Saguaro Astronomy Club

Metro Phoenix, Arizona

SACNEWS

September 1991 — Issue #176

Comet Comments

by Don Machholz

Two returning comets have been recovered recently. Meanwhile, Comet Levy (1991q) is now known to be periodic, taking about 50 years to complete one orbit.

Periodic Comet Wirtanen (1991s): T. Seki of Japan recovered this comet on July 8 at magnitude seventeen. It will be closest the sun Sept. 21 at 1.0 AU.

Periodic Comet Hartley 2 (1991t): T. Kryachko of the USSR visually discovered this eleventh-magnitude comet on July 9. It was proved to be Periodic Comet Hartley 2, returning six days early and five degrees off. This is the second case this year where an amateur visually recovered a returning periodic comet.

Periodic Comet Hartley 2 (1991t)						
Date	RA-1950-Dec		RA-2000-Dec		Elong	Sky Mag
08–27	05h52.8m	+28°27'	05h55.9m	+28°28'	64°	M 9.9
09–01	06h21.8m	+27°01'	06h24.9m	+26°59'	63°	M 9.9
09–06	06h48.7m	+25°18'	06h51.8m	+25°15'	61°	M 9.9
09–11	07h13.5m	+23°25'	07h16.6m	+23°20'	60°	M 9.9
09–16	07h36.4m	+21°26'	07h39.4m	+21°19'	60°	M 10.0
09–21	07h57.5m	+19°23'	08h00.4m	+19°15'	59°	M 10.1
09–26	08h16.9m	+17°20'	08h19.7m	+17°11'	59°	M 10.3
10–01	08h34.7m	+15°18'	08h37.5m	+15°08'	60°	M 10.5
10–06	08h51.2m	+13°19'	08h54.0m	+13°08'	60°	M 10.7

Periodic Comet Wirtanen (1991s)						
Date	RA-1950-Dec		RA-2000-Dec		Elong	Sky Mag
08–27	06h34.6m	+18°15'	06h37.5m	+18°13'	55°	M 10.5
09–01	06h57.8m	+18°38'	07h00.7m	+18°34'	54°	M 10.4
09–06	07h20.9m	+18°51'	07h23.8m	+18°45'	53°	M 10.3
09–11	07h43.9m	+18°53'	07h46.8m	+18°46'	53°	M 10.2
09–16	08h06.7m	+18°45'	08h09.6m	+18°36'	52°	M 10.2
09–21	08h29.0m	+18°28'	08h31.8m	+18°18'	52°	M 10.2
09–26	08h50.7m	+18°02'	08h53.5m	+17°51'	52°	M 10.2
10–01	09h11.8m	+17°29'	09h14.6m	+17°16'	52°	M 10.3
10–06	09h32.2m	+16°49'	09h35.0m	+16°36'	52°	M 10.5

Quick Calendar

Saguaro Astronomy Club meeting
Friday, September 20

Star Party with EVAC
At EVAC's southern site
Directions available at meeting
Saturday, October 5

Public Star Party
Reach 11
Saturday, October 12

Comet Levy (1991q)						
Date	RA-1950-Dec		RA-2000-Dec		Elong	Sky Mag
08–27	07h19.4m	+36°18'	07h22.7m	+36°12'	48°	M 10.2
09–01	07h35.7m	+35°52'	07h39.0m	+35°45'	49°	M 10.4
09–06	07h50.8m	+35°21'	07h54.1m	+35°13'	50°	M 10.6
09–11	08h04.8m	+34°48'	08h08.0m	+34°39'	53°	M 10.8
09–16	08h17.6m	+34°12'	08h20.8m	+34°03'	55°	M 11.0
09–21	08h29.4m	+33°37'	08h32.6m	+33°26'	57°	M 11.2
09–26	08h40.2m	+33°01'	08h43.3m	+32°50'	59°	M 11.4
10–01	08h50.0m	+32°26'	08h53.1m	+32°15'	62°	M 11.5
10–06	08h59.0m	+31°53'	09h02.0m	+31°42'	65°	M 11.7

Bits and Pieces

September's Speaker

The speaker for September will be Dr. Jack Larimer, a Planetary Geologist at ASU. His topic will be planetary formation in the solar system.

1991 SAC Meetings	1991 SAC Star Parties
September 20	October 5
October 25	November 9
November 22	December 28
December 14 Party	

Congratulation

The officers of the Saguaro Astronomy Club offer congratulations to Tom McGrath upon receiving his degree of Bachelor of Science in Geology from A.S.U. last August.

SAC Officers

President	Paul Lind	863-3077
Vice President	Virginia Campbell	253–3025
Secretary	Phil Dahl	839–8990
Treasurer	Bob Dahl	582–5526
Properties	Rick Rotramel	439–4701
Chairman of SACNEWS/Editor		
	Paul Dickson	841-7044

Coming Events

Elections are coming! Nominations for the offices of the Saguaro Astronomy Club will begin at the October meeting.

In early October is the "All-Arizona Star Party" sponsored by the Tucson Amateur Astronomy Association. More info is available in this newsletter. TAAA hopes that this annual observing session will be a truly "All-Arizona" event, with a change of venues each year.

At the Arizona Museum of Science & Technology from October 6 – November 17 will be displaying the "1990 Nikon Small World Photography Exhibit." At the museum are two new interactive exhibits in the Museum's "Science Arcade:" A Catenary Arch and a Bernoulli Blower. The museum is located at 80 North Second Street in downtown Phoenix. For admission prices and information call 256–9388.

Directions to SAC Events

SAC General Meetings 7:30 PM at Grand Canyon University, Fleming Building, Room 105 — 1 mile west of Interstate 17 on Camelback Rd., north on 33rd Ave., second building on the right.

SAC Star Parties at Buckeye Hills Recreation Area — Interstate 10 west to Exit 112 (30 miles west of Interstate 17), then south for 10.5 miles, right at entrance to recreation area, one-half mile, on the right. No water and only pit toilets. Please arrive before sunset; allow one hour from central Phoenix.

SAC Deep Sky Subgroup Meeting at John & Tom McGrath's, 11239 N. 75th St., Scottsdale, 998–4661 — Scottsdale Rd. north, Cholla St. east to 75th St., southeast corner.

Moving About

Steve Coe would like everyone know that he's moving at the end of September. His new address and phone number are 6652 W. Mescal, Glendale, Az., 85304, and 878–1873.

Treasurer's Note

Many of you subscribe to one or more astronomical magazine at group rates through SAC. For those of you whose subscriptions match the calendar year, it's time to get those renewal payments to me!

I must submit your renewal by the first week of October so you can receive your Jan–Dec issues with no interruption. Please use the Member Services Form on the back page of the newsletter and either mail your check to me or give to me at the September meeting.

Those of you who wish to order the 1992 Royal Astronomical Society of Canada's Observers Handbook, please remit $9.50 to me by the September meeting.

A First Report on Ektar Films

By Chris Schur

Since the complete series of these articles appeared as an article in the September issue of Astronomy magazine, they will not be duplicated here. More likely than not, the September issue is still at your local newsstand if you don't already receive it be mail. -Paul Dickson, SACNEWS Editor

Mount Graham Update

This article is from the Sept. 4 issue of the State Press.

MOUNT GRAHAM, Az (AP) — The tranquility of this mountaintop, a "sky island of Canadian forest in southeastern Arizona, has been shattered.

These days, diesel fumes spew from a giant crane and workmens' hammers tattoo wooden forms for the foundations of a $200 million astrophysical observatory. Far below the 10,500-foot peak, two court battles rage over lawsuits that contend the telescope projects threaten an endangered squirrel species and desecrate an Apache holy site.

Access to the summit, in the Pinaleno Mountains 120 miles northeast of Tucson, is restricted. On a reporter's visit last week, it was clear construction has proceeded quickly since it got off to a delayed start in the spring.

Two concrete piers have been tied into the bedrock, roots for the first two of at least three telescopes in the University of Arizona's Mount Graham International Observatory. A portable concrete-mixing plant has been set up to speed construction on Emerald Peak, the lower of two peaks that make up the Mount Graham summit.

Ray Vega, site assistant superintendent for T. L. Roof Construction Co., said the contractor hopes to complete all major concrete work for the first two scopes by November.

The university's major partner in one telescope is the Vatican, the other is being built in conjunction with Germany's Max Planck Institute. The precise spot has yet to be chosen on the peak for the third, the Columbus Telescope, which would be the world's most powerful optical scope.

The normally serene mountaintop, crowned with a canopy of Englemann spruce and corkbark fir that is prime habitat to the Mount Graham red squirrel, has been the object of a legal fight as intense as the summer heat in the desert miles below.

In an immediate sense, the issue revolves around the telescope project's impact on the squirrel subspecies. But in a larger sense, environmentalists are fighting any new development on Mount Graham, whose vegetation makes it a so-called sky island.

Its long-isolated plant species are comparable to those around Hudson Bay in Canada, says Rich Kvale, Safford District ranger for the Forest Service.

The Sierra Club Legal Defense Fund has sued to block the telescope project, contending the observatory's location on prime habitat of the red squirrel will doom the genetically distinct subspecies.

University officials counter that the red squirrel has become a red herring for opponents grasping at anything to block the observatory.

The main arguments in the suit are before the 9th U.S. Circuit Court of Appeals. One aspect, a challenge to the university's program of monitoring the squirrel population, will be argued Sept. 27 before U.S. District Judge Alfredo C. Marquez in Tucson.

It was a ruling by Marquez that allowed construction to begin this spring. He refused to issue a temporary order blocking work while the suit proceeds.

A key issue is whether the 1988 congressional act approving the observatory exempted it from federal environmental laws protecting endangered species.

Even if the university wins the case now on appeal, further litigation looms.

Two weeks ago, the Apache Survival Coalition sued the Forest Service in federal court in Phoenix, contending the service ignored the San Carlos Apache tribe's rights in allowing an observatory on a tribal holy site. The suit, which seeks to stop construction, contends the tribe wasn't informed of plans for the project; the Forest Service and university dispute that.

The Mount Graham summit includes an officially designated "refugium" to protect the squirrel's core habitat.

The university and Forest Service insist that the 8-ounce rodents, whose ancestors became isolated here 10,000 years ago, are increasing.

The spring census estimated at least 293 squirrels, based on food-storage areas, up from the 1990 high estimate of 146. And university and Forest Service officials believe there are significantly more, thanks to a bumper crop of Englemann spruce and corkbark fir cones last summer and because of squirrel sightings on the northern slopes as low as 7,000 feet.

Such-A-Deal

SUCH-A-DEAL is a place to advertise equipment, supplies, and services related to amateur astronomy. This is a free service for SAC members and friends. SAC is not responsible for the quality of advertised items or services.

Wanted—Photograph of Venus appearing from behind the waning crescent moon. Observed on Aug 18, 1990 at approx. 4 to 5am near Four Peaks, Az. Please contact David Robbins at (602) 966–5171, 513 W 17th Place, Tempe Az, 85281. *Note: It's probably the occultation of Jupiter to which he is refering.*

Telescope—Coulter Odyssey 8 with Telrad, better than current model — let me show you why, $375 firm, Pete Burggraaf, 995–4271 (days) 995–1964 (evenings).

For Sale—TeleVue 9mm Nagler Eyepiece $160, C-90 Spotting Scope, tripod, usual viewing accessories $350, Meade 8" SCT, Tripod, Equat. Mt., lots of oculars, filters, accessories $875. Contact Jim Crisman, 584–0896 evenings.