CAPELLA SPACE

Timely, reliable information for critical decision making

Small but powerful micro-SAR

- Rapid path to deployment
- High resolution, high capacity
- InSAR capable

CAPELLA SPACE CORPORATION

A PARADIGM SHIFT IN SATELLITE DEPLOYMENT

OLD SPACE

NEW SPACE

5 m

2 m

CURRENT SATELLITES

TERRASAR-X : 1,230kg

BILLIONS TO BUILD,
MILLIONS TO MAINTAIN,
AND AS BIG AS A SCHOOL BUS.

1.7 m

< .6 m

CAPELLA SPACE CORPORATION WILL LAUNCH THE FIRST U.S. COMMERCIAL SAR SATELLITE IN NOVEMBER 2018.

CAPELLA IS DEPLOYING A CONSTELLATION OF 36 SMALL SATELLITES CAPABLE OF PROVIDING HOURLY EARTH OBSERVATION AT RESOLUTIONS UNDER 1m

CAPELLA SATELLITES

< 40kg

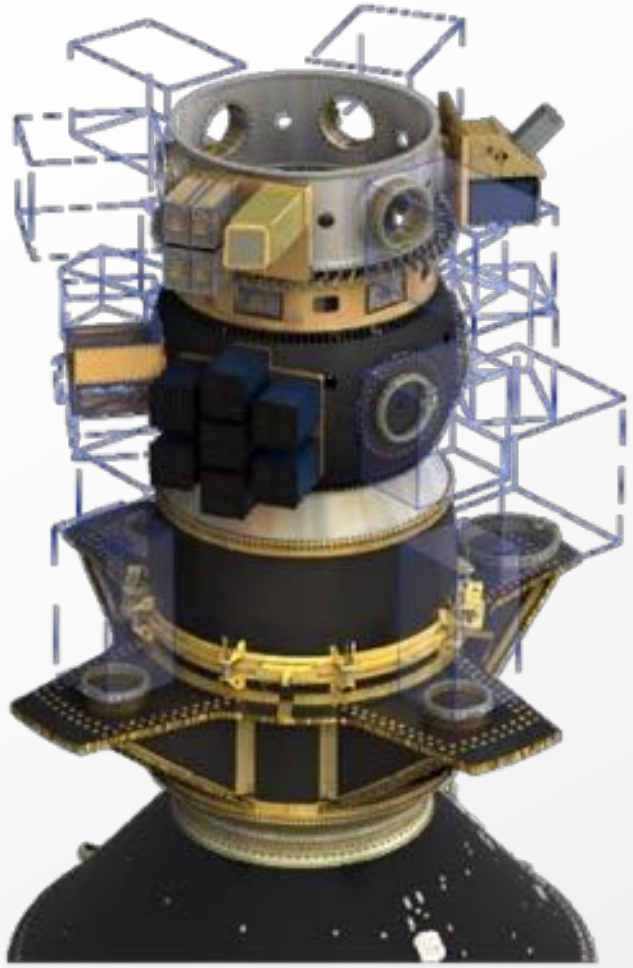
CAPELLA'S SMALLSATS ARE A FRACTION OF THE COST TO BUILD AND DEPLOY.

A COMPACT, LIGHTWEIGHT AND ROCKET-FRIENDLY PAYLOAD...

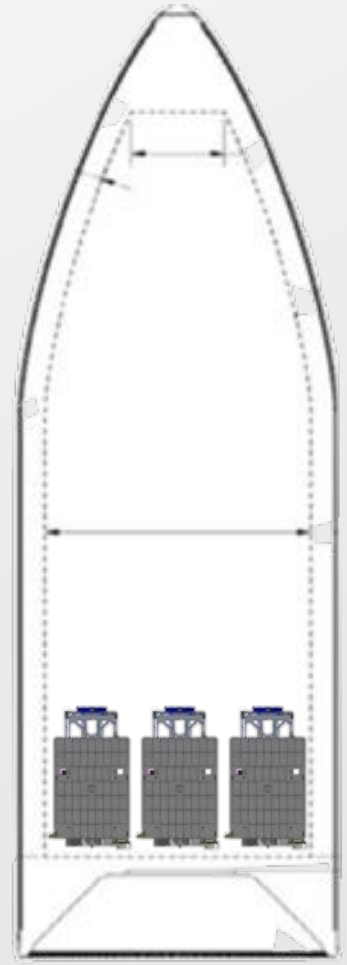
...DEPLOYS TO A POWERFUL MICROWAVE ANTENNA.

8 m^2 antenna

LOWEST MASS FOR FASTEST CONSTELLATION



Ride share



Dedicated launch

CONSTELLATION : 36 SMALL SATS				
MONITORING CAPABILITIES				
Orbital Planes	**2**	**4**	**8**	**12**
Satellites on orbit	**6**	**12**	**24**	**36**
Max Revisit (hrs)	**6**	**3**	**1.5**	**1**
InSAR Revisit (hrs)	**60**	**30**	**15**	**10**

THE CAPELLA SPACE DIFFERENTIATION

TIMELY

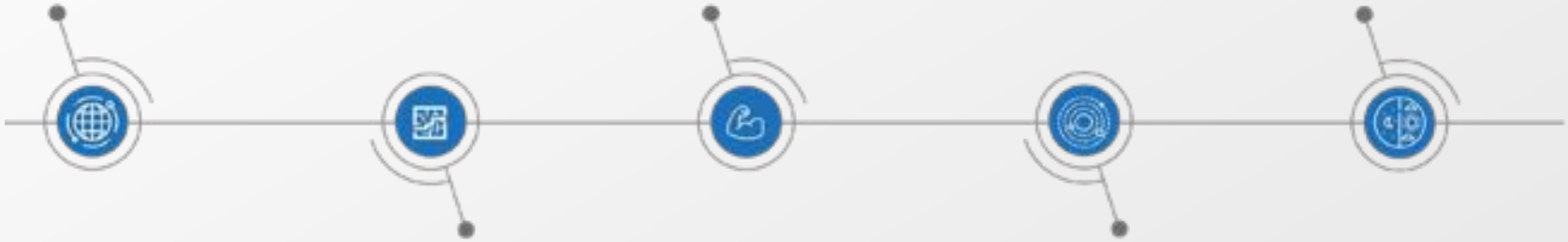
Constellation scales 3x more quickly; maximum of hourly re-visit anywhere on Earth

POWERFUL

1m resolution Spotlight and 3m Stripmap images; up to 3,000 locations per satellite per day; InSAR cabable

RELIABLE

SAR images day and night, through any weather conditions, eliminating uncertainty of acquisition



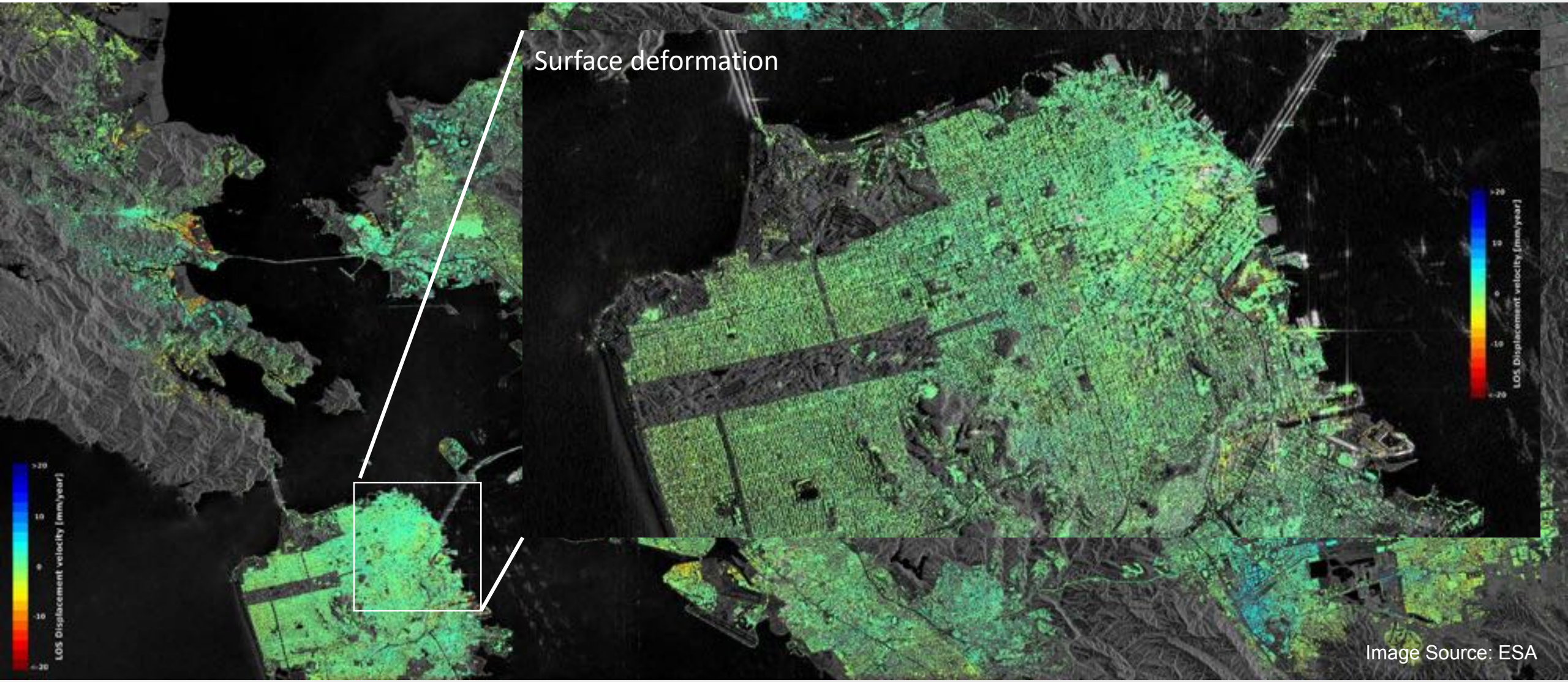
EASY TO ACCESS

Customers can quickly request, access, and receive data through a web-based interface and APIs

FLEXIBLE

Our agile satellites have propulsion and attitude control and can operate in several modes

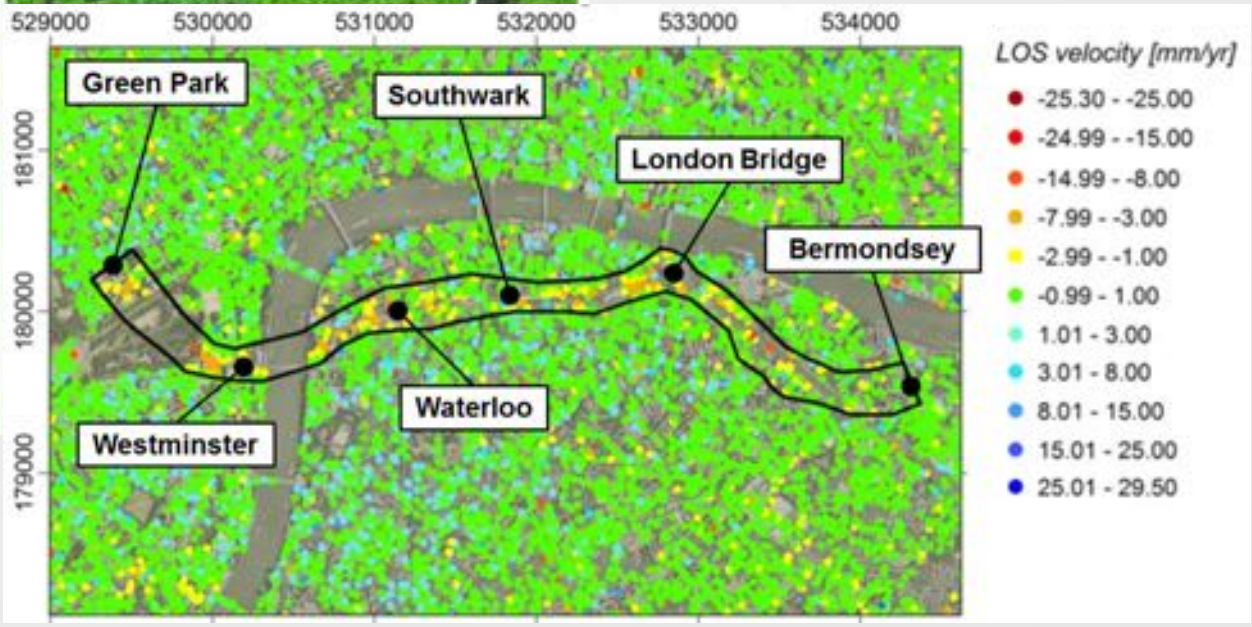
INTERFEROMETRIC CAPABILITIES: SURFACE DEFORMATION



MILLIMETER SCALE ACCURACY

Wide area monitoring

Local changes



COHERENT AND INCOHERENT CHANGE DETECTION

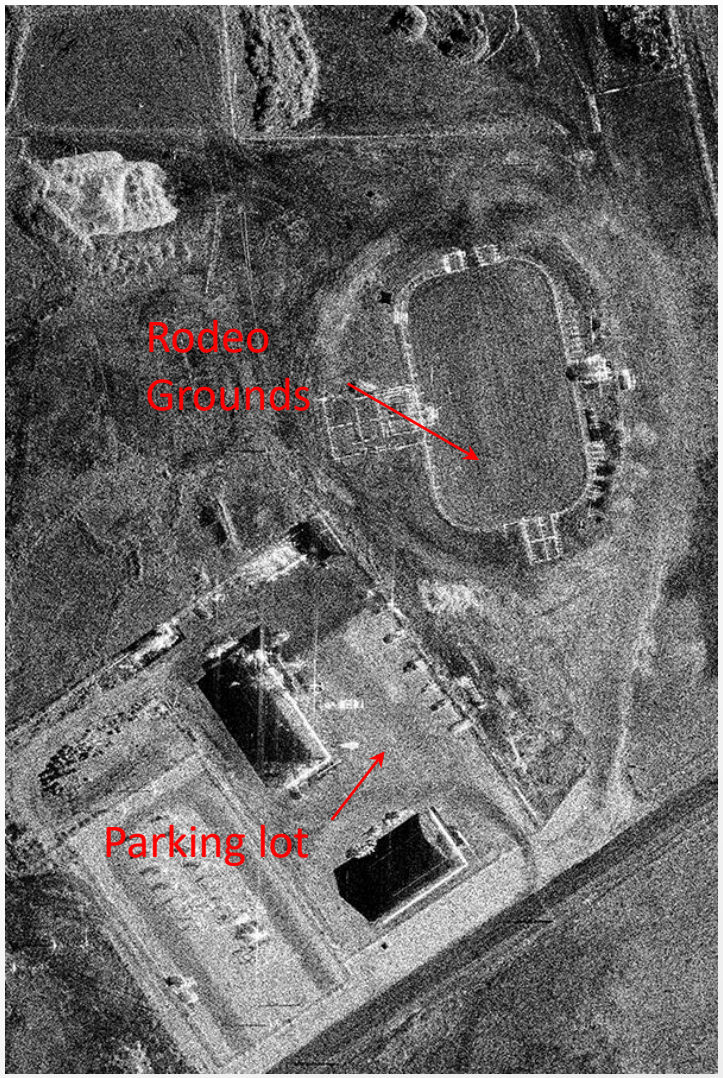


Image 1

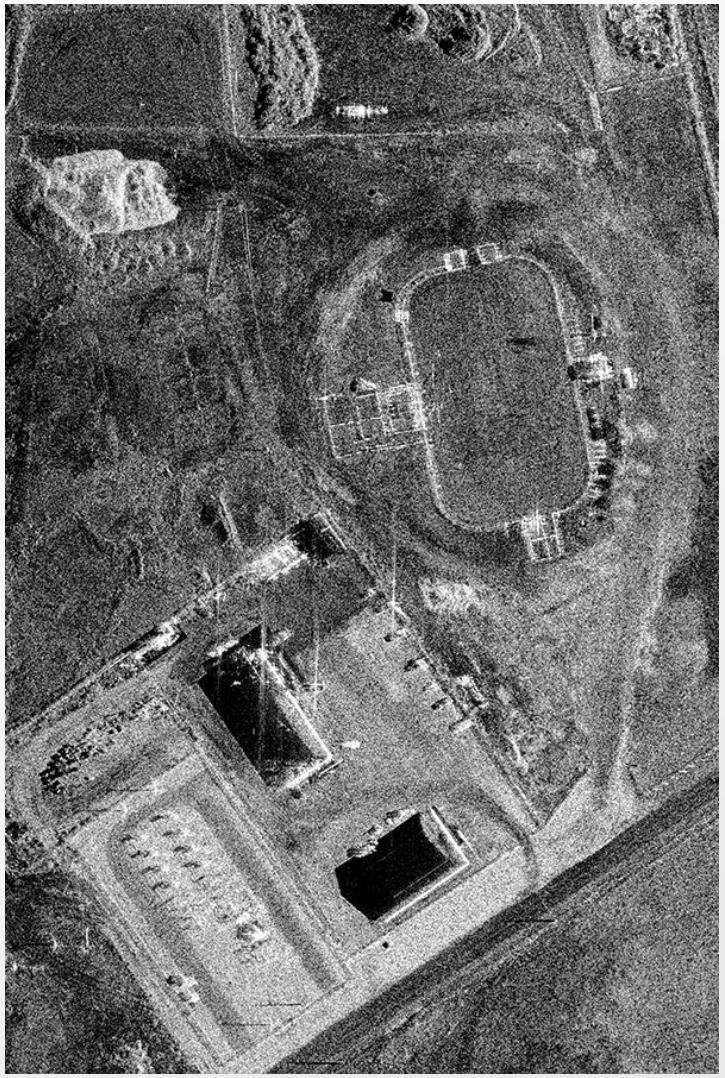
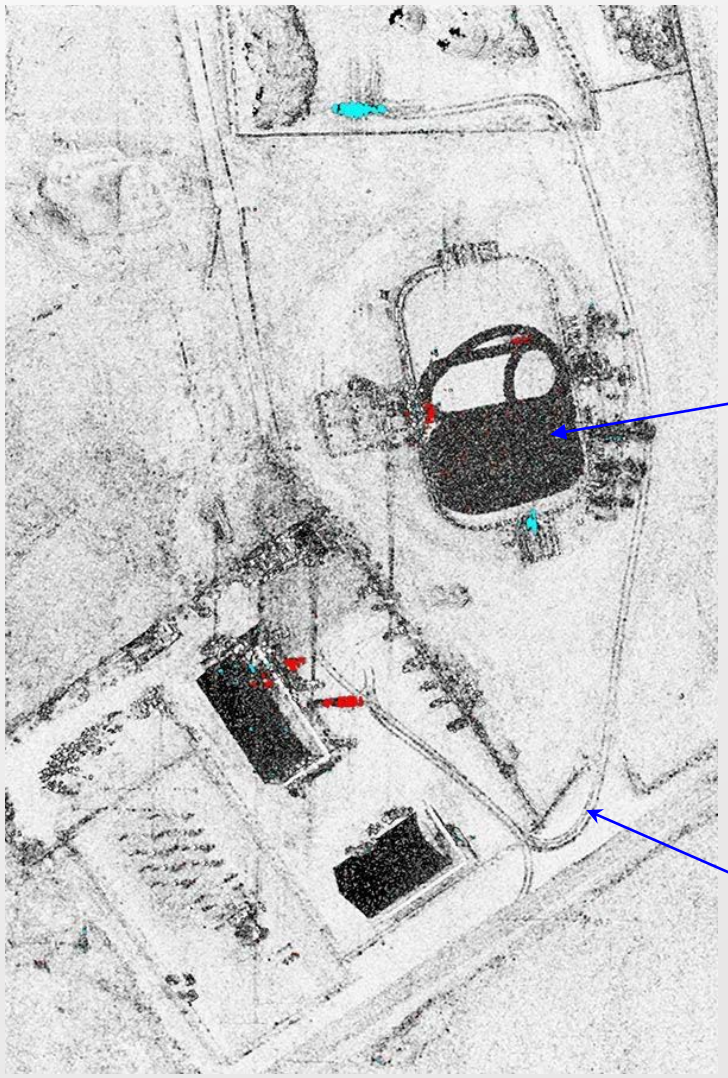


Image 2

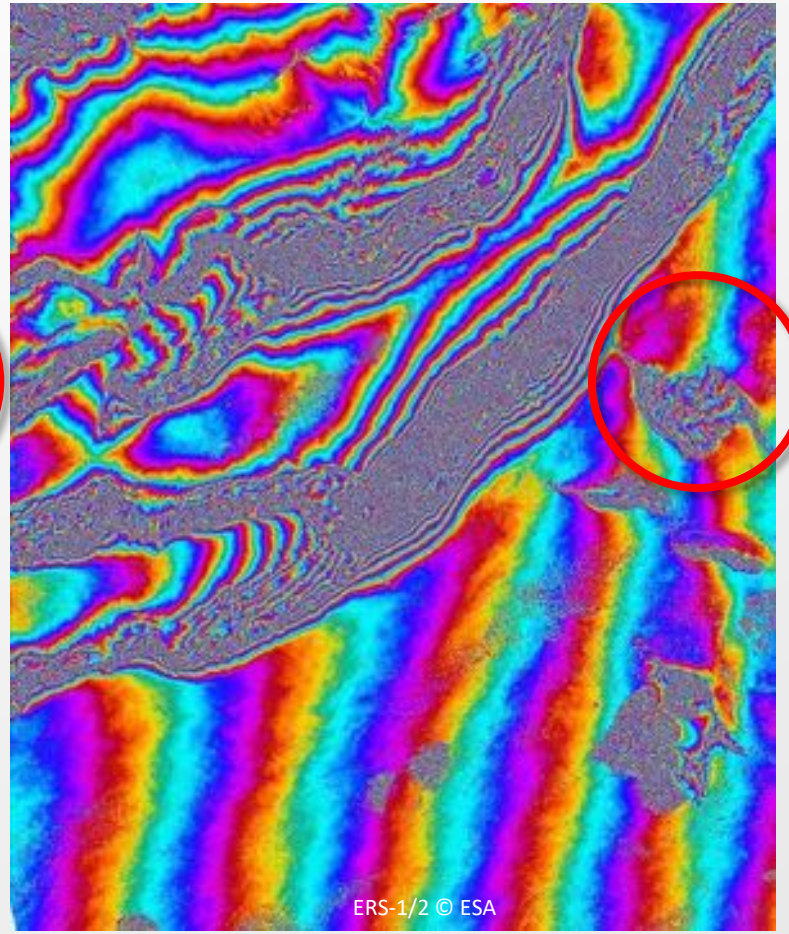


Coherence Image with ICD overlay

DIGITAL ELEVATION MODELS

SAR Image

Interferogram



DEM

Bachu, China (approx. 100 km × 80 km)

TOMOGRAPHIC RECONSTRUCTION: LAS VEGAS

Height estimation result

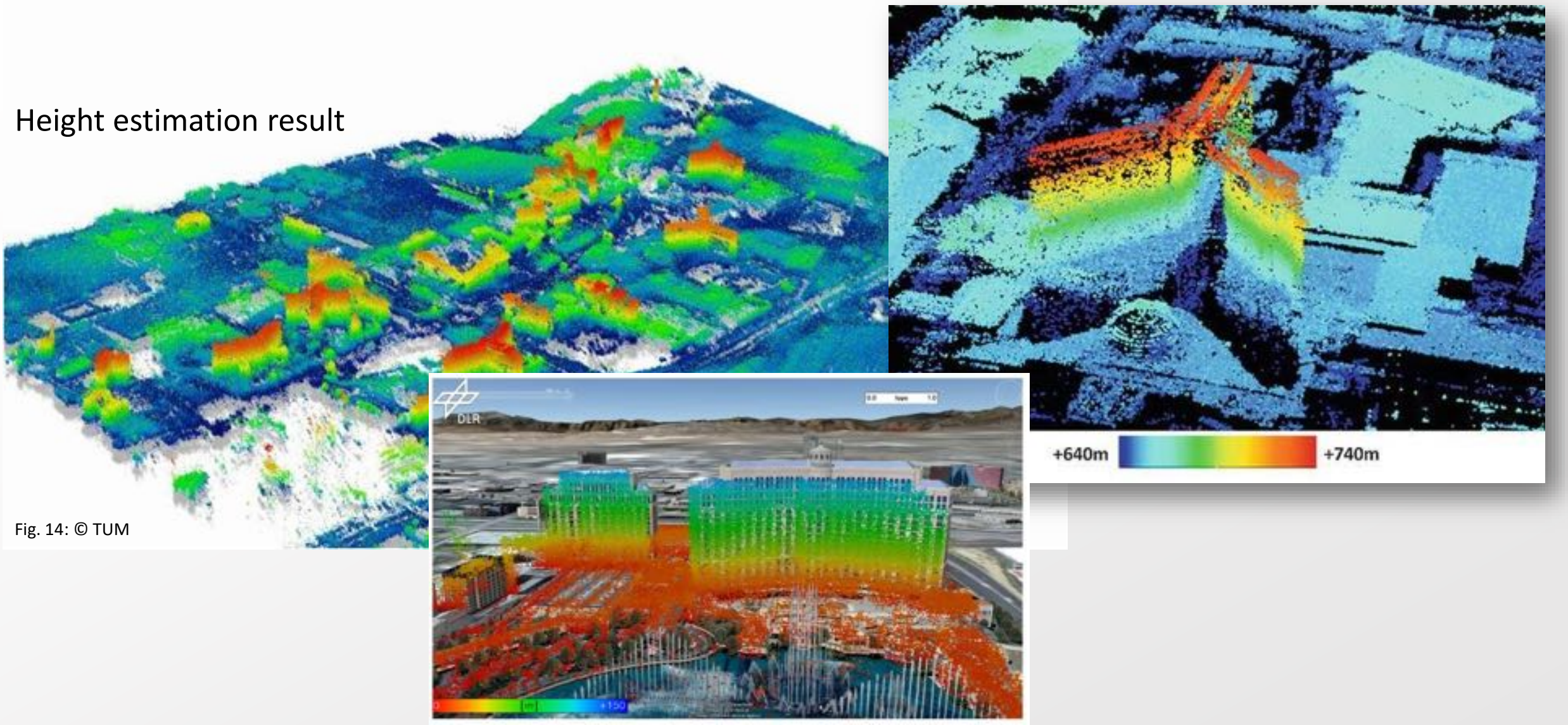


Fig. 14: © TUM

TIMELINE & LAUNCH PLAN

1st Launch: Nov 19

Pilots & Data Evaluation for Partners

Launch of Constellation of 6 Satellites

Constellation of 36 Satellites on orbit by 2022

2018 | **2019** | **2020**

COMMERCIAL PRODUCT AVAILABLE

Commissioning & Internal Evaluation

2nd Launch

Capella Multi-Look Imagery