

# Towards daily global coverage – Planet's Mission One



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## CHALLENGES IN LANDSCAPE MONITORING

### LIMITED COVERAGE



Currently available sensor systems provide only **large coverage** at very **low resolution**, or **high resolution** with **low coverage**

### LOW REVISIT RATES



Low revisit rates in combination with clouds obstruct the ability to detect changes on a frequent basis

### SLOW ACCESS



Inability to take immediate action since it may take days or even weeks for imagery to be taken and then delivered.

## HISTORICAL APPROACH

- Specific tasking
- Low coverage
- Weeks to gain access



## PLANET'S APPROACH

- Continuous monitoring
- Global coverage daily
- Daily online delivery

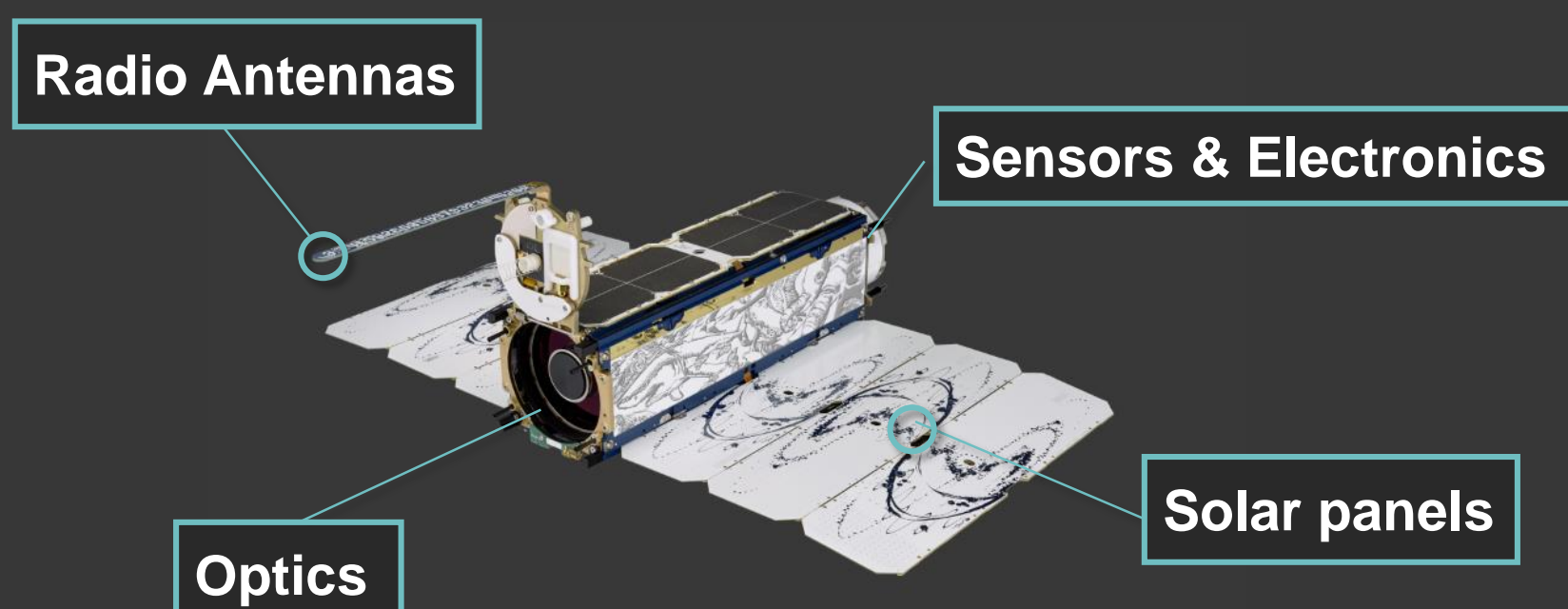


### DOVE

- Consumer-grade electronics
- Lower cost
- 30 x 10 x 10 cm

### AGILE AEROSPACE

- Iterate fast and release often
- Launches every 3-4 months
- 13 design cycles in 4 years



BUILD 1  
APR 2012

BUILD 6  
APR 2013

BUILD 13  
JUN 2015

### CONSTELLATION

CONSTELLATION	DOVE	RAPIDEYE
Mission 1 constellation	130+*	5
Currently in orbit	50 (active)	5
Current capacity	Global coverage every 2 weeks	
Planned image capture capacity	150 million km <sup>2</sup> /day	6 million km <sup>2</sup> /day
Ground sampling distance	3-5 m	6.5 m
Pixel resampled	3.125 m	5 m
Telescope and camera	Matrix CCD sensor	Push broom imager
Spectral bands	RGB + NIR	RGB, Red Edge, NIR

\* Estimated number of Dove satellites to achieve a daily revisit rate - target delivery end of 2016

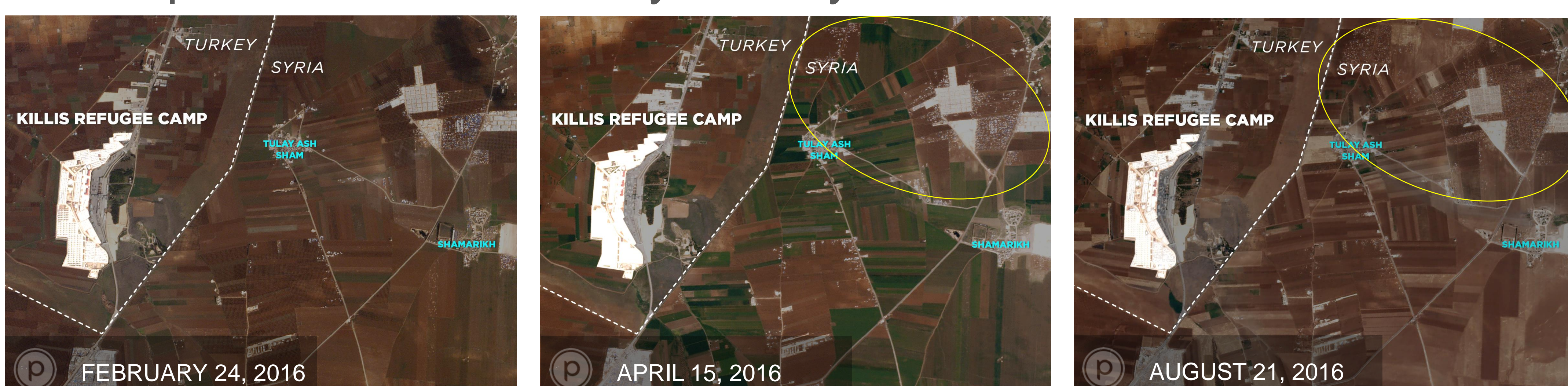
## MONITORING PORT ACTIVITIES

Temporal cadence Suez Canal Container Terminal, Port Said, Egypt



## HUMANITARIAN ASSISTANCE

Developments on the Turkey and Syria border near Killis



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