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IMPORTANT ADDRESS

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IMPORTANT DATES

Application for registration

December 24, 1998

Deadline of manuscript submission

January 27, 1999

COMMITTEE

■ Scientific Committee

John M. Bosworth (NASA) (Chairman)
Zuheir Altamimi (IGN)
Gerhard Beutler (AIUB)
Giuseppe Bianco (ASI)
Thomas A. Herring (MIT)
David L. Jauncey (CSIRO)
James Ray (USNO)
Wolfgang Schlüter (BKG)
Mikio Tobita (GSI)
Taizoh Yoshino (CRL)

■ Local Organizing Committee

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MEETING INFORMATION

■ Dates and Venue

Dates: January 25 (Monday) through 28 (Thursday), 1999
Place: Communications Research Laboratory (CRL)
4-2-1, Nukui-kitamachi, Koganei, Tokyo 184-8795, Japan

■ Official Language

English

■ Registration and Information Desk

During the Workshop period, the registration and General Information Desk will be open as following hours at Communications Reserach Laboratory.

January 25 (Mon.)	9:00 AM - 5:00 PM
January 26 (Tue.)	9:30 AM - 5:00 PM
January 27 (Wed.)	9:30 AM - 5:00 PM

PROGRAM

[Jan. 25]

- ◆ 10:00-10:15 Opening

- ◆ 10:15-11:15 Keynote Address (1)

Chaired by **T.Yoshino**

Beutler, G., H. Drewes, and M. Rothacher:

Collocating Space Geodetic Networks: Scientific Rationale and State of Realization of
the International Space Geodetic Network (ISGN).....30
(min.)

Bosworth, J.M.:

Collocation of Systems at Space Geodetic Sites - Best Practices to Ensure Correct
Scientific Interpretation of Combined Solutions30

- ◆ 11:15-11:35 Break

- ◆ 11:35-12:35 Keynote Address (2)

Chaired by **T.Yoshino**

Altamimi, Z. and C. Boucher:

Recent Results of the International Terrestrial Reference Frame.....30

Yoshino, T. :

Role of the Collocated Stations30

- ◆ 12:35-14:00 Lunch

- ◆ 14:00-15:20 Reference Frame and Collocation (1)

Chaired by **Z. Altamimi**

Ray, J. :

Problems and Limitations of Existing Collocated Space Geodetic Sites.....20

Schlüter, W., R. Dassing, R. Kilger, and U. Schreiber:

The Fundamental Station Wettzell, Current Status and Future Plans20

Hase, H., W. Schlüter, and A. Böer:

TIGO and its Future Application for the ITRF20

Pearlman, M. R., J. Degnan, and V. Husson:

The International Laser Ranging Service: Its Organization and Anticipated Impact
on the Space Geodesy Community20

- ◆ 15:20-15:40 Break

- ◆ 15:40-17:00 Reference Frame and Collocation (2)

Chaired by **J. Bosworth**

*Bianco, G., F. Vespe, R. Devoti, M. Fermi, C. Ferraro, R. Lanotte, V. Luceri, A. Nardi,
R. Pacione, P. Rutigliano, and C. Sciarretta:*

Integrated Geodetic Techniques at the CGS/ASI20

Tatevian, S.K., S.P. Kuzin, and L.S. Shtirberg:

Collocation of Different Space Geodesy Technique at the Simeiz Geodynamical
Observatory.....20

*Koyama, Y., R. Ichikawa, T.Otsubo, T. Kondo, J. Amagai, M. Furuya, K. Sebata, and
H.Kunimori:*

Comparison of Coordinates and Velocities of the Key Stone Project Observation Sites
Determined from VLBI, GPS and SLR20

Kaminuma, K., K. Shibuya, M. Kanao, and K. Doi:

Space Geodetic Observations at Syowa Station, Antarctica.....20

[Jan. 26]

- ◆ 09:30-11:10 Reference Points and Local Tie at Collocated Station

Chaired by **W. Schlüter**

Niell, A. and V. Nelson:

The VLBI to GPS Tie at Westford	20
	(min.)

Matsuzaka, S., M. Ishihara, K. Nemoto, and K. Kobayashi:

Local Tie between VLBI and GPS at Geographical Survey Institute	20
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Schlüter, W., H. Hase, H. Lang, B. Richter, R. Stoger, and R. Zernecke:

Actual Results of the Local Survey at the FS-Wettzell	20
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Banni, A., F. Buffa, and L. Mureddu:

Determination of the Local Transform Parameters in Sardinia	20
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Xia, S., H. Tamura, H. Hasegawa, J. Ooizumi, H. Kunimori, J. Amagai, and H. Kikukawa:

Total Tie at the Key Stone Sites	20
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- ◆ 11:10-11:30 Break

- ◆ 11:30-12:30 Toward an Integration of Independent Space Techniques (1)

Chaired by **T.A. Herring**

Takahashi, Y., H. Kiuchi, A. Kaneko, Y. Koyama, N. Kurihara, M. Sekido, T. Kondo, R. Ichikawa, T. Yoshino, J. Amagai, M. Furuya, and K. Sebata:

The Comparison of VLBI and GPS Station Movements and Their Variations Longer than One Month.....	20
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Ogi, S., Y. Fukuzaki, M. Iwata, K. Shiba, M. Yazawa, K. Takashima, and K. Nagata:

Comparison of the Time Variation with GSI VLBI Domestic Experiments and Daily GPS Measurements.....	20
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Govind, R., J. Dawson, G. Luton, and D. Sproule:

Combination of High Precision Space Geodetic Techniques.....	20
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- ◆ 12:30-14:00 Lunch

- ◆ 14:00-15:00 Toward an Integration of Independent Space Techniques (2)

Chaired by **J. Ray**

Herring, T.A.:

Combination of Space Geodetic Measurements.....	20
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Sandwell, D. T., and Y. Bock:

Integration of Interferometric SAR and Continuous GPS for Monitoring Crustal Strain in Southern California.....	20
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Murakami, M., H. Nakagawa, M. Tobita, S. Fujiwara, and M. Murakami:

Complementary Aspects of Satellite-Borne InSAR and Continuous GPS as Used for Crustal Deformation Monitoring.....	20
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- ◆ 15:00-17:00 Poster Session

- ◆ 17:15- Reception

[Jan. 27]

- ◆ 09:30-10:50 Collocation in Space Chaired by **G. Bianco**
 - Iwata, T., M. Ogawa, K. Yonekura, T. Babauchi, N. Nonaka, N. Namiki, H. Hanada, N. Kawano, K. Heki, Y. Kozai, T. Takano, M. Hosokawa, and RSAT/VRAD Mission Group:*
A Conceptual Study of the Mission Instruments for Selenodesy using SELENE Relay Satellite 20
 - Hanada, H., T. Iwata, N. Kawano, K. Heki, S. Tsuruta, T. Ishikawa, H. Araki, K. Matsumoto, Y. Kono, Y. Kaneko, M. Ogawa, Y. Iijima, Y. Koyama, M. Hosokawa, T. Miyazaki, N. Namiki, A. Sengoku, Y. Fukuzaki, T. Ikeda, F. Fuke, and RISE group:*
Observation System of Radio Sources on the Moon by VLBI in SELENE project 20
 - Schreiber, U., N. Kawano, T. Yoshino, H. Kunimori, and W. Schlüter:* (min.)
Laser Ranging and VLBI for the SELENE-II Mission 20
 - Heki, K., N. Kawano, H. Hanada, M. Ooe, S. Tsuruta, H. Araki, K. Matsumoto, Y. Kono, and RISE group:*
In-situ Lunar Orientation Measurement (ILOM) with an Optical Telescope on the Lunar Surface 20
- ◆ 10:50-11:10 Break
- ◆ 11:10-12:30 APT / APSG (1) Chaired by **D.L.Jauncey**
 - Sasao, T., D.L. Jauncey, and APT Group:*
Asia-Pacific Telescope 22GHz VLBI Experiment in October 1997 20
 - Minh, Y.C.:*
Construction of the Korean VLBI Network (KVN): A New Project of Korea 20
 - Antarctic VLBI Consortium (read by Y. Tamura):*
VLBI Experiments at Syowa Station, Antarctica 20
 - Kondo, T., N. Kurihara, Y. Koyama, M. Sekido, R. Ichikawa, T. Yoshino, J. Amagai, K. Sebata, M. Furuya, Y. Takahashi, H. Kiuchi, and A. Kaneko:*
KSP VLBI System and its Measurement Accuracy 20
- ◆ 12:30-14:00 Lunch
- ◆ 14:00-15:20 APT / APSG (2) Chaired by **M. Tobita**
 - Sengoku, A., M. Fujita, and H. Fukura:*
Range Bias Problem Associated with SLR Data at Simosato 20
 - Tobita, M*
Project97; Joint Simultaneous Observing Project of Space Geodetic Stations in Japan, 1997 20
 - Murakami, M:*
Establishment of the New Reference Frame of Japan Using Space Geodetic Techniques 20
 - Li, J., Z. Qian, G. Wang, W. Zhu, and C. Feng:*
The Motion of the Shanghai Collocation Site Relative to the Eurasia Plate 20
 - Kunimori, H., F. Katsuo, J. Amagai, and T. Otsubo:*
Collocation of Multiple SLR Systems and Calibrations 20
- ◆ 15:20-15:50 Break
- ◆ 15:50-17:00 Plenary Meeting: (1) GEMSTONE, (2) APT/APSG

[Poster Papers]

◆ Reference Frame and Collocation

- Bosworth, J. M., J.L. Long, V.E. Nelson and R. Allenby:*
Basic Criteria for an ISGN SiteP
- Shimada, S.:*
GPS Terrestrial Reference Frame in JapanP
- Rudenko, S.:*
Terrestrial Reference Frace Realization From the Analysis of the 15-year Lageos-1 & Lageos-2 SLR World Network DataP
- Hosokawa, M., Hanado, Y., M. Sekido, S. Hama, and M. Imae:*
Toward a Tie of the Celestial Reference Frames via the Observations of the PulsarsP

◆ Reference Points and Local Tie at Collocated Station

- Bosworth, J. M.,J. L. Long, V.E. Nelson, and R. Allenby:*
Survey Techniques for Space Geodesy Collocation at Greenbelt, Maryland; Fort Davis, Texas; and Tahiti, French PolynesiaP
- Katsuo, F., T. Otsubo, J. Amagai, and H. Nojiri:*
A Dual Checking System for Determining the Telescope Reference PointP

◆ Error Sources for Collocated Space Techniques

- Haas, R., L. P. Gradinarsky, J. M. Johansson, and G. Elgered:*
The Atmospheric Propagation Delay: A Common Error Source for the Collocated Space Techniques of VLBI and GPS.....P
- Ichikawa, R., Y. Koyama, T. Kondo, H. Hanado, K. Aonashi, Y. Shoji, Y. Hatanaka, J. Yamamoto, and T. Takamura:*
Evaluation of Wet Troposphere Delay Estimated by Space Geodetic Techniques Using Water Vapor Radiometers in the Kanto District, Central Japan.....P

◆ APT/APSG

- Sekido, M., J. Nakajima, Y. Koyama, N. Kurihara, H. Kiuchi, T. Kondo, and N. Kawaguchi:*
Fringes from Giga-bit VLBI systemP
- Takahashi, Y., H. Kiuchi, A. Kaneko, S. Hama, J. Nakajima, N. Kurihara, T. Yoshino, T. Kondo, Y. Koyama, M. Sekido, J. Amagai, K. Sebata, N. Kawaguchi, H. Kobayashi, M. Iguchi, T. Miyaji, T. Uose, and T. Hoshino:*
The Plan of the Big Virtual Telescope Using the High Speed Communication Network.....P
- Kiuchi, H., S. Hama, Y. Takahashi, A. Kaneko, Y. Koyama, and T. Kondo:*
Real-time VLBI System using STM-1/OC-3P
- Sebata, K., Amagai, J. and T. Kondo:*
VLBI Blocking by TreesP
- Furuya, M., K. Sebata, J. Amagai, T. Yoshino, M. Sekido, Y. Koyama, and T. Kondo:*
Strain Field Inferred from Key Stone VLBI networkP

PRESENTATIONS

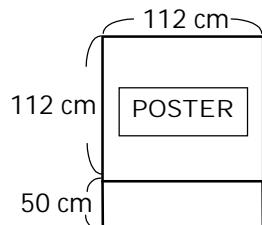
■ Oral Presentation

An overhead projector will be used for the oral presentations. If you wish to use a PC, please contact the Local Organizing Committee in advance by December 24, 1998. (e-mail: gemstone@ksp.crl.go.jp)

■ Poster Presentation

Posters should be displayed from Monday noon to Wednesday afternoon.

Local Organizing Committee will prepare the pins.



PROCEEDINGS

Please see the attached instruction. And deposit it at the registration desk during workshop period.

REGISTRATION

■ Registration

Persons wishing to attend the Workshop should complete the enclosed Registration Form and send it to reach the Secretariat (ICS) by December 24, 1998.

The form and enquiries relating to the registration should be addressed to:

Secretariat for Registration, GEMSTONE
International Communications Specialists, Inc. (ICS)
Sabo Kaikan-bekkan, 2-7-4 Hirakawa-cho, Chiyoda-ku, Tokyo 102-8646, Japan
Tel: +81-3-3263-6968 Fax: +81-3-3263-7577 e-mail: tai@ics-inc.co.jp

■ Confirmation

Upon receiving your registration form, the Secretariat (ICS) will send you a Confirmation, bearing your registration number. Please bring this confirmation slip to the registration desk at the workshop site.

RECEPTION

Please join and enjoy the Reception on January 26. All registered participants and accompanying persons are invited.

Date and Time : January 26 (Tue.) 17:15 - 19:00

Place : Reception Hall in Communications Research Laboratory

Fee : Free

SCIENTIFIC EXCURSION (One day trip)

Scientific excursion to Tsukuba Science City will be planned on January 28. If wishing to join this excursion, please indicate number of participants in the registration form. Since excursion capacity is limited to 40 persons, application will be made on a first-come, first-served basis. Details regarding the schedule will be announced at the workshop site.

Date and Time : January 28 (Thus.) Start from CRL

Visiting Place : Geographical Survey Institute (GSI)

National Space Development Agency of Japan (NASDA)

Fee : Free

HOTEL ACCOMMODATIONS

Local Organizing Committee blocked rooms a hotel near workshop site during the workshop period. Reservation will be made on a first-come, first-served basis. If the hotel is fully booked, we will reserve space at another hotel.

Hotel	Twin with bath	Single with bath	Address
Hotel Mets Kokubunji	¥15,000	¥9,000	3-20-3 Minami-machi, Kokubunnji, Tokyo 185-0021 Tel: +81-42-328-6111 Fax: +81-42-328-6110

Note: 1) Room rates include tax, service charge and a breakfast.

2) Following credit card available: Visa, MasterCard, AMEX, Diners Club

■ Application

Participants wishing to reserve hotel accommodation should complete the application form with your credit card information and return it to the Congress Secretariat (ICS).

■ Confirmation

Upon receiving your application, the Congress Secretariat (ICS) will send you a confirmation.

Secretariat for Registration, GEMSTONE
International Communications Specialists, Inc. (ICS)
Sabo Kaikan-bekkan, 2-7-4 Hirakawa-cho, Chiyoda-ku, Tokyo 102-8646, Japan
Tel: +81-3-3263-6968 Fax: +81-3-3263-7577 e-mail: tai@ics-inc.co.jp

■ Cancellation

In the event of cancellation, written notification should be sent to the Congress Secretariat. The following cancellation fees will be charged to your credit card.

10 days to 3 days before the first night of stay ¥2,000
Less than 2 days before, or not notice given 100% of daily room charge

GENERAL INFORMATION

■ Passport and Visa

All foreign visitors entering Japan must possess valid passports. Participants requiring visas should apply to the Japanese consular office or diplomatic missions in their countries prior to departure. Persons who need an invitation letter to get a visa are asked to contact the Local Organizing Committee.

■ Climate of Tokyo

The temperature will be between 0 ~ 10 and the humidity will be 60%. However Meeting site and hotel are air conditioned.

■ Currency Exchange

Only Japanese Yen(¥) is acceptable at regular stores and restaurants. Certain foreign currencies and credit cards may be accepted at a limited number of hotels, restaurants and souvenir shops. You can buy Yen at foreign exchange banks (open hour: 9:00-15:00, Monday-Friday) and other authorized money exchanges on presentation of your passport.

■ Electrical Appliances

Japan operates on 100-110 volts for electrical appliances. The frequency is 50Hz in eastern Japan including Tokyo, and 60 Hz in western Japan including Kyoto.