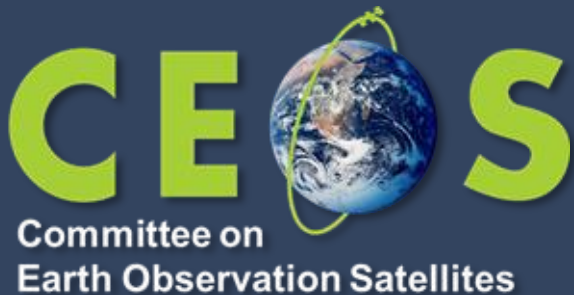


CEOS

WGCV-56 / LSI-VC-19

Joint Meeting

SatVu Update



SatVu

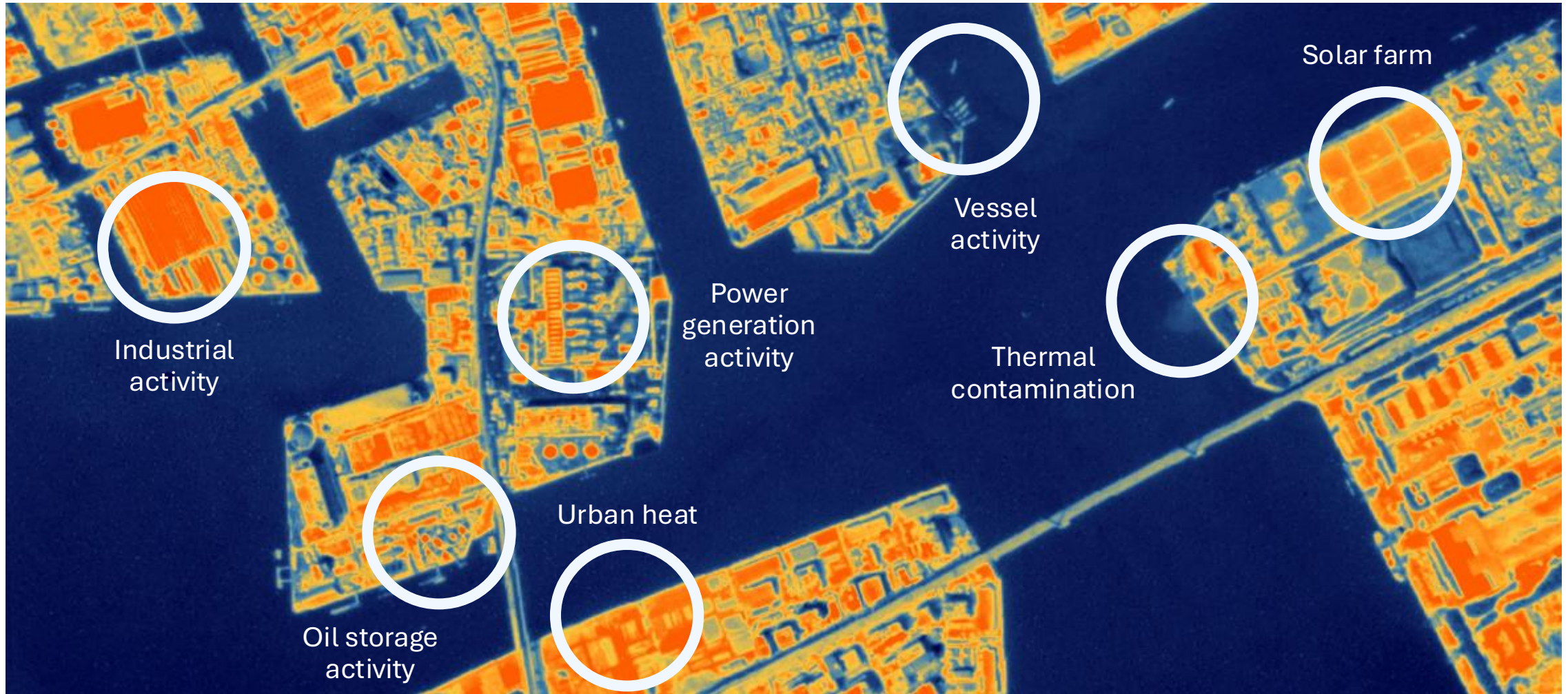
Jamie McMillan, SatVu

Agenda Item W8.2

WGCV-56 / LSI-VC-19 Joint Meeting

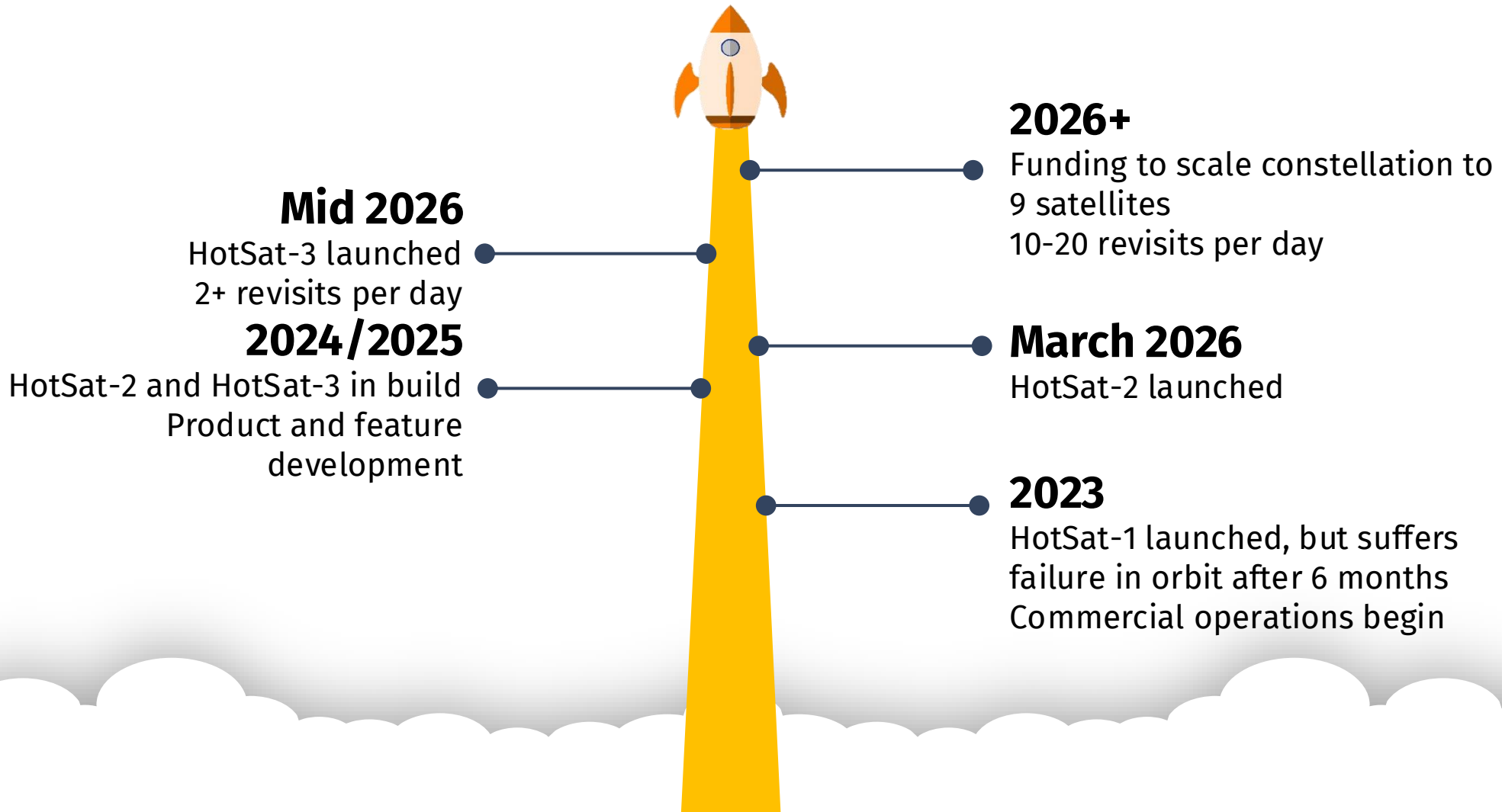
Sioux Falls, SD, USA

20-24 April, 2026



Yokohama, Japan – 24 October 2023

20231024_041338_HS1



Primary and surface brightness temperature

- ❖ Calibrated
- ❖ Different insights from just thermal
- ❖ ARD supports this

- ❖ Imagery user guide
- ❖ Algorithm theoretical basis document
- ❖ Product quality assurance document
 - What methods and specification will we use to validate our products
- ❖ Product quality assurance report
 - How did the product behave over the previous three months
 - Released on a regular cadence

ESA’s EDAP process for the accreditation as a third-party mission

- ❖ Early product offering from 2023/4 used for assessment by Telespazio
- ❖ On-boarded as a Third-Party Mission in 2024



Data Provider Documentation Review			Validation Summary	Key
Product Information	Metrology	Product Generation		
Product Details	Geometric Calibration & Characterisation	Radiometric Calibration Algorithm	Radiometric Validation Method	Not Assessed
Product Format, Flags & Metadata	Radiometric Calibration & Characterisation	Geometric Processing	Geometric Validation Method	Not Assessable
User Documentation	Metrological Traceability Documentation		Radiometric Validation Results Compliance	Basic
Availability & Accessibility	Uncertainty Characterisation	Mission-Specific Processing	Geometric Validation Results Compliance	Good
	Ancillary Data			Excellent
				Ideal
				Not Public

Figure 1-1: Summary Matrix Cal/Val Maturity Matrix.

ESA's OPT-MPC group have been evaluating the product through the Copernicus Contributing Mission programme

- ❖ Recent product offering from used for assessment
- ❖ ***"The SatVu ATBD is of very high quality. It provides not only a clear and relatively detailed description of the algorithms but also identifies limitations and provides some elements of justification."***, OPT-MPC report
- ❖ Have received two assessment reports presently

Developing CEOS-ARD Surface Temperature specification

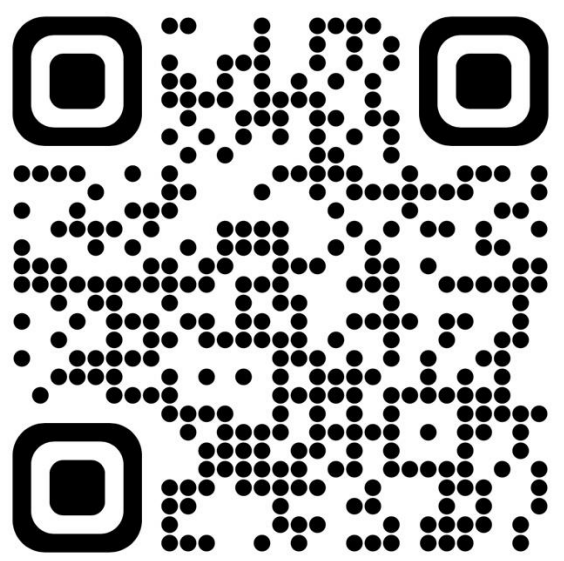
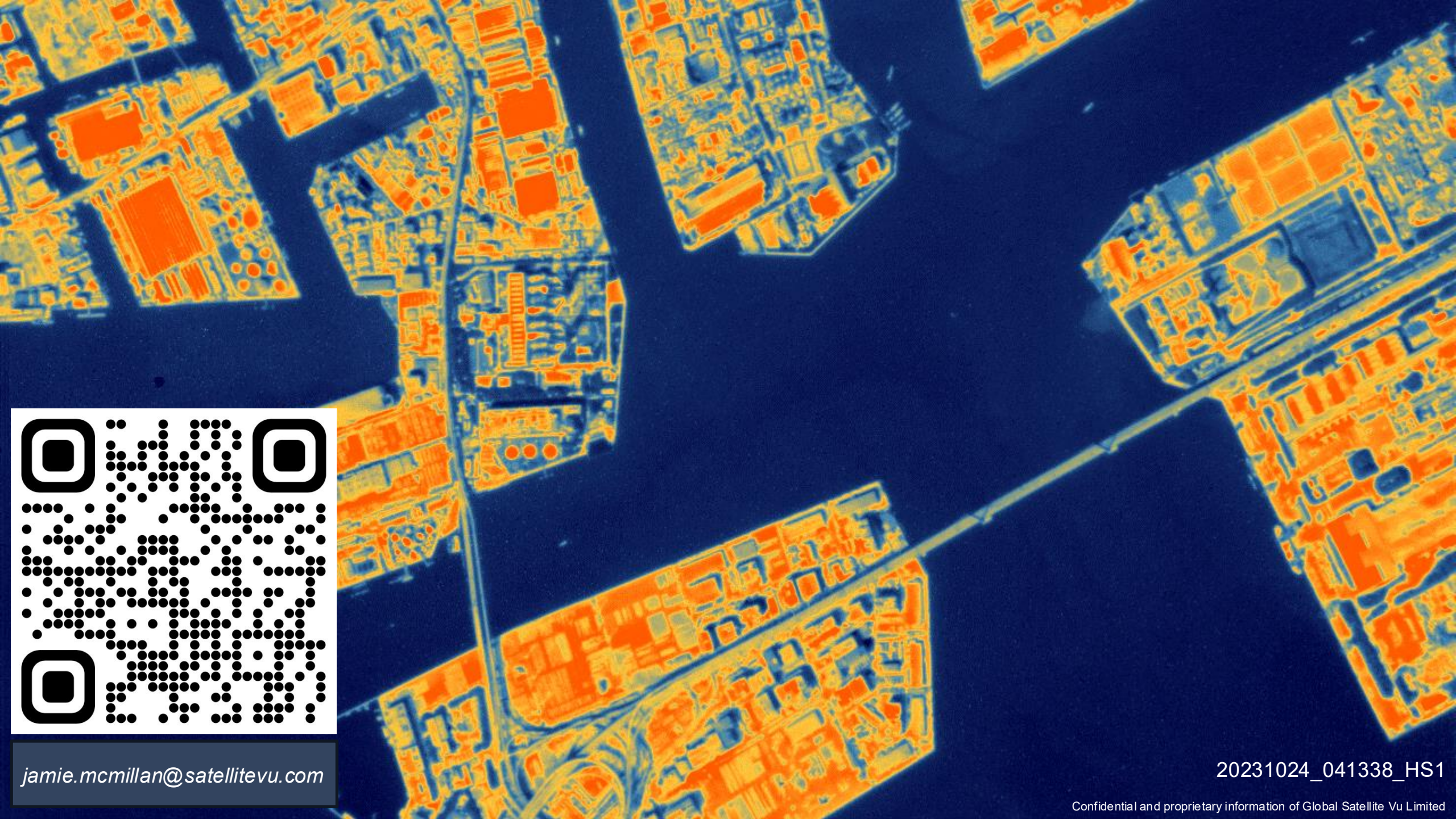
- ❖ Collaborating with agencies and industry to update the specification
- ❖ Including a Surface Brightness Temperature (SBT) product level to align with our current offering

Pre-launch calibration project: UKSA funded General Support Technology Programme

- ❖ Calibration measurements of hardware
- ❖ Detector spectral responsivity measured by Leonardo (detector manufacturer)
- ❖ Blackbody emissivity measured by PTB
- ❖ Telescope component's transmission and reflectivity measured by RAL
- ❖ Expecting to understand our spectral response function in much more detail

Following HotSat-2's launch in March 2026

- ❖ Progressing through payload commissioning
- ❖ Arrive at start of commercial operations
- ❖ Uncertainty evaluation
- ❖ Preparing for first quality assurance report



jamie.mcmillan@satellitevu.com

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