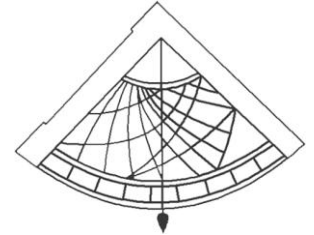


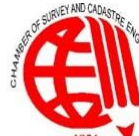
WEGENER 2010

15th General Assembly of Wegener

Programme



September 14-17, 2010, Istanbul, Turkey



WEGENER 2010 is organised by the Geodesy Department of Kandilli Observatory and Earthquake Research Institute of Bogazici University

Programme

14TH SEPTEMBER 2010

08:30 Registration desk opened

Opening Session

09:45 Welcome address, Haluk Ozener, Chair of WEGENER 2010 General Assembly

10:00 Welcome address, Tevfik Ozludemir, President of Istanbul Branch of Chamber of Survey and Cadastre Engineers

10:10 Welcome address, Susanna Zerbini, Chair of WEGENER Project

10:20 Welcome address, Mustafa Erdik, Director of Kandilli Observatory and Earthquake Research Institute

10:30 Welcome address, Yesim Arat, Vice President of Bogazici University

10:40 *Coffee break*

Session 1

30 Years of WEGENER - The Evolution of our Knowledge about the Africa-Eurasia Plate Boundaries

~~11:00 Invited talk: *Mediterranean Geodynamics and Present-day Surface Deformation*
Spakman W., Tanasescu G., Ambrosius B. (NOT PRESENTED)~~

11:30 **Invited talk:** *Subduction Drives Arabia/Africa Plate Convergence with Eurasia and Provides a Unifying, Dynamic Mechanism for Mediterranean/Middle East Tectonics*
Reilinger R., McClusky S.

12:00 *Crustal Deformation in the Patras Gulf, Greece, from GPS Data Analysis*
Anastasiou D., Marinou A., Mitsakaki C., Papazissi K., Papanikolaou X., Paradissis D.

12:20 *Monitoring of Geodynamic Activity in the Western Anatolia: Preliminary Results from Repeated Gravity&GPS and PsInSAR Studies*
Ergintav S., Dogan U., Cakir Z., Cakmak R., Arslan, G.

12:40 *Lunch break*

Session 2
Current Plate Motions, Inter- and Intraplate Deformation with a Focus on Europe, the Mediterranean, Northern Africa and the Middle East

General Session

- 14:00 *Comparison of a Geodetically-derived Velocity Field from the Permanent NOANET-GPS Network (2007-2010) with a Model of Microplate Tectonic Motion in Greece*
Ampatzidis D., Kotsakis C., Katsambalos K., Rossikopoulos D.
- 14:20 *Update from Central Europe - The Improved Velocity Field from CEGRN Campaigns till 2009 and New Central European Research Initiatives*
Becker M., Caporali A., Stangland G., The CEGRN Team
- 14:40 *Postseismic Deformation of the Mw=6.9, 21 May 2003 Zemmouri (Algeria) Earthquake Deduced from PsInSAR*
Cakir Z., Meghraoui M., Belabbes S., Akoglu A.
- 15:00 *Static Stress Drop as Determined from Geodetic Strain Rates and Statistical Seismicity*
Caporali A., Barba S., Carafa M.C., Devoti R., Pietrantonio G., Riguzzi F.
- 15:20 *GPS Derived Interseismic Strains Resolved on the North Anatolian Fault in Marmara Sea*
Evren E., Cakir Z.
- 15:40 *Coffee break*

Session 2.1. The Mediterranean: A Geohazards Focus Area

- 16:00 *Deviatoric Stresses in Eastern Mediterranean Region*
Ozeren M.S., Holt W.
- 16:20 *Deformation Studies in the Kaparelli Area, Central Greece*
Marinou A., Ganas A., Papanikolaou X., Bosy J., Papazissi K., Anastasiou D., Paradissis D., Drakatos G., Kontny B., Cacon S., Papanikolaou M.
- 16:40 *Analysis of Earthquake Parameters by Utilizing AHP and GIS*
Erden T., Karaman H.
- ~~17:20 *Strike-slip Faulting in the Aegean Sea Region and the Surrounding Lands*
Kiratzi A.-(NOT PRESENTED)~~

17:40 *A Critical Review of Geodetic Studies on the Preparation of the Active Fault Map of Marmara and Surrounding Region*

Komut T.

19:00- **Ice Breaker Evening** at South campus of Bogazici University (Roof of Eng.Faculty)
21:00

15TH SEPTEMBER 2010

Session 2

Current Plate Motions, Inter- and Intraplate Deformation with a Focus on Europe, the Mediterranean, Northern Africa and the Middle East

General Session

~~09:00 *Horizontal Motions in Bulgaria and Northern Greece by GPS Spanning 1993–2008 and the Eurasia Present day Plate Boundary*~~

~~**Georgiev I., Zagorchev I., Dimitrov D. (NOT PRESENTED)**~~

09:20 *Active Tectonics and Kinematic Modeling at the Triple Junction between the East Anatolian Fault, the Dead Sea Fault and the Cyprus Arc*

Meghraoui M., Cakir Z., Masson F., Ferry M., Ergintav S., Inan S., Alchalbi A., Daoud M., Karabacak V., Altunel E.

09:40 *GPS Characterization of the Triple Junction between Arabia, Africa and Anatolia: New Measurements in SE Turkey and in NW Syria*

Masson F., Mahmood Y., Cakir Z., Yavasoglu H., Meghraoui M., Alchalbi A., Daoud M., Ergintav S.

10:00 *Global Deformations of the Eurasian Plate and Variations of the Earth Rotation Rate*

Milyukov V., Kravchuk V., Mironov A., Latinina L.

10:20 *Interferometric Synthetic Aperture Radar (InSAR) imaging of crustal deformation associated with the May 2009 earthquake sequence in Harrat Lunayir, northwestern Saudi Arabia*

Gomez F., Abdallah C., Bollin B., Cochran W.

10:40 *Surface Deformation along the Carmel Fault System, Israel*

Reinking J., Philipp H. S., Even-Tzur G.

11:00 *Coffee break*

Poster Introduction Session

11:30 Short introductions to posters (No. 1, 2, 4, 8, 9, 10, 11, 13) See page 10-11.

12:30 *Lunch break*

Session 5

Open Session with Proposed Focus on International Organization of Geodetic Initiatives Contributing to Earth Sciences

14:00 **Invited talk:** *The Global Earth Observation System of Systems (GEOSS): Observe, Share, Inform*

Cripe D.

14:30 **Invited talk:** *Facilitating Scientific Research through Open Data Sharing: Experience at the UNAVCO GNSS Archive*

Boler F., Meertens C., Miller M.

15:00 *GPS Geodesy for AfricaArray: Infrastructure to Support Multidisciplinary Science*

Nyblade A., Calais E., Meertens C., Miller M., Semazzi F.

15:20 *Coffee break*

Session 4

Earth Observation Systems and Reference Frames, Observation Techniques, Methods and Data Analysis

15:40 *Long-period, Non-linear and Seasonal Variability Observed in GPS Station Positions and Environmental Parameters over Europe and the Mediterranean*

Zerbini S., Errico M., Ferri S., Raicich F.

16:00 *Radar Interferometry for Measuring Regional-scale Processes*

Hooper A., Arikan M., Bekaert D.

16:20 *InSAR Time Series Analysis of Slow Slip Events on the Guerrero Subduction Zone, Mexico*

Bekaert D., Hooper A., Yun S.

16:40 *UNAVCO Event Response Capabilities: Three Great Earthquakes in the Americas in Early 2010*

Miller M., Blume F., Borsa A., Normandeau J., Walls C.

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- 17:00 *Investigating the Noise Properties of GPS Stations in Iberia*
Bos M.S., Bastos L., Fernandes R.M.S.
- 17:20 *Orbit Tuning for GOCE Measuring Phases and for Planetary Orbiters to Maximize Accuracy Gain in the Gravity Field Mapping*
Klokocnik J., Bezdek A., Kostecky J.
- 18:30 **WEGENER Governing Board Meeting** (board members only)

16TH SEPTEMBER 2010

Session 2

Current Plate Motions, Inter- and Intraplate Deformation with a Focus on Europe, the Mediterranean, Northern Africa and the Middle East

General Session

- 09:00 *Velocity Field in Mediterranean Area from ASI-CGS GPS, SLR and VLBI Solutions; the ASIMed Solution*
Lanotte R., Luceri V., Pacione R., Sciarretta C., Pace B., Iacovone D., Bianco G., Vespe F.
- 09:20 *Kinematics of Azerbaijan and surroundings through GPS Observations*
Meherremov E., Aktug B., Parmaksiz E., Kurt M., Esedov N., Kilicoglu A., Ozdemir S., Seymen S.
- 09:40 *Slow Deformation in the Western Alps from a Decade of Continuous GPS Measurements*
Nocquet J.M., The RENAG Team
- 10:00 *Slip Rates Near Karliova Triple Junction by GPS Observations*
Ozener H., Aktug B., Dikmen U.
- 10:20 *Intra-Eurasia Plate Motions based on CODE-EPN, IVS-Europe, and IVS-combined Solutions*
Teke K., Bohm J., Nilsson T., Spicakova H., Schuh H.
- 10:40 *Coffee break*

Session 2.1. The Mediterranean: A Geohazards Focus Area

- 11:00 *Establishing a Tsunami Warning System in Turkey*
Necmioglu O., Ozel N.M., Yalciner A.C., Kalafat D., Erdik M.
- 11:20 *Determination of the Displacements along the Tuzla Fault (Izmir) and Surroundings by GPS and Precise Leveling Techniques*
Sabuncu A., Ozener H.
- 11:40 *Determination of the Kinematic Structure of Izmir and Surrounding Using Repeated GPS/GNSS Observations: Preliminary Results*
Pamukcu O., Kahveci M., Ersay E.Y., Yurdakul A., Salk M., Sozbilir H.
- 12:00 *Static Stress Changes and Fault Interactions in the Lefkada Island (Ionian Islands-Western Greece)*
Mitsakaki C., Anastasiou D., Marinou A., Papazissi K., Paradissis D., Sakellariou M.
- ~~12:20 *Strain Analysis on the Neo-tectonic Basin of Saronikos Gulf: Preliminary Results*
Papageorgiou E. (NOT PRESENTED)~~
- 12:40 *Lunch break*

Session 2.2. The Seismotectonics and the Earthquake Cycle of the Marmara Region

- 14:00 *Invited talk: Short-term and Long-term Slip Rate along the Westernmost Segment of the North Anatolian Fault*
Aksoy M. E., Meghraoui M., Cakir Z., Ferry M., Ucakus G.
- 14:20 *Crustal Deformation from 15 Years Space-based Geodetic Data on the Inactive Fault Branch of Western North Anatolian Fault Zone*
Ozener H., Gurkan O., Turgut B., Yilmaz O., Unlutepel A., Dogru A., Halicioglu K., Sabuncu A., Havazli E., Altin A.
- 14:40 *Present-day Vertical Crustal Deformations in the Marmara Region, Turkey from Repeated Absolute Gravity and GPS Observations*
Dogan U., Ergintav S., Karaboce B., Arslan G., Aydin C., Sadikoglu E., Oz D., Cakmak R., Selendi A., Direnc A., Turkezer A., Lenk O.

15:00 *Seismotectonic Setting of the Karadere-Duzce Branch of the North Anatolian Fault Zone between the 1999 Izmit and Duzce Ruptures from Analysis of Izmit Aftershock Focal Mechanisms*

Gorgun E., Bohnhoff M., Bulut F., Dresen G.

15:20 *Coffee break*

Session 4

Earth Observation Systems and Reference Frames, Observation Techniques, Methods and Data Analysis

15:40 *Invited talk: High Rate GPS for Earthquake Source Study*

Nocquet J.M., Ueno M., Vallee M., Delouis B., Guihua C., Klinger Y., Xiwei X.

16:00 *Monitoring the Kinematics of Anatolia through Continuous GPS Observations*

Aktug B., Parmaksiz E., Kurt M., Cingoz A., Ozdemir S., Erkan Y.

~~16:20 *Additional Improvements in Geoid Determination in Algeria Using the New EGM2008 and the Satellite Altimetry-derived Marine Gravity Anomalies*~~

~~**Benahmed Daho S. A. (NOT PRESENTED)**~~

16:20 *The Two Maradja Surveys (Maradja I and II) Along the Algerian Margin: a Better Improvement in the Knowledge of the African-Eurasian Plate Boundary in the Western Mediterranean Region*

Yelles A.K., Deverchère J., Boudiaf A., Bracene R., Cattaneo A., Gaullier V., Geli L., Graindorge D., Kherroubi A., Djellit H., Klingelhoefer F., Mercier de Lepinay B., Sage F., Strzerzynski P., Abtout A.

16:40 *Evaluation of Recent Global Geopotential Models with Turkish Local GPS/Levelling Geoid*

Yilmaz N.

17:00 *Comparing Conventional Stochastic Model with Helmert Variance Component Estimation in Geodetic Nets*

Yavuz E., Coskun M.Z., Sahin M., Baykal O.

17:20 *Continuous and Semi-Permanent GPS Networks in Northern Algeria*

Lammali K., Bellik A., Yelles-Chaouch A., Bougrine A., Bacha W., Mahsas A.

19:00-
22:00 **Conference Dinner (Social Facilities Area of Istanbul University in Baltalimani)**

17TH SEPTEMBER 2010

Session 2

Current Plate Motions, Inter- and Intraplate Deformation with a Focus on Europe, the Mediterranean, Northern Africa and the Middle East

General Session

- 09:00 *Current Red Sea and Gulf of Aden Rifting and Motion of Arabia*
ArRajehi A., McClusky S., Reilinger R., Ergintav S., Gomez F., Sholan J., Bou-Rabee F.
- 09:20 *VLBI Estimates of Vertical Crustal Motion in Europe*
Tanir E., Teke K., Schuh H.
- 09:40 *Investigation of the Stability of IGS Station Points: TRAB IGS Station as a Case Study*
Ulukavak M., Yalcinkaya M., Bayrak T.
- 10:00 *Deformation of Central Anatolia by GPS Data*
Aktug B., Parmaksiz E., Kurt M., Kilicoglu A., Gurdal M.A., Ozdemir S.
- 10:20 *Understanding of Aseismic Creeping Process in the Ismetpasa Region of North Anatolian Fault Zone by GPS Data*
Ozener H., Dogru A., Turgut B., Yilmaz O., Ergintav S., Cakmak R., Cakir Z.
- 10:40 *Coffee break*

Session 4

Earth Observation Systems and Reference Frames, Observation Techniques, Methods and Data Analysis

- 11:00 *CORS-TR Network and its Application to Crustal Deformation*
Eren K., Uzel T.
- 11:20 *RTK Application for Levelling Network Deformation Control*
Balodis J., Caunite M., Janpaule I., Rubans A., Silabriedis G., Zarinsjh A.
- ~~11:40 *Deformation Monitoring with TUSAGA-AKTIF System*
Bakiei S., Yildirim O. (NOT PRESENTED)~~
- 12:00 *San Fernando Naval Observatory High Rate GPS Data Processing*
Mendoza L., Garate J., Davila J.M., Becker M., Drescher R.

12:20 *Mapping Strain Tensors Errors for a Realistic Representation of Crustal Deformations*

Eissa L., Kasser M.

12:40 *Lunch break*

14:00- **Excursion to Kandilli Observatory & Eq. Res. Ins. of Bogazici Uni.**

17:00 *Travel by bus.*

List of Posters

1. Relation Between Sensitivity and Observing Session Duration in GPS Monitoring Networks

Aydin C., Dogan U., Oz D. (2-min presentation)

2. Geodetic Observations from a Semi-Permanent Network Around the Constantine Active Faulting

Bellik A., Lammali K.

3. Estimating Strain Accumulation Rates in the Northern part of Marmara Region, Turkey

Deniz I., Ozener H.

4. The Establishment of a Gravity Calibration Baseline in the Marmara Region, Turkey

Dogan U., Ergintav S., Karaboce B., Arslan G., Aydin C., Sadikoglu E., Oz D., Direnc A., Turkezer A., Lenk O.

~~*5. Review of Leveling Comparisons and Combination of Triangulation and GPS Data in the Upper Rhine Graben to Estimate Tectonic Deformation*~~

~~**Ferhat G. (NOT PRESENTED)**~~

6. Crustal Deformation of Broader Athens (Greece) by GPS Measurements

Foumelis M., Fountoulis I., Lagios E. (presented by Marinou A.)

7. Summary Study on Seismogenic Faults in the Region of Boumerdes and Seismotectonic Context of the Earthquake (May 21, 2003 Mw = 6.8)

Mabrouk D., Mohand A.

8. Modern Geodynamical Motion of the Northern Caucasus from Data of GPS/GLONASS Observations

Milyukov V., Zharov V., Kaufman M., Mironov A., Myasnikov A.

9. GPS Antenna Monuments and Mounts Supported by UNAVCO

Normandeau J., Meertens C., Bartel B., Blume F., Jackson M. (presented by Miller M.)

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10. *An Automated Processing Scheme Designed for All Available Permanent GPS Stations in Greece.*
Papanikolaou X., Marinou A., Mitsakaki C., Papazissi K., Paradissis D., Zacharis V., Anastasiou D.
11. *GPS Networks for Deformation Monitoring in the Canary Archipelago*
Sevilla M. J., Martin A. M., Zurutuza J.
- ~~12. *Determination of Active Tectonic Movements of South West Anatolia*
Tiryakioglu I., Erdogan S., Gulal E., Ergintav S., Cakmak R., Reilinger R., McClusky S., Sahin M. (NOT PRESENTED)~~
13. *Geodetic Survey of Global Climatic Changes in the Mediterranean Area*
Valty P., Viron O., Panet I.
14. *Techniques and Methods for the Sea Level Observation in the Lanzarote Geodynamics Laboratory*
Velez E., Vieira R. , Martin Hernandez A.
15. *The Lanzarote Geodynamics Laboratory: a Natural Laboratory for Multidisciplinary Investigation in Geodynamics and Global Change*
Vieira R., Velez E., Weixi C., Van Ruymbeke M., Sevilla M. J., Arnosó J., Martin Hernandez A.
16. *Adaptive Filtering of GPS Time Series in Crustal Deformation Studies*
Yalvac S., Ustun A.
17. *Deformation Measurements on the Western Marmara, Turkey*
Yavasoglu H., Tari E.
18. *Comparison of Variance Component Estimation Methods for Horizontal Control Networks*
Yavuz E., Coskun M.Z., Ersoy N.
19. *Deformation between African and Eurasian Plate Estimated from the European and the Egyptian GPS Geodetic Networks*
Zeman A., Hassan K., Holesovsky J., Mohamed A.S., Novotny Z., Salah M.M., Kostelecky J., Ali M.R.