Updated 50cm Satellite Imagery Coverage for Every Country in Africa.

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Presentation for geospatial information framework for development in UN-GGIM on 19 November 2025

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- A team of experienced professionals supporting your success.
- A loyal distribution network with over 100 partners
- The most extensive portfolio of unique optical, radar, hyperspectral and other specialty satellites and satellite constellations
- Supplier of imagery and solutions in-orbit satellites and ground stations
- Our headquarters are in Singapore, and our regional office is in South Africa

The OMEO Space Team

10
Speaking languages covered within the team

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Commercial Director
Africa

Experienced commercial and technical team on all continents with 100 local partners

120+ Satellites in Orbit

OPTICAL

80 VERY HIGH RESOLUTION SATELLITES

	30cm			40cm/50cm			65cm	75cm		80cm
	OM30	OM30	OM30NEO	SV/BJ	MS-8 EARTHSCANNER	EARTHSCANNER	GAOFEN-7 STEREO	DAILYVISION	DV WIDE	GAOFEN-2
										
#	1	1	2	6	1	9	1	54	4	1
GSD	0.30m PAN 1.2m MS	0.30m PAN 1.2m MS	0.30m PAN 1.2m MS	SV2: 0.40m PAN 1.6m MS SV1/BJ3A: 0.50m PAN 2m MS	0.50m PAN 2m MS	0.50m PAN 2m MS	0.65m PAN 2.6m MS	0.75m PAN 3m MS	0.75m PAN 3m MS	0.80m PAN 3.2m MS
	15CM SR OPTION				EXTRA WIDE SWATH & BANDS	EXTRA WIDE SWATH	NATIVE STEREO	INTRADAILY REVISIT		
STEREO	✓	X	✓	✓	X	X	✓	X	✓	X
SWATH	11 km	15 km	15 km	12-24 km	136 km	136 km | 150 km	20 km	18 km	40 km	50 km
REVISIT	5 DAYS	5 DAYS	2 DAYS	2 DAYS	3 DAYS	1 DAY	5 DAYS	18 TIMES/DAY	2 DAYS	5 DAYS

19 MEDIUM RESOLUTION

	NIGHTVISION & VIDEO	NATUREYE	ZY3	HYPERSCAN	SUPERWIDE	GF-4GEO	GAOFEN-5	ZY1 HYPERSPECTRAL
								
#	3	5	3	2	1	1	2	2
GSD	1.2m	2m PAN 8m MS	2.1m PAN 3.5 MS	3m RGB bands 20 bands 5-10-20m	3.5m PAN	50m PAN 50m MS	30m 320 bands inc. SWIR	2,5m/10m/30m 166 Bands inc. SWIR
	NIGHT & VIDEO		NATIVE TRI-STEREO	20 BANDS	~300.000 KM² COLLECT	GEO STATIONARY	HYPERSPECTRAL	
STEREO	X	X	✓	X	X	X	X	X
SWATH	19 km	60 km	51 km	110 km	1000 km	400 km	60 km	60 km
REVISIT	3 DAYS	DAILY	3 DAYS	2 DAYS	2 DAYS	8 SEC	5 DAYS	3 DAYS

RADAR

25 SAR

	C-BAND		X-BAND				L-BAND	Ku-BAND
	GAOFEN-3	C-SAT	SV NEO	AIRSAT X	PIESAT-1	PIESAT-2	LT1	AIRSAT KU
								
#	3	3	2	1	4	8	2	2
GSD	Up to 1m/100m	Up to 1m	Up to 0.5m/2m	Up to 0.5m/20m	Up to 0.5m/3m	Up to 0.5m/12m	Up to 3m/30m	Up to 0.5m/2m
		C-BAND INSAR	X-BAND INSAR				L-BAND INSAR	
					DEM		DEM	
SWATH	10-640 km	7-170 km	10-100 km	10-160 km	5-80 km	5-100 km	30-400 km	10-18km
REVISIT	3 DAYS	2-3 DAYS	3-4 DAYS	2 DAYS	4 DAYS	1 DAY	4 DAYS	3 DAYS

FOR SALE IN ORBIT

FOR SALE IN ORBIT

FOR SALE IN ORBIT

FOR SALE IN ORBIT

FOR SALE IN ORBIT


OMEO
OMEO
30 CM
Mexico, Toluca de Lerdo, 2024.02.21


OMEO
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15 CM
30 cm native AI resampled to 15cm

EarthScanner: 9 satellites at 150 km swath and 50 cm resolution

Africa COVERAGE MAX CC 15% 50 cm

2024 Continent almost complete

2025 (dark green) captured by 30/09/25

NATIONAL REFERENCE LAYERS

1. 50 cm resolution Basemap
2. 5 m resolution DTM

NATIONAL BASEMAP
50 cm resolution: ALL FRESH usually < 12 months available archives

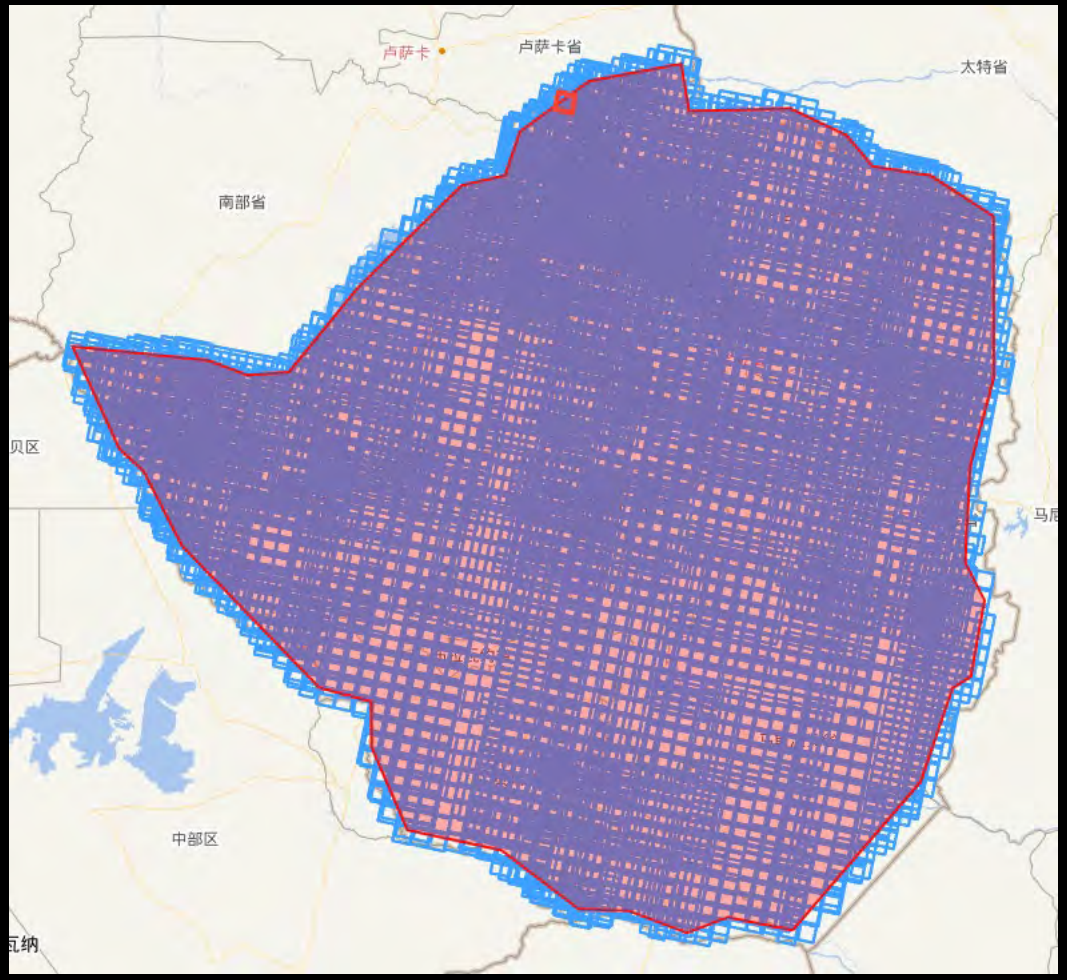
Harare City of Zimbabwe captured by EC2 on 16 September 2023

- **Quality**: ~ Cloud free
- **For Mapping and cadaster:** All data <7 deg ONA
- **License**: government + universities.
- **Option 1:**
  - Resolution: 50cm (1:5,000 scale map)
  - Accuracy: 5m RMSE (meeting 1:20,000 requirement)
- **Option 2**: **with Customer GCPs** and OMEO 5m DTM
  - Resolution: 50cm (1:5,000 scale map)
  - Accuracy: 1.25 m RMSE (meeting 1:5,000 requirement)
- **Data:** All (PAN +4 bands, L 1A) data are provided with the mosaic.
- **Value**: 2 m MSS data (R,G,B, NIR) can be used for image analysis and change detection
- **Streaming:** as an option with 3 band mosaic.

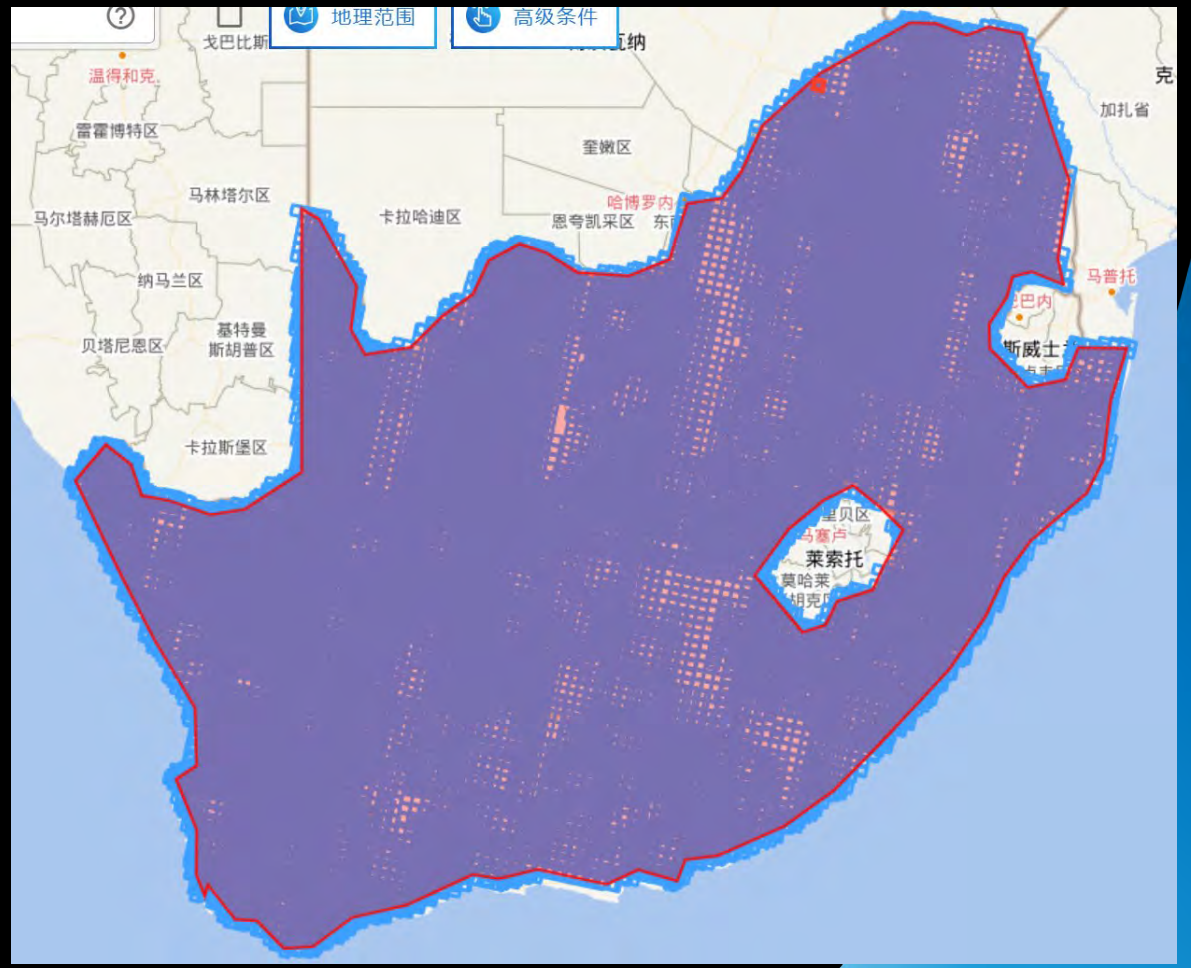
You can clearly see every house, tree, car…

100% Country Coverages by 50cm Satellite Images Captured in 2025

Africa COVERAGE MAX CC 15% 50 cm



2025 Zimbabwe 100% 50cm Coverage



2025 South Africa 100% 50cm Coverage

EarthScanner Covering all of Ghana

9 satellites

Each with 150 km swath width

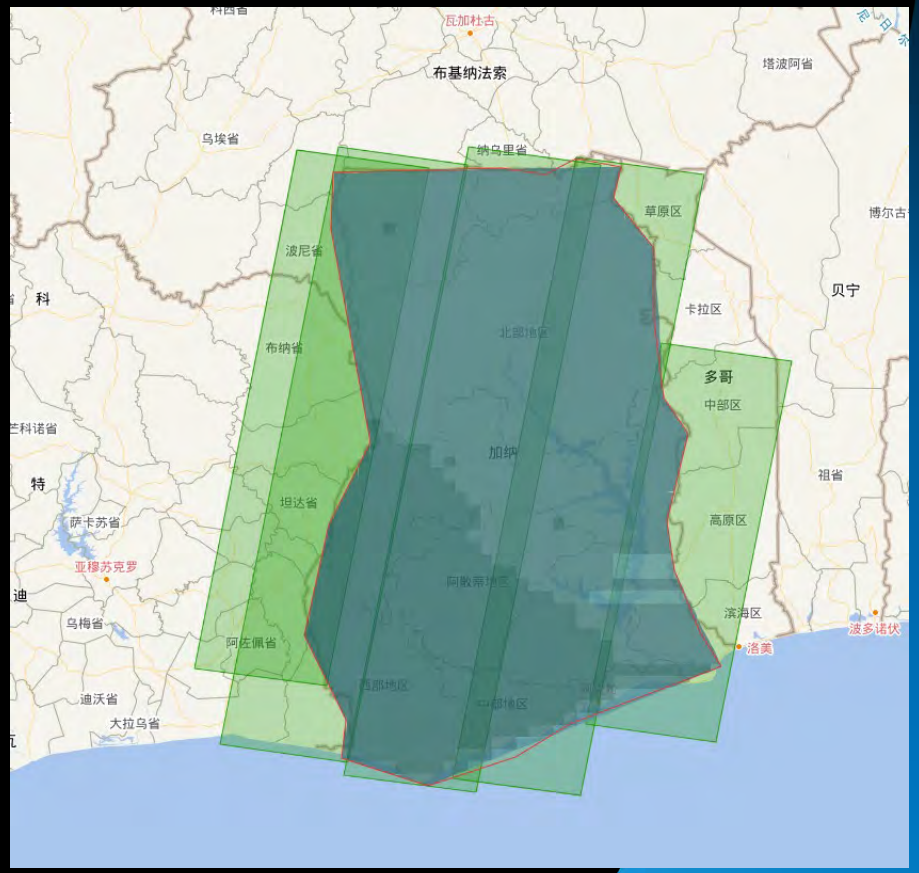
50 cm resolution

All imagery at <7 degrees Off Nadir Angle

Very high quality

Unbelievably low price

We can image **all of Ghana** every three days at 50 cm resolution (not considering clouds). This is a unique and unmatched capability.

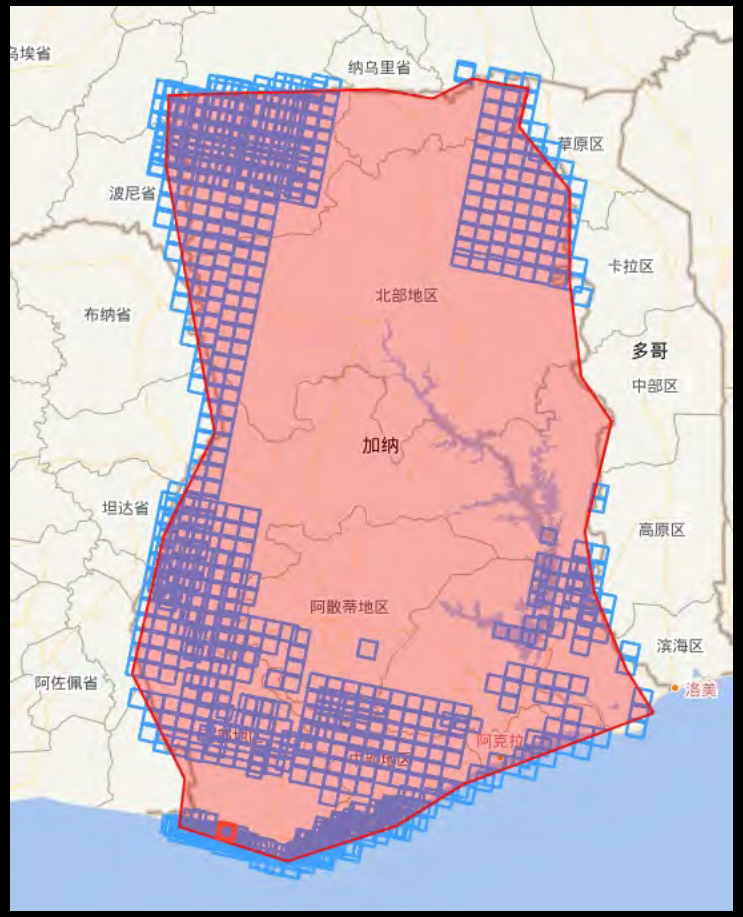


9 satellites can image all Ghana in 3 days if no clouds

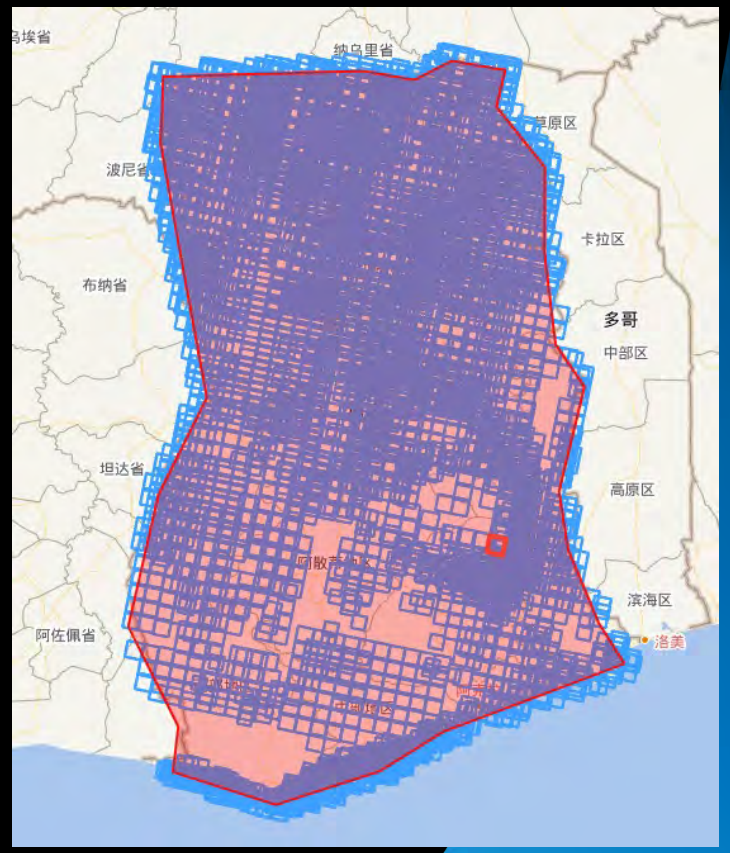
Speculative tasking is done to collect imagery when you have no customer.

We committed to speculative tasking since 2023.

- **38.97% Ghana coverage of 2025 in May 2025**
  - **Near cloud free**
- **No purchase risk** (data are in archive).
- **90% Ghana coverage in 2025 on 17 November:**
  - **Through speculative tasking**
  - **able to achieve 100% coverage by the end of 2025 with the capability of covering the entire country within 3 days**



Coverage 2025 Ghana:
38.97% in May

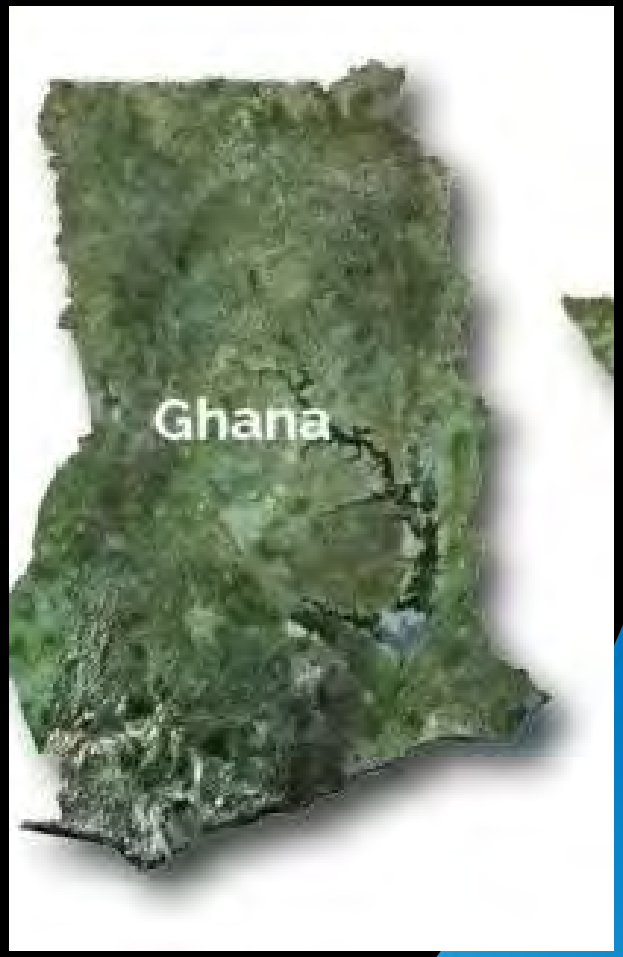


Coverage 2025 Ghana:
90% on 17 November

Worldwide Very-High Resolutie Annuel Mosaic

2021 Ghana Mosaic

2022 Ghana Mosaic



2023 Ghana Mosaic

Sample of Earthscanner 50cm Images

Locomotive SGR Nairobi, Grain bulk Terminal C Nairobi in KENYA

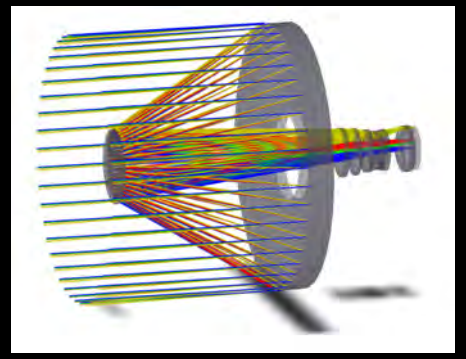
Jomo Kenyatta Int. Airport, Nairobi – KENYA


EarthScanner.
Nairobi – KENYA
Industrial area

50cm Extra Wide Swath (150 km) Satellites

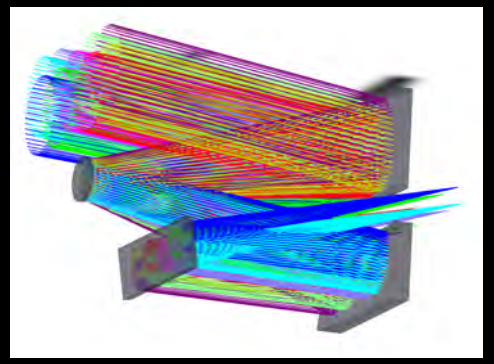
Our Unique Ability to Map Your Entire Country in Days

Field Of View: 1°~2°



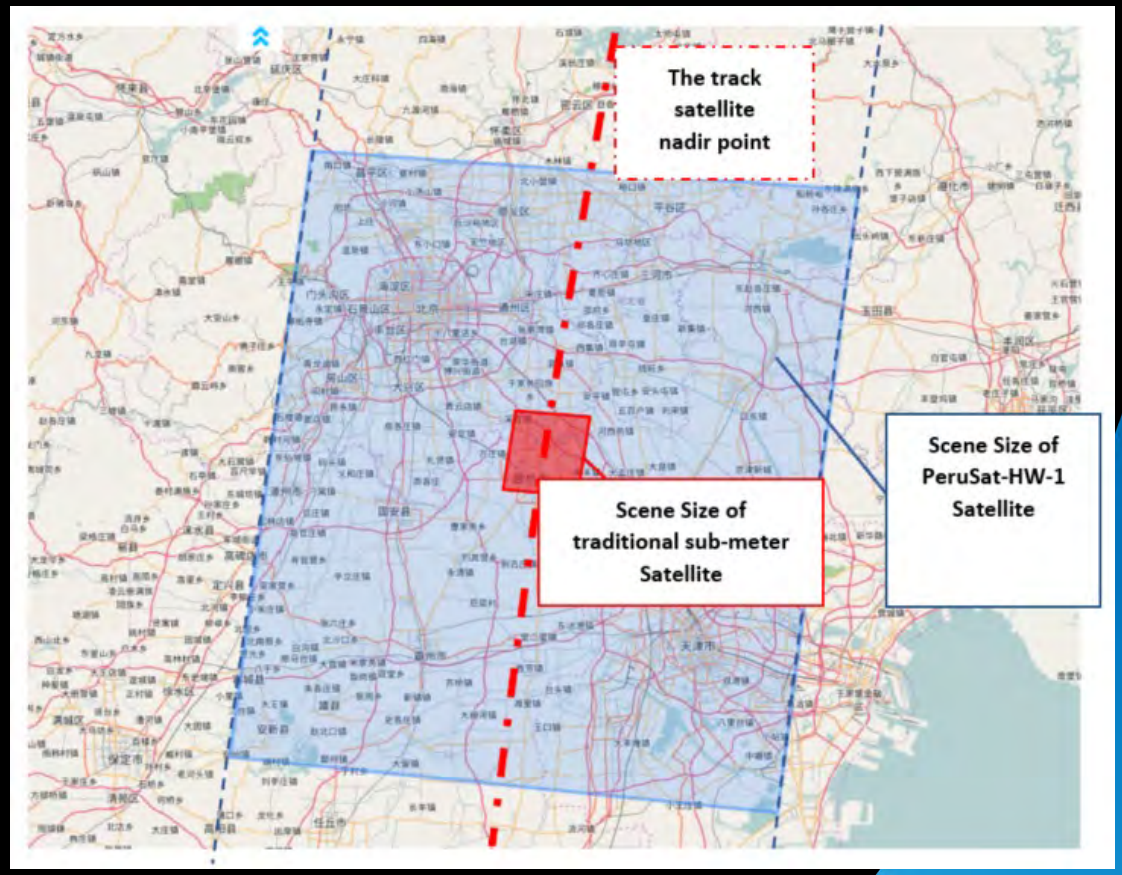
Conventional on-axis reflective optical system

Field Of View: **3°~70°**



EarthScanner Off-axis reflective optical system

Orbit Height (km)	Field of View (degree)	Swath (km)
535 (standard 50 cm satellites)	~2	~18
535 (EarthScanner)	16.2	150
535	20°	188.7
535	40°	389.4

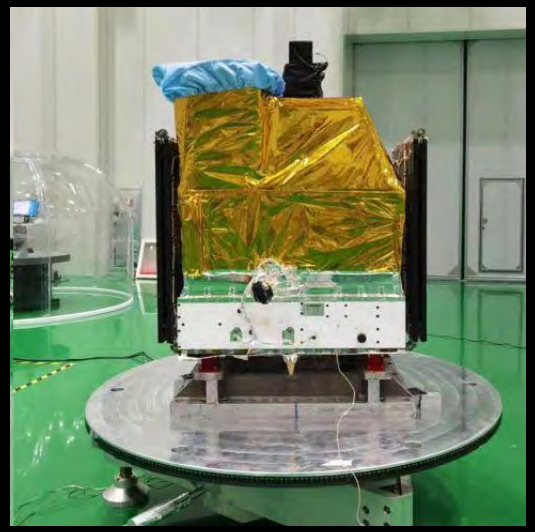


Swath area of Earthscaner (blue) compared to a traditional sub-meter satellite (red)

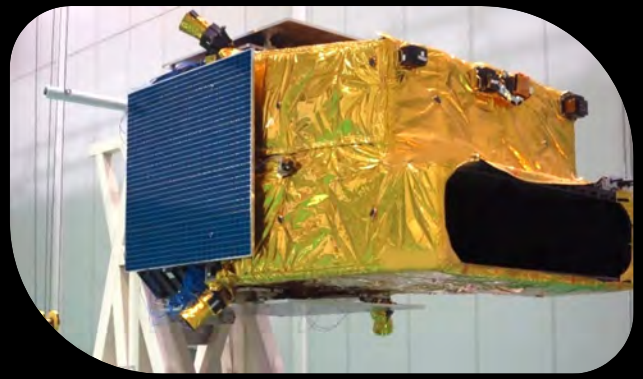
EarthScaner Constellation – Unique 50cm resolution with Extra Wide (150km) Swath

To meet the demand of mapping China once per quarter and the world annually at 50cm

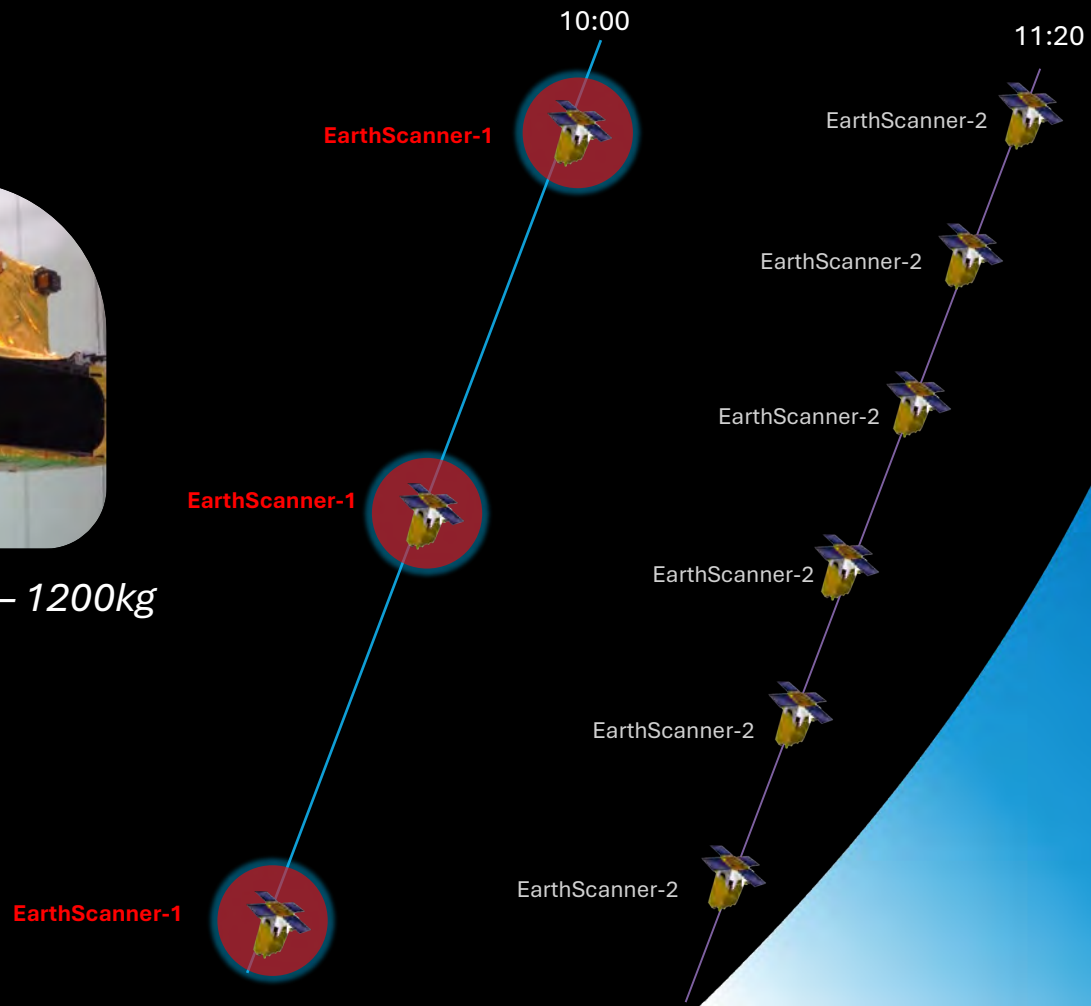
- EarthScaner commercial constellation has been deployed based on TMA technology that was developed and perfected in previous national missions
- The EarthScanner TMA technology has been further refined to reduce the satellite weight from 1200kg (3 first generation satellites) to 275kg (6 second generation satellites)



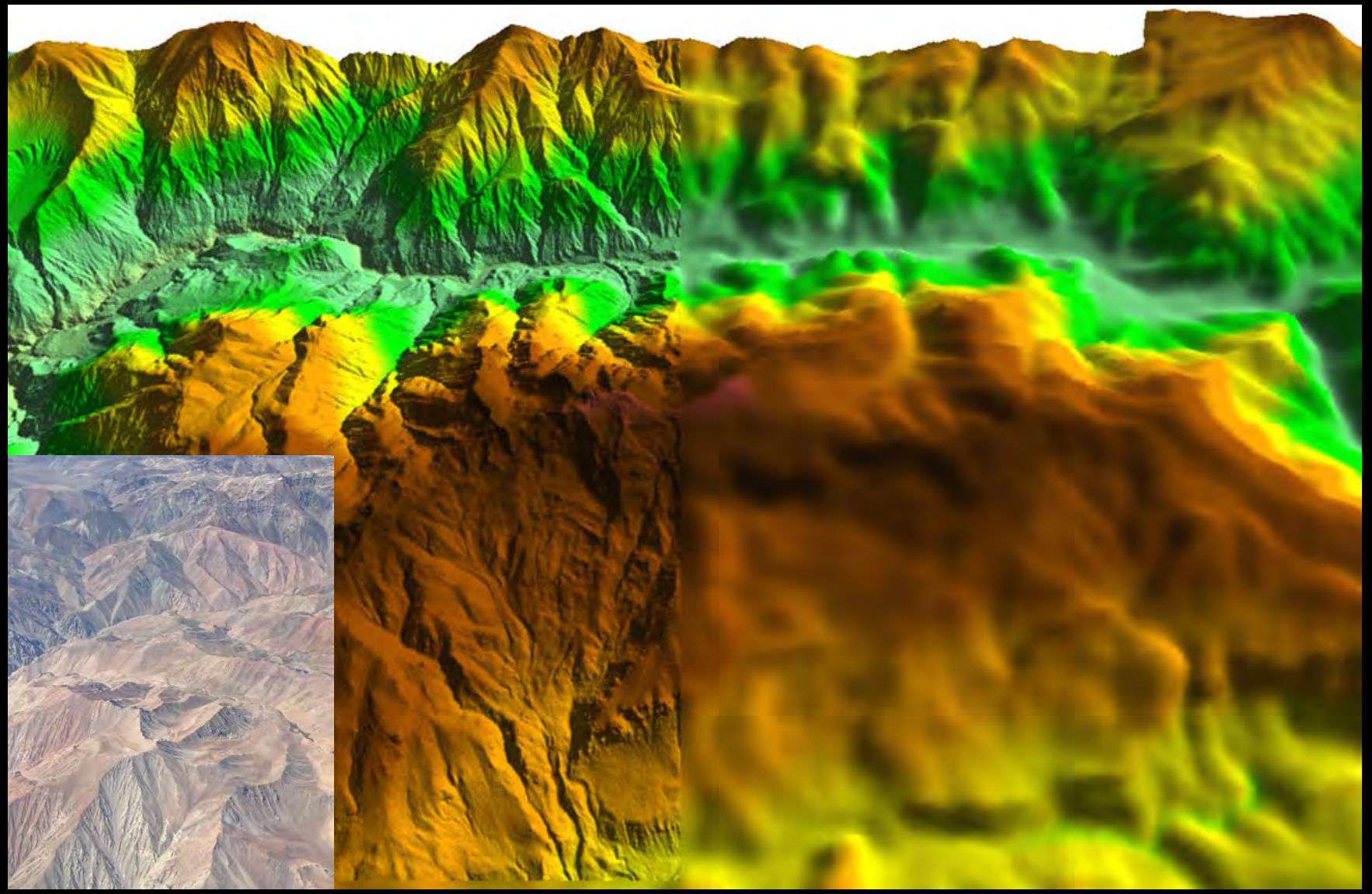
EarthScaner second generation – 275kg



EarthScaner first generation – 1200kg



2. A National, High Resolution DTM

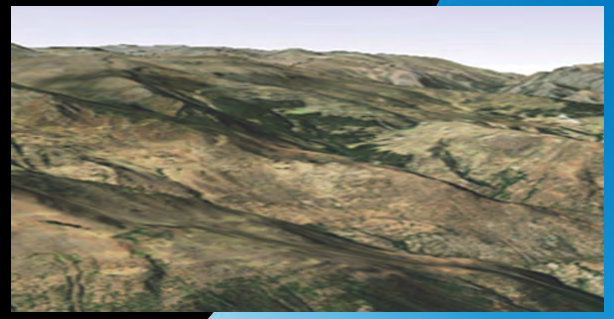


5 m

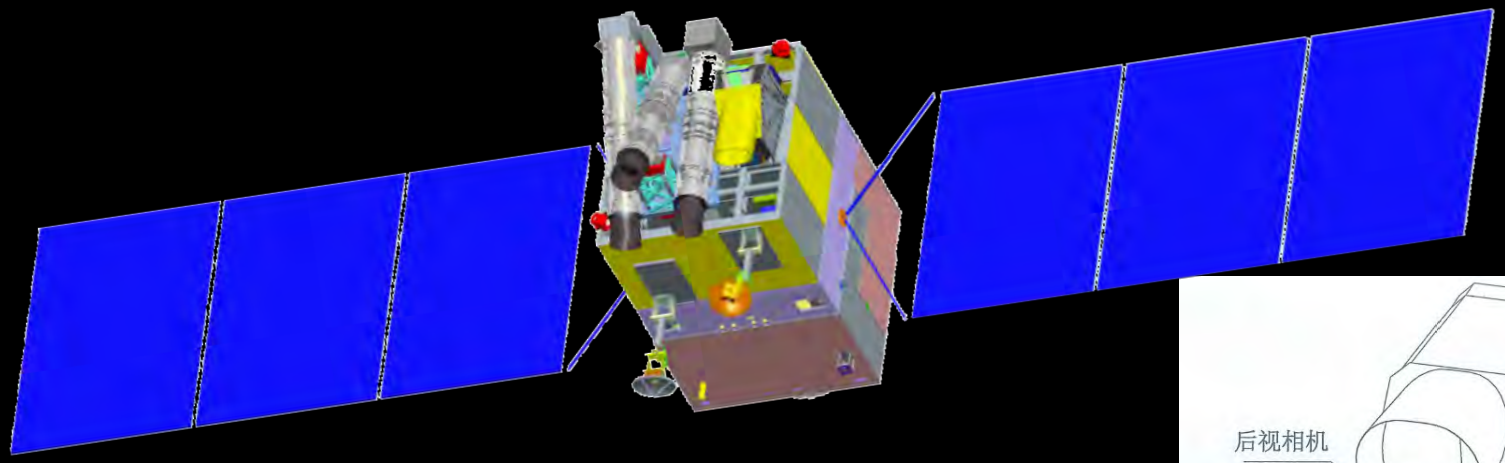
30 m

- Data orthorectification
- Engineering
- Hydrology and flood modeling
- Infrastructure development
- Planning
- Visualization
- Disaster modeling
- Pipeline and powerline planning
- Agriculture planning
- Mining and exploration

Enables clear and concise communications and visualization of information

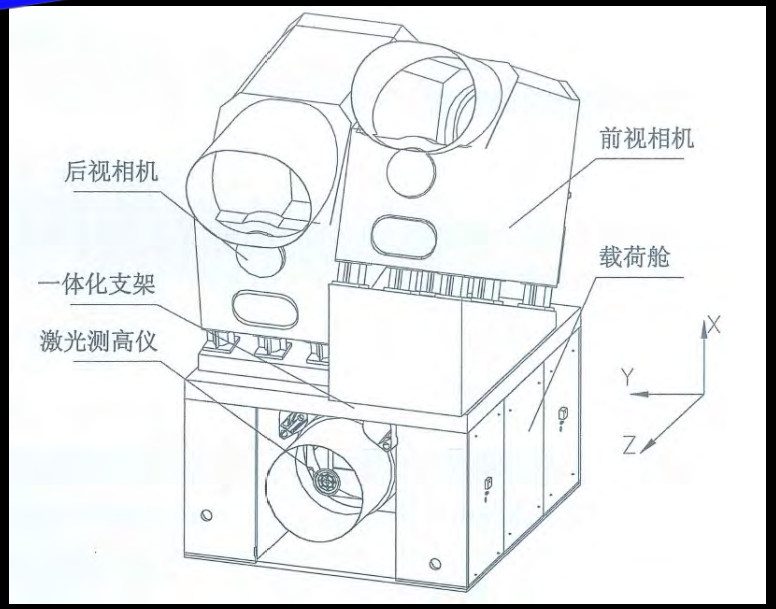


ZY-3 Optical Mapping Satellite Constellation

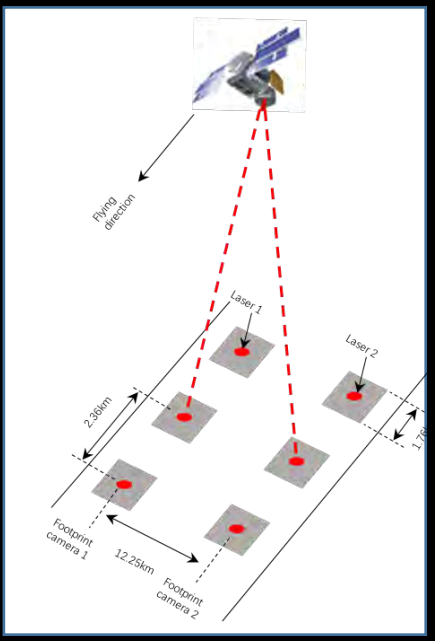


Three Angled Cameras for Simultaneous Tri-Stereo Image Generation

- DTM proposed created from ZY-3 Stereo Images
- GF7 used to fill voids



Two Angled Cameras on Board GF-7 Satellite for Simultaneous Stereo Image Pair Generation



Laser altimetry on ZY-3 and GF-7 satellites, each is equipped with a footprint camera.

Current DTM Availability for Zimbabwe

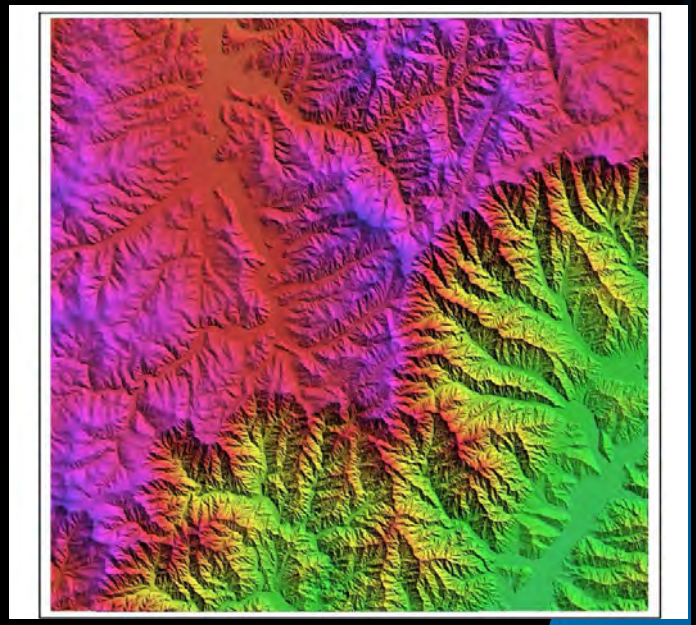
100% Country Coverage of Zimbabwe with 2.5m Tri-Stereo Images

100% coverage since 2021

It is fresh and in the archive.

PRODUCT SPECIFICATONS

- **Horizontal Accuracy: 5 m RMSE**
- **Vertical Accuracy: 5 m RMSE**
- **Resolution: 5 m.**
- **Optional**
  - **2.5 m resolution**
  - **3 m RMSE accuracy without GCPs in flat areas**



Use Case: Colombia at 1:5,000 Scale

- Colombia is 1,142,000 km²
- ~820,000 km² purchased to date by IGAC, the national cartographic agency.
- 125,000 km² processed to RGB+NIR mosaic by external company
- 1 m resolution mosaic from 50+75 cm imagery
- Accuracy 1.25 m RMSE (1:5,000 scale)

50cm Basemap for Every Country in Africa

Fresh image data

< 12 months

Standard License:

All Defense **OR**

Civil Government + Public Universities

Thank you!

@omeospace

Spectacular specs.

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