



White Sands Missile Range Southern Basin

Seven-Day Forecast

Weather Forecast Office, Building 1830

Phone: (575) 678-2462/678-2488

Last Updated 0850L May 30 2023 by E. Webb










WSMR WEATHER WARNING INFO

NO CURRENT WEATHER WARNINGS

[Click for Warning Details](#)

Temperatures in degrees Fahrenheit. Winds in miles per hour.

		Tuesday, May 30 2023						
	MOSTLY CLEAR	HIGH	WIND DIRECTION	WIND SPEED	PEAK WIND	PRECIP CHANCES	T'STORM CHANCES	
			94	S-SSW	5-13	28	0%	0%
		Seasonably warm and breezy. Some high level clouds moving in during the afternoon.						
		Wednesday, May 31 2023						
	MOSTLY CLEAR TO PARTLY CLOUDY	LOW	HIGH	WIND DIRECTION	WIND SPEED	PEAK WIND	PRECIP CHANCES	T'STORM CHANCES
		64	92	S-SW	6-15	35	0%	0%
		Mostly clear - partly cloudy (high clouds), warm, and breezy throughout the day. Isolated strong wind gusts (35+ MPH) possible during the afternoon-evening, mainly over the higher elevations.						
		Thursday, Jun 01 2023						
	MOSTLY CLEAR	LOW	HIGH	WIND DIRECTION	WIND SPEED	PEAK WIND	PRECIP CHANCES	T'STORM CHANCES
		59	87	SW	6-15	32	0%	0%
		Mostly clear, cooler, and breezy.						
		Friday, Jun 02 2023						
	MOSTLY CLEAR TO PARTLY CLOUDY	LOW	HIGH	WIND DIRECTION	WIND SPEED	PEAK WIND	PRECIP CHANCES	T'STORM CHANCES
		60	88	SW	4-11	26	0%	0%
		Mostly clear - partly cloudy (high clouds) and warm with light afternoon winds.						
		Saturday, Jun 03 2023						
	MOSTLY CLEAR	LOW	HIGH	WIND DIRECTION	WIND SPEED	PEAK WIND	PRECIP CHANCES	T'STORM CHANCES
		56	91	SW	2-8	22	0%	0%
		Mostly clear and seasonable with light winds.						
		Sunday, Jun 04 2023						
	AM: MOSTLY CLEAR PM: PARTLY CLOUDY	LOW	HIGH	WIND DIRECTION	WIND SPEED	PEAK WIND	PRECIP CHANCES	T'STORM CHANCES
		58	92	NE-SE	4-11	28	10% (PM)	10% (PM)
		Mostly clear in the morning, becoming partly cloudy in the afternoon. Stray-isolated showers & thunderstorms potentially moving into Range, mainly during the late evening - early overnight hours.						
		Monday, Jun 05 2023						
	PARTLY-MOSTLY CLOUDY	LOW	HIGH	WIND DIRECTION	WIND SPEED	PEAK WIND	PRECIP CHANCES	T'STORM CHANCES
		61	90	E-SE	3-9	28	30%	30% (PM)
		Stray-isolated rain showers possible in the early morning hours, followed by isolated-scattered showers & thunderstorms developing during the afternoon-evening.						



White Sands Missile Range Weather Threat Assessment



Caution
Dangerous
Life Threatening

Tuesday, 30 May 2023					
Criteria/Threat	Main Post/East Slopes	Southern Range	Northern Range	Higher Elevations ¹	West Slopes
NO THREATS EXPECTED					
Wednesday, 31 May 2023					
Criteria/Threat	Main Post/East Slopes	Southern Range	Northern Range	Higher Elevations ¹	West Slopes
Wind Gusts > 35 MPH (PM)	LOW	LOW	LOW	LOW	LOW
Thursday, 01 Jun 2023					
Criteria/Threat	Main Post/East Slopes	Southern Range	Northern Range	Higher Elevations ¹	West Slopes
Wind Gusts > 35 MPH	LOW	NO	NO	LOW	NO
Friday, 02 Jun 2023					
Criteria/Threat	Main Post/East Slopes	Southern Range	Northern Range	Higher Elevations ¹	West Slopes
NO THREATS EXPECTED					
Saturday, 03 Jun 2023					
Criteria/Threat	Main Post/East Slopes	Southern Range	Northern Range	Higher Elevations ¹	West Slopes
NO THREATS EXPECTED					
Sunday, 04 Jun 2023					
Criteria/Threat	Main Post/East Slopes	Southern Range	Northern Range	Higher Elevations ¹	West Slopes
Thunderstorms (LATE PM)	LOW	LOW	LOW	LOW	LOW
Monday, 05 Jun 2023					
Criteria/Threat	Main Post/East Slopes	Southern Range	Northern Range	Higher Elevations ¹	West Slopes
Thunderstorms (PM)	LOW	LOW	LOW	LOW	LOW

¹ Higher elevation locations include San Augustin Pass, Salinas Peak, and North Oscura Peak

[List of abbreviations and acronyms](#)



White Sands Weather Forecast Office

Detailed Weather Discussion



Last Updated 0850L May 30 2023 by E. Webb

Quiet and seasonable weather pattern prevails this work week. Very slight chance of strong wind gusts mid-week (mainly over the higher elevations) will be accompanied by cooler & more comfortable daytime temperatures for Thu into Fri. Shower & thunderstorm chances return to the forecast by late Sunday and Monday of next week.

Warm and breezy start to the (shortened) holiday work week expected today as a mid-upper level ridge axis transits over Range, keeping our temperatures up and clouds at bay until the afternoon-evening hours today. Some modest afternoon breezes are possible thanks to diurnally-forced lee troughing east of the Sacramentos and daytime deepening of the boundary layer, but shouldn't be anything to write home about. Afternoon highs look to be similar to yesterday, in/around the middle 90s for south Range.

By tomorrow, a closed mid-upper low over Arizona will begin to approach the area, steepening the height gradient aloft and increasing the deep-layer flow over the area, resulting in stronger surface winds area-wide, with some places (mainly over the higher elevations) approaching advisory level conditions. (35+ mph wind gusts) during the afternoon-evening. The retreating ridge axis and few more high-level clouds should be enough to knock our temperatures back a few degrees from Tuesday, but still remaining close to climatological averages for this time of the year. On Thu, this trough will be lifting by just to our north, remaining close enough to keep our surface winds strong throughout much of the day. A rather strong Pacific front (for late May - early June standards) will accompany this system, cutting down our daytime high temperatures to the mid-upper 80s in southern WSMR basin, a rare treat for the beginning of meteorological summer in southern NM, especially considering the lack of showers/thunderstorms involved.

Temperatures should recover somewhat for Friday and the weekend, but likely will not approach today's levels, thanks to our mid-week disturbance getting trapped underneath an unusually strong mid-upper level ridge that'll retrograde from the Great Lakes states to the Upper Midwest & south-central Canada.

As we near the end of the weekend and early next week, it looks like this ridge will continue retrograding closer to west-central Canada/into a more favorable large-scale position that's often associated with stormy weather in New Mexico. One dynamical reason for this is in a pattern like this, relatively cooler continental polar air masses & hydrostatically-forced surface highs tend to come down the Great Plains more frequently (due to anomalous north-northeasterly flow on the eastern side of the ridge), with enhanced low-level easterly flow south of the surface high encouraging the Western Plains dry line to slosh further west across New Mexico. This is largely what most guidance is forecasting to occur as soon as Sunday evening into early Monday morning.

Furthermore, these poleward excursions of the subtropical ridge tend encourage/trap upper-level disturbances underneath them in/near southern NM, which increases deep-layer instability and forcing for ascent needed to generate shower/thunderstorm activity across Range. This is also what's generally being depicted on most guidance into early next week, (with the GFS/GEFS and CMC/GEPS suites being more gung-ho on precip than the ECMWF/EPS) and thus, have introduced scattered shower/storm chances for Monday. However, unlike the last rendition of this pattern that we saw earlier in May, the western extension of the Bermuda high is considerably weaker this time around, and as result, we likely will not be able to tap into the very rich and deep tropical moisture over the Gulf of Mexico. This suggests that shower/storm chances may be limited somewhat overall, and that this pattern may not have much staying power beyond the early-middle part of next week once deeper layer southwesterly flow becomes re-established.