the development of the carbonate layer within the broader story of Everglades tree island formation.

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GEOPHYSICISTS

In Memoriam

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John E. Brolley, 89, 28 January 2008, Magnetospheric Physics, 1980

Steven Clifford, 64, 18 September 2007, Atmospheric Sciences, 1974

C. Allin Cornell, 69, 14 December 2007, Fellow, Seismology, 1993

William P. Elliot, 79, 29 January 2008, Atmospheric Sciences, 1985

Yoshoi Kurihara, 76, March 2007, Atmospheric Sciences, 1967

George H. Milly, 87, 21 February 2008, Atmospheric Sciences, 1965

Dallas Reigle, 61, 1 October 2007, Hydrology, 1986

John Summersett, 93, 29 November 2007, Hydrology, 1949

Alan T. Waterman Jr., 89, 9 January 2008, Atmospheric Sciences, 1960

Robin A. Wooding, 78, 19 November 2007, Hydrology, 1969

Jin Wu, 73, 14 January 2008, Ocean Sciences, 2005

MEETING

Climatic, Tectonic, and Biotic Evolution in Continental Cores

Colorado Plateau Coring Project Workshop; St. George, Utah, 13–16 November 2007

PAGE 118

A workshop was convened in St. George, Utah, to advance planning for the Colorado Plateau Coring Project (CPCP). The vast continental basins of the southwestern United States, particularly well exposed on the Colorado Plateau and its environs, contain one of the richest stratigraphic records of early Mesozoic age (between roughly 145 and 250 million years ago). This time period was punctuated by two of the major mass extinctions in the past 550 million years and witnessed the evolutionary appearance of the modern biota and dramatic climate changes on the continents.

Since the mid-nineteenth century, classic studies of these basins, their strata, and their fossils have made this sequence instrumental in framing our context for the early Mesozoic world. Nonetheless, striking ambiguities in temporal resolution, uncertainties in global correlations with other early Mesozoic strata, and major doubts about latitudinal position still hamper testing of the major competing climatic, biotic, and tectonic hypotheses.

A scientific drilling experiment is essential because the most continuous sections in outcrop are either inaccessible in vertical cliffs or weathered and geochemically altered, making observations and sampling at the appropriate level of detail impossible. Furthermore, the nearly flat lying sediment layers in combination with facies changes compromise the ability to determine superposition in sections compiled over long geographic traverses.

Forty-five researchers from six countries attended the CPCP workshop and focused their discussion on developing a basic coring plan for the American Southwest venue that would attempt to resolve several important issues. These include differentiating global or regional climate trends versus latitudinal changes over Pangea during periods of intense greenhouse warming, the response of largely fluvial systems to cyclical climate change, the rates and magnitudes of the transition from Paleozoic (550–250 million years ago) to essentially modern terrestrial ecosystems, and how the stratigraphy of the basins reflects the interplay between growth in accommodation space, uplift, and eustatic fluctuations.

To tackle these questions, the workshop participants identified five major stratigraphic packages on the Colorado Plateau and environs as key coring targets. These five packages span the Triassic (~200 to 250 million years ago) and Jurassic (145 to 200 million years ago). They include Early to Middle Triassic Moenkopi Formation, Late Triassic Chinle Group, latest Triassic to approximately the Middle Jurassic Glen Canyon Group, Middle to approximately the Late Jurassic San Rafael Group, and Late Jurassic Morrison Formation. Specific geographic areas were selected for drilling of three long (~1 kilometer) cores and two shorter cores that will recover the critical Early Mesozoic transitions in the region (see Figure 1, in the electronic supplement).

With the further development of a robust and effective data management system and an education outreach program, the CPCP workshop endorsed development of drilling proposals for submittal to the International Continental Scientific Drilling Program (ICDP) and the U.S. National Science Foundation (NSF) Continental Dynamics program in 2008. A smaller ICDP workshop is being planned for mid-2008 in Albuquerque, N. M., to refine the science groups (including the principal investigators) for the CPCP. The CPCP workshop was funded by grants from Drilling, Observation and Sampling of the Earth's Continental Crust, Inc. (DOSECC), and NSF (Sedimentary Geology and Paleobiology).

The full text of this meeting report and Figure 1 can be found in the electronic supplement to this *Eos* issue (http://www.agu.org/eos_elec).

—PAUL E. OLSEN, Lamont-Doherty Earth Observatory of Columbia University, Palisades, N.Y.; E-mail: polsen@ldeo.columbia.edu; DENNIS V. KENT, Department of Earth and Planetary Sciences, Rutgers University, Piscataway, N. J.; and JOHN W. GEISSMAN, Department of Earth and Planetary Sciences, University of New Mexico, Albuquerque

ABOUT AGU

Arvidson Receives 2007 Whipple Award

Raymond E. Arvidson received the 2007 Whipple Award at the 2007 AGU Fall Meeting in San Francisco, Calif. The award recognizes an individual who has made an outstanding contribution in the field of planetary science.

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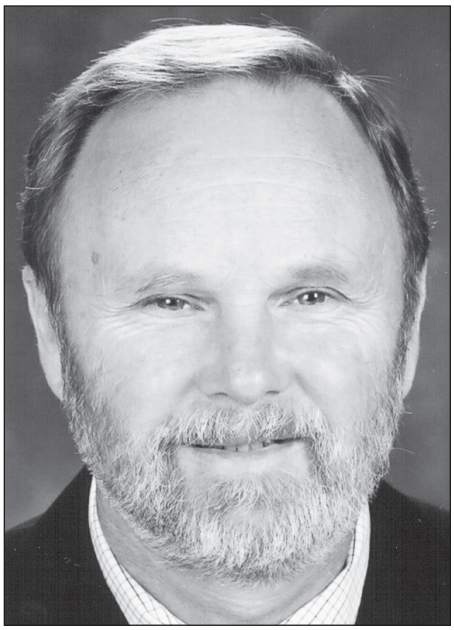
The Planetary Sciences section presents with great pleasure the 2007 AGU Whipple Award to Ray Arvidson. Ray has participated in all Mars missions since Viking, and in Magellan. His vigorous and productive career has resulted in nearly 200 peer-reviewed publications on Earth, Mars, Venus, and the Moon, many of which are considered pivotal to our understanding of planetary processes. His topics include remote sensing of planetary surfaces and surface processes; he provided the first quantitative study of aeolian processes on Mars. Ray's contributions are numerous and broadly applied. He played a major role in developing robotic techniques for the in situ exploration of Mars, in particular for the hugely successful MER mission. An AGU Fellow, Ray's work has been recognized by numerous awards in the past. In addition to his scientific work, Ray has provided essential services to the community. His work in pioneering and standardizing planetary data archiving has been particularly recognized as outstanding. He has served on more than 30 NASA committees and was the secretary and the president of the AGU Planetary Sciences section. In addition, he has been an associate editor of *JGR* and an editor of *Geology*. He served on the Space Science Board of the National Academy of Sciences and has been chair of its Committee on Data Management and Computation. Enthusiastic support for his nomination came from all over the world.

Ray is a true leader in the planetary sciences community.

—TILMAN SPOHN, Institut für Planetenforschung, Berlin

Response

Receiving the 2007 Whipple Award and presenting the Whipple Lecture mean a great deal to me. First, I knew Fred Whipple because we were both principal investigators in the early NASA Planetary Geology Program. We both attended a number of the early meetings of researchers supported by the program. Fred was a gracious individual who was deeply interested in all aspects of solar system science, in addition to his fundamental interest in planetary astronomy and the characteristics and dynamics of comets. Thus, receiving an honor named after Fred Whipple is especially rewarding. Second, the award comes from the Planetology section, and that means from the community of researchers who know my work well and can comment on it with a deep understanding of how it affects our understanding of the evolution of planetary surfaces. This is particularly important to me.



Raymond E. Arvidson

My career has focused on understanding the nature and dynamics of planetary surfaces, including participating in the Magellan Radar Mapping Mission to Venus and helping understand surface dynamics on this interesting planet. The mountains of Venus were found to be covered with metal frost or snow, precipitated from the atmosphere on these relatively cold peaks. The plains have distal ejecta deposits that were carried leeward of the impact sites by regional winds, forming elongate features with interesting dielectric and roughness properties. These two examples illustrate the richness of the Magellan data, which are still being examined over a decade after the mission ended. I have also been fortunate to have worked on all Mars missions since Viking, with the exception of Pathfinder. In fact, Phoenix, scheduled to land on the northern plains of Mars on 25 May 2008, will be my fifth landed mission (Viking Landers 1 and 2; Mars Rovers Spirit and Opportunity). The existing landed data show that Mars maintains evidence of past lakes (dirty evaporates observed by Opportunity) and of extensive alteration by hydrothermal systems (sulfate and high silica deposits found by Spirit). Connecting to orbital observations using Mars Express OMEGA and Mars Reconnaissance Orbiter CRISM data shows many other examples where water has modified crustal rocks. This includes formation of phyllosilicates on the old Noachian cratered terrains and deposition of layered sulfates in Terra Meridiani and Valles Marineris. These relatively recent landed and orbital results bode well for Mars as a planet that was habitable and may have had or even today harbors life.

I have also participated in the development and implementation of NASA's Planetary Data System (PDS), from the development of the concept of distributed scientific data management units defined under the NRC's Space Science Board in the 1980s, to directing the Geosciences Node of the PDS today (http://pds-geosciences.wustl.edu/). Archiving efforts have been particularly rewarding in that the PDS now works directly with data producers (investigators recovering or producing data) to ensure that products and documentation are produced, validated, put into the PDS, and made available to current and future communities of researchers. Part of my selection as the 2007 Whipple Award winner was to recognize these efforts. This is especially gratifying since much of the work is "behind the scenes" and does not lead to recognition through scientific discoveries and publications.

—RAYMOND E. ARVIDSON, Washington University, St. Louis, Mo.