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HOW TO CREATE STRAIN MAPS BY ON-LINE TOOLS

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What is Strain Analysis:

- **based on continuum mechanics**, describes the change in shape and dimensions of the monitored object
- **is more objective dynamic indicator** in the researched area **than** the only calculus and representation of point **displacement vectors**.

How to determine of Strain tensors from geodetic repeated measurements:

- First step is **determination of displacements**
- The second step is **determination of deformations parameters by geometric analysis of continuum mechanics (strain analysis).**
- For computation of strain tensors can everybody use **on-line application : www.vugtk.cz/~deformace**

Deformation Analysis - Windows Internet Explorer

http://www.vugtk.cz/~deformace/cgi/index.php

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Deformation Analysis

www.vugtk.cz/~deformace

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Deformation Analysis

Web Application to on-line calculation of deformations derived from repeated geodetic plane survey. Parameters of deformation field (strain tensors, total dilatation, ...) are determined in a grid covering the area in question.

Input data:
coordinates and horizontal movements

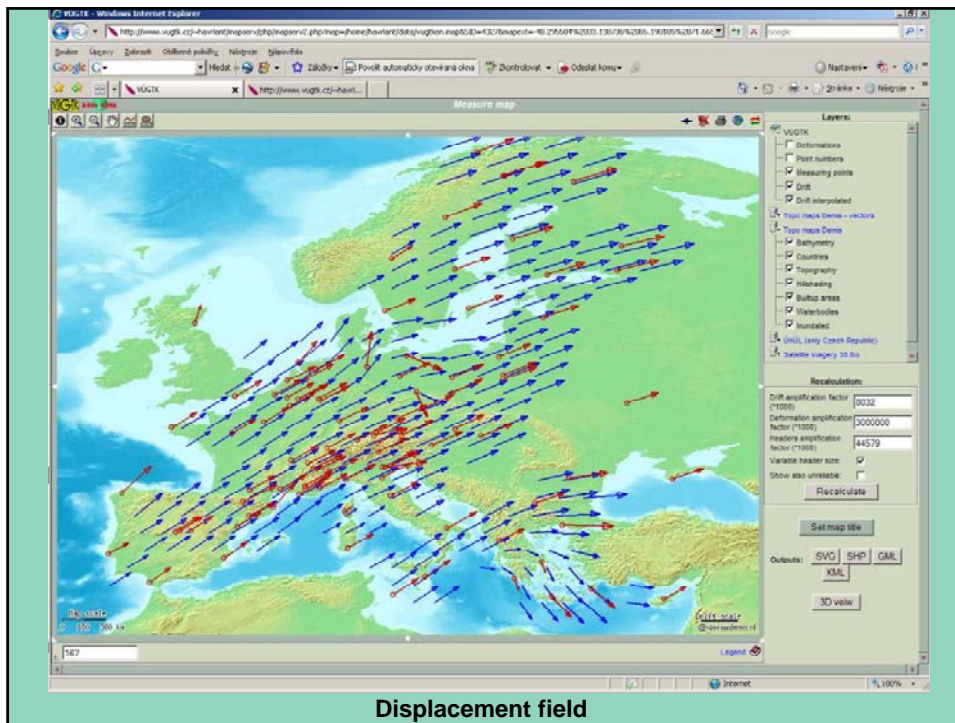
1	95807.2	7110.1	61.33	-5.48
2	96824.2	2215.3	77.89	35.50
3	93283.9	6244.8	92.42	11.45
4	92448.9	6404.8	-2.50	47.99
5	94314.9	8896.5	98.99	28.31

server VUGTK

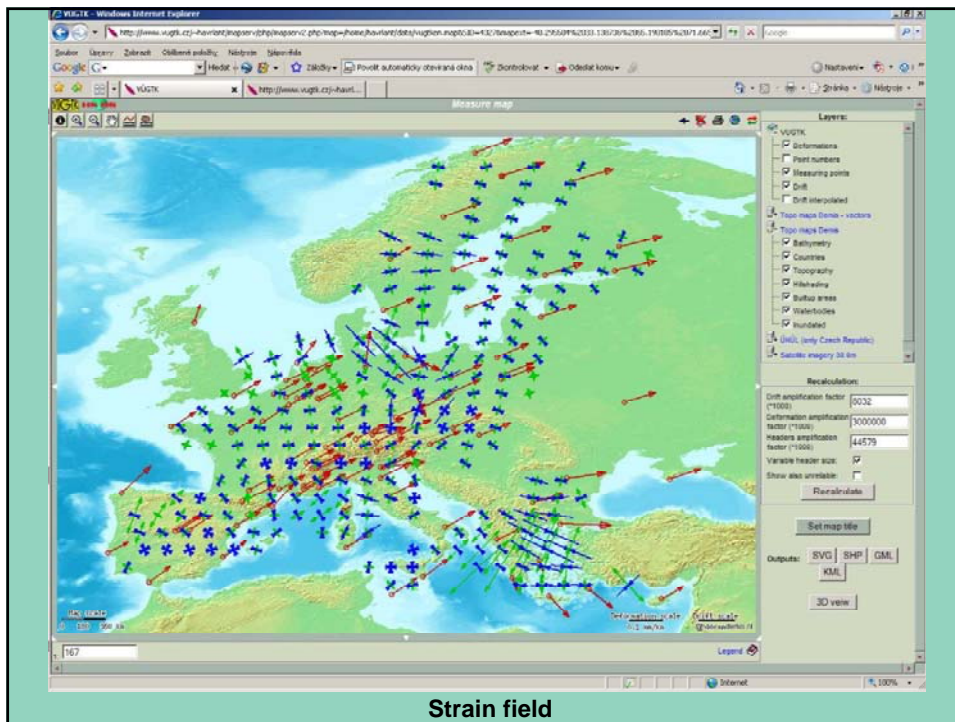
user

Output data:
strain tensors,
total dilatation,
protocol, ...

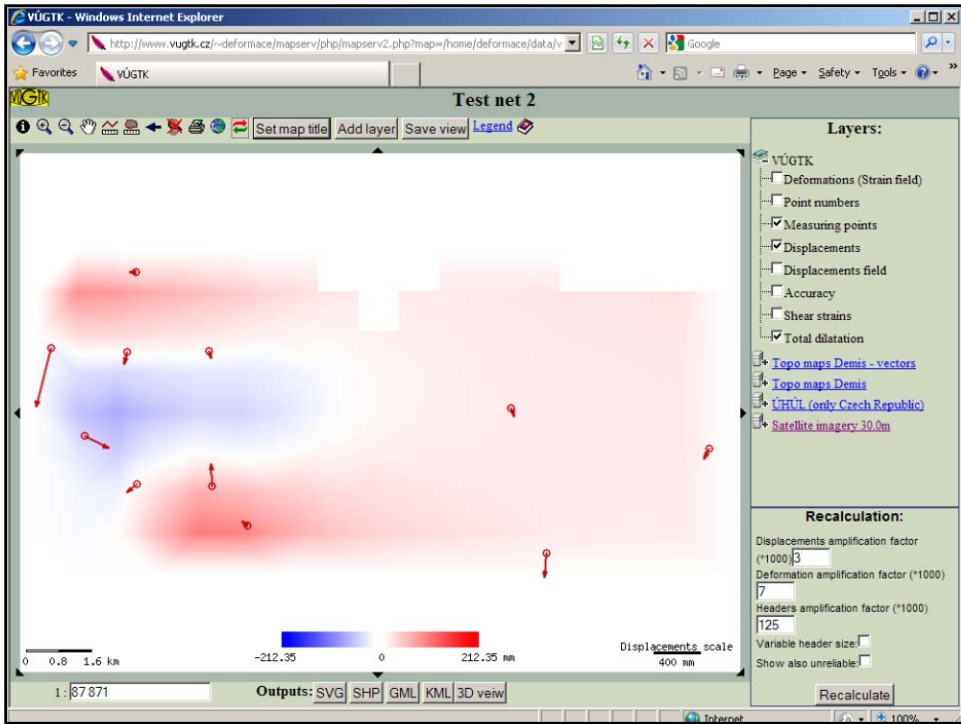
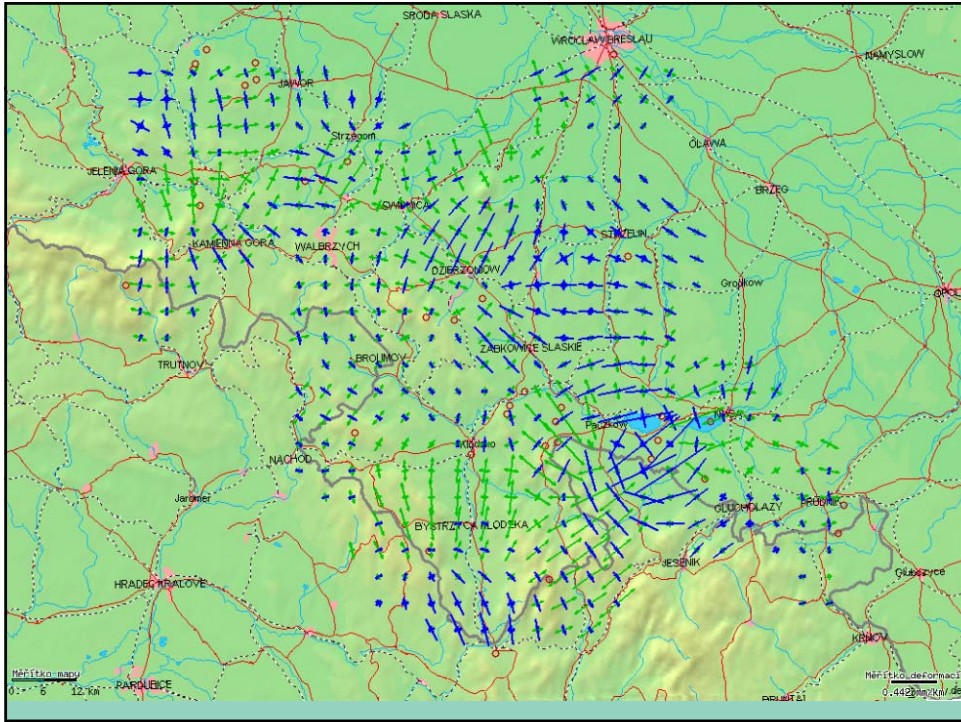
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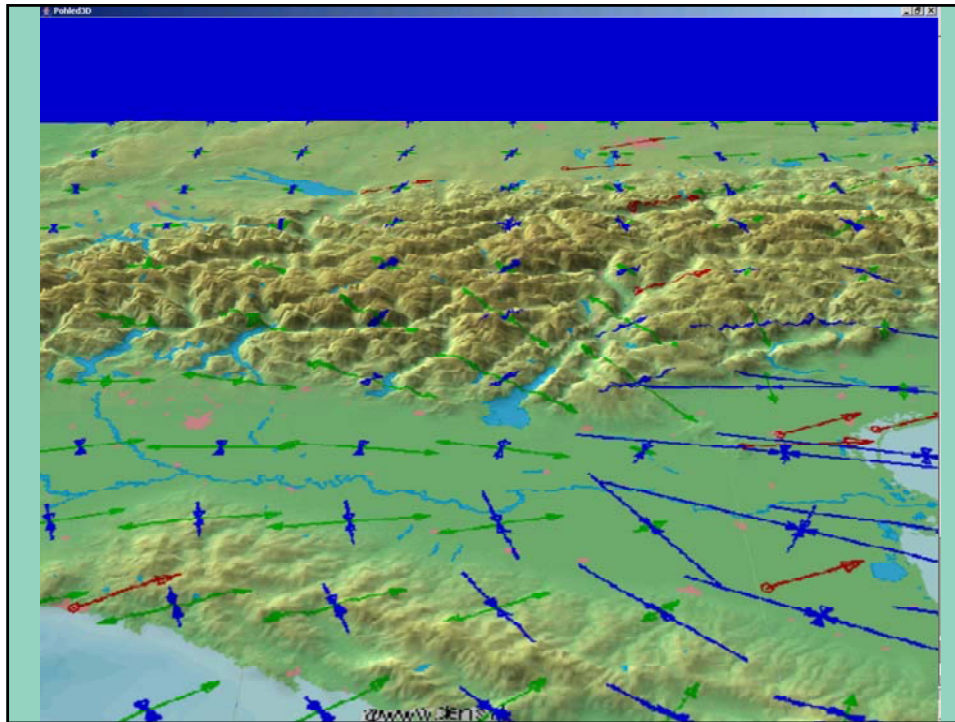


Displacement field



Strain field





We can help you with processing of your data.

Thank you for your attention

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