



Creating Dashboard Using Tableau

Week 7

India Air Quality Index



Winter Internship
By Arijit Dhali

Data Processing

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	stn_code	sampling_state	location	agency	type	so2	no2	rspm	spm	location_r	pm2_5	date	
2	150	February	Andhra Pr	Hyderabad	NA	Residential	4.8	17.4	NA	NA	NA	2/1/1990	
3	151	February	Andhra Pr	Hyderabad	NA	Industrial	3.1	7	NA	NA	NA	2/1/1990	
4	152	February	Andhra Pr	Hyderabad	NA	Residential	6.2	28.5	NA	NA	NA	2/1/1990	
5	150	March	M Andhra Pr	Hyderabad	NA	Residential	6.3	14.7	NA	NA	NA	3/1/1990	
6	151	March	M Andhra Pr	Hyderabad	NA	Industrial	4.7	7.5	NA	NA	NA	3/1/1990	
7	152	March	M Andhra Pr	Hyderabad	NA	Residential	6.4	25.7	NA	NA	NA	3/1/1990	
8	150	April	M0 Andhra Pr	Hyderabad	NA	Residential	5.4	17.1	NA	NA	NA	4/1/1990	
9	151	April	M0 Andhra Pr	Hyderabad	NA	Industrial	4.7	8.7	NA	NA	NA	4/1/1990	
10	152	April	M0 Andhra Pr	Hyderabad	NA	Residential	4.2	23	NA	NA	NA	4/1/1990	
11	151	May	M05 Andhra Pr	Hyderabad	NA	Industrial	4	8.9	NA	NA	NA	5/1/1990	
12	152	May	M05 Andhra Pr	Hyderabad	NA	Residential	3.6	18.6	NA	NA	NA	5/1/1990	
13	150	June	M0 Andhra Pr	Hyderabad	NA	Residential	3.9	14.1	NA	133	NA	6/1/1990	
14	151	June	M0 Andhra Pr	Hyderabad	NA	Industrial	5.6	11.8	NA	82	NA	6/1/1990	
15	152	June	M0 Andhra Pr	Hyderabad	NA	Residential	3.3	19.3	NA	111	NA	6/1/1990	
16	150	July	M07 Andhra Pr	Hyderabad	NA	Residential	3.9	8.2	NA	118	NA	7/1/1990	
17	152	July	M07 Andhra Pr	Hyderabad	NA	Residential	3.5	12.1	NA	135	NA	7/1/1990	
18	151	July	M07 Andhra Pr	Hyderabad	NA	Industrial	7.9	10.2	NA	80	NA	7/1/1990	
19	150	August	N Andhra Pr	Hyderabad	NA	Residential	4	9.9	NA	179	NA	8/1/1990	
20	151	August	N Andhra Pr	Hyderabad	NA	Industrial	12.4	11.5	NA	58	NA	8/1/1990	
21	152	August	N Andhra Pr	Hyderabad	NA	Residential	4	12.3	NA	99	NA	8/1/1990	
22	150	September	Andhra Pr	Hyderabad	NA	Residential	6.3	11.5	NA	270	NA	9/1/1990	
23	151	September	Andhra Pr	Hyderabad	NA	Industrial	44.8	13.7	NA	97	NA	9/1/1990	
24	152	September	Andhra Pr	Hyderabad	NA	Residential	8.1	17.8	NA	167	NA	9/1/1990	
25	150	October	Andhra Pr	Hyderabad	NA	Residential	7.7	11.3	NA	145	NA	10/1/1990	

Uncleaned Data



50%
Size Reduction

	A	B	C	D	E	F	G	H	I	J
1	state	location	type	so2	no2	rspm	spm	pm2_5	date	year
2	Andhra Pr	Hyderabad	Industrial	3.1	7	130.3	82		2/1/1990	1990
3	Andhra Pr	Hyderabad	Industrial	4.7	7.5	130.3	82		3/1/1990	1990
4	Andhra Pr	Hyderabad	Industrial	4.7	8.7	130.3	82		4/1/1990	1990
5	Andhra Pr	Hyderabad	Industrial	4	8.9	130.3	82		5/1/1990	1990
6	Andhra Pr	Hyderabad	Industrial	5.6	11.8	130.3	82		6/1/1990	1990
7	Andhra Pr	Hyderabad	Industrial	7.9	10.2	130.3	80		7/1/1990	1990
8	Andhra Pr	Hyderabad	Industrial	12.4	11.5	130.3	58		8/1/1990	1990
9	Andhra Pr	Hyderabad	Industrial	44.8	13.7	130.3	97		9/1/1990	1990
10	Andhra Pr	Hyderabad	Industrial	20.6	13.6	130.3	75		10/1/1990	1990
11	Andhra Pr	Hyderabad	Industrial	11.2	18.6	130.3	61		11/1/1990	1990
12	Andhra Pr	Hyderabad	Industrial	28.7	16.2	130.3	77		1/1/1991	1991
13	Andhra Pr	Hyderabad	Industrial	20.4	12.6	130.3	93		2/1/1991	1991
14	Andhra Pr	Hyderabad	Industrial	4.8	8.4	130.3	85		3/1/1991	1991
15	Andhra Pr	Hyderabad	Industrial	21.2	11.5	130.3	108		4/1/1991	1991
16	Andhra Pr	Hyderabad	Industrial	17.7	14	130.3	121		5/1/1991	1991
17	Andhra Pr	Hyderabad	Industrial	3.1	7.5	130.3	84		6/1/1991	1991
18	Andhra Pr	Hyderabad	Industrial	7.9	9.2	130.3	67		7/1/1991	1991
19	Andhra Pr	Hyderabad	Industrial	7.8	9.8	130.3	71		8/1/1991	1991
20	Andhra Pr	Hyderabad	Industrial	13.3	11.9	130.3	56		9/1/1991	1991
21	Andhra Pr	Hyderabad	Industrial	12.3	12.2	130.3	83		10/1/1991	1991
22	Andhra Pr	Hyderabad	Industrial	14.6	12.9	130.3	103		11/1/1991	1991
23	Andhra Pr	Hyderabad	Industrial	11.2	18.4	130.3	129		12/1/1991	1991
24	Andhra Pr	Hyderabad	Industrial	24.5	11.5	130.3	118		1/1/1992	1992
25	Andhra Pr	Hyderabad	Industrial	14.4	10.4	130.3	122		2/1/1992	1992

Cleaned Data

Data has been processed using Pandas



AIR QUALITY DASHBOARD

State

(All)

Year

< 2013 >

Year [Only For AQI Index]

1987

2015

Location

Healthy Poor Unhealthy

Andhra Pradesh Arunachal Pradesh Assam Bihar Chandigarh Chhattisgarh
Dadra & Nagar Haveli Daman & Diu Delhi Goa Gujarat Haryana
Himachal Pradesh Jammu & Kashmir Jharkhand Karnataka Kerala
Madhya Pradesh Maharashtra Manipur Meghalaya Mizoram Nagaland
Odisha Puducherry Punjab Rajasthan Sikkim Tamil Nadu Telangana ...

NO2

974,740

SO2

407,019

SPM

10,357,941

RSPM

4,934,536

AQI Index

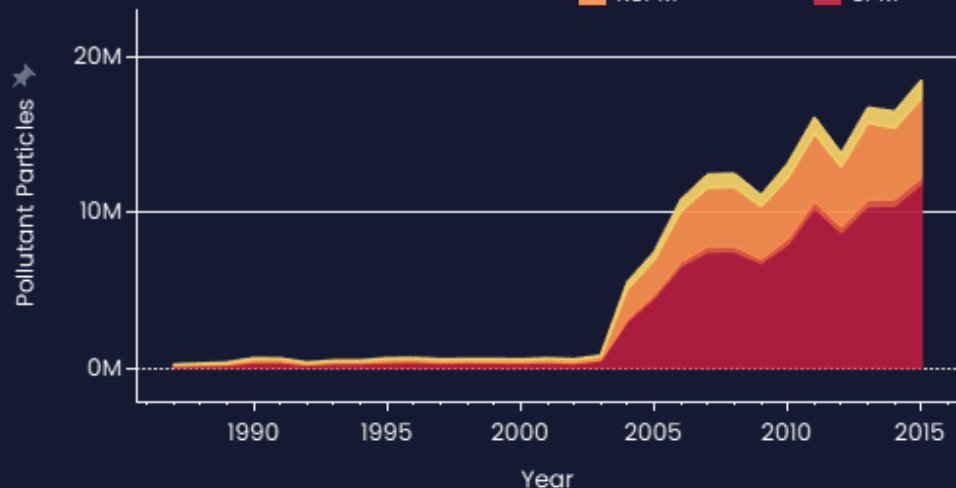
Measure Names

NO2

SO2

RSPM

SPM



PPM

Type

Sensitive

RIRUO

Residential

Industrial

SO2



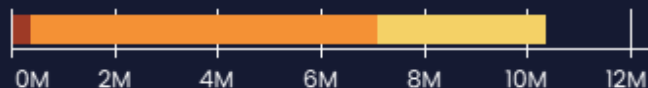
SO2

NO2



NO2

SPM



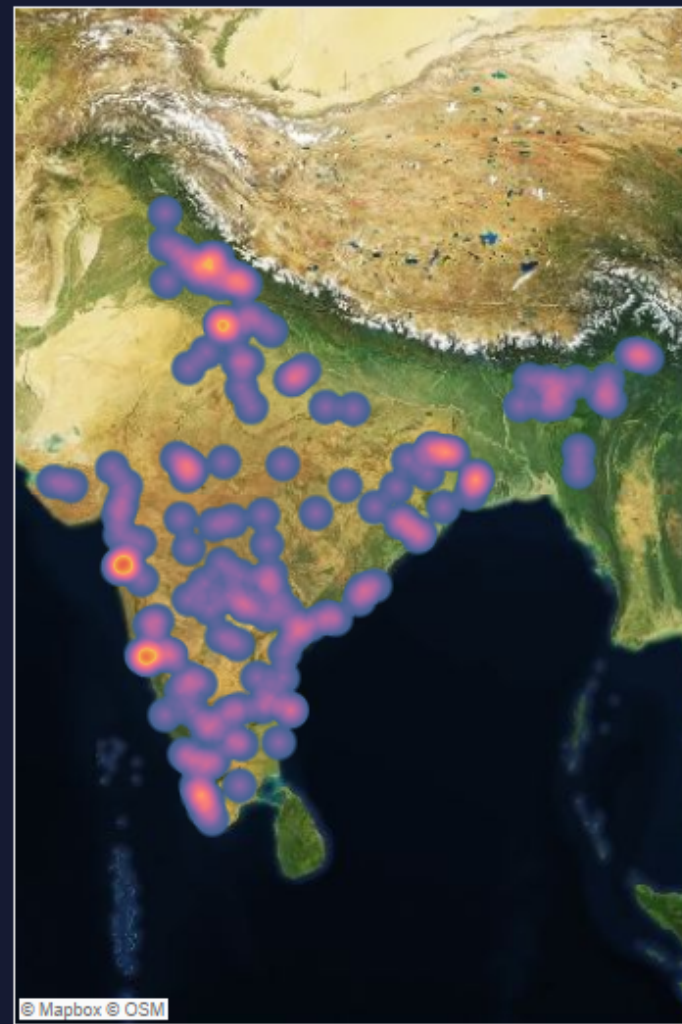
SPM

RSPM



RSPM

AQI Density Map



© Mapbox © OSM



PrepInsta

Thank You

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