



Dust and Sandstorms Events in June 2024

Executive Summary:

This report presents an in-depth analysis of dust and sandstorm (SDS) events across Saudi Arabia during June 2024, benchmarked against the 21-year climatological average (2003–2023). A total of 65 dust hours distributed over 23 days were recorded, reflecting a 76% decrease in dust hours and a 76% decrease in dust days compared to the long-term mean (522 hours; 96 days). Regional variations were pronounced: the Eastern Province (notably Al-Ahsa and Dammam) exhibited limited activity, with Al-Ahsa (2 d; 11 h, –9 d; –85 h) and Dammam (1 d; 8 h, –7 d; –47 h), while Dhahran dropped to zero (–7 d; –49 h). Hafar Al-Batin reported (1 d; 3 h, –5 d; –25 h). The Central Region remained largely below normal: Riyadh (1 d; 2 h, –6 d; –30 h), Al-Kharj (2 d; 2 h, –3 d; –26 h), and Al-Dawadmi (1 d; 3 h, –2 d; –81 h). Al-Qassim had no activity (–2 d; –8 h). The Northern Region saw almost no dust activity, with Arar (–4 d; –17 h), Rafha (–4 d; –22 h). The Western Region reported minimal events: Jeddah (1 d; 2 h, near normal), Yanbu (1 d; 2 h, –2 d; –8 h), and Al-Madinah (1 d; 1 h, –1 h). Al-Wajh had no events (–1 d; –1 h). In the Southern and Southwestern Regions, Jizan with a positive anomaly (8 d; 19 h, +4 d; +7 h), making it the national hotspot for June. Elsewhere, Sharurah (2 d; 4 h, –2 d; –7 h) and Taif (1 d; 4 h, –1 d; –1 h) recorded limited events, while Najran, Bisha, Khamis Mushait, and Abha saw no activity. These results emphasize that June 2024 was exceptionally calm compared to climatology, with national totals showing more than three-quarters reductions.