

*System of Air Quality And Weather Forecasting And Research (SAFAR-India)  
Indian Institute of Tropical Meteorology (IITM), Pune  
& IMD, New Delhi  
Earth System Science Organization (ESSO)*

**SAFAR -Air Quality Forecast for Diwali-2017**

**PUNE**

(Valid for: 21<sup>st</sup> Oct – 23<sup>rd</sup> Oct., 2017)

SAFAR forecasted levels (upto next 3 days) of air quality for Pune Region is based on high-resolution atmospheric chemistry transport prediction model on supercomputer with a feedback of 10 air quality Monitoring stations in and around PUNE. All data presented here are 24hr Average for which NAQI is provided. Forecast will be updated every 24hr for better accuracy with latest input.

**Highlights:**

1. On Diwali day PM<sub>2.5</sub> was recorded to be 82.75µg/m<sup>3</sup> which falls under MODERATE category of AQI and on post Diwali Day it is recorded to be 138.59 µg/m<sup>3</sup> which falls under Very poor category of AQI. On Diwali Day there was around 2°C drop in the minimum temperature as compared to previous days. This drop in the minimum temperature along with calm winds resulted in the accumulation of pollutants emitted from firecrackers.
2. The highest levels of PM<sub>10</sub> and PM<sub>2.5</sub> were recorded between 10PM to 3AM on the night of 19-20, October.
3. Air quality is likely to improve from 22<sup>nd</sup> October.
4. MOST POLLUTED TO CLEANEST AREA in Pune:
  1. **Katraj** -HIGHEST Pollution
  2. **Shivajinagar**
  3. **Hadapsar**
  4. **Lohegaon**
  5. **Bhumkar Chowk**
  6. **Alandi**
  7. **Bhosari**
  8. **Nigdi**
  9. **Manjri**
  10. **Pashan**-LEAST Pollution

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<b>SAFAR- 3 Day-WIND SPEED and WIND DIERCTION Forecast</b>			
	<b>21<sup>st</sup> Oct</b>	<b>22<sup>nd</sup> Oct</b>	<b>23<sup>rd</sup> Oct</b>
<b>WIND DIRECTION</b>	<b>SW</b>	<b>SW</b>	<b>SW</b>
<b>WIND SPEED (km/h)</b>	<b>1.6</b>	<b>1.4</b>	<b>1.5</b>
<b>R. HUMIDITY (%)</b>	<b>49</b>	<b>48</b>	<b>60</b>

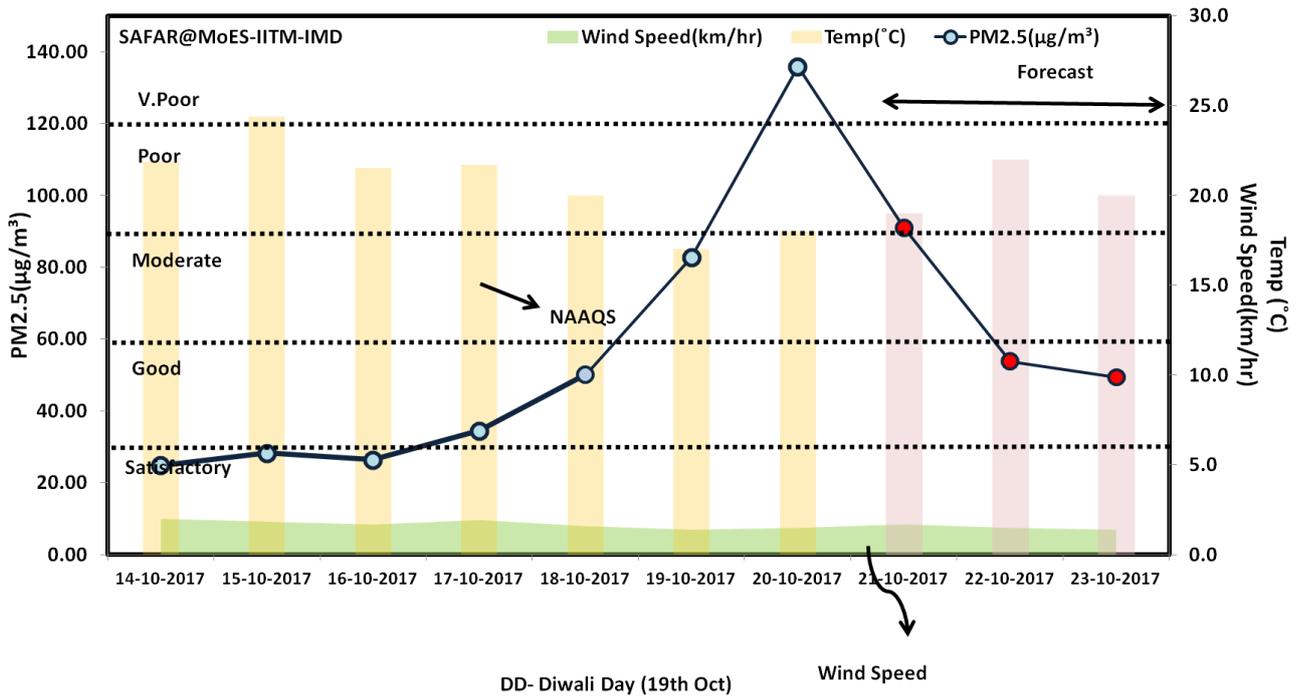
<b>SAFAR-AQ 3 Day-Forecast (updated 24h @ 5PM IST)</b>			
<b>AIR QUALITY INDEX (AQI) ONE INDEX ,ONE DELHI</b>	<b>21<sup>st</sup> Oct</b>	<b>22<sup>nd</sup> Oct</b>	<b>23<sup>rd</sup> Oct</b>
<b>AQI</b>	<b>203</b>	<b>90</b>	<b>82</b>
<i>Please Credit to: SAFAR@MoES-IITM-IMD</i>			

\*Note: AQI is a unit less number

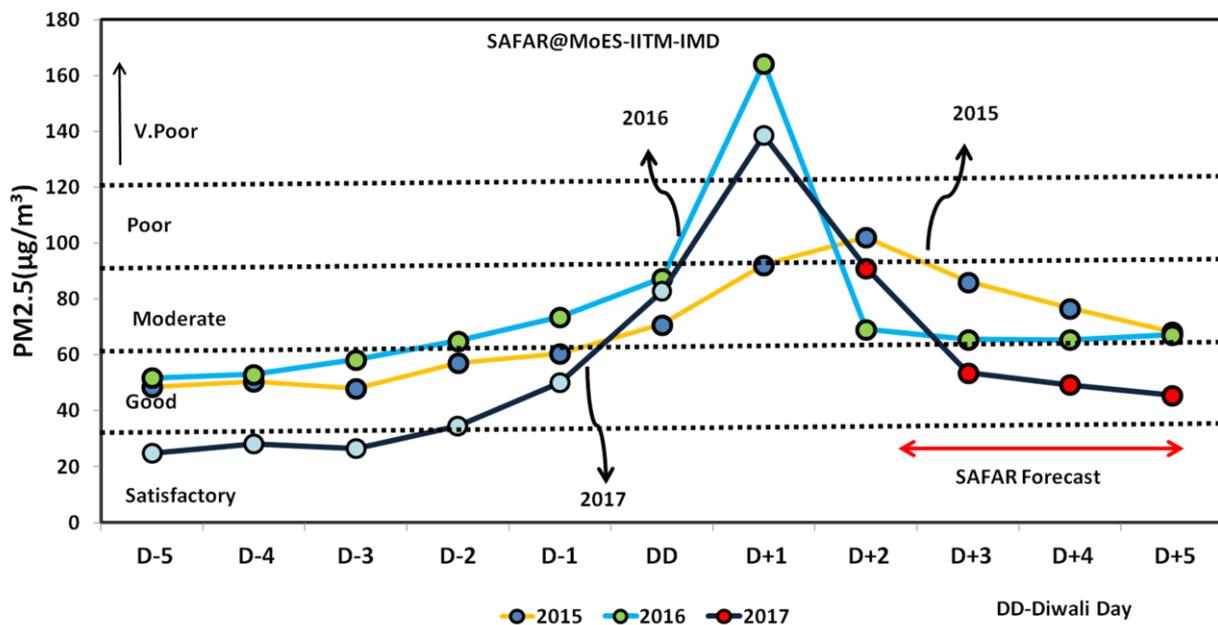
### **Advisory**

<b>Air Quality Index (AQI)</b>	<b>Health Advisory (Cautions)</b>	<b>Health Effect Statement</b>
<b>Satisfactory (51-100)</b>	Air pollution poses little or no risk.	Minor breathing discomfort to sensitive people
<b>Poor (201-300)</b>	People with heart or lung disease, older adults, and children should reduce prolonged or heavy exertion and outdoor activity.	Increasing likelihood of respiratory symptoms in sensitive individuals. Children and elderly at risk. Everyone may begin to experience some level of discomfort.

Pune PM2.5 ( $\mu\text{g}/\text{m}^3$ ) - 2017



Pune PM2.5 ( $\mu\text{g}/\text{m}^3$ ) - Comparison of 2015 vs 2016 vs 2017



**DD=Diwali Day**  
 DD(2015)=11<sup>th</sup> Nov  
 DD(2016)=30<sup>th</sup> Oct  
 DD(2017)=19<sup>th</sup> Oct

**Note:**  
 D-5 means five days prior to DD  
 D+5 means five days after DD