

ULTRACAM

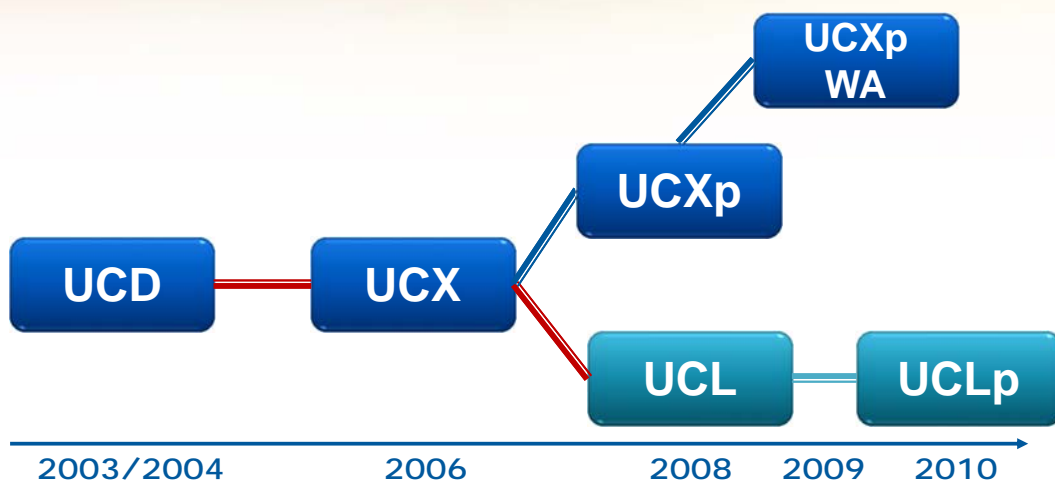
UltraCam and UltraMap - Towards All In One Solution by Photogrammetry

Photogrammetric Week
2011, Stuttgart

Microsoft

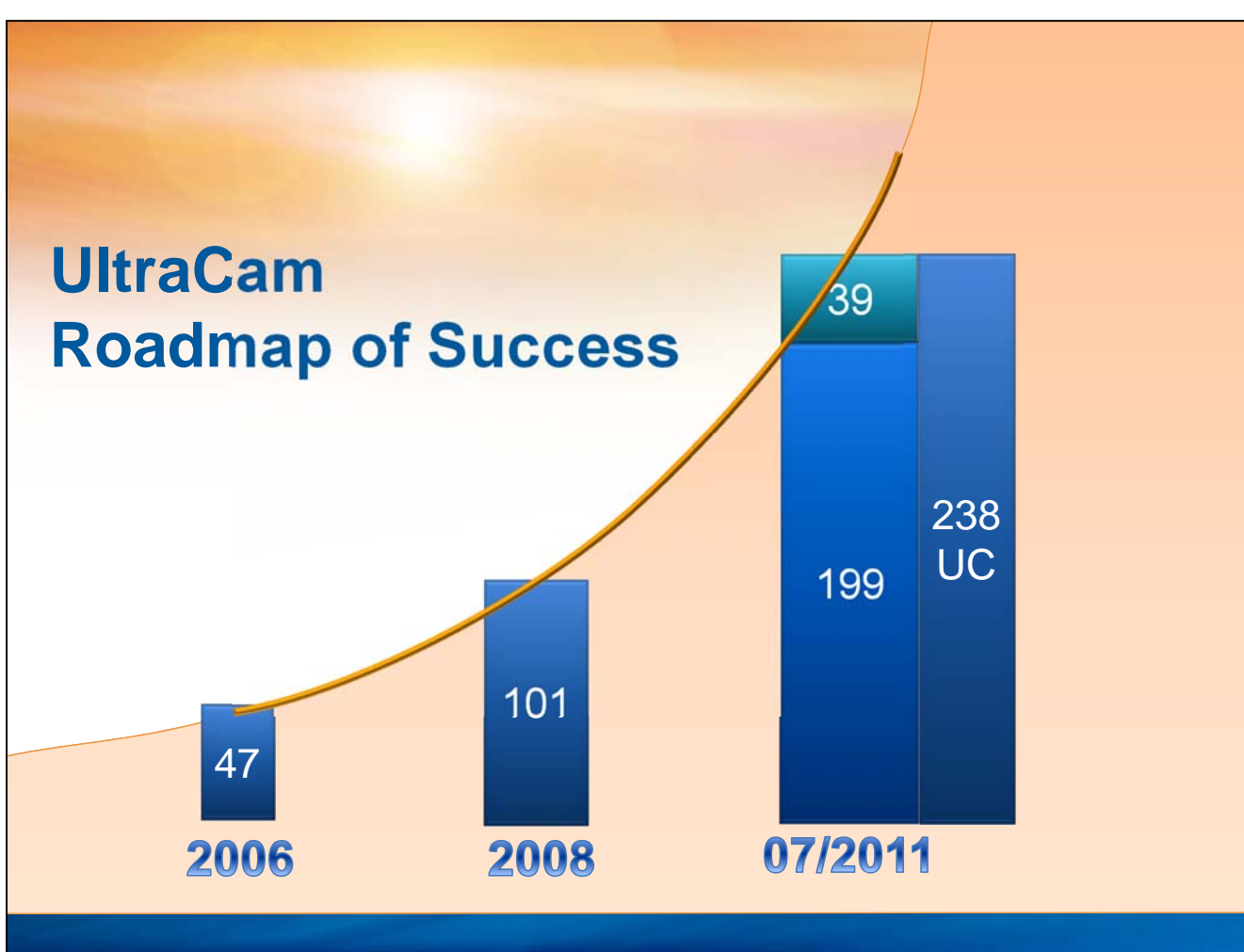
ULTRACAM

Innovation Path



Microsoft

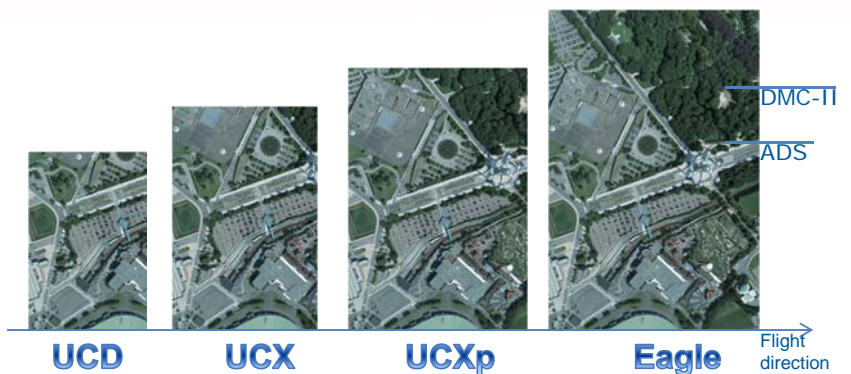
UltraCam Roadmap of Success



SOAR WITH THE EAGLE

UltraCam Eagle

20,010 pixel accross





UltraCam Eagle



Exchangeable lens system
80mm PAN **210mm PAN**



Microsoft

UltraCam Eagle

Integrate ...

or ... Separate



Microsoft

UltraMount GSM 3000

- Gyro stabilized mount
- Keeps camera vertical
 - ± 8.4 deg. pitch
 - ± 6.2 deg. Roll
 - and oriented (± 25 deg. drift)
- Angular rates 15 deg./second
- Connects to GPS/INS/FMS system



Microsoft

UltraNav - Integration

POSTrack



UltraNav



Microsoft

UltraCam Eagle

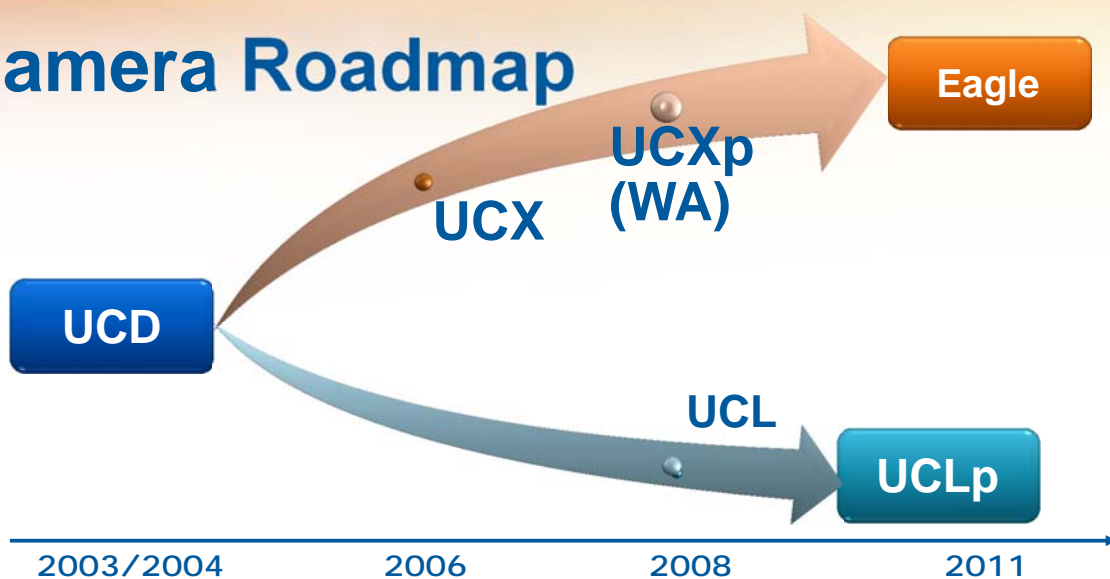


▪ Launching Customer

- Weser Bildflug, Germany
- Geocart, Germany
- Keystone, USA

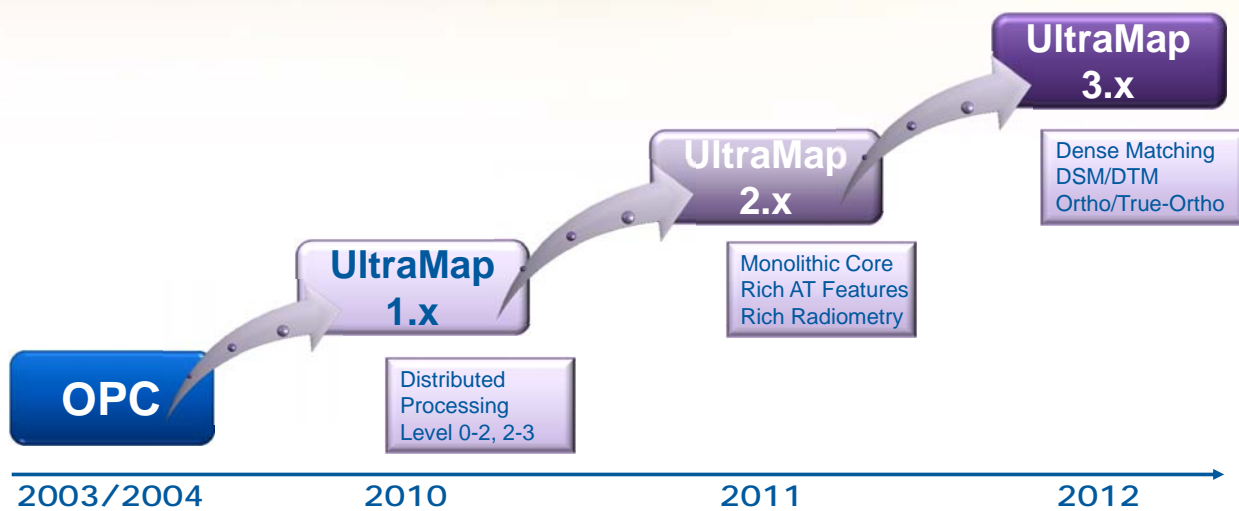
Microsoft

Camera Roadmap

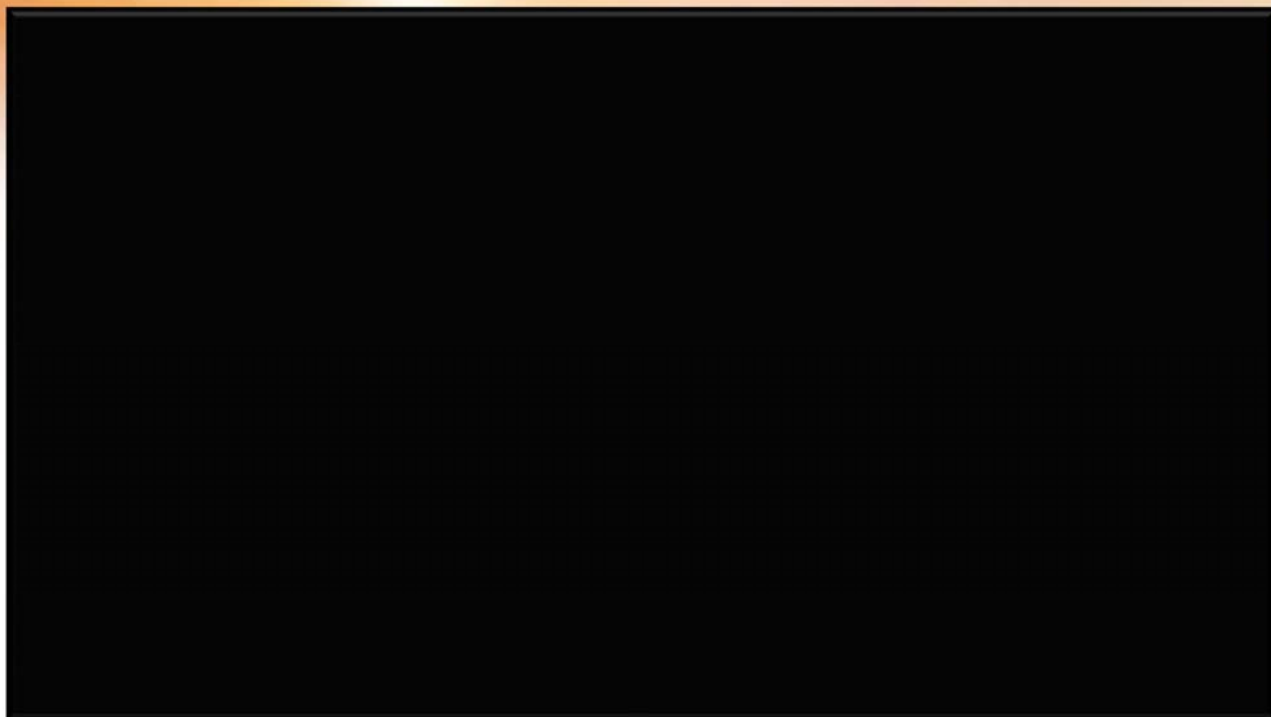


Microsoft

Software Roadmap

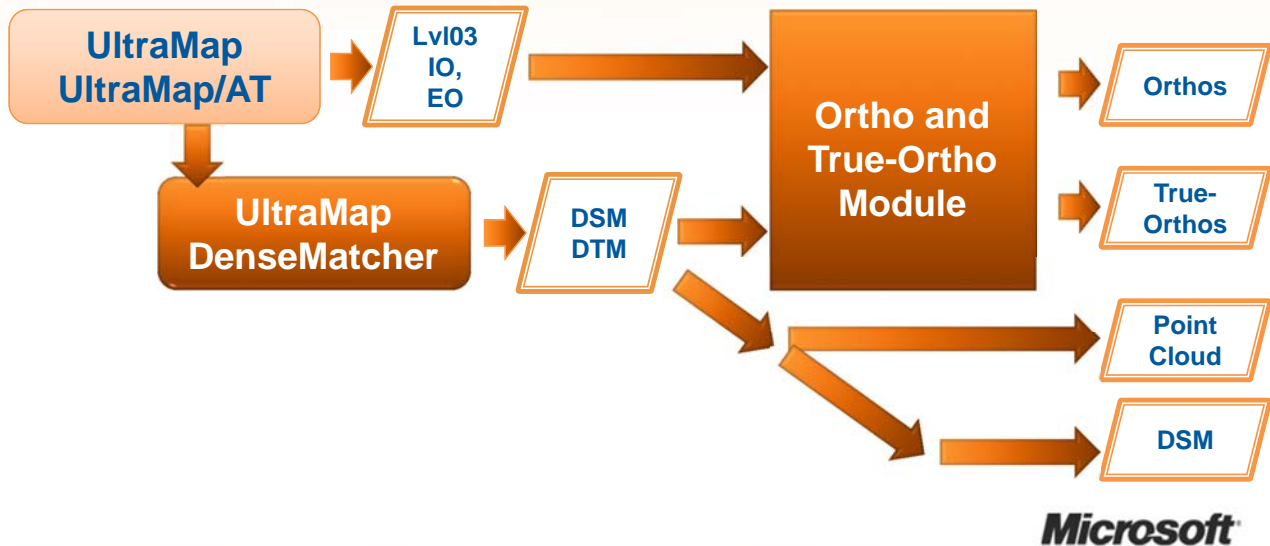


Microsoft



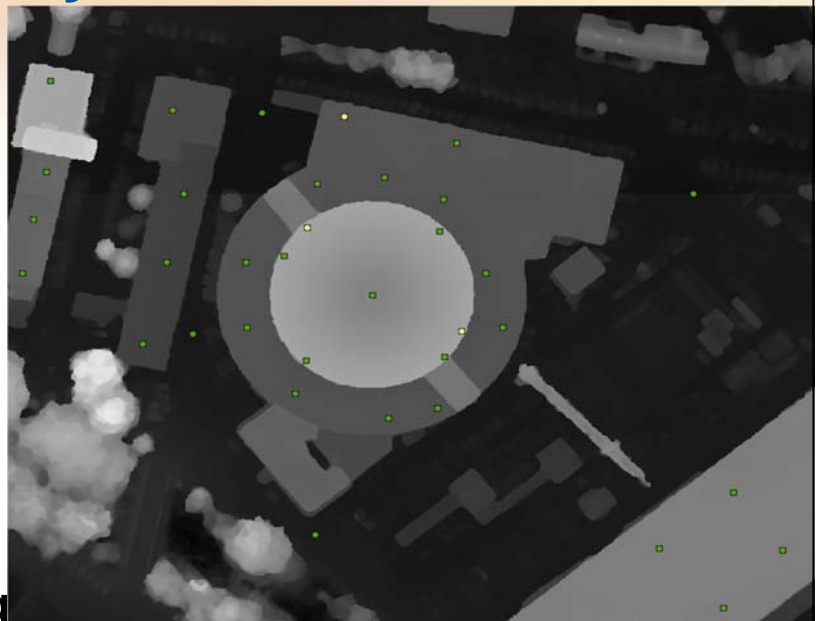
Microsoft

UltraMap 3.0 - Workflow

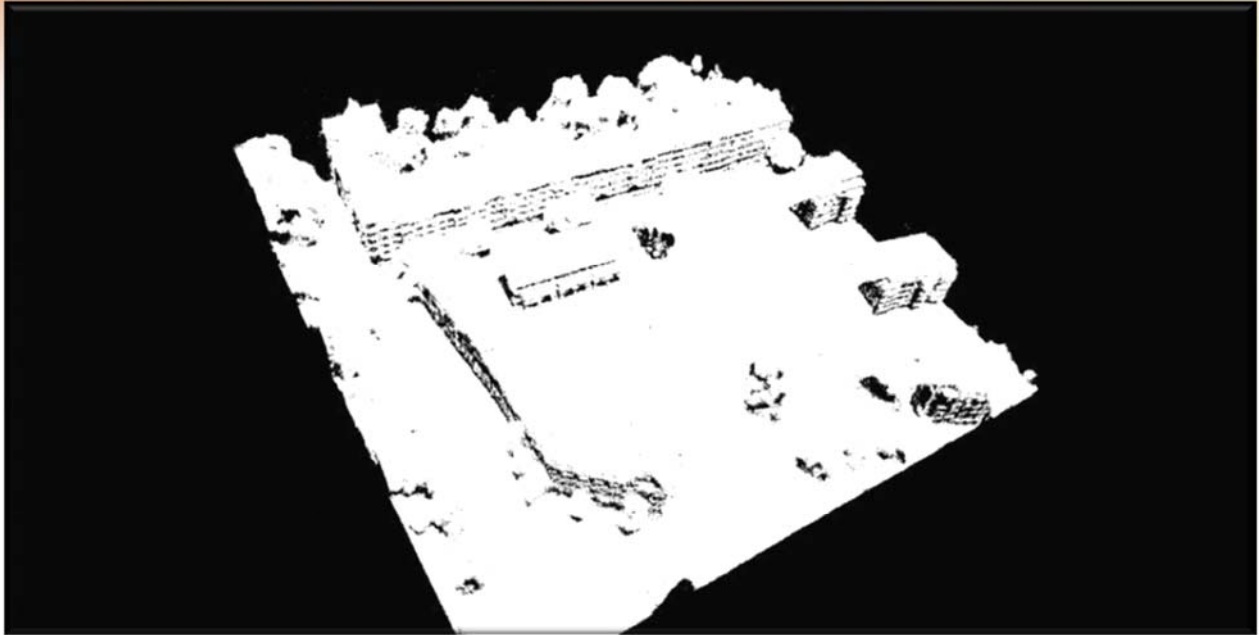


DSM by Multi-Ray Photogrammetry

- **Source**
 - Set of high resolution images
 - 80/60 overlap
 - Up to 12 rays per point
- **DSM by an automated dense matching of the pixel**



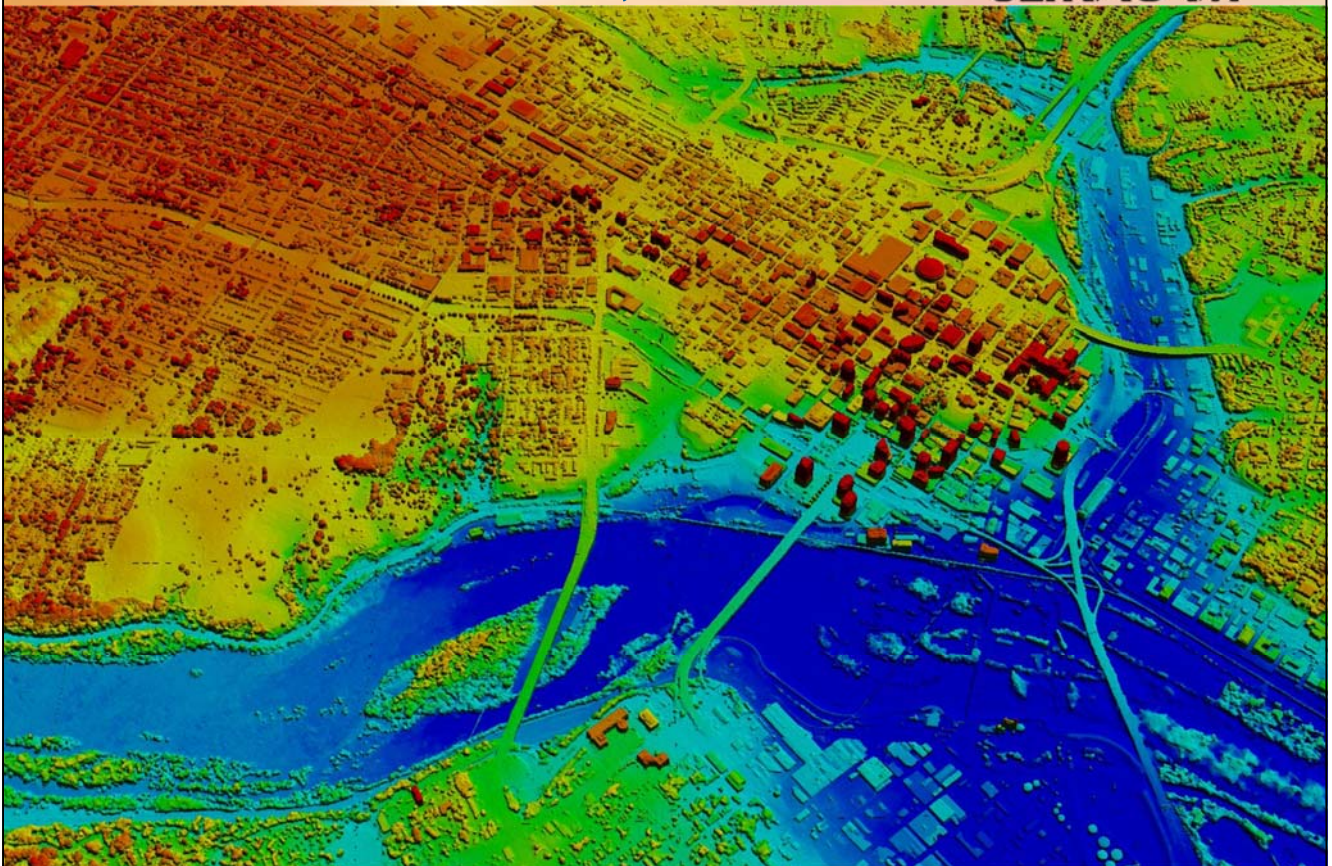
Point Cloud by UltraMap



Microsoft

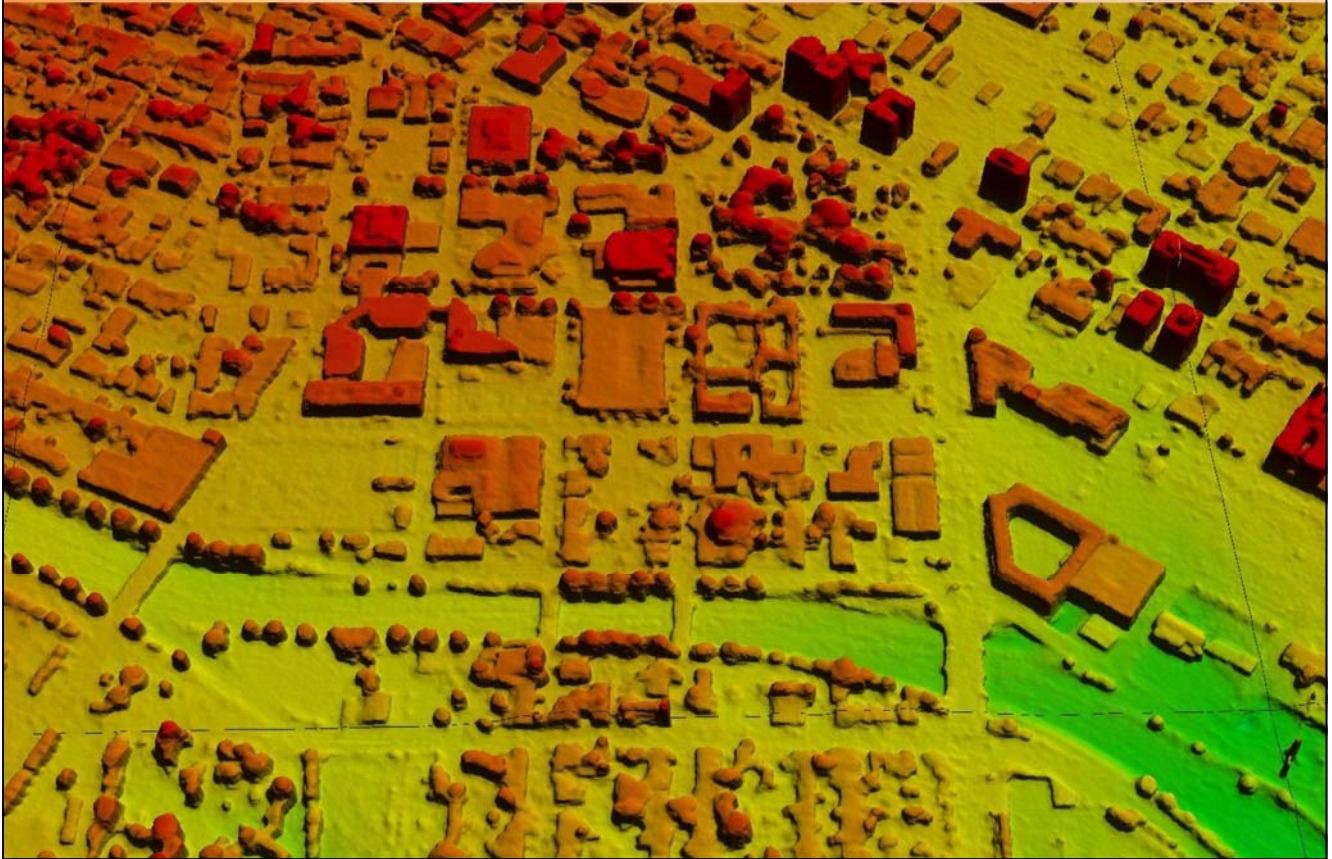
DSM: Richmond, VA

ULTRACAM



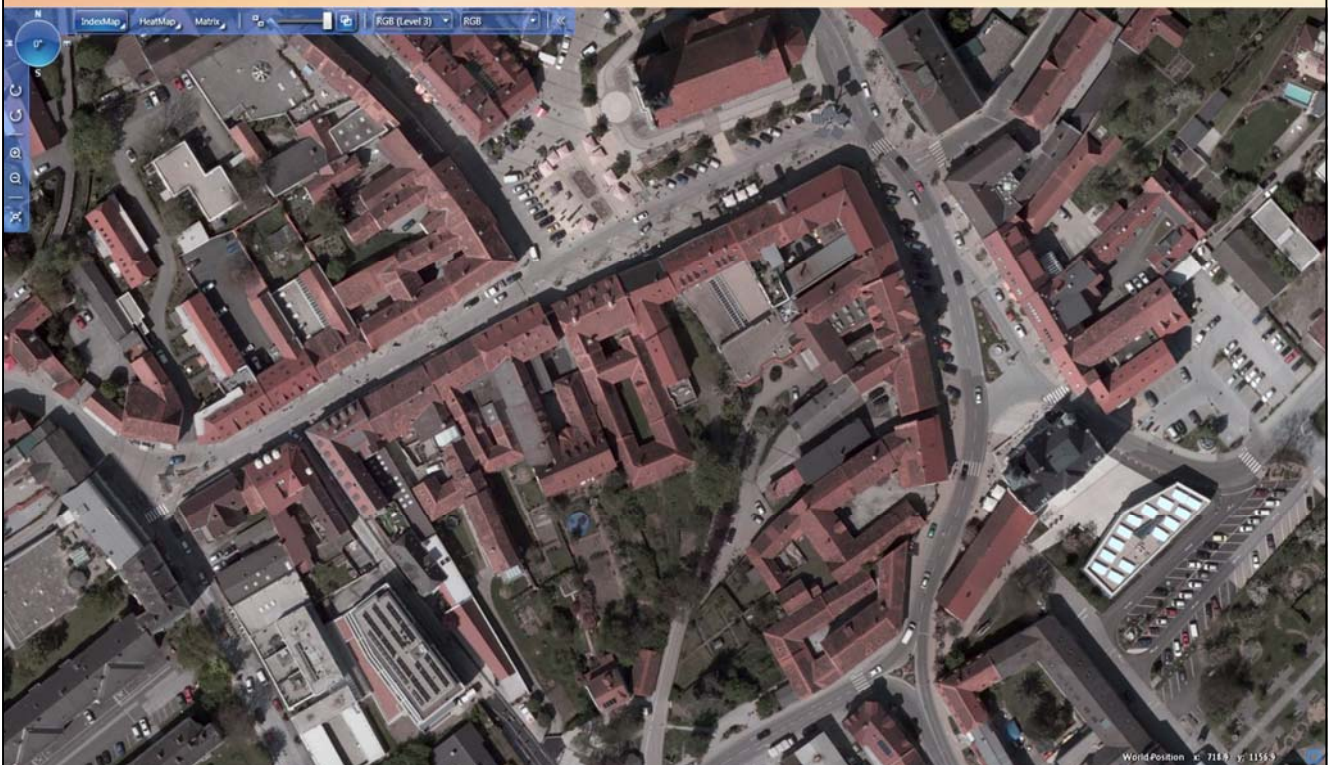
DSM: Richmond, VA

ULTRACAM



UCL, True-Ortho, 10cm GSD, Graz

ULTRACAM



Graz, 10cm GSD

ULTRACAM



Microsoft

DSM for NW New Mexico (100 km²)



DSM + Overlay: Kentucky ULTRACAM



DSM + Overlay: Grand Canyon ULTRACAM

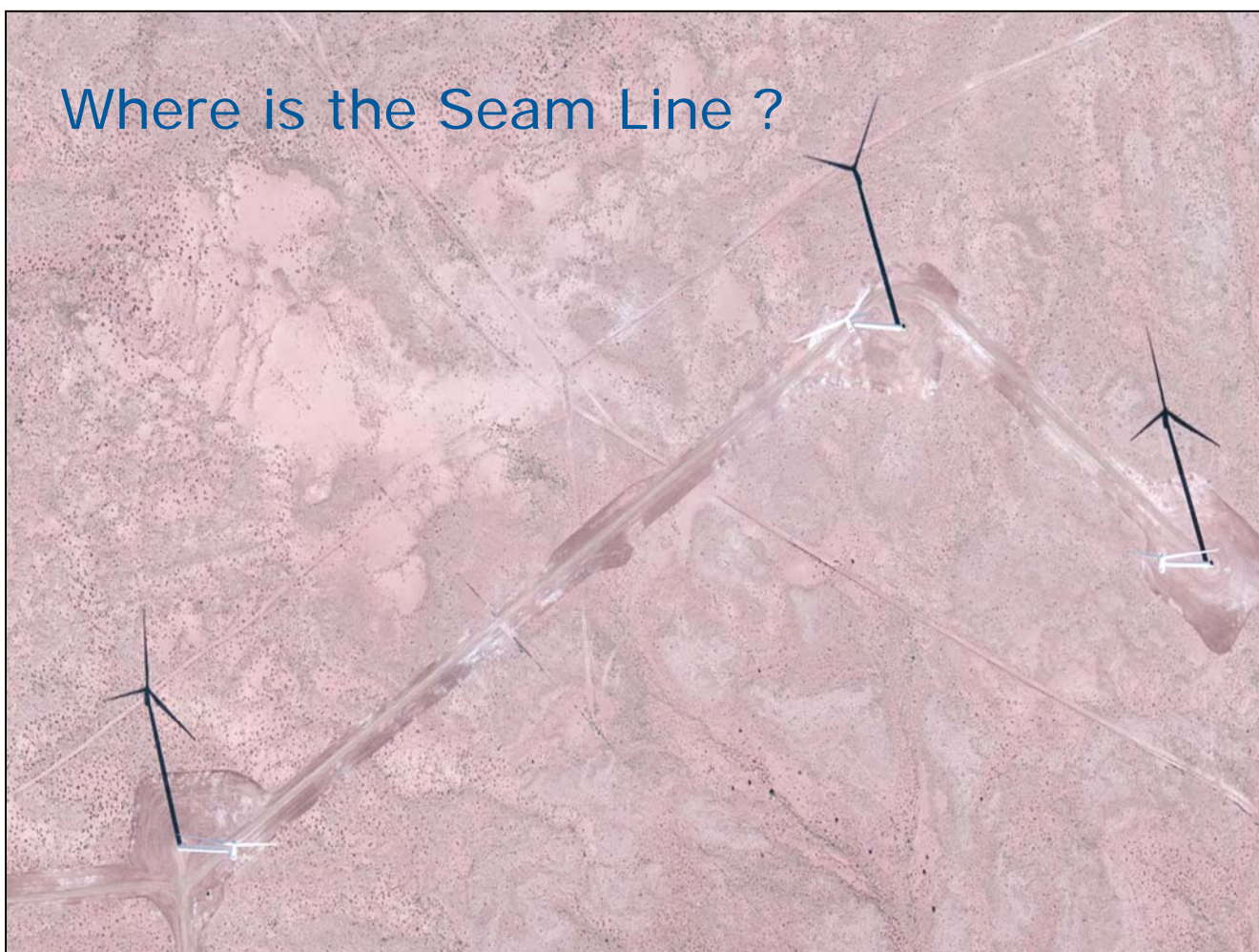


DTM Generation By Winston-Salem Filtering

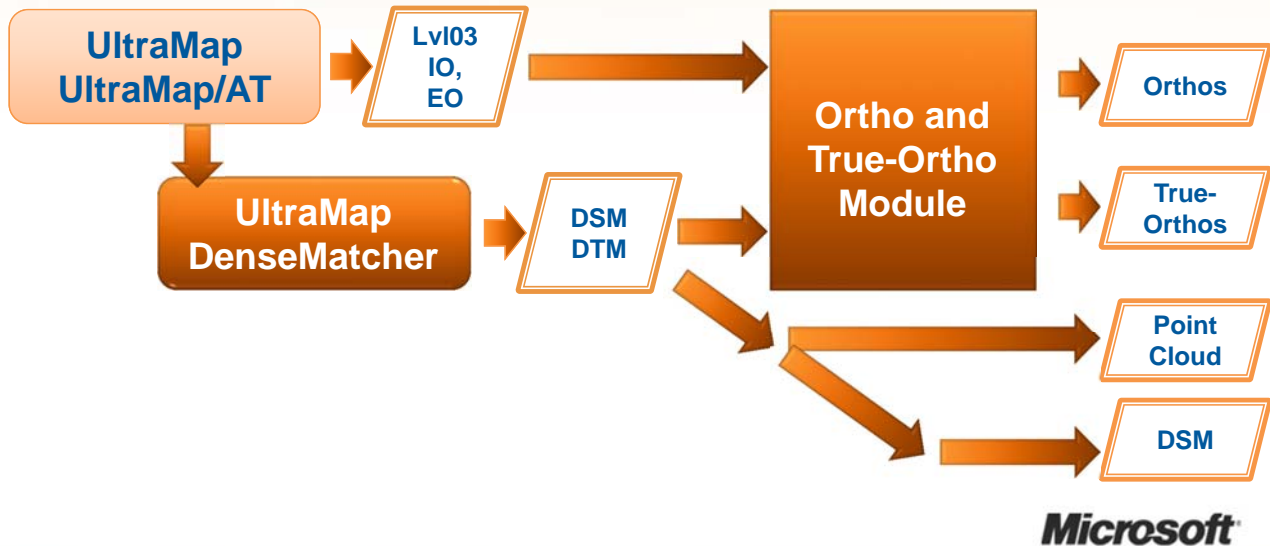
ULTRACAM



Where is the Seam Line ?



UltraMap 3.0 - Workflow



Get an first-hand insight: Demonstration „G“

- UltraCam Eagle
- Tech. preview of the new UltraMap workflow
 - Dense Matcher
 - Ortho/True-Ortho Workflow
- Where?
 - Location: Keplerstr. 17
 - First Floor
 - Room: 17.12