA	49.000000	32.2184524	39.979167	NA	cold	1987
chic	67.0	59.00000	1987-06- 22	NA	52.000000	25.0539349	25.232435	NA	cold	1987
chic	76.0	71.12500	1987-06- 21	NA	42.000000	32.7782738	20.381944	NA	cold	1987
chic	77.0	73.62500	1987-06- 20	NA	59.833333	45.6979167	32.875000	NA	cold	1987
chic	77.5	61.37500	1987-06- 19	NA	80.000000	47.2689145	51.175000	NA	cold	1987
chic	80.5	62.75000	1987-06- 18	NA	90.000000	62.9696558	43.816667	NA	hot	1987
chic	77.0	61.00000	1987-06-	NA	71.000000	54.9618918	47.925423	NA	cold	1987
chic	75.0	52.87500	17 1987-06-	NA	46.000000	33.2013889	30.632639	NA	cold	1987
chic	73.5	48.50000	16 1987-06-	NA	28.000000	33.7540761	22.205918	NA	cold	1987
chic	83.0	68.50000	15 1987-06-	NA	43.666667	45.4218750	25.995833	NA	hot	1987
chic	77.0	62.00000	14 1987-06- 13	NA	73.000000	39.6510417	35.425000	NA	cold	1987

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrend	tempcat	year
chic	80.0	62.00000	1987-06- 12	NA	41.000000	29.2907691	24.245897	NA	cold	1987
chic	72.5	68.75000	1987-06- 11	NA	46.000000	27.7461174	32.455177	NA	cold	1987
chic	61.0	51.00000	1987-06- 10	NA	50.000000	28.7330163	29.298611	NA	cold	1987
chic	57.5	41.12500	1987-06- 09	NA	15.000000	29.6111866	15.299306	NA	cold	1987
chic	74.5	60.25000	1987-06- 08	NA	51.500000	49.2121830	23.107639	NA	cold	1987
chic	77.5	58.12500	1987-06- 07	NA	46.000000	50.7916667	15.739583	NA	cold	1987
chic	71.0	54.62500	1987-06- 06	NA	57.000000	43.7447917	34.167929	NA	cold	1987
chic	70.0	54.87500	1987-06- 05	NA	61.000000	33.1927083	35.627525	NA	cold	1987
chic	63.0	45.00000	1987-06- 04	NA	45.000000	20.4272274	25.611111	NA	cold	1987
chic	69.0	47.25000	1987-06- 03	NA	42.000000	23.3133605	21.743056	NA	cold	1987
chic	72.0	64.75000	1987-06- 02	NA	33.666667	18.3385417	37.350000	NA	cold	1987
chic	74.5	68.50000	1987-06- 01	NA	30.000000	34.1875000	28.341667	NA	cold	1987
chic	76.0	60.12500	1987-05- 31	NA	32.000000	31.4434524	22.208333	NA	cold	1987
chic	76.0	65.62500	1987-05- 30	NA	35.000000	21.8593750	33.566667	NA	cold	1987
chic	78.5	67.12500	1987-05- 29	NA	50.000000	26.1302083	36.056169	NA	cold	1987
chic	78.5	65.75000	1987-05- 28	NA	49.000000	28.9122283	32.130435	NA	cold	1987
chic	78.5	67.37500	1987-05- 27	NA	40.600000	30.5468750	25.158103	NA	cold	1987
chic	73.0	67.62500	1987-05- 26	NA	28.000000	29.8712121	26.819444	NA	cold	1987
chic	57.5	62.87500	1987-05- 25	NA	50.000000	13.0089286	19.256944	NA	cold	1987
chic	50.5	45.12500	1987-05- 24	NA	NA	18.9843750	11.673611	NA	cold	1987
chic	51.0	45.62500	1987-05- 23	NA	13.000000	10.5781250	11.714015	NA	cold	1987
chic	61.5	49.75000	1987-05- 22	NA	NA	12.3206522	12.742150	NA	cold	1987
chic	74.0	66.75000	1987-05- 21	NA	46.166667	33.2518116	26.697917	NA	cold	1987
chic	66.5	59.75000	1987-05- 20	NA	47.000000	15.2747283	21.791982	NA	cold	1987
chic	67.5	61.12500	1987-05- 19	NA	42.000000	26.0721726	28.051772	NA	cold	1987
chic	66.5	57.62500	1987-05- 18	NA	NA	24.8336730	27.201389	NA	cold	1987

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrendempca	t year
chic	70.5	63.62500	1987-05- 17	NA	63.000000	50.4481431	22.879529	NA cold	1987
chic	62.5	42.62500	1987-05- 16	NA	47.000000	31.6755359	28.177234	NA cold	1987
chic	56.5	33.87500	1987-05- 15	NA	21.571429	24.0208333	19.023359	NA cold	1987
chic	69.0	53.37500	1987-05- 14	NA	NA	38.8489583	29.545139	NA cold	1987
chic	59.0	53.00000	1987-05- 13	NA	20.000000	26.5591033	35.523359	NA cold	1987
chic	51.5	32.75000	1987-05- 12	NA	12.000000	25.3385417	18.017677	NA cold	1987
chic	71.0	58.00000	1987-05- 11	NA	81.000000	44.9862745	24.222222	NA cold	1987
chic	74.5	51.50000	1987-05- 10	NA	NA	43.0125000	20.173611	NA cold	1987
chic	69.5	43.75000	1987-05- 09	NA	56.166667	42.7968750	22.152778	NA cold	1987
chic	59.0	33.37500	1987-05- 08	NA	54.000000	16.8048246	38.774123	NA cold	1987
chic	59.5	40.87500	1987-05- 07	NA	41.000000	30.1893116	29.518281	NA cold	1987
chic	58.0	40.12500	1987-05- 06	NA	NA	32.3705739	51.285353	NA cold	1987
chic	50.5	32.62500	1987-05- 05	NA	60.000000	23.4375000	39.609217	NA cold	1987
chic	48.0	29.37500	1987-05- 04	NA	26.000000	31.2243590	23.026175	NA cold	1987
chic	45.0	35.00000	1987-05- 03	NA	20.285714	27.2023810	22.116667	NA cold	1987
chic	53.0	47.37500	1987-05- 02	NA	30.000000	24.1845238	31.508333	NA cold	1987
chic	53.5	39.00000	1987-05- 01	NA	66.000000	19.5615942	45.944444	NA cold	1987
chic	46.0	16.62500	1987-04- 30	NA	19.000000	35.4895833	18.320572	NA cold	1987
chic	64.5	34.62500	1987-04- 29	NA	61.000000	34.8522727	24.106061	NA cold	1987
chic	53.5	28.62500	1987-04- 28	NA	72.000000	22.6458333	32.036534	NA cold	1987
chic	56.5	31.62500	1987-04- 27	NA	37.333333	35.9276042	27.052083	NA cold	1987
chic	57.0	33.87500	1987-04- 26	NA	58.000000	33.1458333	33.458333	NA cold	1987
chic	51.0	32.50000	1987-04- 25	NA	30.000000	28.0625000	27.766667	NA cold	1987
chic	49.0	30.75000	1987-04- 24	NA	16.000000	27.5729167	20.661156	NA cold	1987
chic	52.0	43.75000	1987-04- 23	NA	26.000000	10.0946558	23.493056	NA cold	1987
chic	47.0	45.62500	1987-04- 22	NA	28.000000	9.0781250	23.234217	NA cold	1987

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n <b>2</b> 3tmean2	no2tmean2p	om25detrendempcar	year
chic	56.0	39.00000	1987-04- 21	NA	36.200000	20.4687500	19.177838	NA cold	1987
chic	71.0	55.75000	1987-04- 20	NA	55.000000	41.3906250	40.534722	NA cold	1987
chic	64.0	53.00000	1987-04- 19	NA	NA	32.8392857	45.159722	NA cold	1987
chic	61.5	49.87500	1987-04- 18	NA	106.000000	31.5297619	55.416667	NA cold	1987
chic	57.5	47.00000	1987-04- 17	NA	43.000000	19.3095238	44.208333	NA cold	1987
chic	54.0	49.25000	1987-04- 16	NA	28.000000	22.1071429	30.750000	NA cold	1987
chic	51.5	50.12500	1987-04- 15	NA	30.000000	17.1428571	32.020065	NA cold	1987
chic	52.5	51.50000	1987-04- 14	NA	33.000000	13.2440476	35.722222	NA cold	1987
chic	48.0	47.25000	1987-04- 13	NA	47.000000	17.7678571	37.932449	NA cold	1987
chic	49.5	43.12500	1987-04- 12	NA	37.000000	25.6785714	26.020833	NA cold	1987
chic	51.0	45.62500	1987-04- 11	NA	24.000000	28.9739583	23.145833	NA cold	1987
chic	59.5	44.87500	1987-04- 10	NA	69.000000	21.8593750	39.354167	NA cold	1987
chic	50.0	28.50000	1987-04- 09	NA	78.285714	15.4010417	57.525423	NA cold	1987
chic	40.0	31.37500	1987-04- 08	NA	19.000000	21.0104167	28.991244	NA cold	1987
chic	49.5	30.87500	1987-04- 07	NA	28.000000	25.4947917	28.246212	NA cold	1987
chic	50.0	21.25000	1987-04- 06	NA	19.000000	31.8020833	19.855745	NA cold	1987
chic	43.5	33.00000	1987-04- 05	NA	18.000000	36.0312500	12.190972	NA cold	1987
chic	35.5	17.12500	1987-04- 04	NA	26.000000	28.3906250	21.281250	NA cold	1987
chic	28.0	17.37500	1987-04- 03	NA	22.428571	16.8697917	35.481433	NA cold	1987
chic	29.5	14.62500	1987-04- 02	NA	44.000000	22.5663496	22.036534	NA cold	1987
chic	41.5	22.87500	1987-04- 01	NA	36.000000	21.4531250	19.298611	NA cold	1987
chic	30.0	19.00000	1987-03- 31	NA	43.000000	24.0448718	24.611111	NA cold	1987
chic	29.0	12.87500	1987-03- 30	NA	27.000000	30.4375000	19.655676	NA cold	1987
chic	39.5	30.12500	1987-03- 29	NA	37.000000	20.9722222	22.340278	NA cold	1987
chic	46.0	35.00000	1987-03- 28	NA	34.500000	20.1041667	31.180556	NA cold	1987
chic	43.0	38.50000	1987-03- 27	NA	47.000000	16.4375000	32.315025	NA cold	1987

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	pm25detrend	empcat	year
chic	45.0	40.25000	1987-03- 26	NA	43.000000	15.1174242	23.493687	NA o	cold	1987
chic	45.0	40.12500	1987-03- 25	NA	14.000000	14.8750000	23.204545	NA o	cold	1987
chic	57.5	46.12500	1987-03- 24	NA	58.000000	25.6250000	30.55556	NA o	cold	1987
chic	53.5	35.25000	1987-03- 23	NA	70.000000	31.4541667	33.738647	NA o	cold	1987
chic	48.0	32.37500	1987-03- 22	NA	37.857143	37.6666667	36.239583	NA o	cold	1987
chic	43.5	22.50000	1987-03- 21	NA	40.000000	38.2083333	43.903080	NA o	cold	1987
chic	43.0	16.62500	1987-03- 20	NA	28.000000	36.6250000	45.958333	NA o	cold	1987
chic	41.5	26.12500	1987-03- 19	NA	32.000000	31.6755952	33.296014	NA o	cold	1987
chic	39.5	30.25000	1987-03- 18	NA	63.000000	18.6666667	32.207799	NA o	cold	1987
chic	38.5	19.37500	1987-03- 17	NA	55.000000	27.8125000	25.986111	NA o	cold	1987
chic	37.5	17.87500	1987-03- 16	NA	27.000000	36.3722826	22.423611	NA o	cold	1987
chic	35.0	24.50000	1987-03- 15	NA	NA	36.8958333	18.034722	NA o	cold	1987
chic	37.0	33.00000	1987-03- 14	NA	49.000000	17.7291667	27.652778	NA o	cold	1987
chic	34.0	33.12500	1987-03- 13	NA	47.000000	22.4791667	31.555556	NA o	cold	1987
chic	33.5	22.37500	1987-03- 12	NA	72.000000	20.4375000	41.127525	NA o	cold	1987
chic	28.5	17.00000	1987-03- 11	NA	38.000000	19.7708333	29.906099	NA o	cold	1987
chic	25.5	13.62500	1987-03- 10	NA	19.571429	28.3750000	19.747163	NA o	cold	1987
chic	31.0	14.00000	1987-03- 09	NA	25.000000	29.8333333	12.469381	NA o	cold	1987
chic	54.5	33.62500	1987-03-	NA	61.000000	31.1666667	39.045139	NA o	cold	1987
chic	59.5	36.87500	08 1987-03- 07	NA	49.000000	25.4166667	41.743056	NA o	cold	1987
chic	48.5	39.50000	1987-03- 06	NA	76.000000	9.0760870	47.169988	NA o	cold	1987
chic	44.0	34.37500	1987-03-	NA	30.000000	13.5833333	29.388889	NA o	cold	1987
chic	38.0	26.75000	05 1987-03-	NA	39.428571	5.5000000	38.409722	NA o	cold	1987
chic	36.5	14.87500	04 1987-03-	NA	32.000000	19.7500000	28.578208	NA o	cold	1987
chic	41.0	27.87500	03 1987-03-	NA	36.000000	20.8125000	21.631944	NA o	cold	1987
chic	39.0	28.37500	02 1987-03- 01	NA	15.000000	15.6208333	18.614583	NA o	cold	1987

city	$\operatorname{tmpd}$	$\operatorname{dewptp}$	date	pm25	pm10tmea	n@3tmean2	no2tmean2p	om25detrendempca	t year
chic	40.0	38.37500	1987-02- 28	NA	31.000000	6.8750000	23.458333	NA cold	1987
chic	39.5	28.25000	1987-02- 27	NA	56.000000	14.2083333	33.691964	NA cold	1987
chic	36.0	18.50000	1987-02- 26	NA	29.000000	16.0000000	32.854167	NA cold	1987
chic	34.5	21.87500	1987-02- 25	NA	48.000000	17.1250000	38.137716	NA cold	1987
chic	31.5	25.25000	1987-02- 24	NA	48.000000	13.2291667	36.477437	NA cold	1987
chic	35.5	24.75000	1987-02- 23	NA	47.000000	13.0416667	32.562500	NA cold	1987
chic	35.5	25.12500	1987-02- 22	NA	46.000000	10.8333333	21.861111	NA cold	1987
chic	38.0	24.50000	1987-02- 21	NA	59.000000	4.5833333	41.381944	NA cold	1987
chic	32.5	17.00000	1987-02- 20	NA	69.857143	8.5000000	51.253247	NA cold	1987
chic	34.0	19.62500	1987-02- 19	NA	49.000000	15.5018116	44.480676	NA cold	1987
chic	31.5	20.00000	1987-02- 18	NA	27.000000	24.1702899	29.860119	NA cold	1987
chic	31.5	20.25000	1987-02- 17	NA	23.000000	24.9375000	19.180556	NA cold	1987
chic	24.0	18.12500	1987-02- 16	NA	14.000000	24.1875000	15.854167	NA cold	1987
chic	23.5	10.12500	1987-02- 15	NA	12.000000	28.1041667	10.490972	NA cold	1987
chic	31.5	22.00000	1987-02- 14	NA	24.857143	11.1666667	21.243056	NA cold	1987
chic	34.5	30.87500	1987-02- 13	NA	39.000000	10.3695652	33.430858	NA cold	1987
chic	34.0	24.75000	1987-02- 12	NA	84.000000	7.6875000	34.993056	NA cold	1987
chic	39.5	29.37500	1987-02- 11	NA	83.000000	8.1215415	42.001125	NA cold	1987
chic	35.0	27.37500	1987-02-	NA	36.000000	8.3125000	31.327459	NA cold	1987
chic	24.5	17.37500	10 1987-02- 09	NA	42.000000	9.2083333	25.579861	NA cold	1987
chic	32.5	3.50000	1987-02- 08	NA	18.250000	24.9375000	10.646825	NA cold	1987
chic	40.5	35.75000	1987-02-	NA	44.000000	5.7500000	25.090278	NA cold	1987
chic	37.0	30.37500	07 1987-02-	NA	63.000000	6.4148551	27.994709	NA cold	1987
chic	29.5	27.25000	06 1987-02-	NA	70.000000	5.7291667	38.909091	NA cold	1987
chic	31.5	24.25000	05 1987-02-	NA	37.000000	10.5000000	29.999275	NA cold	1987
chic	34.0	26.25000	04 1987-02- 03	NA	59.000000	8.0416667	20.146149	NA cold	1987

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmear	n@3tmean2	no2tmean2p	om25detrendem	pcat year
chic	36.5	34.00000	1987-02- 02	NA	41.166667	6.0416667	30.784722	NA cold	1987
chic	41.0	32.25000	1987-02- 01	NA	NA	8.0416667	21.701389	NA cold	1987
chic	27.5	26.50000	1987-01- 31	NA	36.000000	10.3750000	25.267361	NA cold	1987
chic	32.5	24.12500	1987-01- 30	NA	59.000000	8.7916667	19.798611	NA cold	1987
chic	29.5	32.87500	1987-01- 29	NA	35.000000	2.9166667	28.145290	NA cold	1987
chic	29.5	18.25000	1987-01- 28	NA	47.000000	6.8750000	29.129428	NA cold	1987
chic	17.5	17.75000	1987-01- 27	NA	39.333333	6.0000000	30.693056	NA cold	1987
chic	16.0	4.75000	1987-01- 26	NA	71.000000	4.5833333	32.421429	NA cold	1987
chic	9.5	5.25000	1987-01- 25	NA	NA	6.6666667	26.304167	NA cold	1987
chic	2.0	-	1987-01- 24	NA	38.000000	10.0833333	18.691667	NA cold	1987
chic	2.5	5.62500 - 12.25000	1987-01- 23	NA	55.000000	14.6250000	14.662500	NA cold	1987
chic	19.5	7.37500	1987-01- 22	NA	52.000000	10.5000000	16.987978	NA cold	1987
chic	22.0	20.62500	1987-01- 21	NA	32.857143	8.9130435	24.520833	NA cold	1987
chic	20.5	11.50000	1987-01- 20	NA	38.000000	7.2500000	21.610211	NA cold	1987
chic	23.0	15.75000	1987-01- 19	NA	32.000000	14.8750000	17.174094	NA cold	1987
chic	17.5	11.12500	1987-01- 18	NA	39.000000	6.3750000	21.033333	NA cold	1987
chic	27.0	24.75000	1987-01- 17	NA	NA	5.8333333	20.708333	NA cold	1987
chic	25.0	21.50000	1987-01- 16	NA	19.000000	7.9166667	19.466667	NA cold	1987
chic	32.5	24.25000	1987-01- 15	NA	28.833333	4.4583333	18.871309	NA cold	1987
chic	37.5	36.37500	1987-01- 14	NA	43.000000	4.2083333	32.194444	NA cold	1987
chic	34.0	32.25000	1987-01- 13	NA	53.000000	4.9583333	38.061418	NA cold	1987
chic	34.5	26.00000	1987-01- 12	NA	26.000000	8.0000000	33.020833	NA cold	1987
chic	29.5	20.12500	1987-01-	NA	22.000000	17.5416667	13.701389	NA cold	1987
chic	32.5	27.75000	11 1987-01- 10	NA	NA	4.9583333	19.541667	NA cold	1987
chic	26.5	29.00000	1987-01- 09	NA	33.285714	4.5000000	23.388889	NA cold	1987
chic	29.0	22.00000	1987-01- 08	NA	36.000000	11.2916667	17.037231	NA cold	1987

city	$\operatorname{tmpd}$	dewptp	date	pm25	pm10tmea	n@3tmean2	no2tmean2pr	n25detrer	ndempc	at year
chic	34.5	26.75000	1987-01- 07	NA	41.000000	9.2916667	20.581710	NA	cold	1987
chic	40.0	35.12500	1987-01- 06	NA	48.000000	5.8333333	25.772331	NA	cold	1987
chic	32.0	28.87500	1987-01- 05	NA	NA	4.7500000	30.333333	NA	cold	1987
chic	29.0	28.62500	1987-01- 04	NA	47.000000	4.3750000	30.434524	NA	cold	1987
chic	33.0	27.37500	1987-01- 03	NA	34.166667	3.3333333	23.815476	NA	cold	1987
chic	33.0	29.87500	1987-01- 02	NA	NA	3.3043478	23.190994	NA	cold	1987
chic	31.5	31.50000	1987-01- 01	NA	34.000000	4.2500000	19.988095	NA	cold	1987

```
summarize(years, pm25 = mean(pm25, na.rm = TRUE),
o3 = max(o3tmean2, na.rm = TRUE),
no2 = median(no2tmean2, na.rm = TRUE))
```

year	pm25	о3	no2
1987	NaN	62.96966	23.49369
1988	NaN	61.67708	24.52296
1989	NaN	59.72727	26.14062
1990	NaN	52.22917	22.59583
1991	NaN	63.10417	21.38194
1992	NaN	50.82870	24.78921
1993	NaN	44.30093	25.76993
1994	NaN	52.17844	28.47500
1995	NaN	66.58750	27.26042
1996	NaN	58.39583	26.38715
1997	NaN	56.54167	25.48143
1998	18.26467	50.66250	24.58649
1999	18.49646	57.48864	24.66667
2000	16.93806	55.76103	23.46082
2001	16.92632	51.81984	25.06522
2002	15.27335	54.88043	22.73750
2003	15.23183	56.16608	24.62500
2004	14.62864	44.48240	23.39130
2005	16.18556	58.84126	22.62387

## 1.8 %>%

month	pm25	03	no2
1	17.76996	28.22222	25.35417
2	20.37513	37.37500	26.78034
3	17.40818	39.05000	26.76984
4	13.85879	47.94907	25.03125
5	14.07420	52.75000	24.22222
6	15.86461	66.58750	25.01140
7	16.57087	59.54167	22.38442
8	16.93380	53.96701	22.98333
9	15.91279	57.48864	24.47917
10	14.23557	47.09275	24.15217
11	15.15794	29.45833	23.56537
12	17.52221	27.70833	24.45773

## 1.9 dplyr

dplyr Once you learn the dplyr "grammar" there are a few additional benefits dplyr can work with other data frame "backends" data.table for large fast tables SQL interface for relational databases via the DBI package