# SMART EYES IN THE SPACE KOMPSAT



# SI Imaging Services

Exclusive representative of KOMPSAT image. Also distributor of TeLEOS-1 and Deimos-2 image.



### VHR Satellite images

With the resolution up to 40cm, KOMPSAT constellation spots small features clearly and detects changes over sites.

### **Operations**

We run KOMPSAT operation by our own including imaging plan, image processing, calibration, validation and so on





### **Direct Receiving System**

It is a flexible and modular system for acquisition, archiving, processing, analysis and distribution of KOMPSAT image.

### SI Group

SI Group creates synergy and provides customized services with the collaboration.



### Satellite manufacturer

Satellite platform
Payload
Ground station



# SIA (SI Analytics)



### Satellite imagery provider

KOMPSAT representative VHR optical and SAR KOMPSAT operation

### Geospatial analytics provider

Artificial intelligence Dataset building Analytic platform

### KOMPSAT (Korea Multi-Purpose Satellite) Program

National space development program
Developed and operated by KARI



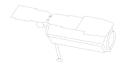
EO

KOMPSAT-2, KOMPSAT-3, KOMPSAT-3A KOMPSAT-7

SAF

KOMPSAT-5, KOMPSAT-6

To be launched



### KOMPSAT-6 (SAR)

**Resolution** Sub-meter class **Launch** Scheduled for 2020

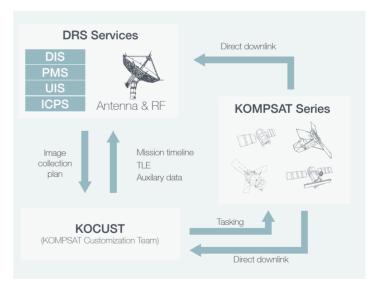


### KOMPSAT-7 (EO)

**Resolution** PAN 0.3m, MS 1.2m **Launch** Scheduled for 2021

### Direct Receiving System

KOMPSAT Direct Receiving Station(DRS) is a full ground station with antenna system and ground station terminal.



### KOMPSAT DRS provides

Planning for KOMPSAT series image acquisition

Direct reception & archiving of KOMPSAT satellite downlink

Standard product and catalog generation





# KOMPSAT-3A

VHR EO

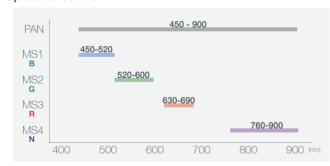
### **Product resolution**

PAN: 0.4 m MS: 1.6 m @ altitude 528 km (nadir)

### Orbit

Sun synchronous orbit

### Spectral bands



### Data quantization

14 bits / pixel

### File format

GeoTIFF

### Map projection / Datum

UTM / WGS84

### **MLTAN**

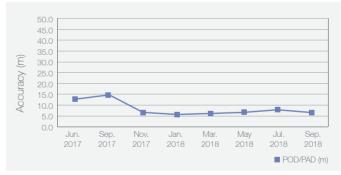
13:30 (local time)

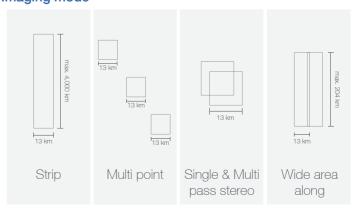
### Swath width

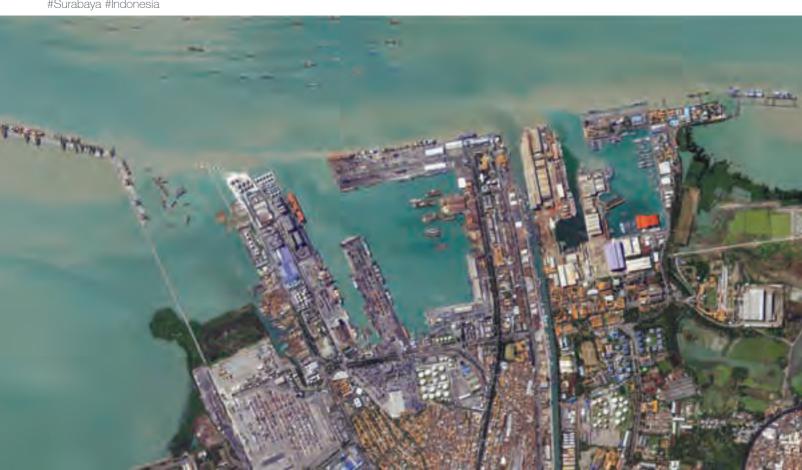
13 km (nadir)

### **Location accuracy**

6.20 m RMSE, < 9.40 m CE 90 with POD/PAD







# KOMPSAT-3

VHR EO

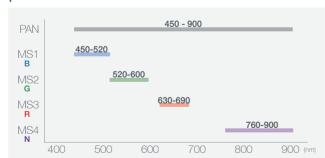
### **Product resolution**

PAN: 0.5 m MS: 2.0 m @ altitude 685.13 km (nadir)

### **Orbit**

Sun synchronous orbit

### Spectral bands



### **Data quantization**

14 bits / pixel

### File format

GeoTIFF

### Map projection / Datum

UTM / WGS84

### **MLTAN**

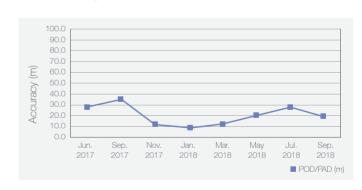
13:30 (local time)

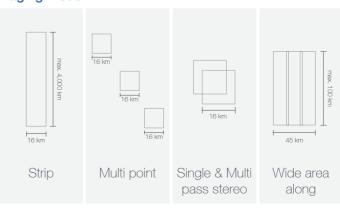
### Swath width

16 km (nadir)

### **Location accuracy**

19.9 m RMSE, < 30.19 m CE 90 with POD/PAD







# KOMPSAT-5

### X-band SAR

Map projection / Datum

Altitude

UTM / WGS84

550 km

File format

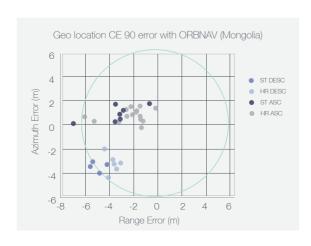
**MLTAN** 

HDF5 / GeoTIFF

06:00 / 18:00 (local time)

### Location accuracy

Location	Ground resolution			
(Geometric)	ES	EH	UH	
6.22 m CE 90	< 2.5 m	< 1 m	< 0.85 m	



### Orbit

### Orbit cycle

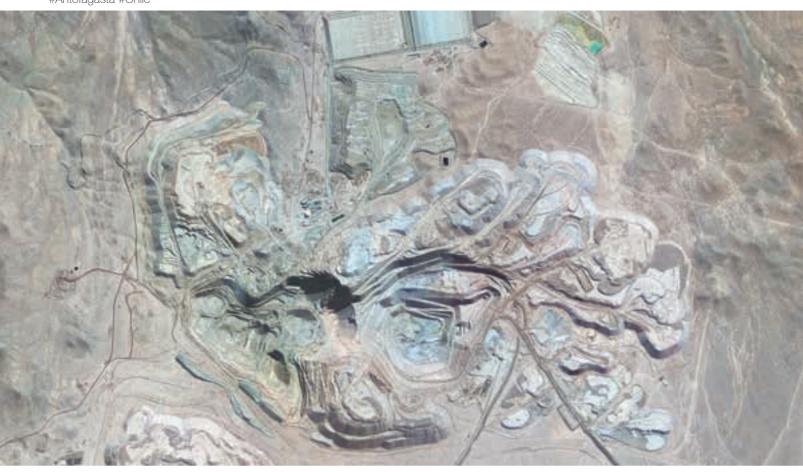
Dawn-dusk orbit

28 days

Imaging mode		GSD *	Swath *	Polarization
Spotlight	UH Ultra HR	0.85 m		Single Polarization (HH, HV, VH, VV)
	EH Enhanced HR	1 m	5 km	
	HR High Resolution	1 111		
Strip	ES Enhanced Strip	2.5 m	00.1	
	ST Strip	3 m	30 km	
Wide swath	EW Enhanced WS	00	100 km	
	WS Wide Swath	20 m		

<sup>\* @</sup> nominal incidence angle of 45°





# KOMPSAT-2



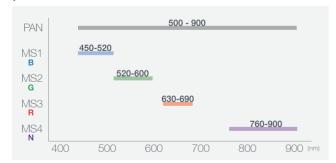
### **Product resolution**

PAN: 1.0 m MS: 4.0 m @ altitude 685 km (nadir)

### Orbit

Sun synchronous orbit

### Spectral bands



### Data quantization

10 bits / pixel

### File format

GeoTIFF

### Map projection / Datum

UTM / WGS84

### **MLTAN**

10:50 (local time)

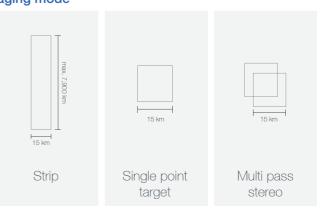
### Swath width

15 km (nadir)

### **KOMPSAT-2** Archive coverage

Since July 28, 2006





## Our resellers



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" FAIR ACCESS TO SPACE"

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