

InSAR and Geodetic Reference Systems

Ramon Hanssen

EUREF Tutorial, Amsterdam, 29-05-2018

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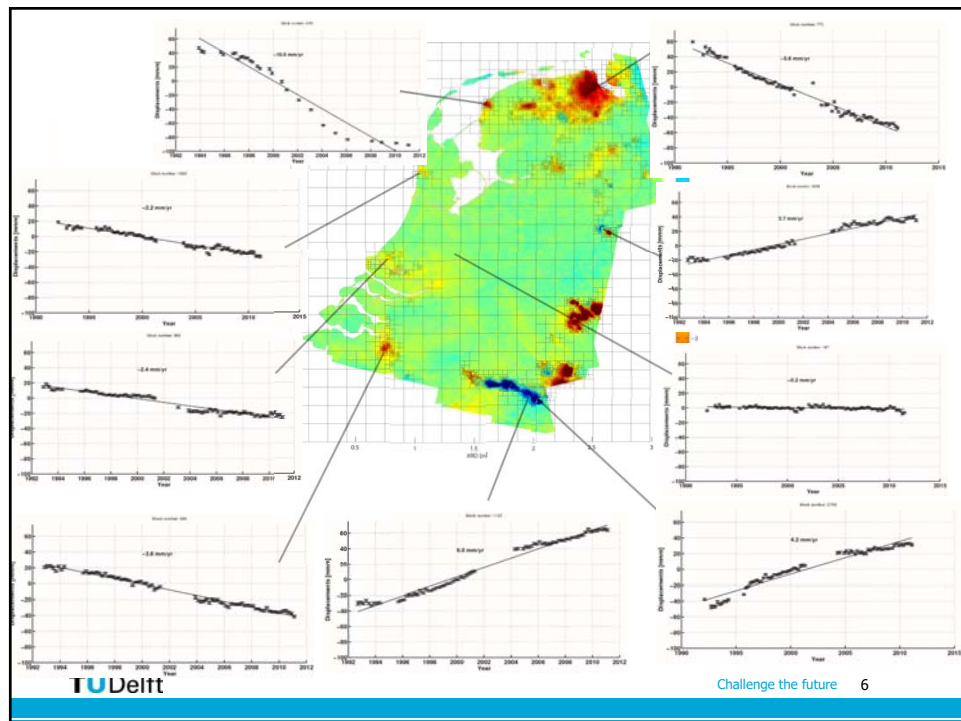
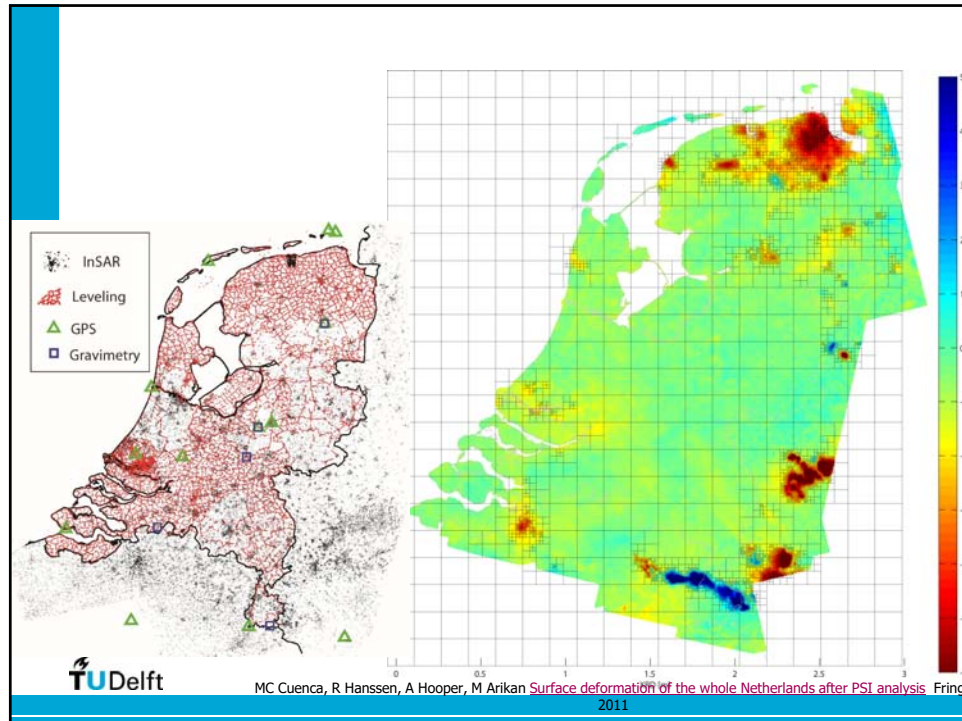
Afternoon session: InSAR and Geodetic Reference Systems			
14:00	14:25	Datum connection and integration of techniques	prof. Ramon Hanssen (NCG/TUD)
14:30	14:55	Geodetic infrastructure: Transponders and Reflectors	dr. Hans van der Marel (TUD)
15:00	15:25	Practical experience: case study Groningen	dr. Gini Ketelaar (NAM)
15:30	16:00	Coffee break	
16:00	16:30	Transponders for operational practice	dr. Adriano Meta (MetaSensing)
16:30	17:00	Practical experience: maintaining the Dutch Vertical Reference System	Dr. Bas Alberts (RWS)
17:00			

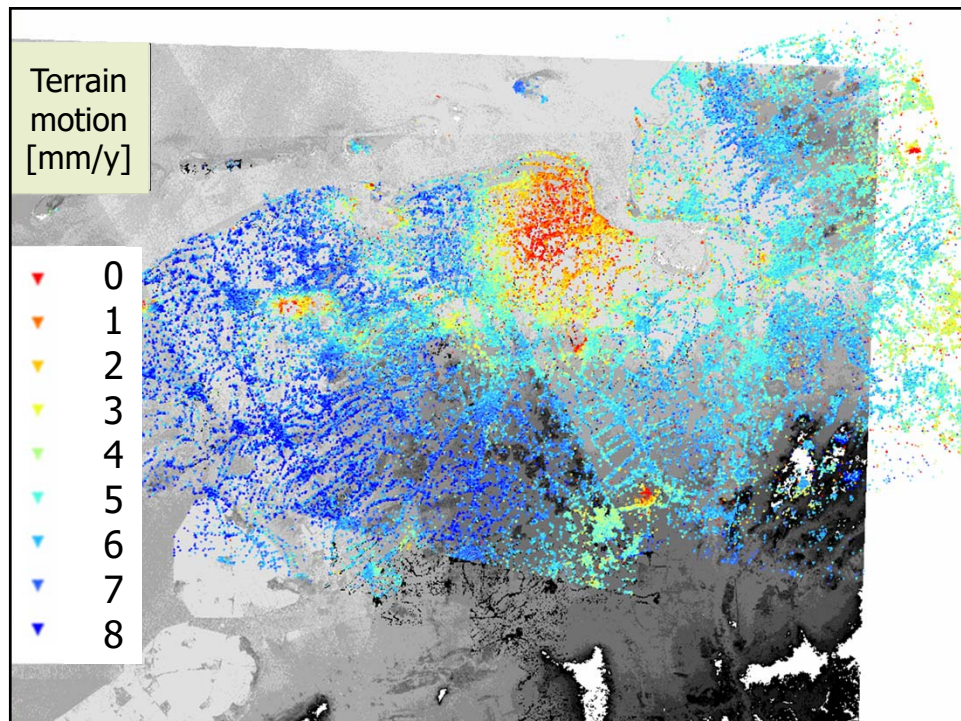
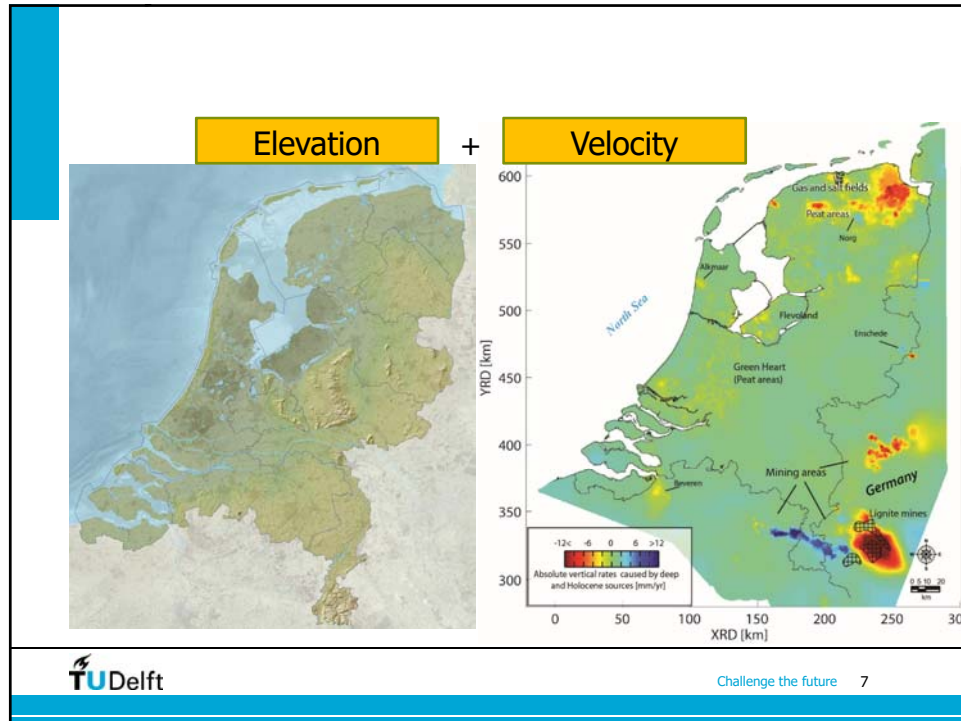
InSAR datum connection and integration of techniques

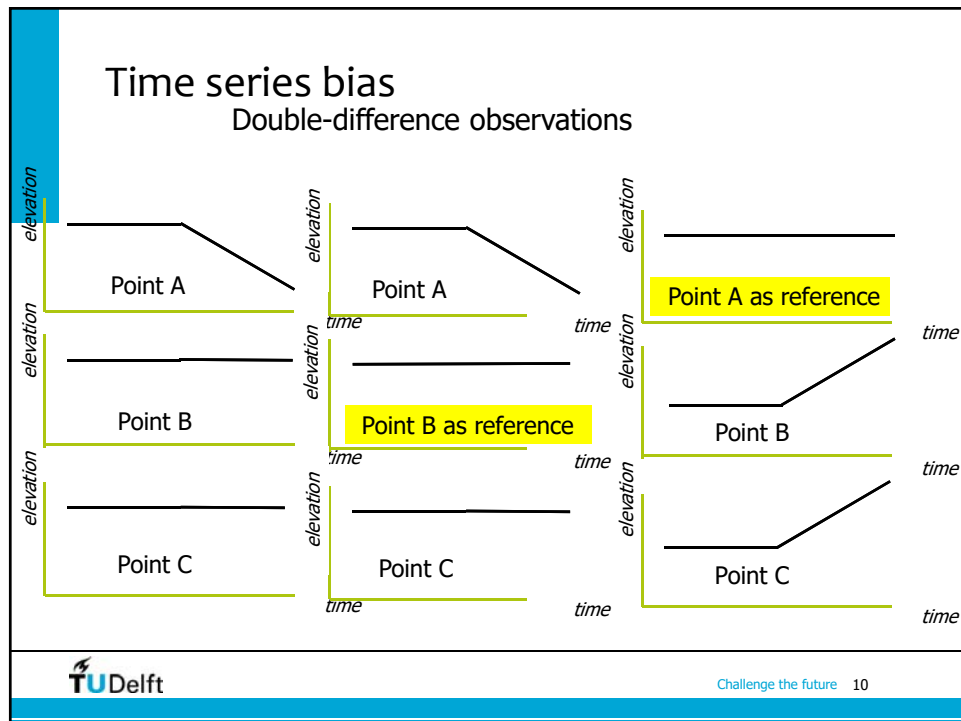
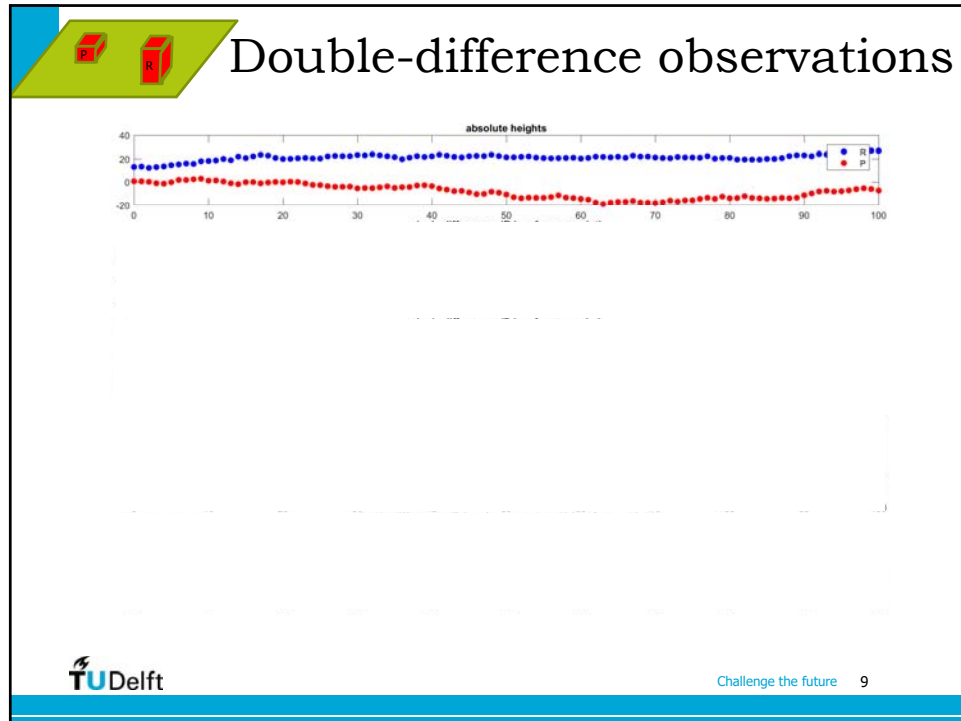
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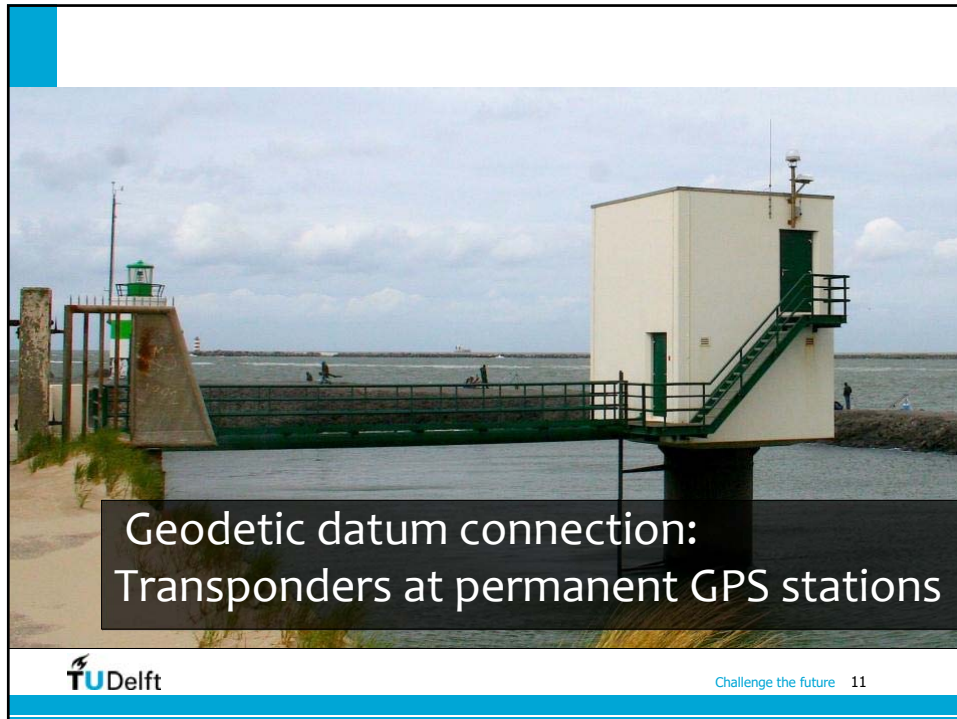
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Geodesy: Datum Connection







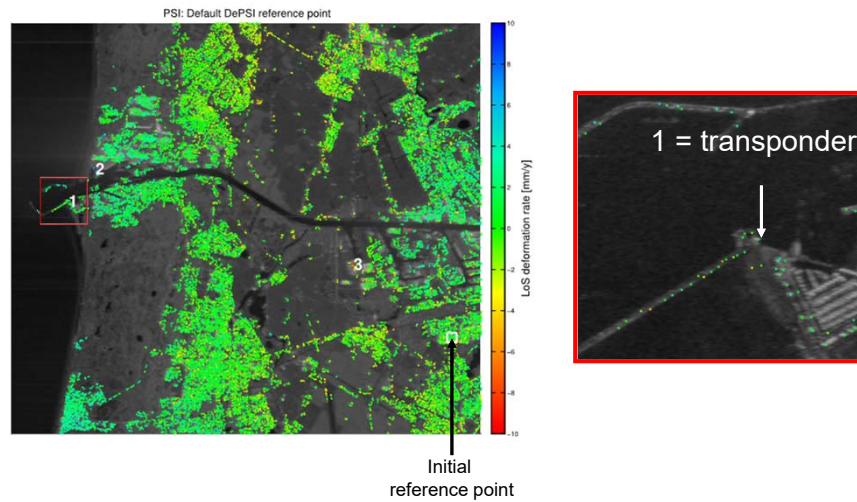


'Absolute' InSAR velocities

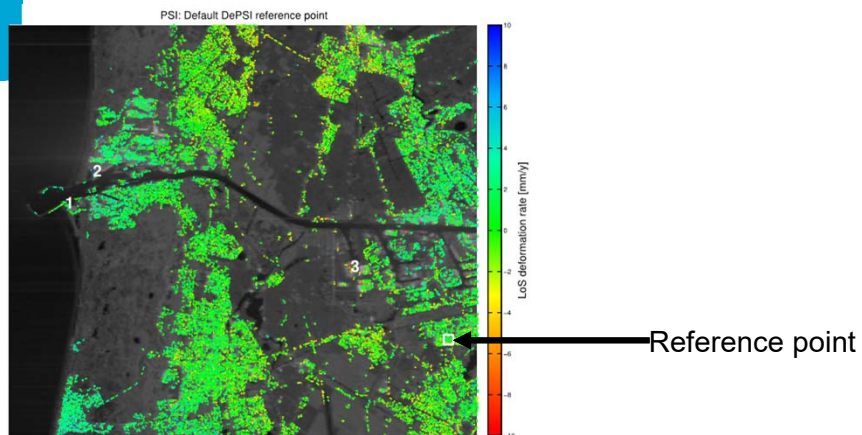
- Transponders mechanically connected to GPS stations



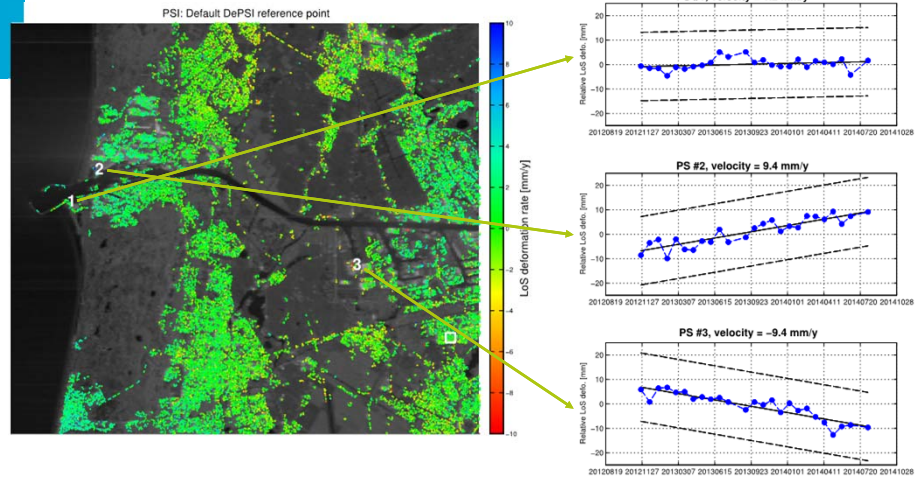
Geodetic datum connection



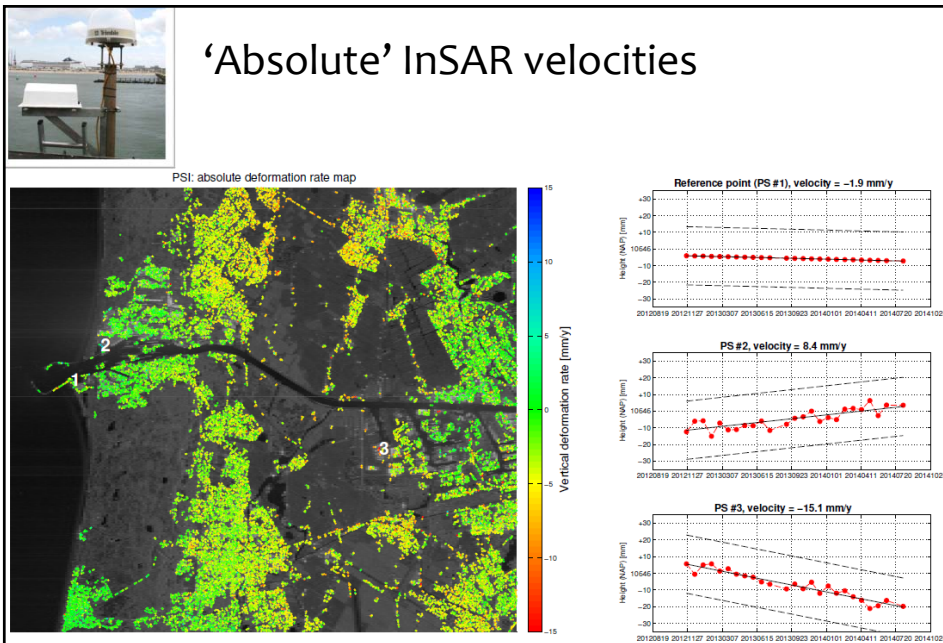
The standard approach



InSAR deformation estimates are relative



'Absolute' InSAR velocities



'Absolute' motion of large areas



The outlook: operational systems



Having the InSAR reference point in a geodetic reference systems will make billions of InSAR observations valuable more quantitatively



Radarsat-2

Metasensing transponders: “Electronic Corner Reflectors”



Integrated Geodetic Reference Stations



<http://www.bodemdalingskaart.nl>