

## Recent Plate Kinematics in Romania

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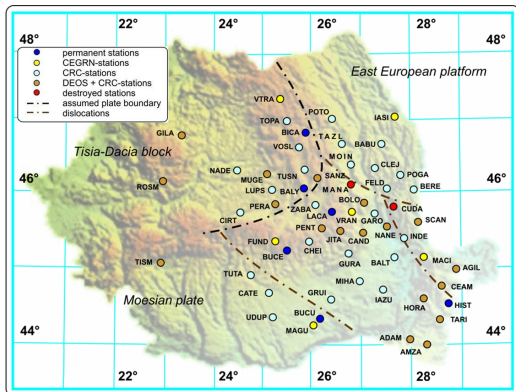
<sup>3</sup>Faculty of Geodesy, Technical University of Bucharest, Romania

20.04.2009

# Campaigns

## 15 GPS campaigns:

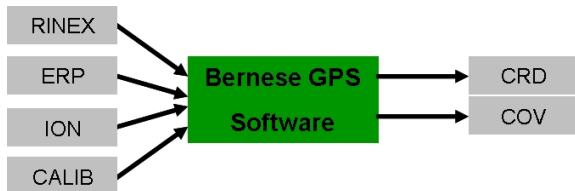
- 2 NATO
- 5 CEGRN
- 3 Collaborative Research Center (CRC) 461
- 2 ISES
- 3 CRC and ISES



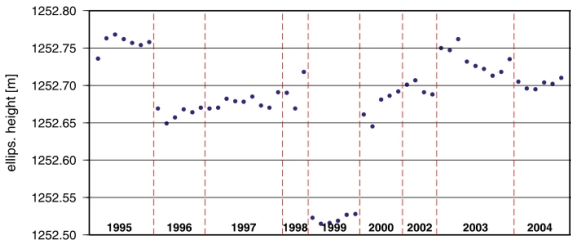
## External data:

- RINEX data of IGS sites in Europe
- IGS products:
  - Final orbits
  - Earth Rotation Parameters
  - Absolute antenna calibration values
- Coordinates of reference sites

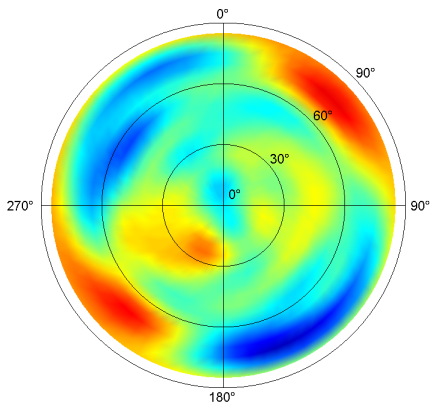
- Consistent reprocessing of all campaigns (1995-2006)
- Bernese GPS Software V5.0, BPE



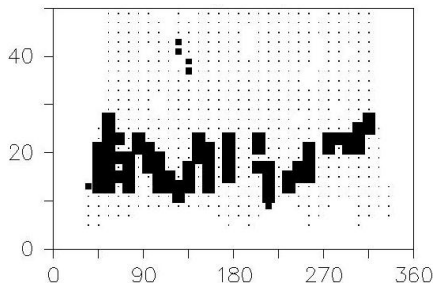
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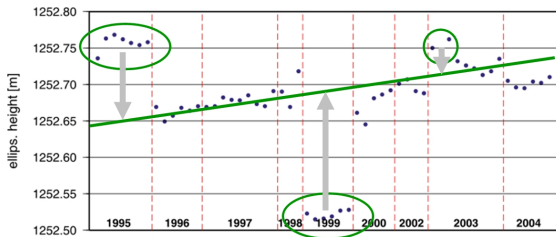
- Antenna calibration:  
absolute, individual  
PCOs and PCVs vs.  
absolute IGS values
- Multipath analysis
- Estimation of height  
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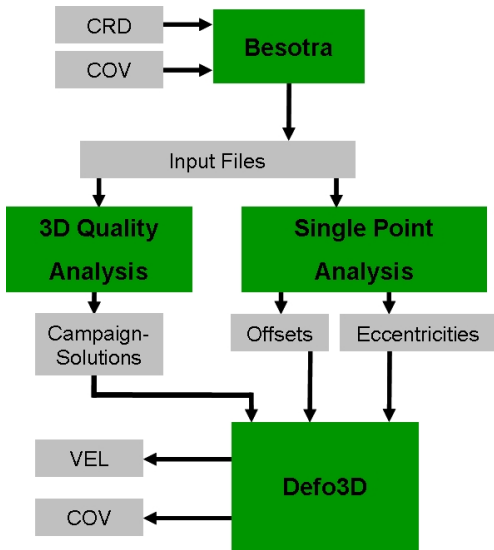


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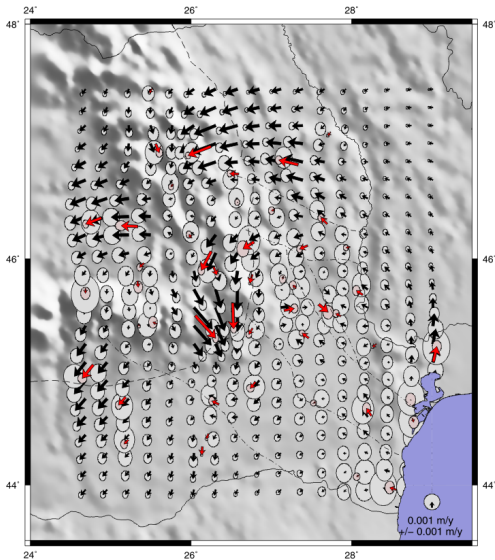


- 3D deformation analysis
- Estimation of 3D velocity field
- Estimation of strain components



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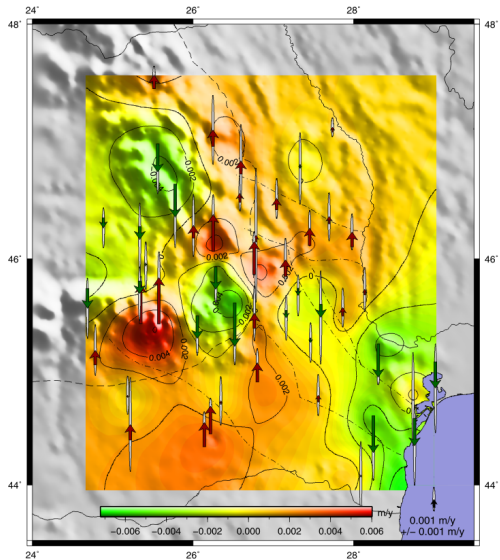
## Horizontal velocity



[1]

- 3D deformation analysis
- Estimation of 3D velocity field
- Estimation of strain components

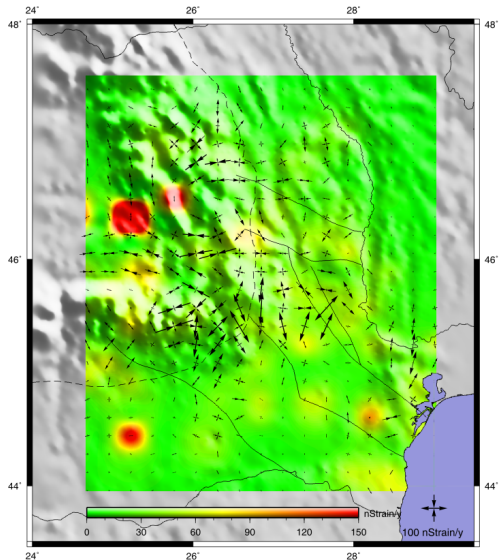
## Vertical velocity



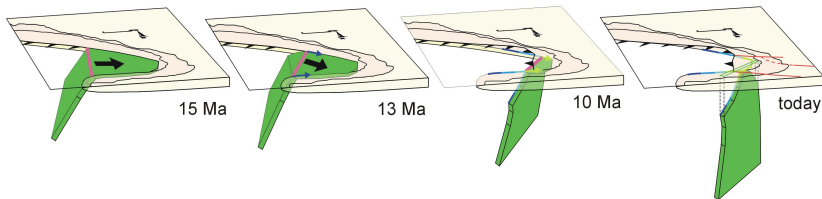
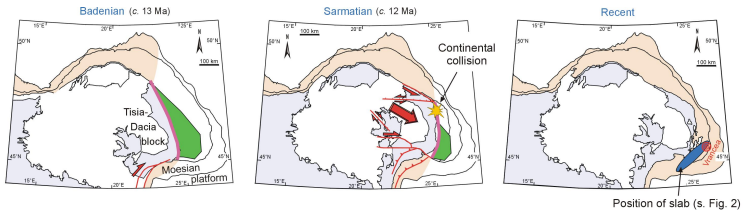
[1]

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Change in the main directions of strain of 2D deformation tensors



[1]



[2]

- [1] A. Nuckelt.  
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Universitätsverlag Karlsruhe, 2007.
- [2] Sperner, B. & the CRC 461 team.  
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