IGS Reference Frame Maintenance

Oral Presentations

IGS Reference Frame Maintenance
Ferland R., Gendt G., Schöne T.

Detection and Handling of EPN Station Irregularities
C. Bruyninx, G. Carpentier, F. Roosbeek

IGS Reference Frame Maintenance - Session Summary
Ferland R., Gendt G., Schöne T.

Poster Presentations

Discontinuities in the IGS Tracking Stations Coordinate Time Series
Mendes Cerveira Paulo Jorge, Weber Robert

GPS Time Series and Sea Level
M. Poutanen , H. Koivula, M. Tervo, K. Kahma, M. Ollikainen, H. Virtanen

Contribution to EUREF of the ASI (Agenzia Spaziale Italiana) Matera Space Geodesy Centre "G.Colombo" (CGS)
C.Ferraro, A.Nardi, G.Bianco, F.Vespe

Hafelekar GPS Permanent Station Seasonal Monitoring
G Stangl, C Haslinger, E. Cristea

Other Reference Frame Issues

Oral Presentations

IGS Reference Frames: Status and Future Improvements
J. Ray, D. Dong, Z. Altamimi

Tests of IGS Reference Frame Stability
Zuheir Altamimi, Jim Ray

Poster Presentations

CODE High-rate GPS Satellite Clock Corrections
H. Bock, R. Dach, U. Hugentobler, S. Schaer, G. Beutler

IENG: A New IGS Station in Italy
V. Pettiti, D. Orgiazzi

Continuously Operating GPS Receivers at Thule, Greenland
Shfaqat Abbas Khan, Finn Bo Madsen, Per Knudsen

Reprocessing of the Global GPS Network – First Results
Markus Rothacher, Peter Steigenberger, Reinhard Dietrich, Mathias Fritsche, Axel Rülke

Rigorous Combination of GPS and VLBI to Study Reference Frame Related Issues
M. Krügel, V. Tesmer, D. Angermann, D. Thaller, M. Rothacher, R. Schmid

Seasonal Height Errors and the TRF

A. E. Niell

Real Time Aspects

Oral Presentations

Summary of Session 3 – Real Time Aspects
Mark Caissy

Real-Time Data Flow and Product Generation for GNSS
Ronald J. Muellerschoen, Mark Caissy

The EUREF-IP Ntrip Broadcaster: Real-time GNSS data for Europe
Denise Dettmering, Georg Weber

ESA/ESOC Real Time Infrastructure
C.Garcia, J. Dow, J.Perez, I.Romero

Poster Presentations

GFZ's Development of GPS Real-Time Network
Roman Galas, Wolfgang Köhler

Real-Time IGS Protocol, Formats and Software Tools
Ken MacLeod, Mark Caissy, Ray Fong, Bob Twilley, Javier Perez Bartolome, Carlos.Garcia-Martinez, Roman Galas, Ron Muellerschoen

A HTTP Based Technique for Streaming GNSS Data Over the Internet
Harald Gebhard

Impact of Imperfect Orbit on Ground-based GPS Atmospheric Sounding Applications
Peng Fang, Yehuda Bock, and Seth Gutman

Real-Time Wide-Area Differential GPS Corrections from Natural Resources Canada
Paul Collins, François Lahaye, Ken MacLeod, Yves Mireault, Pierre Héroux

Network Issues

Oral Presentations

Network Issues
Angelyn Moore, Carine Bruyninx, Robert Twilley

Status of AFREF Project
Zuheir Altamimi

Working With the IGS Network: The ESA/ESOC Experience
I. Romero, C. Garcia, J. Dow

Network Issues session summary
Angelyn Moore, Carine Bruyninx, Robert Twilley

Poster Presentations

EPN Network Coordination
C. Bruyninx, G. Carpentier, F. Roosbeek

EUPOS - a new European Initiative of Establishment of the Multifunctional Reference Station System in Central and Eastern European Countries
J. Balodis, I. Fejes, P. Hankemeier, K. Leitmannova, G. Milev, O. Odalovic, G. Rosenthal, P. Pihlak, U. Samratov, J. Sledzinski, D. Ghiţău, G. Wübbena

On the Use of Non-Permanent GPS Stations for Geokinematics
J. Krynski, Y.M. Zanimonskiy

Activities of the Astrogeodetic Observatory in Józefoslaw in the Last Decade
J. B. Rogowski, J. Bogusz, M. Figurski, M. Klek, M. Kruczyk, L. Kujawa, W. Kurka, T. Liwosz

Korean GPS Network (KGN) Activities
Pil-Ho Park, Kwan-Dong Park, Jong-Uk Park

Sub-Daily Site Coordinates Variations in EUREF Permanent Network
Jan Hefty, Marian Kovac, Miroslava Igondova, Michal Hrcka

UNAVCO Support to the GPS Global Network (GGN) and the International GPS Service (IGS)
Ruud O., Stowers D., Fisher S., Meertens C., Andreatta V.

Missing power point presentations
Network Issues – Position Paper (*Angelyn Moore)*

Data Transfer and Data Centers

Oral Presentations

Enhancing the IGS Data and Products Infrastructure – A Data Center Perspective
Michael Scharber, Carey Noll

New Server Concept at the BKG Data Centre
Heinz Habrich

Addition of Real-Time Capability to the Japanese Dense GPS Network
Yuki Hatanaka, Atsushi Yamagiwa, Masao Iwata, Shigeru Otaki

Data Transfer and Data Centers: Session Summary
Carey Noll and Chuck Meertens

Poster Presentations

The IGS Global Data Center at the CDDIS – An Update
Carey Noll, Maurice Dube

Availability and Completeness of IGS/IGLOS Tracking Data
Stefan Schaer, Michael Meindl

Proposing to Host the Fourth Global Data Center at Korea Astronomy Observatory
Pil-Ho Park, Kwan-Dong Park, Jong-Uk Park, Hyung-Chul Lim, Jeong-Ho Joh

ESA/ESOC IGS Activities
J. Dow, C. Garcia, I. Romero, J. Feltens , R. Gautschi, J. Perez, E. Rojo, H. Boomkamp

The CERGOP2 Database Information for Geodynamic in Central Europe
G. Stangl, P. Pesec, E. Cristea

Integrity Monitoring of IGS Products

Oral Presentations

Integrity Monitoring of IGS Products
J.F. Zumberge, H.-P. Plag

Products Produced Under the Direction of the AC Coordinator: Processes, Accuracies and Quality Control
Gerd Gendt

Integrity Monitoring of IGS Products: Session Summary
J.F. Zumberge

Poster Presentations

Modelling of GPS Satellite Clocks and Comparisons of IGU Clock Products
Veronika Broederbauer, Robert Weber

Zero Difference Residuals for Multipath Maps and ZTD Quality Indication
B. Gundlich, H. van der Marel

Routine GPS Data Quality Check at GFZ Potsdam
M. Ramatschi, R. Galas

Missing power point presentations
GNSS Integrity Concept (*Bruno Lobert)*

Wednesday Symposium

Oral Presentations

The Accomplishments of the IGS and their Implications on the Future of Geodesy
Gerhard Beutler

Industry Perspectives on IGS Collaboration, Impact and influence - Past, Present and Future
Gordon T. Johnston

The IGS and the Education of the Next Generation of Users
Chris Rizos

Kinematics of deformation in the Tibetan Plateau and its margins constrained by GPS measurements
Pei-Zhen Zhang, Zhijun Niu

Missing power point presentations
Gravity and Space Missions *(Christoph Reigber)*
Earthquake/Deformation Science (*Kosuke Heki)*

GNSS I

Oral Presentations

GSTB-V1: The First Step Towards the Development of Galileo Navigation Algorithms
Álvaro Mozo García, Miguel M. Romay Merino, Carlos Hernández Medel, Ana Cezón Moro

Summary: Global Navigation Satellite Systems I
Dow J., Weber R.

Poster Presentations

Polaris: A Software Tool to Evaluate Navigation Performances at Application Level
Angel Gavin

GNSS II

Oral Presentations

Time and Frequency Transfer Using GNSS
P. Defraigne, C. Bruyninx, A. Moudrak, F. Roosbeek

GPS/GLONASS Antennas and Ground Planes: Size and Weight Reduction Perspectives.
Dmitry Tatarnikov, Vladimir Filippov, Igor Soutiaguine, Andrey Astahov, Anton Stepanenko

The IGLOS Pilot Project – Transitioning an Experiment Into an Operational Service
James A. Slater, Robert Weber, Elisabeth Fragner

Global Navigation Satellite Systems II: Session Summary
James A. Slater

Poster Presentations

GLONASS Data Analysis for IGS
Heinz Habrich, Peter Neumaier, Karin Fischer

Impact of Galileo on Geodetic Positioning Applications
Hans van der Marel, Sandra Verhagen, Peter Joosten

C/A Code Biases in High-end Receivers
Andrew Simsky, Jean-Marie Sleewaegen

Precise Orbit Determination

Oral Presentations

Bigger, better, faster POD
Henno Boomkamp, Rolf König

Precise Orbit Determination: Session Summary
Henno Boomkamp

Ultra-Rapids and Ultra-Rapids Predictions for GPS
Jan Douša, Leoš Mervart

Poster Presentations

Activities at the CODE Analysis Center
Stefan Schaer, Urs Hugentobler, Rolf Dach, Michael Meindl, Heike Bock, Claudia Urschl, Adrian Jaeggi, Pierre Fridez, Gerhard Beutler

A High Precision Analytical Surface Force Model For GPS Block IIR Satellites
Marek Ziebart, Sima Adhya, Ant Sibthorpe, Simon Edwards, Paul Cross

High and Low POD Using GPS at CNES/GRGS
S. Loyer, F. Perosanz, S. Bruinsma, F. Mercier

Orbit Determination of Low Earth Satellites at AIUB
A. Jäggi, H. Bock, U. Hugentobler, G. Beutler

NRCan Analysis Centre Contributions to the IGS: 1994 – 2004
B. Donahue, Y. Mireault, C. Huot, P. Tétreault and J. Kouba

GPS LEO POD Activity at CGS (SPACE GEODESY CENTRE "G. COLOMBO")
A. Nardi, G. Bianco

Kinematic Orbits for LEO Satellites – a New Product
Drazen Svehla, Markus Rothacher

USNO Analysis Strategy Summary
V. J. Slabinski, J. R. Rohde, M. S. Carter, A. E. Myers, D. Pascu, W. H. Wooden

Antenna Effects

Oral Presentations

From Relative to Absolute Antenna Phase Center Corrections
Ralf Schmidt, Gerry Mader, Tom Herring

Summary of the session Antenna Effects
Ralf Schmid, Gerry Mader, Tom Herring

Estimation and validation of the IGS absolute antenna phase center variations
Maorong Ge, Gerd Gendt

New Anechoic Chamber Results and Comparison with Field and Robot Techniques
B. Görres, J. Campbell, M. Siemes, M. Becker

The Effect of SCIGN Domes on the Vertical Phase Centre Position in Routine Processing of GPS Data
H. Dragert and M. Schmidt

Poster Presentations

Absolut Field Calibration of Carrier Phase Multipath
F. Dilssner, G. Seeber, U. Feldmann, G. Wübbena, M. Schmitz, M. Bachmann

The Impact of the PCV Parameters in the Coordinates Estimate
Riccardo Barzaghi, Alessandra Borghi

Ground-Based Neutral Atmosphere and Ionosphere Sounding

Oral Presentations

IGS Ionosphere WG Status Report: Performance of IGS Ionosphere TEC Maps
Manuel Hernandez-Pajares

IGS Tropospheric Products and Services at a Crossroad
Yoaz Bar-Sever

Usage of IGS TEC Maps to explain RF Link Degradations by Spread-F, observed on Cluster and other ESA Spacecraft
J. Feltens, J. Dow , G. Billig, D. Fornarelli, S. Pallaschke, B. Smeds, H.-J. Volpp, P. Escoubet, H. Laakso

Ground-Based Atmosphere and Ionosphere Sounding: Summary (Ionosphere Part)
Manuel Hernandez-Pajares

Poster Presentations

VMF and IMF Mapping Functions Based on Data from the ECMWF
Harald Schuh, Johannes Böhm

GPS Tomography and Remote Sensing Techniques for Water Vapor Determination in the ESCOMPTE Campaign
S. Lutz, M. Troller, A. Somieski, A. Walpersdorf, E. Doerflinger, A. Geiger, B. Bürki, O. Bock, H.-G. Kahle

Mapping Function Parameters Derived from Numerical Weather Model Data in Global GPS Network Analyses – A Comparative Study
S. Vey, A. Rülke, R. Dietrich, M. Rothacher

MATRAG – Measurement of Alpine Tropospheric Delay by Radiometer and GPS
Petra Häfele, Matthias Becker, Elmar Brockmann, Lorenz Martin, Michael Kirchner

Activities of swisstopo in GPS Meteorology
E. Brockmann, D. Ineichen, G. Guerove, J.-M. Bettems, A. Somieski, M. Troller, M. Becker, P. Heafele

Modeling and Forecasting of TEC obtained with IGS network over Europe
A. Krankowsk, Baran L.W., I.I. Shagimuratov

GPS Ionosphere Rapid Service for Europe – Suggestions and First Experiences
M. Figurski, J.B. Rogowski