



Dust and Sandstorms Events in November 2025

Executive Summary:

This report provides a comprehensive assessment of dust and sandstorm (SDS) activity across Saudi Arabia during November 2025, benchmarked against the 21-year climatological average (2003–2024). Dust activity during the month was exceptionally low, with only 5 dust hours recorded across 2 dusty days, representing a dramatic 94% reduction in dust duration and an 82% decline in dust frequency relative to the long-term mean of 86 hours over 11 days.

Spatial analysis reveals a near-complete suppression of SDS activity across the Kingdom. Historically active regions including Riyadh, Al-Ahsa, Dammam, Dhahran, Arar, Gassim, Hafar Al-Batin/Qaisumah, and Turaif recorded zero SDS events in November 2025. Only a minimal and isolated pocket near Rafha displayed 1 SDS day, reflecting extremely localized boundary-layer dust transport. No other station across the Central, Eastern, Southern, or Western regions exhibited measurable activity.

The classification of SDS event types further shows a sharp decline in Blowing Dust (BLDU) with a 94% reduction, while Dust Storms (DS) and Sandstorms (SS) remained absent in both the historical and 2025 datasets. This uniform decrease indicates a widespread weakening of dust-lifting mechanisms driven by suppressed Shamal winds, weakened synoptic forcing, higher soil moisture, and stabilized surface conditions following early-season rainfall.

November 2025 stands out as one of the calmest Novembers in the climatological record. These findings underscore the evolving SDS dynamics in late autumn and provide essential insights for hazard preparedness, atmospheric monitoring, and early-warning system operations in Saudi Arabia.

Keywords: Dust storms, Blowing dust, November 2025, Saudi Arabia, Dust anomaly, Shamal winds, Atmospheric stability.