JOURNÉES 2002 SYSTÈMES DE RÉFÉRENCE SPATIO-TEMPORELS
“Astrometry from ground and from space”
“Astrométrie au sol et dans l’espace”

Scientific Organising Committee: Brzeziński A., Poland; Capitaine N. (Chair), France; Defraigne P., Belgium; Kovalevsky J., France; Soffel M., Germany; Vondrák J., Czech R.; Yatskiv Y., Ukraine.
Local Organising Committee: Mioş V., Popescu P., Stavinschi M. (Chair) Astronomical Institute of the Romanian Academy, Bucharest, RO-040558, Romania

Venue: Institut Français (Bucharest)

SCIENTIFIC PROGRAMME

Wednesday, 25 September: 14 h 30 – 18 h 00

OPENING OF THE JOURNÉES 2002: Introduction and presentation
N. Capitaine and M. Stavinschi

SESSION 1a – KINEMATICAL AND DYNAMICAL CELESTIAL REFERENCE SYSTEMS

Invited papers
M. SOFFEL, S. KLIONER: Relativity for astrometry at the microarcsecond level
J. CHAPRONT, G. FRANCOU: The lunar ephemeris ELP2000 revisited

Oral communications
G. DAMLJANOVIĆ, J. SOUCHAY: Cross-identification of HIPPARCOS-2MASS second incremental data release
Z. ZHOU: Hipparcos proper-motion system with respect to FK5 and SPM 2.0 systems
G. PINININ et al.: Refinement of linking optical-radio reference frames on the basis of collaborative observatories in international joint project
R. TEIXEIRA et al.: Optical position and proper motion of X-Ray sources south-eastern of the Ophiuchus molecular clouds
B. COLL: A principal positioning system for the Earth

Oral presentation of posters (Sessions 1 and 2)

Thursday, 26 September: 9 h 00 – 13 h 00

SESSION 1b – CELESTIAL AND TERRESTRIAL REFERENCE SYSTEMS

Invited papers
P. CHARLOT: Extending and improving the ICRF
J. VONDRAK, C. RON: An improved optical reference frame for long-term Earth rotation studies
H. SCHUH, W. SCHLUETER, N. VANDENBERG: Prospective improvements of IVS products and evolution of observing programs
Ya. YATSKIV et al.: Recent compiled catalogue of radio source positions RSC(GAO UA) 01 C01
N. CAPITaine: Accurate formulation for the transformation between the Terrestrial and Celestial Reference Systems

Oral communications
R. POPESCU, P. POPESCU and O. BĂDESCU: Deflection of the vertical in Bucharest derived from geodetic astronomical observations
Ș. LAMBERT, Ch. BIZOUARD: Positioning the Terrestrial Ephemeris Origin in the International Terrestrial Reference Frame
V. MIOC: Earth’s rotation and stability of satellite orbits
Oral presentation of posters (Sessions 3 and 4)

Thursday, 26 September: 14 h 30 – 18 h 00

SESSION 2 – THEORY OF EARTH ROTATION

Invited papers
A. BRZEZINSKI, S. MATHEWS: Recent advances in modeling the lunisolar perturbation in polar motion corresponding to high frequency nutation: report on the discussion of the IAU Comm.19 WG on Nutation O. de VIRON et al.: Nutation residuals and physics of the Earth’s interior A. ESCAPA, J. GETINO, J. M. FERRANDIZ: Variational approach to the rotational dynamics of a three-layer Earth model: fluid outer core dynamics Ch. BIZOUARD, S. LAMBERT: Variable processes in polar motion and length of day

Oral communications
W. KOSEK: Polar motion prediction by different methods in polar coordinates system O. KUDLAY: Precise Analysis of EOP Series: an attempt to distinguish chaotic and non-stationary processes J. SOUCHAY, M. FOLGUEIRA: Free motion of rigid and elastic bodies with respect to inertial frame V. E. ZHAROV, S. L. PASYNOK: Theory of nutation of the non-rigid Earth with the atmosphere V. MIOC, M. STAVINSCHI: Martian rotation influence on eccentric trajectories of orbiters

POSTER SESSION

CONFERENCE : 19 h 00

SESSION 3 – SPACE AND GROUND-BASED ASTROMETRY

Oral communications

Discussion of the IAU Working Group including short communications
G. PINIGIN: Limit capabilities of ground-based optical astrometry instrumentation R. POPEȘCU, P. POPEȘCU, P. PARĂȘCHIȘ: Preliminary tests for CCD observations of mutual phenomena in Bucharest

CONFERENCE : 12 h 00 -13 h 00

Concluding paper of Session 3 and discussion
J. KOVALEVSKY: Synthesis of possible programs using small ground-based astrometric instruments
SESSION 4 – TIME, TIME TRANSFER AND EARTH ROTATION

Invited papers
S. DEBARBAT, M. LERNER: La rotation de la Terre de l’Antiquité à l’âge du XXe siècle
D. GAMBIAS, D. ABARCA del RÍO and D. SALSTEIN: Solar activity and Earth rotation variability from interannual to decadal times scales

Oral communications
M. SOMA, K. TANAKAWA, K.A. KAWABATA: Earth’s rotation in the 7th century derived from eclipse records in Japan and China
P. TEYSSANDIER, B. LINET: Time transfer and frequency shift to the order 1/e^4 in the field of an axisymmetric rotating body
C. MANACHE et al.: The atomic frequency standards and the time measurement
P. PARAŞCU, P. POPEŞCU: Long-term stability of RhodeSchwarz quartz clocks

CLOSING SESSION OF THE JOURNEES 2002

LIST OF POSTERS

SESSIONS 1a and 1b – REFERENCE SYSTEMS

Yu. BABENKO et al.: Reduction of compiled catalogue in the selected extragalactic radio sources fields
E. DROBITKO, V. VITYAZEV: HIPPARCOS Kinematics of nearby and distant stars
M. FUJISHITA: Problems to construct the radio celestial reference frame using VERA
E. KAZAKEVICH, V. ORLOV, V. VITYAZEV: HIPPARCOS, search for stellar groups
E. KAZAKEVICH, V. VITYAZEV: TYCHO2, the wavelet search for stellar groups

SESSION 2 – THEORY OF EARTH ROTATION

G. BOURDA: Earth rotation and gravitational potential
A. ESCAPA, J. M. FERRANDI, J. GETINO: Quasi-semidiurnal nutations induced by the indirect effect of the triaxiality of the Earth : Rigid and non-rigid models
A. KORSUN, G. KURBASOVA: Dynamical study of Siberian anticyclone and Earth rotation
Y. XIA, C. ZHANG: Martian precession and nutation
V. E. ZHAROV, S.L. PASYNOK, J. GETINO: Comparative analysis of the new nutation series

SESSION 3 – SPACE AND GROUND-BASED ASTROMETRY

A. H. ANDREI et al.: Radio structure effects on the optical and radio representations of the ICRF
Yu. BABENKO et al.: Kyiv meridian axial telescope observation programs: First results
M. BOUGERARD: Statistical methods in application to astrometry
R. LANGHANS: A universal computer program for high precision position determination of minor planets on CCD-frames
R. LANGHANS, V. MALYUTO, H. POTTHOFF: Calculated differential color refraction confronted with observed stellar positions
M. POGORELTSEV, O. VERTYPOLOKH, Yu. BABENKO: Application of the “Scanner+MIDAS” complex for processing astrometric photographic plates
Z. TANG et al.: Rigorous vectorial formulae for block-adjustment and application extending FOV of CCD
O. VERTYPOLOKH, Yu. BABENKO, P. LAZORENKO: Devices for reduction of CCD distortion under scan mode