

# *VITA*

## **ROBERT GREGSON STROM**



(Photograph: Sept. 21, 2010)

**DATE OF BIRTH:** October 1, 1933

**PLACE OF BIRTH:** Long Beach, California

### **EDUCATION**

- 1955 BS - Geology, University of Redlands
- 1957 MS - Geology, Stanford University  
Thesis: "Stratigraphy of the Mindego Hill Quadrangle, California"
- 2011 PhD – Honorary Doctor of Planetology, University of Redlands

### **ACADEMIC AND PROFESSIONAL APPOINTMENTS**

- 1957-60 Petroleum Geologist, Standard Vacuum Oil Co., White Plains, New York; Stationed in Karachi, Pakistan; Calcutta, India, and Dhaka, East Pakistan (Bangladesh).
- 1961-63 Research Geologist, Space Sciences Laboratory, University of California, Berkeley, California

- 1963-72 Assistant Professor, Lunar and Planetary Laboratory, University of Arizona
- 1970 Visiting Senior Fellow, University of London Observatory, London, England (Summer)
- 1972-81 Associate Professor, Dept. of Planetary Sciences and Lunar and Planetary Laboratory, University of Arizona
- 1977-99 Founder and Director, Space Imagery Center (A NASA Regional Planetary Image Facility), Lunar and Planetary Laboratory, University of Arizona
- 1985 Visiting Professor, Institute for Space Astrophysics, University of Rome, Rome, Italy (Spring Sabbatical Leave)
- 1981-99 Professor, Dept. of Planetary Sciences, and Lunar and Planetary Laboratory, University of Arizona
- 1995-96 Secretary/Treasurer, Board of Trustees, Center for Image Processing in Education
- 1997 Visiting Professor, Dept. of Science, University d'Annunzio, Pescara, Italy (Spring Sabbatical Leave)
- 2000- Professor Emeritus, Dept. of Planetary Sciences and Lunar and Planetary Laboratory, University of Arizona

## **MAJOR FIELDS OF INTEREST**

Planet and Satellite Geology  
 Solar System Impact Cratering Records  
 Climate Change on Earth and Mars

## **PROFESSIONAL SOCIETY MEMBERSHIPS**

American Geophysical Union (Division of Planetology)  
 American Astronomical Society (Division of Planetary Sciences)  
 International Astronomical Union (Commission 17)  
 Geological Society of America (Fellow)  
 American Association for the Advancement of Science

## **HONORS AND AWARDS**

- 1974 NASA Public Service Group Achievement Award for Mariner 10 Venus/Mercury Television Science Team

- 1979 NASA Special Recognition for serving as a Principle Investigator in the Lunar Program
- 1981 NASA Group Achievement Award Voyager Jupiter/Saturn Imaging Science Investigation
- 1986 NASA Group Achievement Award Voyager Uranus Imaging Science Investigation
- 1990 NASA Group Achievement Award Voyager Neptune Imaging Science Investigation
- 1997 Career Distinguished Teaching Award, College of Science, University of Arizona
- 1998 NASA Certificate of Appreciation, NASA Regional Planetary Image Facilities Founder
- 2003 Asteroid 1995 SX12 named (8408) Strom; Diameter = 8 km; Distance = 3.0 AU; Period = 5.31 years.
- 2008 NASA Certificate of Recognition for being the only member of the MESSENGER science team that was also a science team member on the Mariner 10 mission to Mercury.
- 2009 G.K. Gilbert Award “for outstanding contributions to the solution of fundamental problems in planetary geology”, Geological Society of America
- 2010 Elected Fellow in the Geological Society of America
- 2011 In *Who’s Who in America 2011*
- 2011 Honorary Doctorate of Planetology, University of Redlands, Redlands, CA.
- 2012 Laurels for MESSENGER Team Achievement, International Academy of Astronautics, Naples, Italy

## **RESEARCH GRANTS**

- 1969-73 NASA NGL 03-002-191, "Lunar Surface and Planetology", Co-Investigator
- 1970-72 JPL 953026, "Venus/Mercury Mission", Co-Investigator
- 1973-75 NASA NGL 03-002-191, "Investigation of the Lunar Surface", Principal Investigator  
  - NASA NSG 7146, "Geological investigation of Mercury from Mariner 10 Television Data", Principal Investigator
- 1976-77 NASA NGL 03-002-191, Geological and Statistical Investigation of the Lunar Surface," Principal Investigator

- NASA 7146, "Geological Investigation of Mercury", Principal Investigator
- NASA NASW 2944, "Space Imagery Center," Principal Investigator
- Arizona Foundation, "Space Imagery Center," Principal Investigator
- 1977-78 NASA NGL 03-002-191, "Geological and Statistical Investigation of the Lunar Surface," Principal Investigator
- NASA NGL 7146, "Geological investigation of Mercury and Impact Processes," Principal Investigator
- 1979-80 NASA, "Martian Landforms' Response to Geologic Setting," Co-Investigator
- 1978-90 JPL, "Participation in Voyager Mission to Outer Solar System," Principal Investigator
- 1980- 90 NASA NGL 7146, "Geological and Geophysical Investigations of Planetary Surfaces." Principal Investigator
- 1983-86 NASA NAGW 135, "Geological Investigations of Outer Planet Satellites," Principal Investigator
- 1986-89 NASA NAGW 1212, "Crating, Chemical, and Thermal Investigation of Uranian Satellites," Principal Investigator
- 1989-92 NSF, Image Processing for Teaching, Co-Director.
- 1991-93 NASA, "Geological and Geophysical Investigations of Triton," Neptune Data Analysis Program, Principal Investigator
- 1990-96 NASA NAGW-2021, "Planetary Geological and Geophysical Investigations," Principal Investigator
- 1992-96 NSF Grant, "National Dissemination of Image Processing for Teaching, Co-Director.
- 1993-96 NASA Venus Data Analysis Program, "Impact Crater Investigations of Venus," Principal Investigator
- 1996-97 NSF Grant, "Development of Image Processing Activities for Teaching," Co-Director
- 2000-12 NASA MESSENGER Mission grant, Carnegie Institution of Washington and Applied Physics Laboratory, John Hopkins University, Principal Investigator

**SPACE FLIGHT PROGRAMS and SPACE FLIGHT SCIENCE WORKING GROUPS**

### **SPACE FLIGHT PROGRAMS (Appointed)**

- 1968-69 NASA Apollo 8,10 and 11 Lunar Operations Working Group, Member
- 1972 NASA Apollo 16 astronaut pre-flight briefing (March 23, 1972).
- 1969-75 NASA Mariner Venus/Mercury 1973 Mission, Imaging Science Team, Deputy Team Leader
- 1978-90 NASA Voyager Missions to Jupiter, Saturn, Uranus, and Neptune, Imaging Science Team, Member
- 1997- 2015 NASA MESSENGER Discovery Mission to Mercury, Science Team Member

### **SPACE FLIGHT SCIENCE WORKING GROUPS (Appointed)**

- 1975-76 NASA Comet Mission Working Group  
NASA Jupiter Orbiter Science Working Group (Galileo)
- 1977-78 NASA Venus Orbital Imaging Radar Science Working Group (Magellan)
- 1987-90 NASA Mercury Orbiter Science Working Team
- 1996-97 Discovery Mission - MESSENGER Mercury Orbiter Mission Proposal, Applied Physics Lab., Johns Hopkins University

### **PROFESSIONAL COMMITTEES (Appointed)**

- 1974-77 NASA Lunar Science and Cartography Committee
- 1975-85 NASA Mercury Geologic Mapping Program
- 1975-78 NASA Imaging System Instrument Development Program
- 1976-80 NASA Terrestrial Planet Basaltic Volcanism Project
- 1977-80 NASA Crater Analysis Techniques Working Group  
NASA Lunar and Planetary Cartography Committee
- 1978-99 NASA Regional Planetary Image Facilities Advisory Group, Chairman 1978-80,  
Chairman 1989-93
- 1980-82 NASA Planetary Geology Working Group  
NASA Planetary Geology Review Panel

- 1982-90 NASA Galilean Satellite Geologic Mapping Program  
NASA Workshop on Planetary Geology
- 1986-89 NASA Planetary Geology and Geophysics Working Group
- 1988-89 Consultant, Time/Life Books, McGraw-Hill Books
- 1991 Consultant, Jostens Learning Corp.
- 1992 Co-Convener 3 Special Sessions; 1) Magellan Results at Venus, 2) Planetary Geology Workshop, and 3) Image Processing Workshop. International Geological Congress, Kyoto, Japan.
- 1992 Convener Special Session; Earth, Venus and Mars: New Results and Concepts. Western Pacific Geophysics Meeting, Hong Kong, China.
- 1995-96 Organizing Committee, Comparative Studies of the Moon and Mercury, 31<sup>st</sup> COSPAR Scientific Assembly, Birmingham, England.
- 1997- 99 Member Advisory Board, European School of Planetary Sciences
- 2011 Member Science Committee – Planetary Exploration Research Center (PERC), Planetary Geology Field Symposium, Kitakyushu City, Japan (Nov. 5-9)

### **ACADEMIC COMMITTEES**

- 1974-75 Qualifying Examination/Counseling Committee Seminar Committee (Chair)
- 1975-76 Qualifying Examination/Counseling Committee (Chair)  
Standing Committee on Faculty Status
- 1976-77 Admissions Committee, Graduate Student Affairs Committee
- 1977-78 Admissions Committee, Computer Committee, Curriculum Committee, Text Book Committee (Chair)
- 1978-79 Curriculum Committee, Graduate Student Affairs Committee
- 1980-81 Graduate Student Affairs Committee, Library Committee
- 1981-82 Library Committee, Screening Committee, Faculty Status Committee
- 1982-83 Curriculum Committee, Screening Committee, Advisory Council,  
Director, Faculty Status Committee

- 1983-84 Curriculum Committee
- 1984-85 Curriculum Committee, Screening Committee
- 1985-86 Curriculum Committee, Graduate Student Affairs Committee, Library Committee
- 1986-87 Curriculum Committee, Graduate Student Affairs Committee
- 1987-88 Curriculum Committee, Graduate Student Affairs Committee, Graduate Advisor for the Dept. of Planetary Sciences
- 1988-89 Curriculum Committee, Graduate Student Affairs Committee, Graduate Advisor for the Dept. of Planetary Sciences
- 1990-94 Graduate Advisor for the Dept. of Planetary Sciences, Graduate College Representative for University-wide Qualifying Examinations, Curriculum Committee, Graduate Student Affairs Committee
- 1991-95 Science Education Promotion and Tenure Committee (Chair, 1995), Science Education Curriculum Committee, Science and Mathematics Education Committee
- 1994-95 LPL/PtyS Director/Head Search Advisory Committee, Search Com. for the Director of the Science and Mathematics Education Center, Committee on Undergraduate Core Curriculum
- 1995 Advisor for the Undergraduate Minor in Planetary Sciences, Graduate Advisor for the Dept. of Planetary Sciences, Curriculum Committee, Graduate Student Affairs and Admissions Committee, Science Education Promotion and Tenure Committee (Chair, 1995), Recruitment Committee, Science and Mathematics Education Committee
- 1996 Advisor for the Undergraduate Minor in Planetary Sciences, Graduate Advisor for the Dept. of Planetary Sciences, Graduate Student Affairs and Admissions Committee, Science and Mathematics Education Committee, Colloquium Committee, Promotion and Tenure Committee
- 1997 Advisor for the Undergraduate Minor in Planetary Sciences, Graduate Advisor for the Dept. of Planetary Sciences, Graduate Student Affairs and Admissions Committee, Promotion and Tenure Committee
- 1998 Advisor for the Undergraduate Minor in Planetary Sciences, Curriculum Committee
- 1999 Advisor for the Undergraduate Minor in Planetary Sciences, Curriculum Committee
- 2000 Advisor for the Undergraduate Minor in Planetary Sciences

2001 Advisor for the Undergraduate Minor in Planetary Sciences

2002 Advisor for the Undergraduate Minor in Planetary Sciences

### **TEACHING EXPERIENCE (Dept. of Planetary Sciences formed in 1972)**

#### **Courses Taught:**

1972-73 PtyS 224, Comparative Geologic Processes on Planetary Surfaces, Fall  
PtyS 321, The Moon, Spring

1973-74 PtyS 332, Terrestrial Planets, Fall

1974-75 PtyS 224b, Principles of Cosmochemistry and Planetary Geology, Spring

1975-76 PtyS 322, Terrestrial Planets, Fall  
PtyS 321, The Moon, Spring

1976-77 PtyS 225, Principles of Cosmochemistry and Planetary Geology, Spring

1977-78 PtyS 322, Terrestrial Planets, Fall  
PtyS 399, Independent Studies: The Moon, Spring  
PtyS 396, Seminar: Advanced Topics in Planetary Sciences, Spring

1978-79 PtyS 225, Principles of Planetary Geology, Spring

1979-80 PtyS 562, Evolution of Planetary Surfaces, Fall  
Geos 596e, Planetary Volcanism, Spring

1980-81 PtyS 311, Introduction to Planetary Geology, Fall  
PtyS 106, Survey of the Solar System, Spring

1981-82 PtyS 106, Survey of the Solar System, Fall

1982-83 PtyS 311, Introduction to Planetary Geology, Fall  
PtyS 554, Evolution of Planetary Surfaces, Spring

1984-85 PtyS 311, Introduction to Planetary Geology, Fall

1985-86 PtyS 106, Survey of the Solar System, Fall

1986-87 PtyS 411, Introduction to Planetary Geology, Fall



1987-88 PtyS 106, Survey of the Solar System, Fall

1988-89 PtyS 411, Introduction to Planetary Geology, Fall  
PtyS 106, Survey of the Solar System, Spring

1989-90 PtyS 106, Survey of the Solar System, Spring

1990-91 PtyS 411, Introduction to Planetary Geology, Fall

1991-92 PtyS 106, Survey of the Solar System, Spring

1991-92 PtyS 411, Introduction to Planetary Geology, Fall

1992-93 PtyS 106, Survey of the Solar System, Fall  
PtyS 195D, Exploration of Mars, Fall

1993-94 PtyS 106, Survey of the Solar System, Fall  
PtyS 195, Exploration of Mars, Fall  
PtyS 112, Undergraduate Research in Planetary Science, Spring

1994-95 PtyS 411, Geology of the Solar System, Fall  
PtyS 195D, Exploration of Mars, Fall

1995-96 PtyS 106, Survey of the Solar System, Fall  
PtyS 411, Geology of the Solar System, Fall  
PtyS 195, Exploration of Mars, Fall  
PtyS 112, Undergraduate Research in Planetary Science, Spring  
PtyS 211, Image Processing for Scientific Discovery, Spring

1996-97 PtyS 499H Special Problems (Jerimie Jackson - Venus Geology) Summer  
PtyS 411, Geology of the Solar System, Fall  
PtyS 499H, Special Problems (Courtney Sutherland-Venus Geology), Fall  
PtyS 195A, Exploration of Mars, Fall

1997-98 PtyS 411, Geology of the Solar System, Fall  
PtyS 109L, Exploration and Discovery in Planetary Science, Fall  
PtyS 195A, CLQ 4, Exploration of Mars, Fall  
PtyS 106, Survey of the Solar System, Spring  
PtyS 112H, Undergraduate Research in Planetary Science, Spring

1998-99 PtyS 411/511, Geology of the Solar System, Fall  
PtyS 195A, CLQ 4, Exploration of Mars, Fall  
PtyS 499H, Special Problems (Kerry Harris, Venus Craters), Fall  
PtyS 499, Special Problems (Angela Brada, Venus Craters), Fall  
PtyS 112H, Undergraduate Research in Planetary Science, Spring  
PtyS 195B, Planetary Catastrophes, Spring

1999-00 PtyS 411/511, Geology of the Solar System, Fall  
PtyS 195A, CLQ 3, Exploration of Mars, Fall  
PtyS 206, Golden Age of Planetary Exploration, Spring  
PtyS 112H, Undergraduate Research in Planetary Science, Spring  
PtyS 195A, CLQ 3, Planetary Catastrophes, Spring  
PtyS 299, Special Problems, (Martha Blanke), Spring

2000-01 PtyS 195A, CLQ 4, Exploration of Mars, Fall  
PtyS 195A, CLQ 3, Planetary Catastrophes, Spring

2001-02 PtyS 411/511, Geology of the Solar System, Fall  
PtyS 195A, CLQ 2, Exploration of Mars, Fall  
PtyS 195A, CLQ 2, Planetary Catastrophes, Spring  
Euro Summer School in Planetary Geology, Pescara, Italy -- May 5 - 19, 2002

2006-10 PtyS 299, Student Research, Spring

2009-10 PtyS 195, Lower Division Seminar; Global Warming: How Serious Is It? Spring semester.

2010-11 PtyS 395, Upper Division Seminar; Global Warming: How Serious Is It. Spring semester.

#### **DISSERTATION COMMITTEES:**

Ph.D., Wayne Slattery (member)  
Ph.D., Bruce Cordell (Director)  
Ph.D., Martha Leake (Director)  
Ph.D., Carlton Allen (Director)  
Ph.D., Cliff Stoll (member)  
Ph.D., Kevin Housen (member)  
Ph.D., Michael Fierberg (member)  
Ph.D., Robert Howell (member)  
Ph.D., Abra Watkins (member), Dept. of Biochemistry  
M.S., Barney Issen (member), Dept. of Geosciences  
Ph.D., Larry Crumpler (Director)  
Ph.D., David Tholen (member)  
Ph.D., Faith Vilas (member)  
Ph.D., John Spencer (Director)  
Ph.D., Nadine Barlow (Director)  
Ph.D., David Grinspoon (member)  
Ph.D., Virginia Guilick (member), Dept. of Geosciences  
Ph.D., Daniel Williams (member), Dept. of Geosciences  
Ph.D., Jeffrey Kargel (Director)  
Ph.D., Paul Geissler (member)  
Ph.D., Goro Komatsu (member)  
Ph.D., Jeffrey Johnson (member), Dept. of Geosciences  
Ph.D., Eilene Ryan (member), Dept. of Geosciences

Ph.D., Douglas Dawson (Director)  
Ph.D., Jennifer Grier (member)  
Ph.D., John Pedacino (member)  
Ph.D., David Wood (Director)  
M.S., Janet McLarty (Director)  
Ph.D., Jim Head (member)  
Ph.D., Windy Jaeger (member)  
Ph.D., Devon Burr (member), Dept. of Geosciences  
Ph.D., Justin Ferris (member), Dept. of Hydrology  
M.S., Andreas Ekholm (member)  
Ph.D. Maria Banks (member)  
Ph.D. David Minton (member)  
Ph.D. Ingrid Dauber (member)

### **UNDERGRADUATE RESEARCH SUPERVISION:**

Jennifer Grier 1988-90  
Christine Knight 1990-91  
Natasha Johnson (NASA Space Grant) 1990-1991  
Edward Hackett (NASA Space Grant) 1991-92  
Marguite Carbonaro 1993  
Maria Banks (NASA Space Grant) 1993-94  
Joann Vasquez (NASA Space Grant ) 1993-94  
Andrew Papanikolas 1993-95  
Dylan Krider 1993-94  
Jayln Richardson 1993-94  
Alejandro Diaz 1994  
Michelle Ward 1994-95  
Carmelita Chaille (NASA Space Grant) 1994-95  
Jessica Graybill 1995  
Saron Klute (NASA Space Grant) 1995-96  
Frederico Finan (NASA Space Grant) 1995-96  
Maria Krempasky 1995-96  
Megun Summers, Spring 1996  
Maria Banks, Spring 1996  
John Shehan, Spring 1996  
Jerimie Jackson, Summer 1996  
Courtney Sutherland, Fall 1996  
Erin (Cristy) Magill (NASA Space Grant), 1997-98  
Lindsey Nolan (NASA Space Grant), 1998-1999  
Kerry Harris, Fall 1998  
Angela Brada, Fall 1998  
Martha Blanke, Spring 2000  
Azul Gomez, (NASA Space Grant), 2000-2001  
Stacy Ellwein, Architecture Dept., Senior Capstone Project, 2000  
Jeff Forde, Spring 2002

Pey-Juain Ko, High School Research (2001-2002)  
Triana Henz, Dept. of Planetary Sciences (2009-10)

## Invited Lectures

"The Mariner Venus/Mercury Mission", International Geological Congress, August 1973, Montreal, Canada

"The Surface of Mercury", Division of Planetary Sciences Meeting, Amer. Astronomical Soc., April 1974, Palo Alto, Calif.

"Venus: Atmospheric Motion and Structure from Mariner 10 Images", COSPAR, June 1974, Sao Paulo, Brazil

"Mercury: Television Experiment and Geology from Mariner 10", COSPAR, June 1974, Sao Paulo, Brazil

"Exploration of the Inner Solar System: The Search for Our Origins", Invited Lecture Series, April 1978, University of Oregon, Eugene, Oregon

"The Tectonics of Mercury", Amer. Geophysical Union Meeting, May 1980, Toronto, Canada

"Crater Populations on Ganymede and Callisto", European Geophysical Society Meeting, Budapest, Hungary, August 1980

"Volcanic Eruption Plumes on Io", European Geophysical Society Meeting, Budapest, Hungary, August 1980

"Volcanic Eruptions on Io", Dept. of Geology Colloquium, Stanford University, April, 1981

"The Galellian Satellites", Special Colloquium, University of Pisa, Pisa, Italy, April, 1985  
(Given in the same room where Galileo lectured)

"The Solar System Cratering Record", Special Colloquium, University of Rome, Rome, Italy, May, 1985

"The Solar System Cratering Record", Special Session, American Geophysical Union Meeting, Baltimore, Maryland, 1987

"Mars", Eyes on the Universe Series, Flandaru Planetarium, Univ. of Arizona, 1988

"Mercury and the Origin of the Terrestrial Planets", NASA Special Colloquium, NASA Headquarters, Washington DC, June, 1989.

"Voyager 2 Results at Neptune: Triton and the Satellites", Western Pacific Geophysics Meeting, Kanazawa, Japan, August, 1990.

"Planetary Image Processing on Microcomputers", American Association for the Advancement of Science Meeting, Washington, DC, Feb. 1991.

"Ancient Oceans and Ice Sheets on Mars", Eyes on the Universe Series, Flandaru Planetarium, Oct. 1991

"Mars: The Rediscovered Planet", Green Valley Library Lecture, Nov. 1991

"The Impact Cratering Record on Venus", International Geological Congress, Kyoto, Japan, August, 1992.

"Planetary Impact Cratering", University of Kyoto, Kyoto, Japan, August, 1992.

"Pulsed Resurfacing Events on Venus, Earth and Mars", Western Pacific Geophysics Meeting, Hong Kong, China, August, 1992.

"A Mercury Orbiter: Key to Understanding the Origin of the Terrestrial Planets", Institute of Space and Astronautical Sciences, Tokyo (Kanagawa), Japan, August, 1992.

"Magellan Results at Venus", Lecture Green Valley Astronomy Club, Green Valley Library, Jan. 1993.

"The Apollo Missions", Lecture at the Nogales Rotary Club, Sept. 1994.

"The Shoemaker/Levy 9 Comet Impact on Jupiter", Sauharita High School, Feb. 1995

"Volcanoes and Canyons on Mars", Ames Research Center Teacher Workshop on Mars, San Jose, CA, Aug. 14, 1995.

"Ancient Oceans and Icesheets on Mars", Ames Research Center Teacher Workshop on Mars, San Jose, CA, Aug. 14, 1995.

"Image Processing for Teaching", Ames Research Center Teacher Workshop on Mars, San Jose, CA, Aug. 14, 1995.

Venus Turned Inside-out: Global Resurfacing, Steward Observatory Public Evening Series, Steward Observatory, University of Arizona; Oct. 16, 1995.

The Global Resurfacing of Venus, Society of Earth Science Students, Geology Dept. Univ. of Arizona, Oct. 27, 1995

“Mercury: A New Assessment”, 31<sup>st</sup> COSPAR Scientific Assembly, Comparative Studies of the Moon and Mercury, Birmingham, England, July 14-21, 1996.

“Ancient Oceans and Ice Sheets on Mars”, Students for the Exploration and Development of Space meeting, Univ. of Arizona, Nov. 6, 1996.

“Planetary Catastrophes,” Fenster Private School, Tucson, AZ, Nov. 7, 1996.

“Ancient Oceans and Ice Sheets on Mars”, Dept. of Mathematics, Universita di Pisa, Pisa, Italy, March 13, 1997

“Venus”, Dept. of Geology, Universita d’Annunzio, Chieti, Italy, April 15, 1997

“Mars”, Dept. of Geology, Universita d’Annunzio, Chieti, Italy, April 17, 1997

Planetary Geology Short Course, Universita d’ Annunzio, Pescara, Italy, May, 1997

“Ancient Oceans and Ice Sheets on Mars: Implication for Life”, 1997 National Imaging Technology Conference, Rochester, MN, July 10, 1997

“Ancient Oceans and Ice Sheets on Mars”, 1998 Partners in Science Conference, Research Corp., Tucson, AZ, Jan. 17, 1998

"Mars", Cardin Academy Elementary School, Tucson, AZ, Sept. 1998

“Ancient Oceans and Ice Sheets on Mars”, 1998 Regional Conference on Undergraduate Research, Murdock College Science Research Program, Northwest Nazarene College, Boise, Idaho, Nov. 6, 1998.

"MESSENGER Mission to Mercury", Students for the Exploration and Development of Space, Univ. of Arizona, March 10, 1999.

"Ancient Oceans and Ice Sheets on Mars", Institute of Space and Astronautical Science, Kanagawa, Japan, May 17, 2000.

"Mercury: a New Evaluation", Institute of Space and Astronautical Science, Kanagawa, Japan, May 18, 2000.

"Recent Solar System Explorations", Public lecture at Kyushu Tokei University, Kumamoto, Japan, June 10, 2000.

"Ancient Oceans and Ice Sheets on Mars", Dept. of Earth and Planetary Sciences, University of Tokyo, Tokyo, Japan, June 19, 2000.

"Mercury: The MESSENGER Mission", Dept. of Earth and Planetary Sciences, University of Tokyo, Tokyo, Japan, June 19, 2000.

"The Moon", Project ASTRO, National Optical Astronomy Observatories, Oct. 13, 2000

"Mercury: The MESSENGER results, Japan planetary conference and field trip, Kitakyushu, Japan, Nov. 2011.

Solar System Lecture Series, Caronia Cruise, May 2001

Solar System Lecture Series, Seabourn Sun Cruise, July 2001

Solar System Lecture Series, QE2 Cruise, Dec. 2001-Jan. 2002

Solar System Lecture Series, Seabourn Cruise, Aug. 2003

Solar System Lecture Series, Seabourn Cruise, Dec. 2004

The New Solar System, Tokai University Public Lecture, Kumamoto, Japan, June 2005

Global Warming, Applied Physics Lab., John Hopkins University, Laurel, MD, March 2008.

National Air and Space Museum Public Lecture Series (From Fire to Ice), Impact Cratering and the Solar System Cataclysm, Washington, D.C., April 29, 2010.

MESSENGER orbital results, PERC Planetary Geology Field Symposium, Kitakyushu, Japan, Nov. 5-9, 2011.

Global Warming: How Serious Is It, U.S. Naval Academy Alumni meeting, Tucson, AZ, Sept. 20, 2011.

Global Warming: How Serious Is It, Tucson Committee on International Relations, Tucson, AZ, Sept. 27, 2012.

Early Lunar Studies and the Apollo Missions, Rotary Club, Saddlebrook, Az, March 12, 2015.

University of Arizona, OLLI lecture series for seniors; Global Warming How Serious Is It?, Sept.-Oct. 2014-2016.

**Numerous public lectures on Global Warming, Mercury and the MESSENGER Mission**

## **Bibliography**

## INVITED PAPERS:

1. "Mercury: A Post-Mariner 10 Assessment", **Space Science Reviews**, 24, 3-70, 1979.
2. "Der Merkur" (Mercury), in **Bild der Wissenschaft**, (World of Science), Stuttgart, Germany, March, 1984.
3. "Mercury", **McGraw-Hill Yearbook of Science and Technology**, McGraw-Hill Book Co., 1990
4. "Mercury: The Forgotten Planet", **Sky and Telescope Magazine**, Vol. 80, No. 3, Sept. 1990.
5. "The Ice Ages of Mars", J.S. Kargel and R.G. Strom, **Astronomy**, 41-45, December, 1992.
6. "Planetology", R. G. Strom, **Geotimes**, Amer. Geol. Inst., Vol. 40, No. 2, 23, 1995.
7. "Global Climate Change on Mars", J.S. Kargel and R.G. Strom, **Scientific American**, Nov. 1996
8. "Mercury: An Overview, R.G. Strom, in **Advances in Space Research**, Vol. 19, No. 10, pp. 1471-1485, 1997.

## ARTICLES IN SCIENTIFIC JOURNALS:

1. Possible Elemental Abundances of the Lunar Crust, A. Palm and R.G. Strom, Publ. Astronomical Society of the Pacific, **74**, 36, 1962.
2. Fault Mechanics of the Lunar Straight Wall and the Nature of Mare Material, **Space Sciences Lab. Rpt.**, Ser. **6**, No. 8, Jan. 1963.
3. Possible Origin of the Lunar Walled Plain Ptolemaeus, R.G. Strom and A. Palm, **Nature**, **199**, 1052, 1963.
4. The Craters in the Lunar Walled Plain Ptolemaeus, A. Palm and R.G. Strom, **Planet. Space Sci.**, **11**, 125, 1963.
5. Analysis of Lunar Lineaments, I: Tectonic Maps of the Moon, **Lunar & Planetary Lab. Comm.**, **2**, 205, 1964.
6. Interpretation of Ranger 7 Records, Part II: Experimenters Analyses and Interpretations, G.P. Kuiper, R.G. Strom and W.K. Hartmann, **JPL Technical Report 32-700**, **62**, 1965.



7. Interpretation of Ranger 8 and 9 Records, Part III: Experimenters Analyses and Interpretations, G.P. Kuiper, R.G. Strom, and R.S. LePoole, **JPL Technical Report 32-800**, 85, 1966.
8. Consolidated Lunar Atlas, **Contrib. No. 4 of the Lunar and Planetary Lab., Supplement No. 3 and 4 to USAF Photographic Lunar Atlas**, 1968.
9. Multiphase Development of the Lunar Crater Tycho, R.G. Strom and G. Fielder, **Nature**, **217**, 611, 1968.
10. Multiphase Eruptions Associated with the Lunar Craters Tycho and Aristarchus, R.G. Strom and G. Fielder, **Lunar and Planetary Lab. Communications.**, **8**, 235, 1968.
11. Preliminary Comparison of Apollo 8 and Lunar Orbiter Photography, R.G. Strom, in **Analysis of Apollo 8 Photography and Visual Observations (NASA SP-201)**, p. 12, 1969.
12. Lunar Mare Ridges, Rings and Volcanic Ring Complexes, R.G. Strom, **Modern Geology**, **2**, 133, 1971.
13. An Unusual Farside Crater, R.G. Strom and E.A. Whitaker, in **Analysis of Apollo 10 Photography and Visual Observations (NASA SP-232)**, p. 20, 1970.
14. Lunar Mare Ridges, Rings and Volcanic Ring Complexes, R.G. Strom, **The Moon**, Proceedings from IAU Symposium no. 47, University of Newcastle-Upon-Tyne, England, 22-26 March, 1971 / Runcorn, S. K., Urey, H.C. (eds.). / International Astronomical Union. Symposium no. 47 / D. Reidel, Dordrecht, Netherlands, 1972. – Pp.187-215.
15. Mariner Venus/Mercury 1973 Imaging Sequence Document, B. Murray, R.G. Strom, et al., **JPL MVM Document**, Nov. 1973.
16. The Planet Mercury as Viewed by Mariner 10, R.G. Strom, **Sky and Telescope**, **47**, 360, 1974.
17. Venus: Atmospheric Motion and Structure from Mariner 10 Pictures, B. Murray, R. G. Strom, et. al., **Science**, **183**, 1307, 1974.
18. Mariner 10 Pictures of Mercury: First Results, B. Murray, R.G. Strom, et al., **Science**, **184**, 459, 1974.
19. Mercury's Surface: Preliminary Description and Interpretation from Mariner 10 Pictures, B. Murray, R.G. Strom, et al., **Science**, **185**, 169, 1974.
20. Preliminary Imaging Results from the Second Mercury Encounter, R.G. Strom, et al., **J. Geophys. Res.**, **80**, No. 17, 2345-2356, June 10, 1975.

21. Tectonism and Volcanism on Mercury, R.G. Strom, N.J. Trask, and J.E. Guest, **J. Geophys. Res.**, **80**, 2478, 1975.
22. Surface History of Mercury: Implications for the Terrestrial Planets, B.C. Murray, R.G. Strom, N.J. Trask, and D.E. Gault, **J. Geophys. Res.**, **80**, 2508, 1975.
23. Additional Evidence of Mercurian Volcanism, N.J. Trask and R.G. Strom, **Icarus**, **28**, 559, 1976.
24. Origin and Relative Age of Lunar and Mercurian Intercrater Plains, R.G. Strom, **Phys. Earth Planet. Interiors**, **15**, 156-172, 1977.
25. Mercury, D.E. Gault, J.A. Burns, P. Cassen, and R.G. Strom, **Ann. Reviews Astron. Astrophysics**, **15**, 97-126, 1977.
26. Global Tectonics of Mercury and the Moon, B.M. Cordell and R.G. Strom, **Physics Earth and Planet. Interiors**, **15**, 146-155, 1977.
27. Atlas of Mercury, M.E. Davies, S.E. Dwornik, D.E. Gault, and R.G. Strom, **NASA SP-423**, 1978.
28. The Jupiter system through the eyes of Voyager I, B. A. Smith, R.G. Strom, et al., **Science**, pp. 913-921, June 1, 1979.
29. The Galilean satellites and Jupiter: Voyager 2 imaging science results, B.A. Smith, R.G. Strom, et al., **Science**, 206, 927-950, Nov. 23, 1979.
30. Preliminary geological mapping of Io, Masursky, H., Schaber, G.G., Soderblom, L.A., and Strom, R.G., **Nature**, 280, No. 5725, 725-729, Aug. 30, 1979.
31. Volcanic features of Io, Carr, M.H., Masursky, H., Strom, R.G., and Terrile, R.J., **Nature**, 280, No. 5725, 729-733, Aug. 30, 1979.
32. Volcanic eruption plumes on Io, Strom, R.G., Terrile, R.J, Masursky, H., and Hansen C., **Nature**, 280, No. 5725, 733-736. Aug. 30, 1979.
33. The Solar System cratering record: Voyager 2 results at Uranus and implications for the origin of impacting objects, R.G. Strom, **Icarus**, **79**, 517-535, 1987.
34. Mercury: A Post-Mariner Assessment, R.G. Strom, **Space Science Reviews.**, **24**, 3-70, 1979.
35. Standard Techniques for Presentation and Analysis of Crater Size-frequency Data, Crater Analysis Techniques Working Group, R.G. Strom and 11 others, **Icarus**, **37**, 467, 1979.
36. The Jupiter System Through the Eyes of Voyager 1, B.A. Smith, R.G. Strom, et. al., **Science**, **204**, 951, 1979.

37. Volcanic Features on Io, M. Carr, R.G. Strom, R. Terrile and H. Masursky, **Nature**, **280**, 729, 1979.
38. Volcanic Eruption Plumes on Io: Voyager 1 Results, R.G. Strom, R. Terrile, H. Masursky, and C. Hansen, **Nature**, **280**, 733, 1979.
39. Preliminary Geologic Mapping of Io, H. Masursky, G.G. Schaber, L.L. Soderblom, and R.G. Strom, **Nature**, **280**, 725, 1979.
40. The Galilean Satellites and Jupiter: Voyager 2 Imaging Science Results, B.A. Smith, R.G. Strom, et al., **Science**, **206**, 927, 1979.
41. Volcanic Eruptions on Io, R.G. Strom, N.M. Schneider, R.J. Terrile, A.F. Cook, and C. Hansen, **J. Geophys. Res.**, **86**, 8593, 1981.
42. Crater Populations on Ganymede and Callisto, R.G. Strom, A. Woronow, and M. Gurnis, **J. Geophys. Res.**, **86**, 8659, 1981.
43. Encounter with Saturn: Voyager 1 Imaging Science Results, B.A. Smith, R.G. Strom, et al., **Science**, **212**, 163-537, 1981.
44. Limits on Large Crater Production and Obliteration on Callisto, A. Woronow and R.G. Strom, **Geophys. Res. Letters**, **8**, 891-894, 1981.
45. A New Look at the Saturn System: The Voyager 2 Images, B.A. Smith, R.G. Strom, et al., **Science**, **215**, 504-537, 1982.
46. Geologic Evolution of Galileo Regio, Ganymede, R. Casacchia and R.G. Strom, **J. Geophys. Res.**, **89**, Supp. B419-428, 1984.
47. Der Merkur (Mercury), R.G. Strom, in **Bild der Wissenschaft**, (World of Science), Stuttgart, Germany, pp. 62-74, March, 1984.
48. Planetary Cartography in the Next Decade (1984-1994), R.G. Strom, et al., **NASA SP-475**, NASA Scientific and Technical Information Branch, 1985.
49. Tectonic Framework of Grooved Terrain on Ganymede, R. Bianchi, R. Casacchia, P. Lanciano, S. Pozio, and R.G. Strom, **Icarus**, **67**, 237-250, 1986.
50. Voyager 2 in the Uranian System: Image Science Results, B.A. Smith, R.G. Strom, et al., **Science**, **233**, 43-64, July 4, 1986.
51. The Solar System Cratering Record: Voyager 2 Results at Uranus and Implications for the Origin of Impacting Objects, R.G. Strom, **Icarus**, **70**, 517-531, 1987.

52. Mercury, R.G. Strom, in **McGraw-Hill Yearbook of Science and Technology**, McGraw-Hill Book Co., 1990.
53. Impact Cratering Record on Titan, R.G. Strom et., al., **Science**, **250**, 437-439, 1990.
54. Voyager Imaging Science at Neptune, B.A. Smith, R.G. Strom, et al., **Science**, **246**, 1422-1449, Dec. 15, 1989.
55. Mercury: The Forgotten Planet, R.G. Strom, **Sky and Telescope**, **80**, No. 3, 256-260, Sept. 1990.
56. The Fate of Hyperion's Fragments, P. Farinella, R.G. Strom, et al., **Icarus**, **83**, 186-204, 1990.
57. Geologic Map of the Bach Region of Mercury, R.G. Strom, M.C. Malin, and M.A. Leake, **U.S. Geological Survey Map I-2015**, 1990.
58. The Impact Cratering Record on Triton, R.G. Strom, S.K. Croft and J.M. Boyce, **Science**, **250**, 437-439, 1990.
59. Ancient Oceans, Ice Sheets, and the Hydrological Cycle on Mars, V.R. Baker, R.G. Strom, V.C. Gulick, J.S. Kargel, G. Komatsu, and V.S. Kale, **Nature**, **352**, 589-594, Aug. 15, 1991.
60. Mercury, R.G. Strom, in **McGraw-Hill Encyclopedia of Science and Technology**, McGraw-Hill Book Co., 1991.
61. Mercury: Geology and Geophysics, R.G. Strom, in **Reference Encyclopedia of Astronomy and Astrophysics**, Van Nostrand Reinhold Book Co., 1991.
62. Mercury Orbiter Study, **NASA Special Report**. 1991.
63. Ancient Glaciation on Mars, J.S. Kargel and R.G. Strom, **Geology**, **20**, 3-7, Jan., 1991.
64. Image Processing for Teaching, R. Greenberg and R.G. Strom, In **Proceeding of Hands-on Astronomy for Education**, (C. Pennypacker, ed.), World Sci. Pub. Co., P. 147, 1992.
65. Geology and Distribution of Impact Craters on Venus: What Are They Telling Us?, G.G. Schaber, R.G. Strom, et al., **Jour. Geophys. Res.**, **97**, 13,257-13,301, 1992.
66. The Ice Ages of Mars, J.S. Kargel and R.G. Strom, **Astronomy**, 41-45, December, 1992.
67. Constraints on the Thermal Evolution of Venus from Magellan Data, Arkani-Hamed, J, Schaber, G.G., and Strom, R.G., **Jour. Geophys. Res.**, **98**, E3, 5309-5315, 1993.
68. Volcanology of Venera and VEGA Landing Sites and the Geochemistry of Venus, Kargel, J.S., G. Komatsu, V.R. Baker, and R.G. Strom, **Icarus**, **103**, 253-275, 1993.

69. The Global Resurfacing of Venus, Strom, R.G., G.G. Schaber, and D.D. Dawson, **Jour. Geophys. Res.**, **99**, No. E5, 10899-10926, May 25, 1994.
70. Image Processing for Teaching: A National Dissemination Program, R. Greenberg, M. Magisos, R. Kolvoord, and R. Strom, In **Proceedings of IEEE 1994 Conference on Image Processing**, IEEE Computer Press, Los Alamitos, CA, 1994.
71. Mercury, R.G. Strom, **McGraw-Hill Encyclopedia of Science and Technology**, 8th Edition, McGraw-Hill Book Co., 1994.
72. Planetology, R.G. Strom, **Geotimes**, American Geological Institute, **40**, No. 2, p. 23, 1995.
73. Evidence of Ancient Continental Glaciation in the Martian Northern Plains, J. S. Kargel, R.G. Strom , et al., **Journal of Geophysical Research**, **100**, E3, 5351-5368, 1995.
74. Reply, Strom, R.G., G.G. Schaber, D.D. Dawson, and R.L. Kirk, **Journal of Geophysical Research**, **100**, No. E11, 23361-23365, 1995.
75. Global Climate Change on Mars, J. Kargel and R. Strom, **Scientific American**, November 1996.
76. Mercury: An Overview, R.G. Strom, in **Advances in Space Research**, Vol. 19, No. 10, pp. 1471-1485, 1997.
77. Martian Ice: Science Issues, Resource Exploration, and Preparation for Base Siting, Kargel, J.S., Strom, R.G. and Lewis, J.S., in The Case for Mars IV: The International Exploration of Mars, **American Astronautical Society**, Vol. 90, pp. 201-203, 1997.
78. Fluid Dynamics of Liquids on Titan's Surface, Ori, G.G., Marinangeli, L., Baliva, A., Bressan, M. and Strom, R.G., **Planetary and Space Science**, Vol. 46, No. 9-10, pp 1417-1421, Oct. 1998.
79. Martian Sedimentology: Strategies and concepts for the Exploration of Sediments, Ori, G.G., Strom, R.G., Best, M., McGee, T., and Loenne, I., **Earth Science Reviews**, 1999.
80. Recent and Active Glaciation in the Argyre Basin, Mars, Kargel, J., Baker, V., Strom, R. and Tanaka, K. Submitted to **Icarus**.
81. System of gigantic valleys northwest of Tharsis, Mars: latent catastrophic flooding, northwest watershed, and implications for northern plains ocean, Dohm, J., Strom, R. et al., **Geophysical Research Letters**, Vol 27, No. 21, 3559-3562, Nov. 1, 2000.
82. Analysis of Lunar Lineaments: Far Side and Polar Mapping, Chabot, N., Hoppa, G. and Strom, R. **Icarus**, Vol. 147, 301-308, 2000.

83. Ancient Drainage Basin of the Tharsis Region, Mars: Potential Source for Outflow Channel Systems and Putative Oceans or Paleolakes, Dohm, J., Strom, R. et al. **Jour. Geophys. Res.**, 106(E12), pp. 32,943-32958, 2001
84. Optical Maturity of Ejecta from Large Rayed Lunar Craters, Grier, J.A, Strom, R.G, et al., **Jour. Geophys. Res.**,106(E12), pp. 32,847-32,862, 2001
85. The Origin of Planetary Impactors in the Inner Solar System, Strom, R.G., R. Malhotra, T. Ito, F. Yoshida, and D.A. Kring, **Science**, 309, 1847-1850, 16 Sept. 2005.
86. Venus, Mars, and the Ices on Mercury and the Moon: Astrobiological Implications and Proposed Mission Designs, Schulze-Maluch, D., J.M. Dohm, A.Fairen, V.R. Baker, W. Fink, and R.G. Strom, **Astrobiology**, **5**, No. 6, 778-795, 2005.
87. Possible ancient giant basin and related water enrichment in the Arabia Terra province, Mars. Dohm, J.M., R. Strom, et al., **Icarus**, 190, 74-92, 2007.
88. Mercury Cratering Record Viewed from MESSENGER's First Flyby, R. Strom, C. Chapman, W. Merline, S. Solomon, and J. Head, **Science**, v. 321, No. 5885, July 4, 2008.
89. Recent geological and hydrological activity on Mars: The Tharsis/Elysium corridor, J.M. Dohm, R.G. Strom, et al., **Planetary and Space Science**, **56**, 985-1013, 2008.
90. Mercury Cratering Record Viewed from MESSENGER's First Flyby, Strom, R.G. et al., **Science**, 321, 5885, 79-81, July 4, 2008.
91. Origin of Plains on Mercury: Insights from MESSENGER's First Flyby, Head, J. W., R. Strom, et al., **Science**, v. 321, No. 5885, July 4, 2008.
92. Evidence for young volcanism on Mercury from the third MESSENGER flyby, Prockter, L.M., R.G. Strom, et al., **Science**, 329, no. 5992, 668-671, August 6, 2010.
93. Mercury crater statistics from MESSENGER flybys: Implications for stratigraphy and resurfacing history, Robert G. Strom, Maria Banks, Clark R. Chapman, Caleb I. Fassett, Jeffrey A. Forde, James W. Head III, William J. Merline, Louise M. Prockter and Sean C. Solomon, **Planetary and Space Sci.**, **59**, 15, 1960-1967, Dec. 2011.
94. Flood Volcanism in the Northern High Latitudes of Mercury Revealed by MESSENGER, J.W. Head, R.G. Strom, et al., **Science**, 2011.
95. Problems determining relative and absolute ages using the small crater population, Xiao, Z. and Strom, R.G., **Icarus**, 220, 254-267, 2012.
96. Global inventory and characterization of pyroclastic deposits on Mercury: New insights into pyroclastic activity from MESSENGER orbital data. . Goudge, T.A., R. Strom, et al., *Journal of Geophysical Research; Planets*, 119, 635–658, 2014.

97. The global population of large craters on Mercury and comparison with the Moon, Fassett, C.I., R. Strom et al., *Geophys. Res. Letters*, 38, 2011.
98. Constraining the emplacement time of the northern smooth plains on Mercury, Ostrach, L.R., R. Strom et al., *Icarus*, 250, 602-622 (2015).
99. Global resurfacing of Mercury 4.0-4.1 billion years ago by heavy bombardment and volcanism, Marchi, S, R. Strom et. al, *Nature*, 499, 59-61, July 2013.
100. The inner solar system cratering record and the evolution of impactor populations, Strom, R.G. et al., *Research in Astronomy and Astrophysics*, Vol. 15, No. 4, 407-434, 2015.
101. Duration of lobate-scarp thrust fault activity on Mercury, Banks, M, R. Strom et al., *Geophys. Res. Letters*, 2015 in press.

## **BOOK CHAPTERS:**

1. Multiphase Eruptions associated with the Craters Tycho and Artistarcus, R.G. Strom and G. Fielder, in Geology and Physics of the Moon, (G. Fielder, ed.), Elsevier, 55-92, 1971.
2. Chronology of Planetary Volcanism by Comparative Studies of Planetary Cratering, W.K. Hartmann, R.G. Strom, et al., in Basaltic Volcanism on the Terrestrial Planets, NASA Basaltic Volcanism Study Project, 1981.
3. Volcanic Eruption Plumes on Io, R.G. Strom and N.M. Schneider, in Satellites of Jupiter, Space Science Series, Univ. of Arizona Press, 1982.
4. Interpreting the Cratering Record: Mercury to Ganymede and Callisto, A. Woronow, R.G. Strom and M. Gurnis, in Satellites of Jupiter, Space Science Series, Univ. of Arizona Press, 1982.
5. Mercury, R.G. Strom, in Geology of the Terrestrial Planets, NASA SP- 469, NASA Scientific and Technical Information Branch, 1984.
6. The Cratering Record on Mercury and the Origin of Impacting Objects, R.G. Strom and G. Neukum, in Mercury, Space Science Series, Univ. of Arizona Press, 1988.
7. Miranda, R. Greenburg, R.G. Strom, et al., in Uranus, Space Science Series, Univ. of Arizona Press, 1991.
8. The Martian Impact Cratering Record, R.G. Strom, S.K. Croft and N.G. Barlow, in Mars, Space Science Series, Univ. of Arizona Press, 1992.

9. The Geology of Triton, S.K. Croft, Strom, R.G. et al., in Neptune, Space Science Series, Univ. of Arizona Press, 1995.
10. The Resurfacing History of Venus, A.T. Basilevsky, J.W. Head, G.G. Schaber, and R.G. Strom, in Venus II, ed. Boucher, Phillips, and Hunten, Space Science Series, Univ. of Arizona Press, 1997.
11. Mercury: An Overview, R. G. Strom, in Advances in Space Research, Vol. 19, No. 10, pp. 1471-1485, Elsevier Science Ltd.,1997.
12. Mercury: the inner frontier, Strom R.G., in Worlds Beyond: The Thrill of Planetary Exploration, ed. Alan Stern, Cambridge University Press, 2002.
13. Mercury, R. Strom, in Encyclopedia of the Solar System, Academic Press, October 1998, 2<sup>nd</sup> Edition, 2006.
14. “Mercury”, R.G. Strom and Ann Sprague, in Solar System Update, Praxis Publishing, London, 2006.
15. Mercury, Scott Murchie, R. Strom, et al., 3<sup>rd</sup> Edition, Encyclopedia of the Solar System, Academic Press, July 2014.

## Planetary Atlases:

**Consolidated Lunar Atlas**, Kuiper, G.P., R.G. Strom, et al., 1967.

**Atlas of Mercury**, M. Davies, S. Dwornik, D. Gault, and R. Strom, NASA Sp. 423, 1978.

## BOOKS:

**Mercury: The Elusive Planet**, R.G. Strom, Solar System Series, *Smithsonian Institution Press*, 1987.

**Exploring Mercury: The Iron Planet**, R.G. Strom and A.L. Sprague, *Praxis-Springer Publishing*, 2003.

**Hot House: Global Climate Change and the Human Condition**, R.G. Strom, *Praxis-Springer-Copernicus*, August 2007.

**Total Publications = 129**

## MEDIA INTERVIEWS AND PROGRAMS



Major MESSENGER NASA press conference in Washington D.C. on Jan. 30, 2008 after the first Mercury encounter.

Numerous interviews with the press, TV, and museums about my participation in the MESSENGER mission to Mercury.

Numerous interviews with the Press and TV about global warming.

Media interviews (Radio, TV, and Newspapers) for the 30th anniversary of the first Apollo landing on the Moon, including appearance on KUAT Arizona Illustrated, July 20, 1999.

Appearance on KGUN news (ABC) about the death of astronaut Alan Shepard, Aug. 1998

Interview with Time magazine about Mars Pathfinder, July 1997.

Appearance on NBC local news for Cassini launch, Oct. 12, 1997

Appearance on PBS Nova: Venus Unveiled, October 17, 1995 and March 1999.

Appearance in Europe on BBC Horizon: Farewell to Venus, February 1995

Local TV and radio interviews for the 25th anniversary of the first Apollo landing on the Moon, July 20, 1994.

National Public Radio interview on the loss of Mars Observer mission, August, 1993.

TV, radio and newspaper interviews during the 1979-1989 Voyager encounters with Jupiter, Saturn, Uranus and Neptune.

TV, radio and newspaper interviews during the Mariner 10 encounters with Mercury in March and Sept. 1974, and March 1975.

Periodic TV and newspaper interviews concerning various topics in planetary science during the Apollo manned landings on the Moon, 1969-1972.

TV, radio and newspaper interviews during the MESSENGER flybys of Mercury, 2008-2009.

University of Arizona, OLLI lectures on global warming to senior citizens, Fall 2014 and 2015.