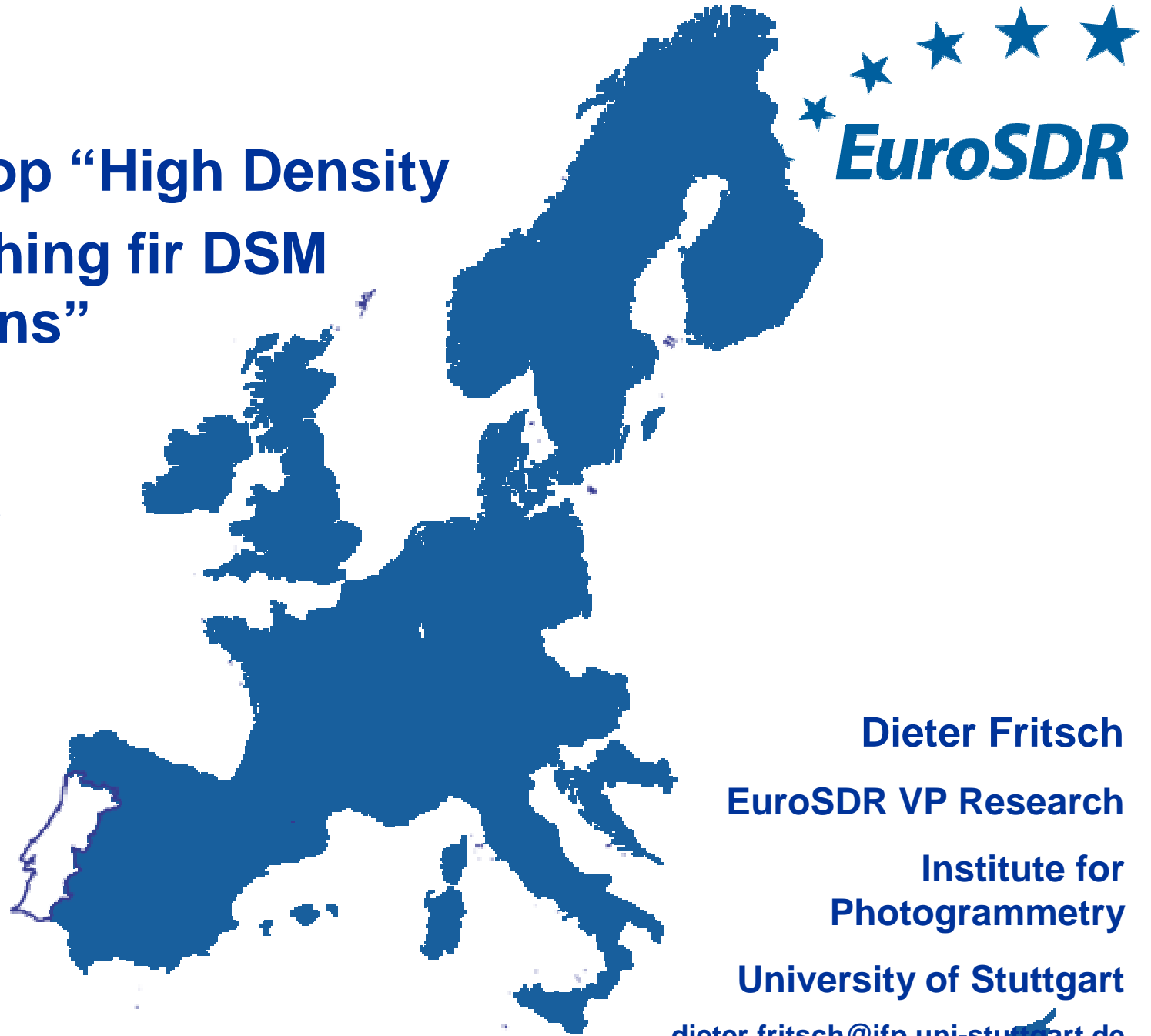


Wrap-Up

2nd Workshop “High Density Image Matching fir DSM Computations”

Vienna

June 13-14, 2013



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Wrap-up of June 13, 2013



- EuroSDR is grateful to BEV as host of this 2nd workshop, appreciated the welcome address by President Hoffmann
- Intro lecture by EuroSDR VP Research, followed by presentations of 2 members of the Project Management Team (W. Stoessel, M. Gruber) – some important side remarks were given!
- Flight parameters important for NMCas: 80% along flight no problem
change of across flight % increases the costs considerably!
Towards Multiray Photogrammetry (80%/60%)?
- Definition of image-based DSM; iDSM?
- Open Questions: PAN or RGB, 8 or 16 bit, Point Clouds substitute stereo models, true ortho or Nadir ortho? Data format for point clouds, vegetation vs. non-vegetation? Where photogrammetry, where aerial LiDAR
- EuroSDR Test DIM4DSM computation is showcase for image-based solutions

Wrap-up of June 13, 2013



- H. Lehner: “DSM Applications” Visibility studies, added value for roof greening, photovoltaic, solar heat potential, landscape vis., change detection, surface class., veg integrated in DSM
- K. Schadauer: “Exploiting DSM for Forestry Analysis”, special req on behalf of forestry, DIM as alternative for ALS – YES for crowns, NO for underneath canopies
- G. Bronner: “DSMs for Forestry”, comparison ALS vs. photogrammetry, Q: estimate stock volume, annual yield, felling activities, expects: infos about forest density, tree species, site&relief
- 1st Break-out Session:
 - Expectations for this EuroSDR Test
 - Expectations beyond this Test
- Results:
 - Advantages/Disadvantages of SW tools, ...

Wrap-up of June 13, 2013



- Results (expectations beyond this workshop):
 - Find best, accurate, fast&cheap SW, pros& cons of every algorithms, iDSM final product?
 - Development of QM/quality of Meta data, get a good available SW for efficient matching & editing, better exploitation of imagery, cont benchmarking
 - Standards for tenders, req of users, performance min vs. max
 - Accuracy vs. costs

All Results will be homogenized, put into a pdf and will be made available (CD ROM, EuroSDR Web pages) - will also help to draft proposal for the EuroSDR BoD Meeting Gaevle, 2013

Thanks to MS Vexcel Imaging for the wonderful social event at the Heurigen “Schuebel-Auer”, Nussdorf – it was a great evening!

Wrap-up of June 14, 2013



- N. Haala: Introduction “High DIM4DSM Computation”, in total 12 groups have participated in the test – this is a great success!
- 9 presentations have been given: C. Ginzler, WSL, Switzerland, B. Brunner, FMM, Asutrai, R. Schneider, Geosystems, Berlin, P. Nonin, Astrium, France, C. Ressler, TU Vienna, Austria, M. Idrissa, RMA, Belgium, K. Gutjahr, Ioanneum, Austria, M. Pierrot-Deseilligny, France, M. Rothermel, ifp, Germany)
- Results:
 - Variety of software solutions: SocetSet, Dense Matcher UltraMap, LPS eATE 2014 (Xpro), PixelFactory, Match-T 5.5, RMA matching sw, RSG embedded matching, MicMac, SURE
 - 2 software packages for download (OpenSource): MicMac, SURE
 - Good: all groups gave figures for processing time, have got results, enjoyed to contribute to the test
 - Problems: interpretation of meta information, ground truth for the result assessment, comparison of the test results (qualitative, quantitative), too less time for analysis

Wrap-up of June 14, 2013



- D. Fritsch: I am very pleased with the results, although there is always room left for optimizations.

Action: The results of the EuroSDR WS will be published as CD ROM (like 1st WS), - find 2 reviewers.

- The Project Management Team will carefully analyze with all input of this workshop the results. A final report will be drafted. Furthermore a journal paper shall be drafted and published in a peer-reviewed scientific journal

Action: The results of the EuroSDR test will be published as booklet/Final Report - find 2 reviewers

Action: Many open questions – proposal of VP Research to BoD Meeting 2013, Gaevle, to continue with another test, similar to this one (as DIM is and will be a hot topic in future)

Wrap-up of June 14, 2013



- In case of approval there will be a next workshop next year again here at BEV – everybody is kindly invited.

Action: Thanks to all

- The Project Management Team
- The groups involved in the test
- The participants who contributed with the break-out sessions to the success of this workshop

Final Remark: On behalf of EuroSDR this workshop is another milestone in the roadmap of EuroSDR as this workshop again was of high quality!

Have all a safe trip back home!

Ultracam-X, Zoom-In (1200x900 pix)
GSD 10cm

