

GREEN BANK SCIENCE CENTER



GREEN BANK
OBSERVATORY

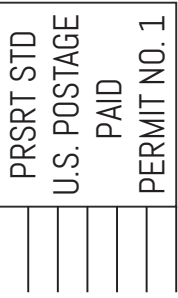
2018



155 Observatory Road
Green Bank, WV 24944



f GreenBankScienceCenter
@GrnBnkTelescope



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PAID
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West Virginia's Space Place

304-456-2150

greenbankobservatory.org/visit
facebook.com/GreenBankScienceCenter/
shop.greenbankobservatory.org

Top 10 things to do!

1

Project Breakthrough Listen

Learn about the most exciting and comprehensive search for Extraterrestrial life! Try our new SETI tour that guides you through the historical search for life and takes you into restricted telescope facilities.*



3

Galaxy Gift Shop

Out-of-This-World science and astronomy toys and gifts, logo apparel and WV artisan souvenirs.



shop.greenbankobservatory.org

4

Catch the Wave Exhibit Hall

Free! Discover how radio astronomers learn about the Universe!



2

Telescope Tours

How do I get up close to the GBT? What is a radio wave? Tour the fascinating world of radio astronomy from the pioneering instruments of the 1950s to the world's premier single-dish telescope, the GBT! Includes science demonstrations and bus excursion into the RFI-restricted Zone I. This hour-long, family friendly tour takes you up-close to the world's biggest telescopes. Offered year round, it's the most popular way to explore the site!



5

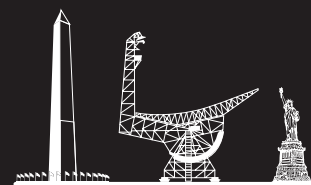
Behind-the-Scenes High Tech Tour

Visit telescope control rooms and engineering labs normally off limits to the public!*



GBT Fast Facts

- Day and night, rain or shine, the GBT works to observe fundamental physics, star formation and evolution, cosmic chemistry and the origins of life and galaxies.
- Despite its weight, the GBT can be pointed with an accuracy of one arcsecond. That's equivalent to the width of a human hair seen from 66 feet (20m) away.
- It weighs 17 million lbs (7.7 million kg) - as much as 20 fully loaded Boeing 747s.
- The GBT is the World's Largest Steerable Telescope and has a surface that could hold 2 whole football fields!
- The telescope is designed to handle a great range of wave-lengths from 9ft (3m) long down to 1/8th inch (3mm).
- The telescope only receives signals from space, never sends them.
- The telescope is 485ft (148m) tall - taller than the Statue of Liberty and nearly as tall as the Washington Monument.



***Find out about these activities and more! Go to greenbankobservatory.org/visit or Call 304-4**

Star Parties!

6

Once a month, we roll out the optical telescopes for a dark sky viewing!*

8

Explore the grounds

Stretch your legs, bring a bike or walk the dog! How far is Neptune from the Sun? Find out for yourself as you walk through our Solar System Model and discover radio astronomy along the way.

9

Stay a Spell!

Come see what Nature's Mountain Playground offers. Pocahontas County is nestled in state and national parks-see trains, telescopes, live music and more! The historic steam engine excursion train at Cass is just 10 minutes away and Snowshoe Mountain Resort is just 30 minutes away.
www.pocahontascountywv.com

7

Starlight Café

Who's Hungry? The Starlight Cafe offers wraps and deli sandwiches, salads, hot dogs & burgers, nachos & soft pretzels, hand-dipped ice cream, and an assortment of snack foods. Take advantage of our special menu and pricing for groups of 20 or more!



Star Lab Sunday!

10

Every Sunday, we roll out the stars! Gather under our planetarium balloon for a fascinating constellation tour. Offered every Sunday at 2pm, this family-friendly event is limited to 20 participants. Reserve your spot early, this tour sells out fast at \$5pp for a 1 hour program!



Organized Group Tours

Motor Coach groups are welcome. Tours can be scheduled any day of the week. For your convenience, and to guarantee a guided tour, please make advance reservations. A \$3 fee per person is required for motor coach tours. Group meals also available.

School and scout groups are welcome. Tours can be scheduled any day of the week. We can tailor a program to your group. Tour reservations are free for organized school and scout groups, advance arrangements are required. See event calendar for new Boy Scout Weekend opportunities!

Informal groups are welcome. If your group is traveling by car, we will incorporate your group into the regularly scheduled public tours. If you have a group of 20 or more people, we appreciate knowing in advance.



For additional group details and reservations, call (304) 456-2150 or email reservations@gbobservatory.org

4-456-2150 for details!

**Plan
your
trip!**

Please
note: our
hours change
seasonally.



Telescope Tours

Jan 4 – May 24

Tours at 11am, 1pm and 3pm. Closed Tues. & Wed.

May 25 – Sept 3

Tours hourly from 9am-6pm. Open Daily.

Sept 6 - Oct 31

Tours hourly from 9am-6pm. Closed Tuesday & Wednesday

November 1 – May 23, 2019

Tours at 11am, 1pm and 3pm. Closed Tuesday & Wednesday

Adults - \$6/person; Seniors - \$5/person
Children 10 & under - Free
Active Service Personnel and Veterans - Free

Offered year Round; Reservations required for groups of 20 or more.
Call 304-456-2011 or email reservations@gbobservatory.org for reservations.

Tour the fascinating world of radio astronomy from the pioneering instruments of the 1950s to the world's premier telescope, the GBT! This family friendly tour is our most popular offering!



High Tech Tours

Select Thursdays; 3:30pm-4:30pm;
\$15/person; Reservations and screening
required 48 hours in advance
Dates below.

15 participants max. No photography.
A special tour through telescope control rooms and engineering labs normally off-limits to the public. Federal regulations require pre-screening attendees age 18 and up.
2/8, 3/8, 4/12, 5/10, 6/14, 7/12, 8/9, 9/13,
10/11, 11/8, 12/13
Call 304-456-2150 or email tours@gbobservatory.org for reservations.

For more on our screening policy visit:
greenbankobservatory.org/visit/screening



Star Parties - Free

(Rain or Shine)
Meet at the Science Center

2/10, 3/10, 4/7, 5/12, 6/16, 7/14,
8/11, 9/15, 10/13,
11/10, 12/8

Green Bank Observatory staff will treat you to views of the night sky through optical telescopes. If it rains, don't worry!
You are invited to a stellar presentation.



Family Science Labs

Select Saturdays; 1pm-3pm;
Reservations Suggested
Dates below.

Get your family started in science! Kids between ages 4-9 will love our fun-filled, hands-on science projects. We provide all materials. Each lab highlights a different science/engineering theme. 1-3pm
3/3, 5/5, 9/9*, 11/3

Open House Edition from 1-5pm!

Don't miss our
Family Science Day



SETI Tours

Select Fridays; 1pm-3:30pm;
\$40/person; Reservations Required
Dates below.

Advance reservations and screening strictly required at least 48 hours prior to tour. 20 participants max., 4 min.; Ages 12 & up. Hard hats and light refreshments provided. Also offered as Group Reservation on request-limited availability, 4 participants minimum.

Our new SETI Tour celebrates Green Bank's historic Search for Extra Terrestrial Intelligence. The tour begins with an exclusive presentation right in the control room of our historic 85-1 Telescope where the search began with Frank Drake's OZMA project. From there, guests enjoy rare admittance inside the 140-foot telescope where Jill Tartar's Project Phoenix took place and then to normally-restricted GBT access points. The tour ends in our Drake Lounge where you will be greeted by one of our own GBO astronomers and learn about the future of SETI as the GBT embarks on the new Breakthrough Listen project. If you've ever wanted to be inside our operation control rooms or to speak to one of our radio astronomers in person, then this is THE opportunity of a lifetime!

Tour dates: 5/11, 5/25, 6/11, 6/15, 6/29, 7/6, 7/13, 7/20, 7/27, 8/3, 8/10, 8/24, 9/14, 9/28, 10/12

Star Lab Sundays

Every Sunday, 2pm-3pm;
\$5/person; Reservations Suggested

Family Fun! Crawl into our planetarium balloon for a fascinating night sky tour! Space is limited to 20 participants. Program lasts approximately one hour and includes a DIY star wheel kit! Reservations recommended. Call 304-456-2150 or email tours@gboobservatory.org for reservations.



Please call 304-456-2150, email tours@gboobservatory.org or visit greenbankobservatory.org/visit/ for more information.



Save the Date!



Join the Largest Optical & Radio Star Party in the Nation!

Enjoy optical and radio astronomy presentations, hands-on workshops and dark West Virginia skies. Learn to use a radio telescope! Fun activities for children too! The Green Bank Star Quest is sponsored by the Central Appalachian Astronomy Club.



For more information visit
www.greenbankstarquest.org

Star Quest • July 11-14

Riders Get Ready!

Join us for a weekend-long cycling festival, where experts will guide you in fun mountain and road rides. Whether you are an experienced mountain biker or complete novice, there will be rides, races and cycling clinics for all ages and levels. The Rumpus also features star parties, bonfires, on-site camping and live music both nights!



Early Registration Discounts!

Find out more information at spaceracerumpus.org

Space Race Rumpus • June 8-10



Educational Field Trips!

Free tours, activities, and day and overnight field trips for organized groups of K-16 students, and youth clubs. Overnight students experience science first hand by completing research projects with a real radio telescope. More than just a tour, a trip to GBO might just inspire your students to join the next generation of scientists and engineers. Registration required.

Email: reservations@gboobservatory.org
Call: 304-456-2011



Create your own event!



greenbankobservatory.org/visit/field-trips/

Merit Badge Weekends!

Boy Scouts -- Earn Astronomy or Electronics Merit Badges during an overnight stay!

Spots fill up fast!

Scheduled weekends include:

Feb 17-19, Mar 24-26,
Apr 28-30, May 19-21, Sept 15-17, Oct 20-22
Nov 17-19, Dec 15-17

Girl Scouts -- Earn Night Owl and Sky Badges, or other STEM related badge
Weekends are scheduled by request

Email: reservations@gboobservatory.org
Call: 304-456-2011





Green Bank Open House & Family Science Day

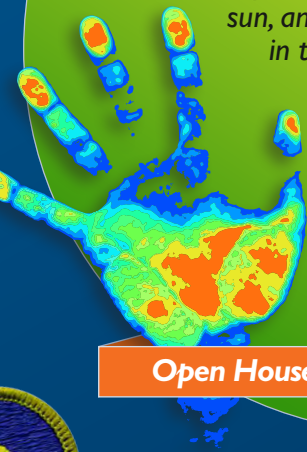
Where else can you... build and launch a rocket, test your engineering skills, play with liquid nitrogen, do fun science experiments, safely view the sun, and see some of the biggest telescopes in the whole world ALL IN ONE DAY?

Public site tours will be available as well as rare peeks into the control room of the world's largest fully-steerable telescope!

Free Event!

No reservations required.

Open House • September 9



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We'll come to you!

Request a college ambassador from our West Virginia Science Public Outreach Team (SPOT) to visit your school or group and deliver standards-based slideshows and hands-on activities. Request a presentation and activities today!



greenbankobservatory.org/education/outreach

Find out about all events and more at:
greenbankobservatory.org

Featured Events

Space Race Rumpus
June 8th - 10th

Garth Newel Music Center
Young Artists Showcase
August 9, 7pm



Green Bank Turkey Trot
5K/10K, November 24th

Green Bank Public Lecture Series
See www.greenbankobservatory.org for details.

Support the Green Bank Observatory!

Making a gift to the observatory supports our daily operation and mission including our Education and Public Outreach program reaching nearly 10,000 students annually. All donations and memberships can be made in honor or in memory of and are a thoughtful gift.

Visit greenbankobservatory.org/engage or call 304-456-2011 to learn how you can become a part of our team!

Dates and events subject to change.
Visit greenbankobservatory.org/visit for updates.

For event reservations call: 304-456-2150



Visit the Green Bank Telescope

Green Bank Observatory

Science Center & Tour Hours

Jan 1 – May 24

Open Thur - Mon, 10am - 6pm (Closed Tue - Wed)

Tours at 11am, 1pm and 3pm

May 25 – Sept 3

Open Daily; 8:30am - 7pm

Tours Hourly 9am - 6pm

Sept 6 - Oct 31

Open Thur - Mon, 8:30am-7pm

(Closed Tue - Wed)

Telescope Tours Hourly 9am-6pm

November 1 – May 23, 2019

Open Thur - Mon, 10am - 6pm (Closed Tue - Wed)

Tours at 11am, 1pm and 3pm

Closed: 4/15 for Easter Holiday

11/20-11/23 for Thanksgiving Holiday

12/23-12/26 for Christmas Holiday

12/31-1/2 for New Year's Holiday

General Admission to the Science Center is FREE!

Telescope Tour Rates

General Pass (Ages 11-64) \$6.00

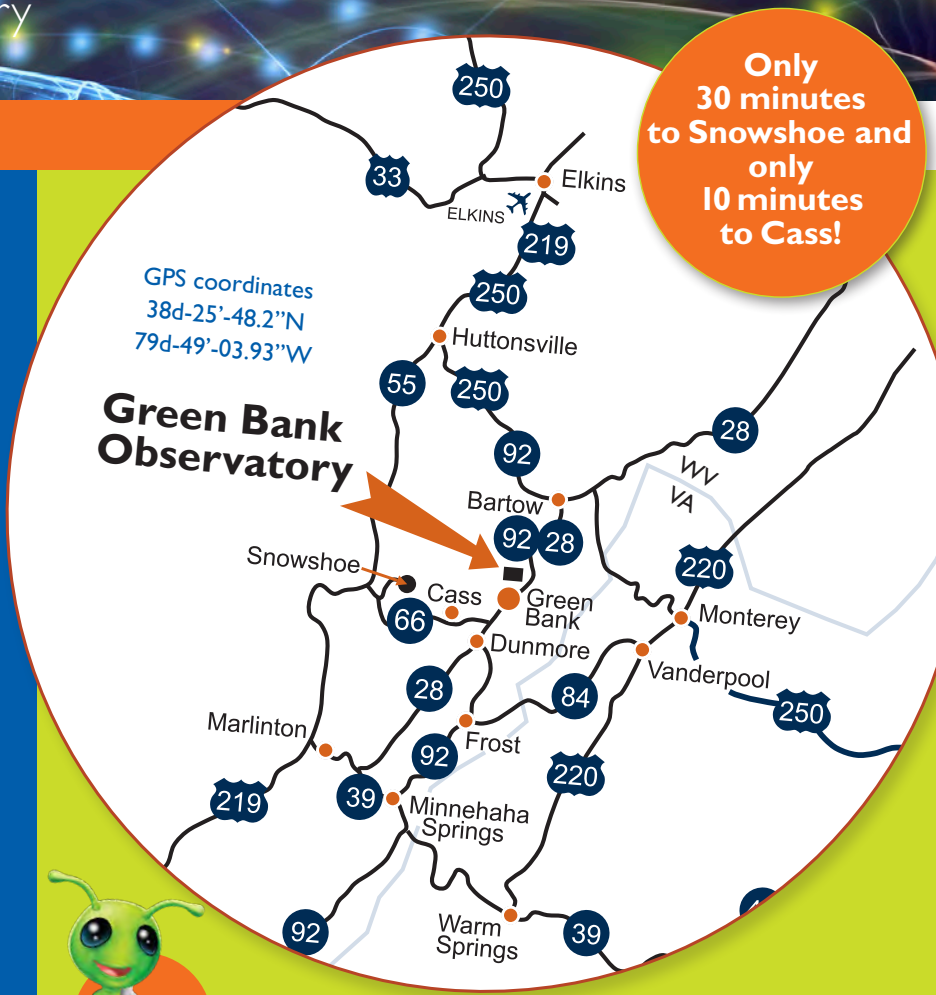
Senior Pass (65 & Up) \$5.00

Children (10 & Under) Free

Veterans and Active Service Members Free

HOURS SUBJECT TO CHANGE.

In inclement weather, please check our Facebook page for updates.



Only 30 minutes to Snowshoe and only 10 minutes to Cass!



Welcome to the Quiet Zone! The Green Bank Science Center is at the heart of the National Radio Quiet Zone, a 13,000 square mile region of minimized radio signal interference designated by the U.S. Government in 1958 to create a safe haven for radio astronomy. Please plan to turn off your cell phone and other wireless devices when you arrive. To learn more, visit <http://greenbankobservatory.org/nrqz>



The GREEN BANK OBSERVATORY is a facility of the National Science Foundation operated under cooperative agreement by Associated Universities, Inc.

The Green Bank Observatory
155 Observatory Road, Green Bank, WV 24944
25 miles north of Marlinton, 53 miles south of Elkins,
and 65 miles west of Staunton, VA.