



CONSTELLATION

Fall 2016, No. 3

Rosetta plunges towards Comet 67P

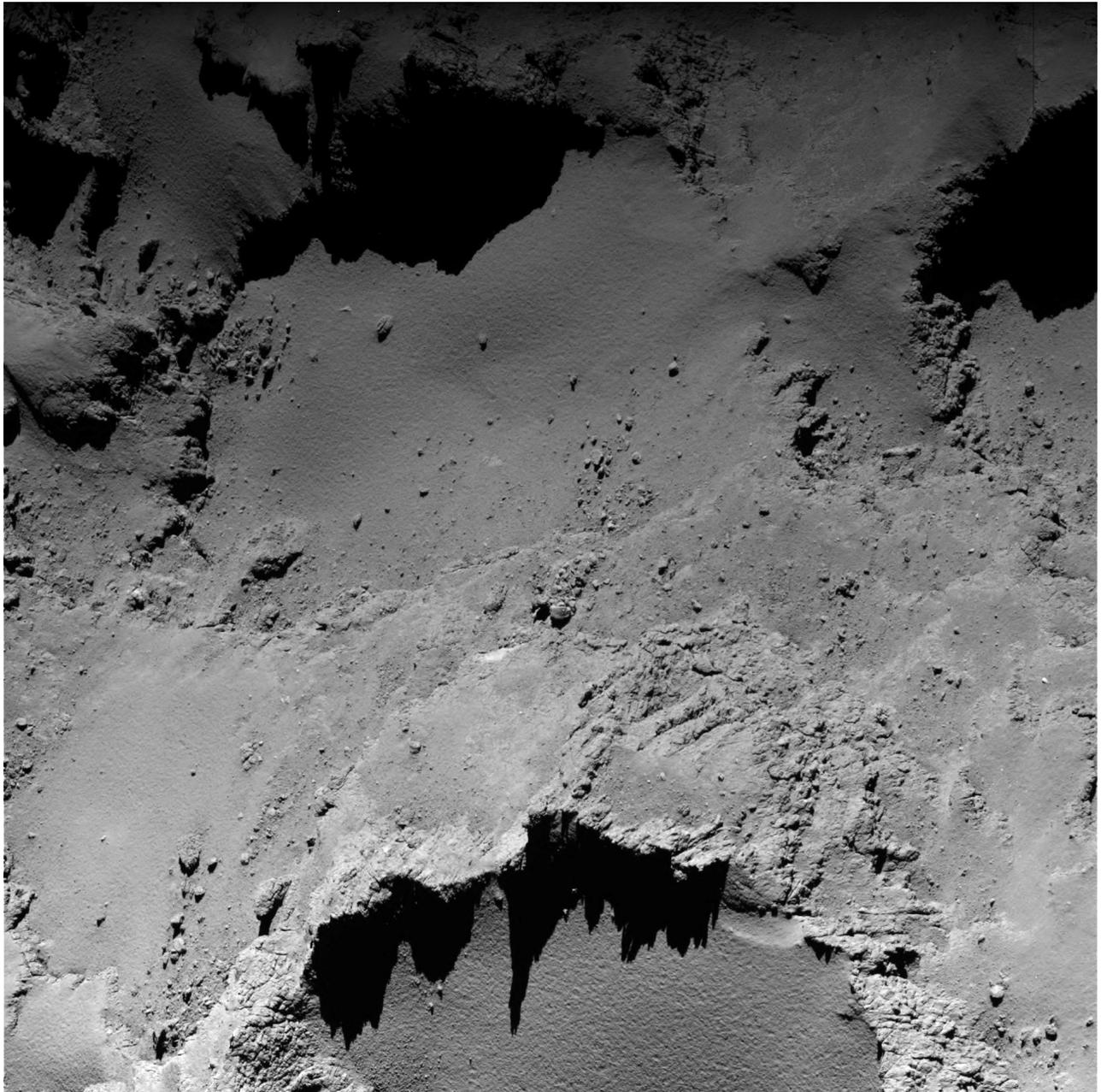


Image from the OSIRIS wide-angle camera onboard ESA's Rosetta spacecraft. Taken on September 5, 2016, when Rosetta was 4.1 km from the center of comet 67P/Churyumov-Gerasimenko. The scale is 39 cm/pixel. For more information about Rosetta's landing on 67P, see: sci.esa.int/rosetta/

Image Credit: ESA/Rosetta/MPS for OSIRIS Team MPS/UPD/LAM/IAA/SSO/INTA/UPM/DASP/IDA

CONTACT!

MAPS Executive Committee

Officers (2015-2017)

President

Jerry Vinski
Morehead Planetarium
Chapel Hill, NC
jvinski@rarityval.edu
908-938-6825

President Elect

Kevin Williams
Whitworth Ferguson Planetarium
SUNY Buffalo State, Buffalo, NY
williakk@buffalostate.edu
716-878-5116

Past President

Alan Davenport
Retired
Glenburn, ME
AlanDavenport51@gmail.com

Secretary

Stephen Dubois
Ferguson Planetarium
Williamsville, NY
perchbuoy@yahoo.com
716-542-5483 x243

Treasurer

Keith Johnson
Edelman Planetarium
Glassboro, NJ
johnsonk@rowan.edu
856-256-4389

Board Members (2016-2018)

Lee Ann Hennig
Thomas Jefferson High School
Alexandria, VA
lahennig@verizon.net
703-597-9228

Paul J. Krupinski
Mr. K.'s Mobile Dome Planetarium
RMSC's Strassenburgh Planetarium
Cheektowaga, NY
mobiledome1993@earthlink.net
716-908-1341

Megan Norris
Suits-Bueche Planetarium
Schenectady, NY
megan.norris@misci.org
518-275-8599

President's Message

The 51st MAPS Conference, held at the James E. Richmond Science Center in Waldorf Maryland this summer, was a great success. Everyone should give a big thank you to Kevin Williams our president-elect, and Monique Wilson and her staff for a well-run and exciting meeting. Sorry if you couldn't make it. We missed you in Maryland this past July. The rest of us had a great time at a beautiful new facility. Steve Russo gave a unique Margaret Noble address thanking all the people who helped him in his career. It was especially warm felt since several of those people are still Maps members and were at the conference. It truly showed how we support each other in this field.

Elsewhere in this issue you'll find information about the spring 2017 mini-conferences that are being planned. Four of them in all, each in a different geographic locations and at slightly different dates. I hope you all can attend at least one of them. Of course, October 2017 will be the National Pleiades Conference in St. Louis, Missouri and our official meeting. (*See the facing page and page 15 for more information.*)

Elections are coming up in a few months and it's not too late to nominate yourself or a colleague to run for office. Patty Seaton has been working hard on the slate for President, Secretary, and Treasurer. The more nominees the better, so throw your name in the mix and get involved. Check out the Maps website for details. <http://www.mapsplanetarium.org/category/officer-elections/>

Does everyone have their plans set for next year's Solar Eclipse? I know some of you are planning on staying at your facilities to help out the home crowd. Others are offering workshops to teachers and the public this coming year so they can discover the eclipse experience themselves. And others are headed out to see the eclipse with a group or just their families. Maps-I and the *Constellation* are good places to share what you are planning and to ask questions. Send our editor, Kevin Conod, an article about what you plan to do this year.

You can also get involved with Maps by sharing what you do at your facility by writing about it in the *Constellation*. Everyone is doing something new or a bit different from everyone else. Tell us about it. You never know when an idea will help another planetarian or create a partnership between facilities.

Have a great fall and don't forget to vote (in the Maps elections).

Jerry Vinski, President
Middle Atlantic Planetarium Society
Currently spending time at Morehead Planetarium, UNC

Meet us in Saint Louis for the Pleiades National Planetarium Conference!

Who: Any interested planetarians from MAPS, GLPA, GPPA, PPA, RMPA, SEPA and SWAP.

What: A combined regional conference that brings together and reflects the unique cultures of the Seven United States Planetarium Regional Organizations with the approval and support of the International Planetarium Society.

Where: James S. McDonnell Planetarium at the Saint Louis Science Center and Airport Renaissance, Saint Louis, MO

When: October 10-14, 2017

Why: To give all planetarians from the United States the opportunity to meet in a central location to share ideas, best practices and professional development.

Other Information: The conference will take place at both the James S. McDonnell Planetarium at the Saint Louis Science Center, as well as at the Airport Renaissance. A block of rooms is being held at the Airport Renaissance for \$109/night. Registration will open soon!

Saint Louis can be conveniently reached by planes, trains or automobiles! We recommend flying Southwest Airlines if you chose to fly into Lambert International Airport (STL).

More information will be made available soon. Please do not hesitate to contact Anna Green, Planetarium Manager of the McDonnell Planetarium, at anna.green@slsc.org.



Photo by Steven M. Ley

We hope to see you in Saint Louis in 2017!

AWARDS 2016

The following awards were presented at the 2016 MAPS Conference held in Waldorf, MD in July.

Exceptional Service Awards:

The MAPS Exceptional Service Award is given to planetarium staff who have gone “above or beyond the call of service” in work related to the planetarium field.

Kevin Williams
Monique Wilson

Fellow Awards:

The MAPS Fellow award, established in 2010, is to recognize those members of the organization who maintain an active membership status of a minimum of 7 consecutive years and provided significant service to the Middle Atlantic Planetarium Society.

Amie Gallagher
Francine Jackson
Wendy Ackerman
April Whitt (2014)
Joanne Young*
Kathy Michaels*
John Meader*

* In absentia



Wendy Ackerman presents Fellow Awards to Francine Jackson, April Whitt and Amie Gallagher

For more information about MAPS Awards and nominations, contact:

Wendy Ackerman
Assistant Director of Education, Maryland Science Center
Baltimore, MD
410.545.5978
wack@mdsci.org
www.marylandsciencecenter.org

Treasurer Address Change

This is a reminder/notification that the snail-mail address of the Treasurer/Membership Chair has changed recently. Keith Johnson has retired from Rowan University, and while his e-mail address there will remain valid until he decides to migrate to Mars, his Rowan snail-mail address will likely no longer work very well. Please send all MAPS-related material to:

Keith Johnson
P.O. Box 64
Clementon NJ 08021

CONSTELLATION DEADLINES

The Constellation is published quarterly near the equinoxes and solstices. Please keep in mind the following deadlines:

Cover Date	Deadline
Dec. 2016	Friday, Dec. 2
March 2017	Friday, Mar. 3
June 2017	Friday, Jun. 2
Sep. 2017	Friday, Sep. 8

Submissions should be sent to the editor:

Kevin Conod
(973) 596-6609
Fax #: (973) 642-0459
kdconod@yahoo.com

MAPS Conference Sponsors

Thank You Very Much! We would like to thank the following who made MAPS 2016 possible by their generous contributions!

First Magnitude:



Second magnitude:



Third Magnitude:

Ash Enterprises
Prismatic Magic Laser Programs
R.S.A. Cosmos
SCISS
Sky-Skan
Space Foundation

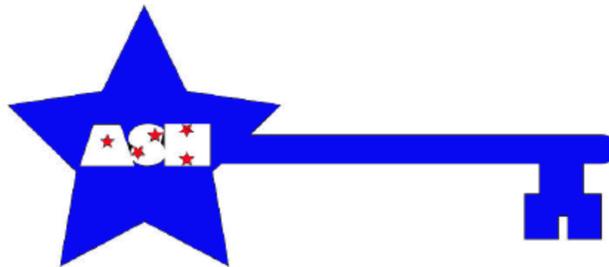
Fourth Magnitude:

ChromaCove
GOTO Inc.
Museum of Science, Boston
Magna-Tec Electronics Co./Konica Minolta
Planetarium Co.

Fifth Magnitude:

AstroFX/Bowen Technologies
Clark Planetarium
Donetsk Planetarium

Turnkey Planetarium Solutions!



- ❖ Fulldome video, optical-mechanical, hybrid projectors
- ❖ Sound systems
- ❖ LED cove light systems
- ❖ Seating
- ❖ Complete service support for Spitz, Goto, RSA Cosmos
- ❖ Low cost full dome video systems

Ash Enterprises International – www.ash-enterprises.com

We Fix Planetariums – and a lot more!



DIGISTAR 6



THE DIFFERENCE IS **DOMECASTING**

simple hosting, unlimited participants, video, audio and chat features



Image Quality



Cloud Library



Domecasting



Ease of Use



Content

THE DIFFERENCE IS **DIGISTAR**

www.es.com



Images from MAPS 2016

Please enjoy these images from the 2016 MAPS Conference at the Richmond Science Center in July 2016.

Photos by Alan Davenport

The conference attendees gathered in front of the Richmond Science Center.



Our gracious hosts for the 2016 MAPS Meeting were recognized at the banquet. L-R Monique Wilson received the Recognition of Exceptional Service Award. Jack Belle, Patrick Rowley and Jennifer Lennon received the host plaque for their stellar service to MAPS.



Patrick McQuillan under the dome talking about his experience designing a public lunar eclipse event at Liberty Science Center.

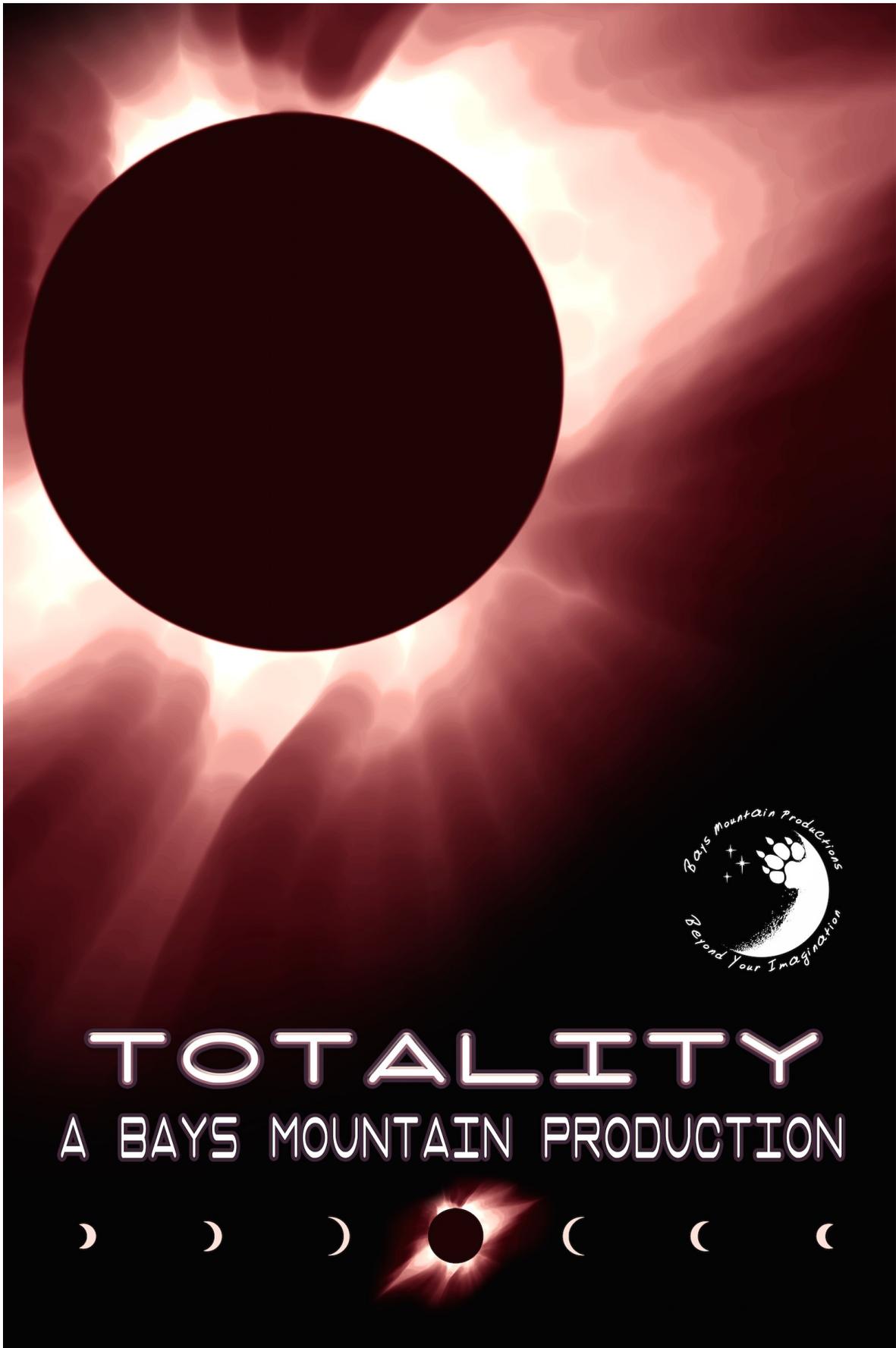


Paul Krupinski listens rapt to the features available with a Science on a Sphere installation as presented by Maurice Henderson, NASA SOS Project Engineer.



Jerry Vinski, MAPS President, chats with Jordan Mogerman about his poster on the new gallery installation on future Mars Missions at the St. Louis Science Center.

Continued on page 16



TOTALITY

A BAYS MOUNTAIN PRODUCTION



NATIONAL GEOGRAPHIC PRESENTS

ASTEROID MISSION EXTREME

Narrated by

SIGOURNEY WEAVER



NATIONAL GEOGRAPHIC STUDIOS presents a SKY-SKAN PRODUCTION ASTEROID: MISSION EXTREME Narrated by SIGOURNEY WEAVER
Written by ANNETTE SOTHERAN-BARNETT & MOSE RICHARDS Exec. Producers BROOKE RUNNETTE & STEVEN SAVAGE Produced & Directed by ANNETTE SOTHERAN-BARNETT
Lead Animator TROY WHITMER Post Production SCOTT WYMAN Music & Sound Design PIP GREASLEY & DALE CORDEROY

skyskan.com/shows

8K/4K, 2D/3D, 30/60fps

For more information: sales@skyskan.com

amontele@ngs.org

filmdist@ngs.org

paul@blazedigitalcinema.com

Bowen Technovation

designers of electronic media

Celebrating our 30th Year

Working world-wide in planetariums every day

AstroFXAudio

The most respected name in audio systems.
Specially engineered for your specific site.

See our new
AstroFXAtmos Dome™
systems for planetariums.

AstroFXAurora LED Lighting

Installed in more nations
worldwide than any other system.

RGB, RGBW and the worlds first
RGBW-A (amber) fixtures for domes.

AstroFXCommander

The most advanced, easiest way
to control all the devices in
your theater or exhibit.

See our interfaces to/from popular
all-dome projection systems for universal
theater control.

AstroFXPresenter

Provides all the tools for dynamic,
effective HD, Bluray, DVD, PowerPoint live
presentations at the touch of a button!

Design and Specifications

Contracted by dozens of architects, owners
and universities since 1985.

See our designs for renovation and new
construction. Avoid costly construction
changes and mistakes.

Exhibits...Exhibits...

Compelling design-build for turnkey
world-class interactive exhibits.

Why we do what we do...

- to work with interesting projects...
- with interesting people...
- and interesting subjects.

www.bowentechnovation.com Indianapolis IN USA 01-317-863-0525

Your audience
will see the difference.



With crisp stars from a ZEISS projector and deep black as only VELVET can deliver, your audiences will be treated to the finest planetarium experience possible.

There's nothing wrong with showing what light pollution looks like...we just think it should be optional.

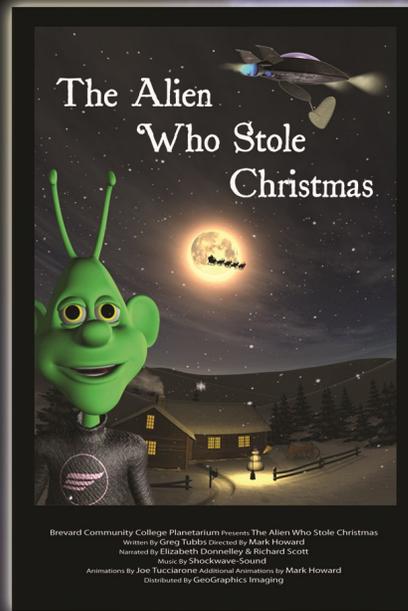
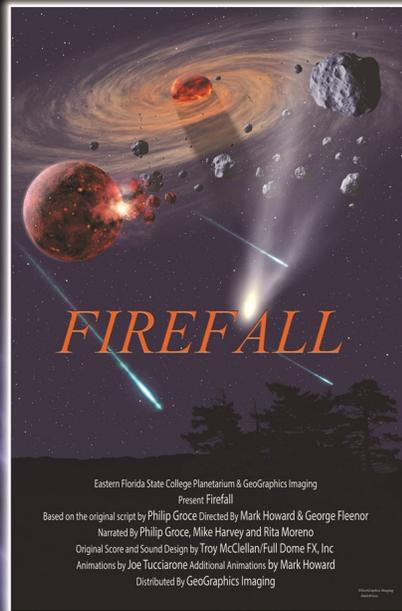


For a personal demonstration, contact:
Chuck Rau, Planetarium Sales Director
Direct: 314-218-6393
Email: crau@seilerinst.com
Toll Free: 1-800-489-2282



Exclusive Partner

*Astronomical Animation Library
Star Shows & More*



WWW.GEOGRAPHICSIMAGING.COM



7803 25th Ave W.
Bradenton, FL 34209 USA
Ph: 1+ (941) 920-0246
GeoGraphicsimaging@gmail.com

Impress your guests
from the moment
they enter your
planetarium.

Big dome or small, automated or manually controlled, LED lighting from ChromaCove is ready to take your audiences to the next level.



9000 Bank St. Suite B, Cleveland Ohio 44125 - www.ChromaCove.com - 1 (330) 541-5337

anatomy **education**

Interactive human body simulation in fulldome

Detailed 3D skeletal, muscular, cardiovascular, nervous, digestive, respiratory, and immune/lymphatic systems.

Isolated specimens of the skull, brain, heart, etc.

in partnership with

ZYGOTE BODY



available exclusively for

SCIdome

SCIdome

powered by **starry night**

THE LAYERED EARTH

TEACH bigger

SPITZ
An E&S Company
www.spitzinc.com

GOTO

Precision + Luck = Totality

Since our founder Seizo Goto filmed the sun's flash spectrograph during a total solar eclipse in 1936, we have learned that precise planning, equipment preparation, and location research – along with some luck regarding weather – come together in the form of spectacular images.

The same is true inside a planetarium – but without the vagaries of weather! GOTO INC takes great pride in producing sun, moon, and planet projectors which complement our starry skies with precision and accuracy. Digitally driven motors move each object via independent axes to exactly the right spot on the sky. While the vast majority of the world's planetarium projectors are analog systems with built-in errors that position sun and moon in the wrong positions, GOTO's CHIRON III, CHRONOS II, and PANDIA II projection systems get it right every time.

In addition to precise positioning and movements of the sun, moon, and planets, GOTO also takes care to represent the features on the moon, and the correct intensity representation of all moving objects, even down to varying planet magnitudes as they move about the sun from opposition to conjunction. So students can do sundial activities using light from the dome's bright sun, and when Venus rises there is absolutely no need to put a label next to it to identify it as a planet, or to make excuses for a fuzzy, dim, video blob. And when these precise opto-mechanical projectors are synchronized with full-dome video in GOTO HYBRID Planetariums, the effect is magical.

Sharp, bright, and in the right place at the right time. Just as we hope you will be on August 21, 2017. Oh, and good luck with that weather!



GOTO INC

4-16 Yazakicho, Fuchu-shi, Tokyo 183-8530 Japan
Tel: +81-42-362-5312 Fax: +81-42-361-9671
E-Mail: info2@goto.co.jp
URL: www.goto.co.jp/english/Index.html



©Yuji Ozawa
at 2006/03/26 Konya, Turkey



©Yuji Ozawa
at 2012/11/14 Cairns, Australia



©Yuji Ozawa
at 2016/03/08 in Indonesia

For Planetarium Educators:

GOTO's "Greatest Eclipse Hits"

From its extensive library of solar eclipse full-dome videos, still photos, and movies GOTO INC has assembled a deeply discounted set of solar eclipse resources to help planetariums teach America about the upcoming eclipse. This set of materials can be used to create your own show or to accompany a live lecture in your dome. Please go to https://www.domenavi.com/en/SearchResults.php?search_word=2017+USA to preview or purchase the materials. Or contact Yuka Sato at <y0807sat@goto.co.jp> for more eclipse clip information.

GOTO USA LIAISON

8060 Clearwater Drive, Indianapolis, IN 46256
Tel: +1-317-537-2806
E-Mail: gotousa@earthlink.net
Contact: Ken Miller

Several MAPS 2017 Area Meetings in the Works

By Alan Davenport, Past President

As you know, MAPS is officially joining the rest of the country in the Pleiades National Planetarium Conference at St. Louis, MO next October 10-14, 2017. The Executive Committee hopes that many of our MAPS friends will attend with us and we will hold our official business meeting there. More information on the National meeting can be found on page 3.



Meanwhile, a few supportive members have volunteered to hold springtime area meetings within the region offering even more professional development and enjoyment to MAPS folks. These are akin to our established tradition of Armand Spitz Regional Meetings and will be 1 or 2 day gatherings for sharing activities on various themes. The hosts are at various stages of developing their tentative meeting plans to take place at Bowie, MD, Schenectady, NY, Indiana, PA, and Mystic Seaport, CT. If you would like to offer input and support for them please contact, respectively, Patty Seaton, Megan Norris, Ken Coles and Brian Koehler. Registration information will be available on the MAPS web site as plans are finalized.

The MAPS officers applaud the dedication of these folks to our members, and we hope everyone will take the opportunity to participate in one or more of the meetings. It is too early to register, but not too early to plan your own contribution to the event by contacting the host(s). MAPS 2017 Area Meetings will be economical for participants, and prospective MAPS members are encouraged to attend.

We have overheard a few exciting ideas in the works. Patty, Meaghan and Ken are expecting to hold their meetings in May, and Brian June 8-9. Most will be held one afternoon and concluded the next morning. Patty hopes to have two full days with a trip to Goddard Space Flight Center in her agenda, and a full Saturday of activities with MAPS members and area public school teachers.

Brian Koehler has communicated these details as he rushes to prepare for a great time to be had by all at Mystic Seaport Museum:

The host is Treworgy Planetarium at Mystic Seaport Museum CT, from June 8th at Noon to June 9th at 4 p.m., on the theme "Engaging Audiences of All Ages." The planetarium is a 30-foot dome housing a Spitz A3P, and two classrooms are available for activities. Several hotels are within a mile of the Museum. Thursday evening might include a trip to an observatory. Brian explained, "We would like for our MAPS 2017 Area Meeting to be centered on the theme of engaging a diverse array of audiences. Many of us see a wide variety of visitors come through our doors - from infants and toddlers, to elementary and middle school students, to high schoolers and college students, to adults and senior citizens. Each demographic brings its own challenges but presents its own unique opportunities."

"Workshops at our meeting will focus on presentation styles, special accommodations, behavior management techniques, and general programming ideas for each of these groups - and of course, the inevitable scenario where two or more of these demographics comprise one audience!"

Additional Images from MAPS 2016

Please enjoy these images from the 2016 MAPS Conference at the Richmond Science Center in July 2016. *Photos by Alan Davenport*



Larry Krozel and Brian Koehler (Director) of Mystic Seaport Museum discuss their hosting an Area MAPS Meeting in 2017 over lunch.



Chums eagerly await a meal outside the Legends Club at Blue Crabs Stadium. L-R Jordan Mogerman, Shawn Laatsch, Patty Seaton (sans fountain), Brian Koehler and Larry Krozel.



Presented with a green salad to begin the banquet are L-R; Tom Button, Sue Button, Steve Berr, and Ron Proctor.



In wanderlust attire, Bob Victor relaxes between sessions.



The 2016 Margaret Noble Address speaker, Steve Russo, bewildered by his invitation to present this talk, explains the random walk of planetarians through their careers.

INCOMING!

*Asteroids, Comets, and the Hard-Hitting
Stories of Our Cosmic Origins*

Narrated by George Takei

**OFFICIAL
SELECTION**
CENTRAL EUROPEAN
FULLDOME FESTIVAL

**OFFICIAL
SELECTION**
JENA FULLDOME
FESTIVAL

Explore the past, present, and future of our Solar System
in a new planetarium show, now available for licensing.

For info on ordering the show, visit www.calacademy.org/licensing
or contact your preferred fulldome film distributor.



**CALIFORNIA
ACADEMY OF
SCIENCES**



SkyLase

The Only 360x180 Degree Full dome Laser Projector

creating a fully immersive and thrilling laser show experience



Audio Visual Imagineering, Inc.

6565 Hazeltine National Drive • Suite 2

Orlando FL 32822

P: 407.859.8166 • F: 407.859.8254

www.av-imagineering.com

Contact Joanne Young: joanne@av-imagineering.com



A RADIANT WORLD AT YOUR FINGERTIPS



A Complete Laser Show System for the Future:

- Vivid, Flicker-Free Imagery
- Full-length Educational and Entertaining Programs
- Weekly Rental and Installations Available

PRISMATIC  MAGIC

866-952-7376 ext. 110

 **RADIANT**
LASER PROJECTION

www.Laser-Radiant.com
[Facebook.com/RadiantLaserProjector](https://www.facebook.com/RadiantLaserProjector)



It's All About The Stars!

(whether it is optical-mechanical, digital, or both)

Background is First-Light photograph of starfield by Konica Minolta's GEMINISTAR III projected onto 18.3 m dome at Vanderbilt Planetarium, Centerport, NY, USA

SUPER MEDIAGLOBE II
2.4K and 4K models.
Digital solutions for
medium to large size domes



MEDIAGLOBE III
Digital solution
for small to medium
size domes

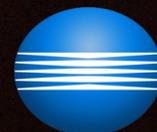
In North America & Russia Contact:



Tel: +1-305-573-7339
Russia: +7-9122-86-1392
kmp@myiceco.com
www.mediaglobeplanetarium.com

All Other Inquiries Contact:
KONICA MINOLTA PLANETARIUM CO., LTD.

www.konicaminolta.com/planetarium/
2-3-10, Nishi-Honmachi, Nishi-ku, Osaka 550-0005, Japan
Tel: +81-6-6110-0570 Fax: +81-6-6110-0572



KONICA MINOLTA