Great Observing Sites in New Mexico

And where to find them

Alan Scott
TAAS
What makes a good observing site?

- It depends on what you want to do with it!
  - Galaxies, nebula, globular clusters and open clusters benefits from dark skies
  - Lunar, planet or double star observing is more tolerant of light pollution
- Dark Skies!! Lack of light domes, headlights or other lights
- Access (a road and permission) to the site
- Amenities – such as food, motel, gas, restrooms and/or warming shack
- Reasonably close to home
- Reasonably warm
- Possibly a large, flat area for telescope setup
- Safety! This can be physical security (a gate), geographical security (away from high crime areas) or crowd security (safety in numbers)
Light pollution of the US  Credit: lightpollutionmap.info
Light pollution of the southwest US  Credit: http://djlorenz.github.io
<table>
<thead>
<tr>
<th>Bortle Scale: 8/9</th>
<th>Bortle Scale: 7</th>
<th>Bortle Scale: 6</th>
<th>Bortle Scale: 5</th>
<th>Bortle Scale: 4</th>
<th>Bortle Scale: 3</th>
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<tr>
<td>Inner City/City Sky</td>
<td>City/Suburbia Transition</td>
<td>Bright Suburban Sky</td>
<td>Suburban Sky</td>
<td>Suburban/Rural Transition</td>
<td>Rural Sky</td>
<td>Dark-Sky Site</td>
<td>Excellent Dark-Sky Site</td>
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Light pollution maps
Light pollution maps

Light pollution at GNTO (hint, we are blue)
Private land
Access (roads)
Current conditions at
Albuquerque, Albuquerque International Airport (KABQ)
Lat: 35.04° N  Lon: 106.61° W  Elev: 5351 ft.

Fair

65°F
18°C

Humidity 12%
Wind Speed 10 mph
Barometer 29.97 in (1009.7 mb)
Deeptown 11°F (-12°C)

Visibility 10.00 mi
Last update 18 Oct 2:52 pm MDT

More Information:
Local Forecast Office
More Local Wx
3 Day History
Mobile Weather
Hourly Weather Forecast

Detailed forecast for
Middle Rio Grande Valley/Albuquerque Metro Area

Tonight Mostly clear. Lows in the lower 40s. Southwest winds 10 to 15 mph in the evening.

Sunday Windy. Partly cloudy in the morning then becoming mostly sunny. Highs in the 60s. West winds 20 to 30 mph. Gusts up to 45 mph in the afternoon.

Sunday Night Windy, colder. Clear. Lows around 30. Northwest winds 20 to 30 mph with gusts to around 45 mph becoming north 10 to 15 mph after midnight.


Monday Night Clear. Lows in the mid 30s. Northwest winds 15 to 20 mph.

Tuesday Sunny. Highs in the upper 60s.

Tuesday Night Clear. Lows in the upper 30s.

Wednesday Sunny. Highs in the lower 70s.

Wednesday Night Mostly clear. Lows in the upper 30s.

Thursday Cooler. Mostly sunny. Highs in the lower 60s.

Weather.gov – daily view
Weather.gov – Accuracy
Clear Sky Clock

Meteoblue.com - Astronomical

Your driveway or back yard

- **Light pollution score:** probably pretty bad. (Mine in NM is orange, CO is dark blue)
- **Access:** walk
- **What to observe:** Urban list, double stars, moon, planets
- **Safety:** Good (I hope)
- **Why observe here:** Hot Chocolate. Warm house. Easy setup.
My driveway
GNTO

- **Light pollution score**: Light Blue. Light pollution mostly north
- **Altitude**: about 4500 feet
- **Access**: Dirt road. 2 wheel drive OK unless it rains
- **Amenities**: pit toilet, womens RV toilet, warming building, 16" observatory in a dome, 16" loaner dobsonian
- **Time from Albuquerque**: 1 hour
- **Directions**: South southwest of Belen. Ask for directions.
- **Why observe here**: Relatively good skies about an hour from Albuquerque. Warming shack. Some of the friendliest astronomers on this planet.
GNTO

General Nathan Twinning Observatory

- Parking Lot
- Gate
- Picnic Area
- Cocina
- Outhouse
- ROOst
- Imaging Dome
- Lecture Area
- Main Dome
- Observing Field
Oak Flat

- **Light pollution score**: Dark Yellow. Light pollution mostly west. Skies are darker than the light pollution score indicates.
- **Altitude**: about 7600 feet
- **Access**: Paved road. About 10 miles south of Tijeras.
- **Amenities**: No toilets. As per Dee, there’s always a tree!
- **Time from Albuquerque**: 30 minutes
- **Directions**: I-40 to Tijeras. Drive south on NM 337. Follow signs.
- **Misc**: Oak Flat is not open at night. Just observe on the entrance road.
- **Why observe here**: Relatively good skies to the east. Close to Albuquerque.
Oak Flat
Oak Flat
White Ridge

- **Light pollution score:** Dark Green. Light pollution south-east
- **Altitude:** about 5600 feet
- **Access:** Dirt road. 2 wheel drive OK unless it rains.
- **Amenities:** None.
- **Time from Albuquerque:** 1 hour (30 minutes from Bernalillo)
- **Directions:** Take 550 west. Before San Ysidro, turn left onto Cabazon road. Drive 4.4 miles, parking lot is on the right.
- **Misc:** Parking lot is gravel, slightly sloped fenced in area. Skies are best to the west. Beautiful views of Cabazon Peak.
- **Why observe here:** Reasonably dark, and fairly close to astronomers in the north valley, Rio Rancho and Bernalillo
White Ridge
White Ridge
Datil Well

- **Light pollution score**: DARK BLACK. No light domes
- **Altitude**: about 7500 feet. May snow in winter
- **Access**: Paved road. About 20 minutes west of the VLA.
- **Amenities**: pit toilet, 10 or so campgrounds, tent camping. Near the town of Datil (with only one commercial building – restaurant, bar, gas, hardware store, grocery, restroom).
- **Time from Albuquerque**: 2.5 hours.
- **Directions**: Drive south to Socorro. Take the south Socorro exit, drive west about 1 hour 15 minutes.
- **Misc**: Bring a few 120 volt red light bulbs to temporarily use outside the toilets. Best observing sites are in the meadows.
- **Why observe here**: Some of the best skies in North America.
Datil Well
Datil Well
Valley of Fire

• **Light pollution score**: GRAY. Minor light dome from Carrizozo.
• **Altitude**: about 5400 feet. Same weather as GNTO.
• **Access**: Paved road. About 5 minutes west of Carrizozo.
• **Amenities**: pit toilets, 19 campgrounds. Near Carrizozo. Restaurant, motels, gas, grocery available
• **Time from Albuquerque**: 2.5 hours
• **Directions**: Drive south to San Antonio. Drive east to Carrizozo
• **Misc**: The best observing site is at the end of the paved road, in the group campsite, in a low bowl. The local ranger will very likely invite everyone in the campground to an impromptu star party with you.
• **Why observe here**: Dark skies and warm temperatures. Closeness of amenities.
Valley of Fire
Valley of Fire
Priest Canyon

- **Light pollution score**: BLUE. Minor Albuquerque light dome.
- **Altitude**: about 6300 feet. 10-15 degrees cooler than the valley.
- **Access**: Dirt road. Some parking spots require 4X4.
- **Amenities**: None.
- **Time from Albuquerque**: 1.5 hours (or less).
- **Directions**: Drive south to Belen. Take road 47, then road 60 towards Mountainair. Take forest road 422 north about 5 miles.
- **Misc**: Be very careful driving this road with a 2 wheel drive car. Observing area for 4 or 5 scopes. Soft dirt.
- **Why observe here**: Relatively excellent skies, distance from Albuquerque.
Priest Canyon
VLOA (Very Large Observing Area)

Private observatory in the east mountains

- **Location**: TAAS members back yard in the east mountains.
- **Misc**: Occasionally opened to TAAS members. I have never observed here.
- **Amenities**: None.
- **Why observe here**: Close to Albuquerque, reasonably good skies.
- **How to contact host**: Send an e-mail to TAAS_TALK.
Okie Tex Star Party

• **Light pollution score**: BLACK. Not a white light to be seen.
• **Altitude**: about 4400 feet.
• **Access**: Paved road to field. Field is dirt.
• **Amenities**: See next page.
• **When held**: September or early October.
• **Time from Albuquerque**: 5 hours (or less).
• **Why observe here**: Spectacularly dark skies. Transparency is generally excellent. Seeing is often good. Weather is generally very good.
Okie Tex Star Party

• Tips and Tricks:
  • **Where to stay**: Closest hotels are in Clayton or Boise City. Tent camping is hot after the sun comes up. There are local B&B’s.
  • **What to eat**: Breakfast, lunch and dinner are available at the star party. Cosmic Café (hamburgers, etc.) is open from 10pm until 2am.
  • **Stores**: Closest gas, stores, ice etc. are in Clayton or Boise City.
  • **Atmosphere**: Okie Tex is a very informal star party. Port-a-poties are clean and abundant. So are garbage cans.
  • **Strangest fact**: Okie Tex runs for 8 days.
  • **TAAS** has a significant footprint at this star party.
Okie Tex
Okie Tex
Okie Tex
Texas Star Party

- **Light pollution score**: BLACK.
- **Altitude**: about 5000 feet.
- **Access**: Paved road to field. Field is dirt.
- **Amenities**: See next page.
- **When held**: Mid April through early June.
- **Time from Albuquerque**: 7 hours.
- **Why observe here**: Spectacularly dark skies. Transparency is generally excellent. Seeing is often good.
Texas Star Party

• Tips and Tricks:
  • **Where to stay**: There are apartments and bunk houses onsite (allotted by lottery). Hotels are in Fort Davis. I stay at the Fort Davis Inn and RV.
  • **What to eat**: Meals at the Prude Ranch are very good. I get a meal plan for the week. A midnight Café (hamburgers, etc.) is open from 10pm until 2am.
  • **Stores**: Closest gas, stores, ice etc. is in Fort Davis, 5 miles away.
  • **Atmosphere**: TSP is quite formal. Registration is checked at the entrance, and white/bright light police are onsite.
  • **Things to do**: Visit the McDonald Observatory. Drive to Big Bend.
  • **Misc**: The upper observing field has the best views south.
  • **Strangest fact**: Bathroom facilities are poor to disgusting.
  • **TAAS**: TAAS has a significant footprint at this star party.
Texas Star Party
Texas Star Party

Credit: Alan Dyer/ AmazingSky.com
Texas Star Party
McDonald Observatory
Big Bend National Park
Enchanted Skies Star Party

- **Light pollution score**: Light GRAY.
- **Altitude**: about 6500 feet. 10 degrees cooler than the valley.
- **Access**: Dirt road. Unknown
- **Amenities**: Unknown.
- **When held**: One month after Okie-Tex, i.e., October.
- **Time from Albuquerque**: 1.5 hours.
- **Misc**: Unknown. I have never observed here.
- **Strangest fact**: Star party has evolved over time. Sounds like a very nice star party.
- **Why observe here**: Reported as excellent skies, distance from Albuquerque.
Enchanted Skies Star Party
Enchanted Skies Star Party
Let's go observe!