

was selected in 1958 as site for a national observatory intensive 3-year survey that included more than 150 ranges across the United States. combination of clear weather, minimum air turbulence, 5 from bright lights, vegetation cover, height and mmmit area were all factors leading to the final selec- Peak.

is located in the Quinlan Mountains of the Sonora the Papago Reservation. The reservation, one of in the United States, is the home of more than ogos and spreads some 90 miles across Arizona's Pima

ogos leased Kitt Peak to the Observatory under the perpetual agreement that is valid as long as scientific facilities are maintained at the site.

Observatory is supported by the National Science Foundation, an agency of the Federal Government established in 1957 to advance scientific progress in the United States. In 1957, entered into a contract with the Association of Universities for Research in Astronomy (AURA), Inc., for the operation as a national center for optical astronomy. Under the original contract and subsequent agreements, been responsible for the construction, development, and operating operation of Kitt Peak as a national research

is a non-profit corporation in Arizona in 1957, AURA grew from its original 7 charter members to the present 13 members, all with strong research and graduate training programs in astronomy.

Member institutions are:

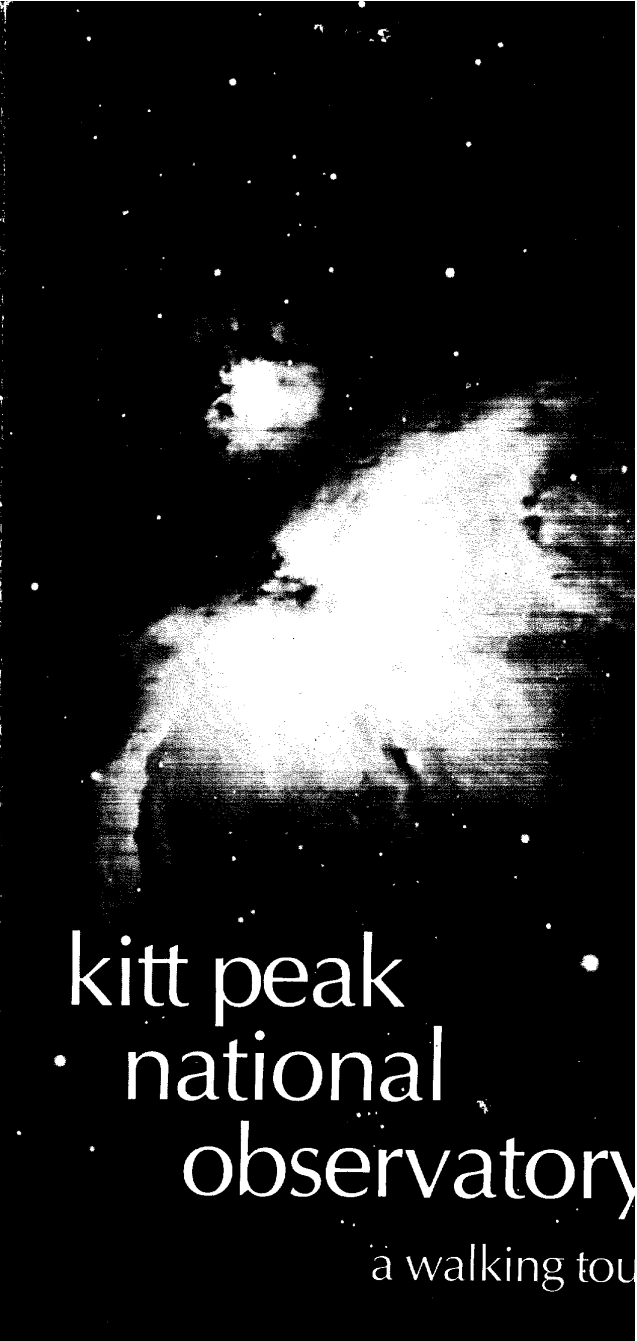
- University of Arizona
- California Institute of Technology
- University of California
- University of Chicago
- University of Colorado at Boulder
- Harvard University
- University of Hawaii
- Yale University
- University of Michigan
- State University
- Yale University
- University of Texas at Austin
- University of Wisconsin
- University

Member institutions
16 + 18 Nov
7 Nov Cornell
148 Nov Stanford
11 Oct Duglass

national center, Kitt Peak allocates 60 percent of its telescope time to qualified visiting astronomers from all over the world. Allocation of users is based entirely upon the merit of the research programs proposed. The remaining 40 percent of available telescope time is used by the Observatory for its own research.

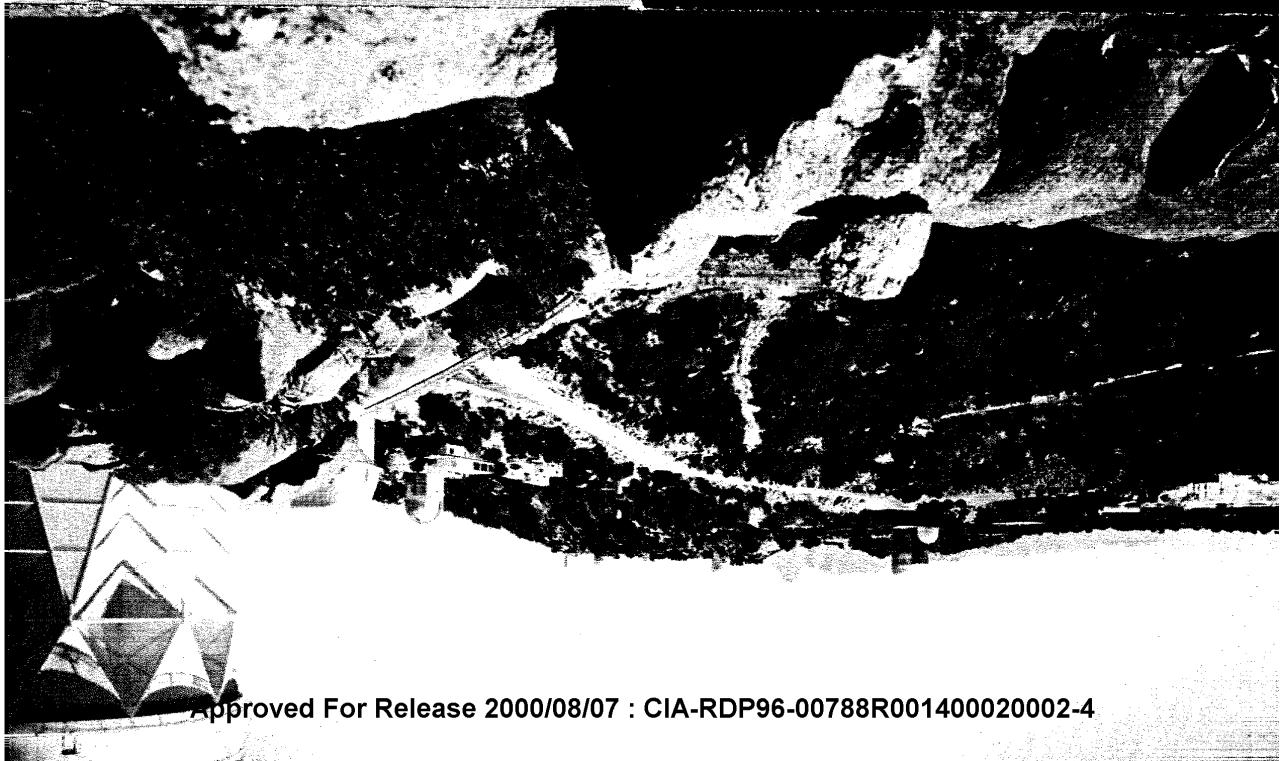
In 1973, in a contract with the NSF, AURA also operates the Cerro Tololo Inter-American Observatory in Chile.

For more information: Write Public Information Office, National Observatory, P.O. Box 26732, Tucson, AZ, 85726.

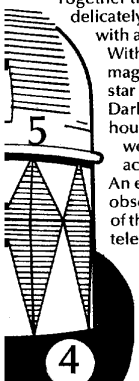


kitt peak national observatory

a walking tour



Together the telescope and the mounting weigh 375 tons, yet they are so delicately balanced that accurate tracking of celestial objects is achieved with a small one-half horsepower motor.
 With this instrument astronomers can study objects as faint as 23rd magnitude—more than six million times fainter than the dimmest star visible with the unaided eye.
 Darkrooms, laboratories, offices, and sleeping quarters are housed in the 19-story-high structure. The movable dome weighs 500 tons; the shutter opening measures 30 feet across. The building itself is 105 feet in diameter.
 An elevator provides access to a glass-enclosed observation deck that presents a panoramic view of the observatory; from there steps lead to a telescope viewing gallery for visitors.
 The telescope was dedicated in June, 1973, and is named for Dr. Nicholas U. Mayall, former Director of the Kitt Peak National Observatory.



ELEVATION

The summit of the mountain lies just North of the 4-meter telescope, at an elevation of 2098 meters (6882 feet).

A Walking Tour

As national center for ground-based optical astronomy, Kitt Peak the largest collection of astronomical instruments in the world. Sc over the world use Kitt Peak facilities for research programs in st planetary studies.

In addition to visiting scientists, over 50 people are employed o but only the necessary support staff lives there. Resident astronomi in Tucson. During observing periods, they, as well as visiting sc dormitory rooms at Kitt Peak.

Kitt Peak is open to the public from 10 a.m. to 4 p.m. ev Christmas. There is no charge or ticket for admission. Regularly scl the Observatory are conducted at 10:30 a.m. and 1:30 p.m. Sunday and holiday. All tours begin at the Visitor Center.

Although no food (other than candy and soft drinks) is sold on t grounds, a picnic area is provided with tables, benches, and fire pi

This Walking Tour Guide has been prepared for visitors who scheduled tour or wish to tour the facilities on their own. Please for a handy reference to the National Observatory.

Your interest in the Observatory's programs and facilities is a sincerely hope that your visit to Kitt Peak will be an ei informative—occasion.

- 2.3-METER TELESCOPE
- 50-CM TELESCOPE
- MITORY TELESCOPE

10.75-METER MILLIMETER-WAVE RADIO TELESCOPE
 Operated by the National Radio Astronomy Observatory this 10.75-meter (36-foot) dish antenna explores the universe in radio wavelengths that are not visible to the human eye (Not open to the public)

GRAPH
 Nebula in Orion, I with the Mayall e.

30-CM SCHMIDT TELESCOPE

REST
 ational Observatory, you will note that some points of by numbers—both on this map and on the mountain below is a brief description of each site.

1-meter telescope, with the McMath Solar Telescope you will be looking south. Behind you stand six of the 13 at Kitt Peak: the 1.3-meter infrared, and the 30-centimeter z the three telescopes of the University of Arizona;

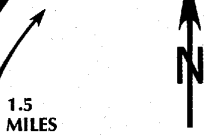
1-meter Nicholas U. Mayall telescope dome is visible. Altar Valley and, visible some 18 miles to the o your right) is the town of Sells, tribal headquarters ans. The distinctive dome-shaped mountain peak due ri, traditional home of the Papago Indian God *I-t'oy*. a schematic diagram of the McMath Solar Telescope. ers can obtain a picture of the telescope with the ground from this point.

vel, photographers find nearly the entire sweep of telescopes before them. The large telescope building houses the University of Arizona's 2.3-meter telescope. you are standing 29 meters, or 96 feet, above the p. The Visitor's Gallery provides a view in all s of 100 miles on most days, and special non-glare is area enhances picture taking. To help with along the gallery show the four points of the compass of surrounding towns. Mountain ranges visible to the ed in Mexico.

iles down this roadway is the Picnic Area with cooking rnk machines, drinking water and restrooms for your beauty, the Picnic Area itself draws many nature

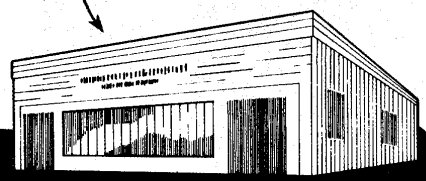
1.3-METER TELESCOPE

l emphasis on infrared astronomy, this telescope observations of objects such as stars embedded st clouds that would be visible in the visible spectrum. This model for all infrared modifications ak telescopes.



VISITOR'S CENTER

Exhibits feature many aspects of astronomy, including models of telescopes and the research programs being conducted at Kitt Peak. Visitors can operate an actual solar telescope, and Kitt Peak-produced films are shown on weekends and holidays. Papago handicrafts and various mementos of the Observatory are available at the gift shop.



A 1-meter coelostat m sunlight to meter (41-i forming mi sends the down throu tanks hrou meter-high tower—desi imize the to the obs Its daily n solar mag give scient understandanc complex pr occur with The Vacuu is also solar veloc spectra, ai ported N/ program t constantly formation i ty for the nauts.

1.3-METER TELESCOPE
ADMINISTRATION BUILDING

1

MAINTENANCE SHOPS

EMPLOYEE'S DINING HALL