

SAFAR-India (AHMEDABAD)

Indian Institute of Tropical Meteorology, Pune
Ministry of Earth Sciences

Air Quality Forecast for Diwali-2021

The Air Quality Forecast for the Diwali-2021 period is issued based on the indigenously developed SAFAR-Air Quality Forecasting Framework. Forecast is based on following two model scenarios:

- (1) Additional Firecracker emissions: Nil (0%)
 - (2) Additional Firecracker emissions: 50% of 2019 emissions.
- Above emissions are in addition to standard background emissions.

1. During this period, the most dominating factor controlling Ahmedabad air quality is calm surface wind and low temperature that helps worsening of air quality.
2. In case of 50% firecracker emission scenario, AQI is predicted to touch very poor category in Ahmedabad for a brief period on 5th November 2021 but it is expected to be back to poor category on 6th Nov.
3. Early morning hours of 5th Nov (0100 hrs to 0600 hrs) are likely to be the hot spot hours.
4. The most polluted and least polluted locations in Ahmedabad: Pirana and GIFT City respectively.

Date	SAFAR-AQI Forecast-Ahmedabad			
	2 nd Nov.	3 th Nov.	4 th Nov.	5 th Nov.
	50% fire cracker emissions			
CONCENTRATION PM _{2.5} (µg/m ³)	85	87	111	192
AIR QUALITY INDEX (AQI)	183	190	269	356
	0% firecracker emissions			
CONCENTRATION PM _{2.5} (µg/m ³)	85	87	94	88
AIR QUALITY INDEX (AQI)	183	190	211	193

