Conference

Summary/Resolutions

CONFERENCE SUMMARY/RESOLUTIONS

Michael Pearlman

RESOLUTION

We wish to acknowledge and thank all of the representatives from NASA Headquarters, Goddard Space Flight Center, and Bendix Field Engineering Corporation for their untiring efforts in support of the 8th International Workshop on Laser Ranging Instrumentation. Without the hard work, dedicated backing, and personal interest of each of these individuals, this workshop would not have enjoyed the tremendous successes that it did. The help and support of John Degnan is especially recognized.

RESOLUTION

As satellite ranging develops towards millimeter accuracy and the use of multiple wavelengths, one of the most important contributions to the energy link budget and satellite signature to ranging accuracy is the design of the laser retro array.

The SLR community appreciates the idea and proposal of the Russian Space Device Engineering Institute to compensate for angular velocity aberrations via the Fizean effect.

We strongly recommend the continuation of space experimentation in this field.

The SLR community proposes that SLR stations and experts in this field should participate in the construction and subsequent tracking of a satellite designed for this purpose.

RESOLUTION

Whereas the Workshop participants recognize the importance of improving the global distribution of SLR sites and applauds the efforts of various member nations to extend coverage outside their national borders through:

1. The establishment of fixed station (e.g., USA in South America, Czechoslovakia in Egypt, Poland in Tunisia, and Germany in Cuba).

and,

2. The use of mobile systems (USA, Germany, the Netherlands, and France).

We resolve to encourage all member nations in the SLR community to assist, to the best of their ability, in the development and/or operation of stations outside their national borders and particularly in the Southern Hemisphere.

RESOLUTION

We would like to recommend the creation of a special study group to investigate all possible new generation laser ranging retroreflector concepts for optical signature and (null) center of mass correction.

RESOLUTION

Whereas, future analysis of our laser data products would benefit by a knowledge of the configuration of the hardware and software by which it was obtained, we resolve to document our operational configurations and changes there to and record these at a centralized facility in a manner as to be defined by the CSTG.

RESOLUTION

We resolve to initiate experiments designed to improve the atmospheric correction through the use of real-time temperature profiles based upon acoustic wave tracking (SODAR).

Business Meeting/

Next Workshop

BUSINESS MEETING/NEXT WORKSHOP
Carroll Alley

It was decided by the participants that the next workshop should be held within two years. Three participants offered to host the next workshop. The proposers were John Luck of Australia, Yang Fu Min of the Peoples' Republic of China, and Erik Vermaat of the Netherlands. Sentiment was strong among many of the delegates that the ninth workshop should be held in either Asia or Australia since previous workshops had all been located in Europe or the United States. The delegates decided (in a very close vote) to hold the next meeting in the September to November 1994 time frame in Canberra, Australia. The meeting will be hosted by the Australian Survey and Land Information Group (AUSLIG).

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The Eighth International Workshop for Laser Ranging Instrumentation was held in Annapolis, Maryland in May 1992, and was sponsored by the NASA Goddard Space Flight Center in Greenbelt, Maryland. The workshop is held once every 2 to 3 years under differing institutional sponsorship and provides a forum for participants to exchange information on the latest developments in satellite and lunar laser ranging hardware, software, science applications, and data analysis techniques. The satellite laser ranging (SLR) technique provides sub–centimeter precision range measurements to artificial satellites and the Moon. The data has application to a wide range of Earth and lunar science issues including precise orbit determination, terrestrial reference frames, geodesy, geodynamics, oceanography, time transfer, lunar dynamics, gravity and relativity. This Proceedings is a compendium of full papers based on material presented at the Annapolis workshop.

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Satellite Laser Ranging, Lunar Laser Ranging, lidar, ranging, optical radar, lasers, optical detectors, timers, satellite tracking, satellite orbits, software, geophysics, terrestrial reference frames, Earth orientation parameters, geodesy, geodynamics, oceanography, time transfer, Moon, gravity, lunar physics, geopotential

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