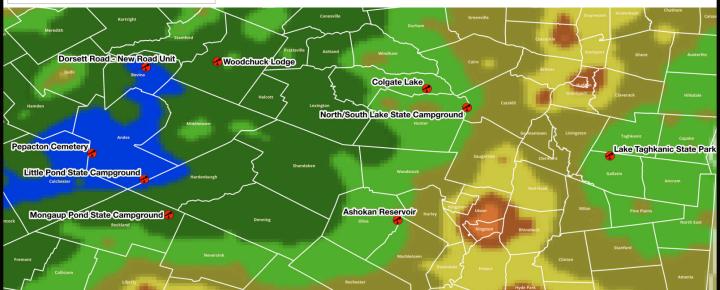


## DARK SITE SERIES

Dark-Site | Downloads



## Mid-Hudson-Valley/Catskill Dark Sites



The mid-Hudson Valley and the Catskills support some of the darkest, most easily accessed observing sites in the northeast US.

Truly dark skies (Bortle 2) can be found here less than 90 miles from New York City. Despite NYC's size, this is as close as from any other major northeastern city, and is darker than the darkest skies in 11 states east of the Mississippi.

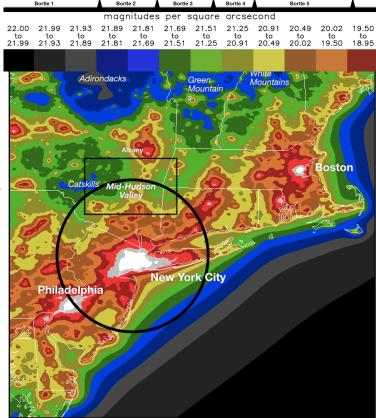
As a service to our members, and the larger community of amateur astronomers, MHAA has identified some of the best, publicly accessible areas for observing within the mid-Hudson area, Each is described in a data sheet providing:

- The name and location of each site with links to Google Maps for driving directions
- The site owner and specific requirements for gaining access, which range from showing up to reserving a campsite
- Suggested observing locations within the property marked on a park map
- Sight lines (horizon images) for the four cardinal directions of the compass

<u>Click here to download</u> these data sheets or use the QR code in the upper right corner of this page.

Note this project is ongoing and we hope to expand the number of locations so described.

BRIGHTNESS SCALE



Mid-Hudson Astronomical Association has educated the public and supported amateur astronomers since 1985. We partner frequently with local organizations to conduct observing parties and educational events while enjoying the camaraderie of amateur astronomers from all walks of life. We sponsor monthly, public star-parties year-round at Taghkanic State Park, and a seminar series at SUNY New Paltz: midhudsonastro.org





Each recommended viewing location was photographed in the 4 cardinal directions using an iPhone application called Theodolite. Each shot provides a wealth of useful information in various windows as explained in the following key, corresponding to the red numbers/rectangles in this image (taken at Lake Taghkanic State Park).

- 1. Longitude/latitude of camera location
- 2. Elevation at camera location
- 3. Crosshair pointing onto the horizon
- 4. Altitude of the crosshair in degrees
- 5. Azimuth reading (TRUE not magnetic)
- 6. Azimuth pointer

## Approximate Conversion of Light Pollution Atlas Colors to Bortle Scale

	Bortl	Bortle 2		Bortle 3			Bortle 5		<b>_</b>
	magr	nitudes	per	per square arcsecond					
1.93 to 1.89	21.89 to 21.81	to	to	21.51 to 21.25	to	to	20.49 to 20.02	20.02 to 19.50	19.50 to 18.95

Bortle Class	Title	SQM	Description				
1	Superb dark-sky site	21.76 - 22.0	<ul> <li>the Scorpius and Sagittarius regions of the Milky Way cast obvious shadows</li> <li>many constellations, particularly fainter ones, are barely recognizable amid the large number of stars</li> </ul>				
2	Typical truly dark site	21.6– 21.75	<ul> <li>clouds are only visible as dark holes against the sky</li> <li>surroundings are barely visible silhouetted against the sky</li> <li>the summer Milky Way is highly structured</li> </ul>				
3	Rural sky	21.3– 21.6	<ul> <li>some light pollution evident at the horizon</li> <li>clouds are illuminated near the horizon, dark overhead</li> <li>the summer Milky Way still appears complex</li> </ul>				
4	Brighter rural	20.8– 21.3	<ul> <li>light pollution domes visible in several directions</li> <li>clouds are illuminated in the directions of the light sources, dark overhead</li> <li>the Milky Way well above the horizon is still impressive, but lacks detail</li> </ul>				

Source: Wikipedia

Light pollution information is sourced from the *Light Pollution Atlas 2022* by David Lorenz, used with permission:

https://djlorenz.github.io/astronomy/lp2022/

Thanks to the many employees of the NY State Department of Environmental Conservation who answered all of my questions enthusiastically (and patiently). The Parks and Campgrounds you manage are absolutely lovely.