

CONTIPARK

æ Interparking Group

Project BetoScan

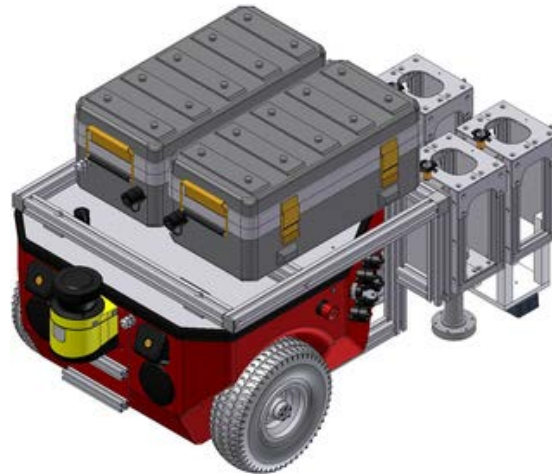
European Parking Award 2015
Innovative schemes in off-street parking



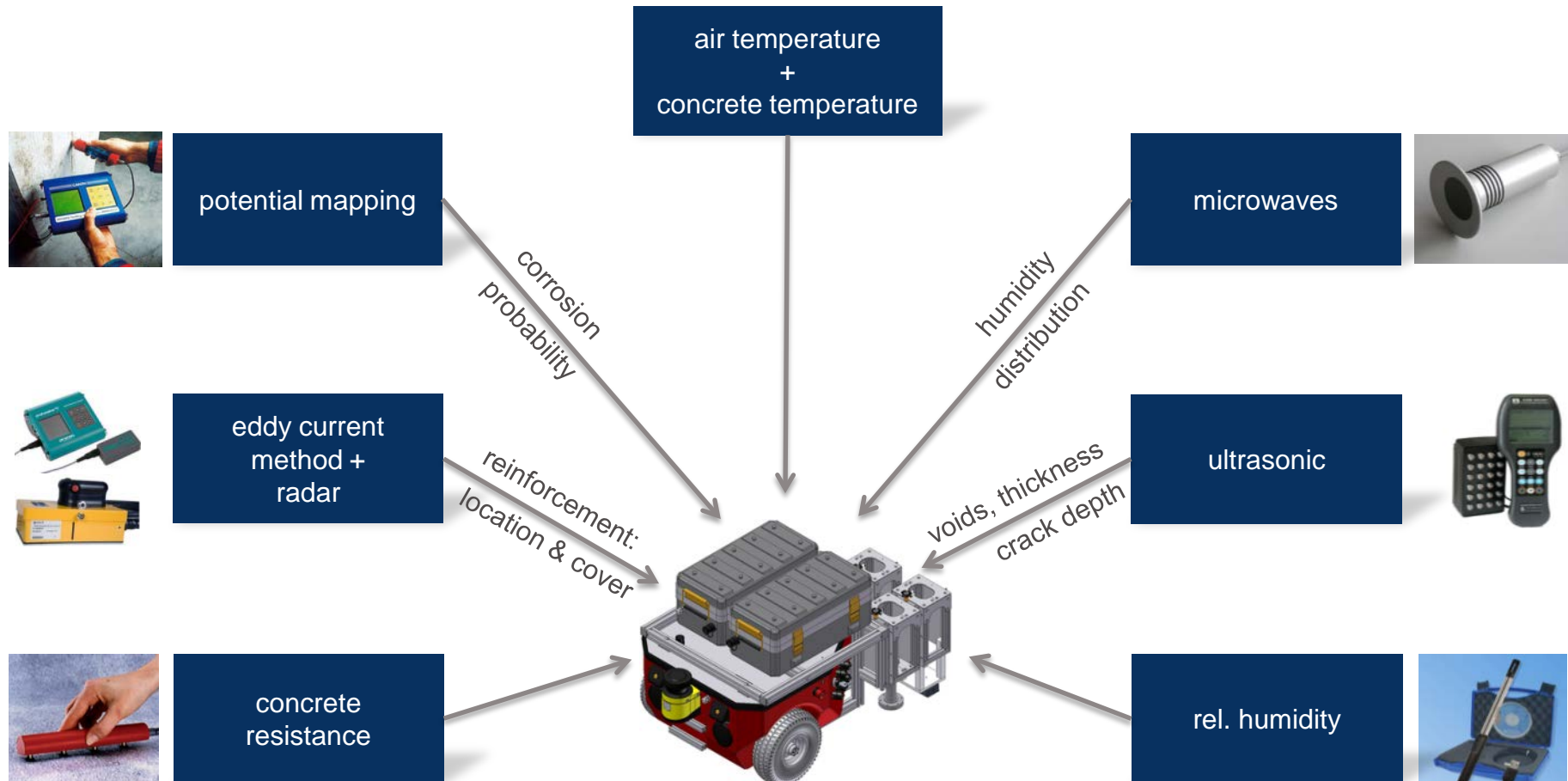
- BetoScan is a „self navigating multi-sensor scanner system for condition assessment of concrete surfaces“.
- Contipark supports the project and is active as a research partner. We operate a lot of car parks that need to be renovated now or at any time in the future. Therefore it is our goal to support the development of a sufficient and non-destructive examination method.
- Motivation:
 - condition assessment
 - large area examination
 - missing documentation
 - parking garages inner-city
 - less new buildings
 - but more reconstruction



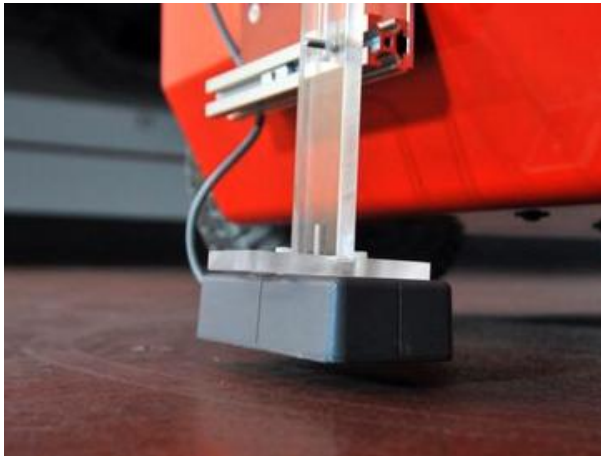
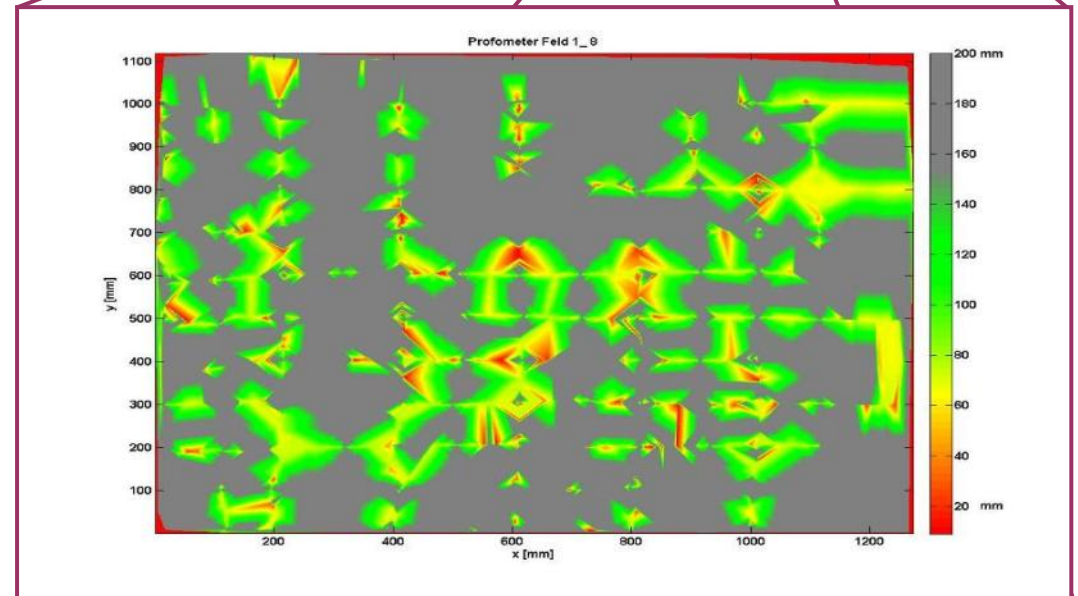
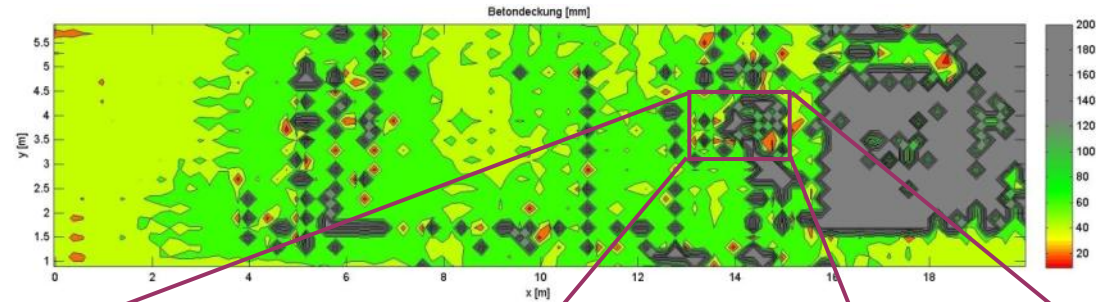
- mobile robot platform equipped with NDT sensors
- the platform navigates autonomously on horizontal areas
- Simultaneous collection of all sensor data with reproducible coordinates
- estimated scanned area several 100 m² per day (battery lifetime 6-8h)
- Onsite analysis with visualization and data fusion



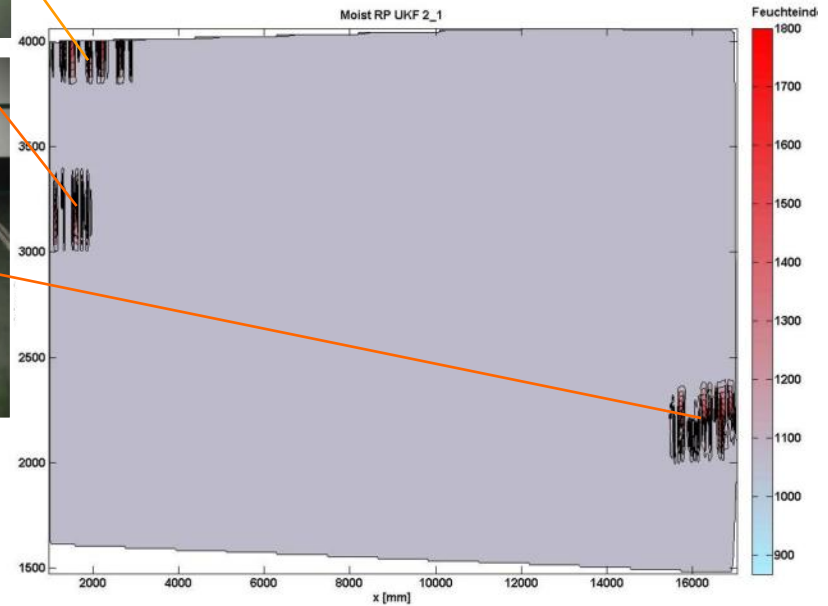
MULTI DATA ACQUISITION



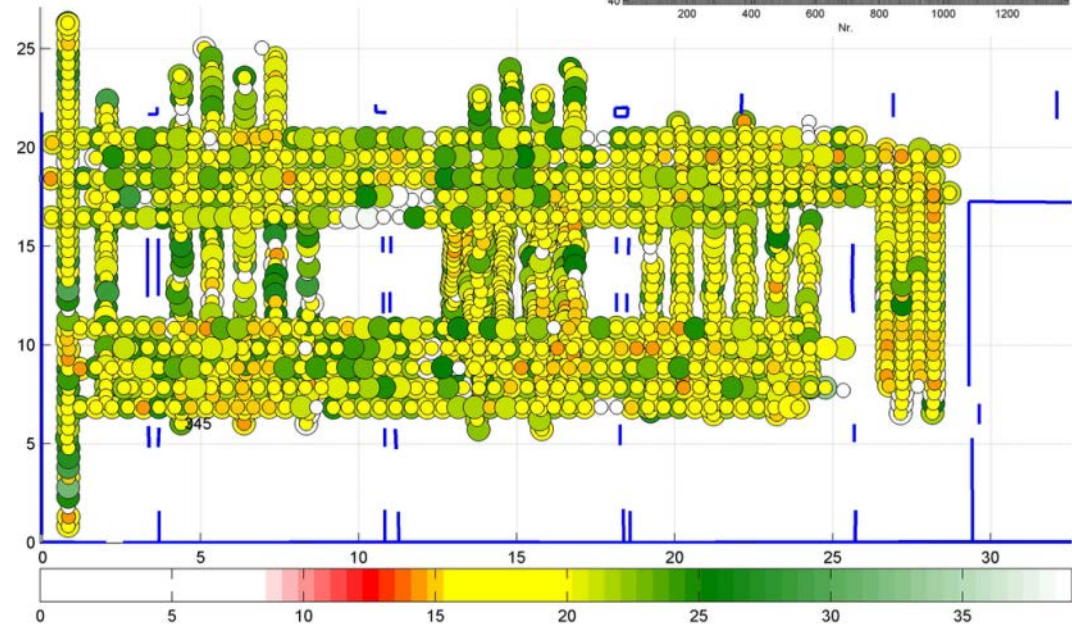
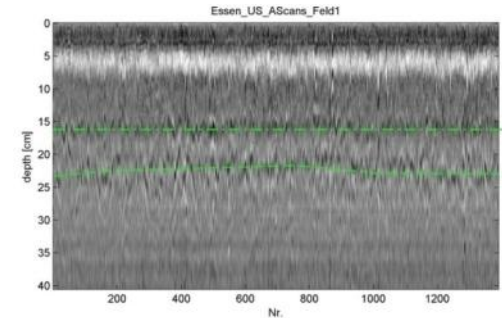
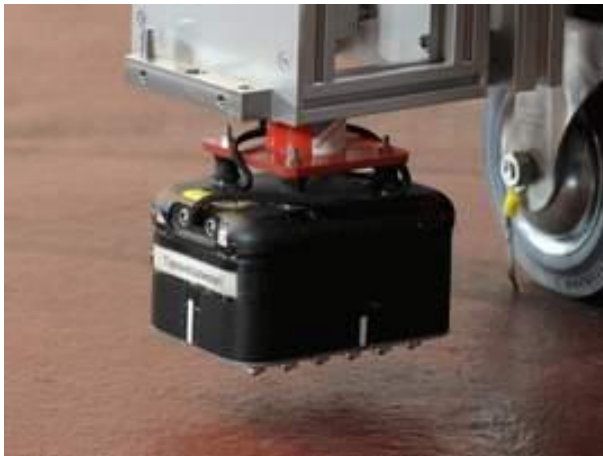
- concrete cover



- moisture



- ultrasound



Colorscale: Concrete thickness in [cm]

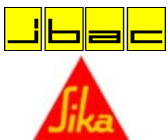
- Large area examination
- High density of measuring points
- Combination of methods
- Saving time due to parallel measurements
- Reliable data base for condition assessment
- Reliable data base for reconstruction planning



PROJECT PARTNER



www.betoscan.de



CONTIPARK

⌘ Interparking Group

