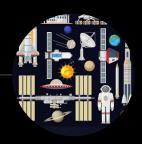
Space Technology in Egypt





#### **Space Technology Development**





**Space Awareness** 



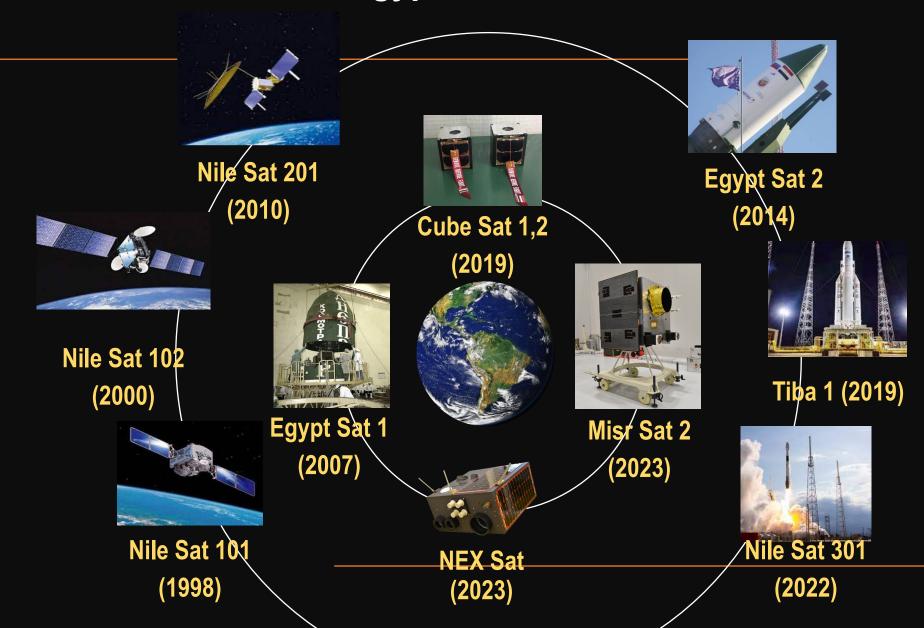
**Space Services** 



**Space Applications** 



#### **Different Generations of Egyptian Satellites**





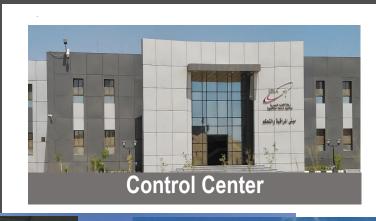
**Space City** 

123 Acers

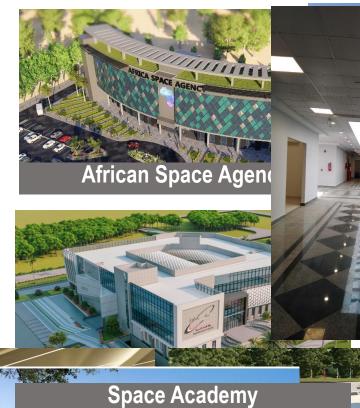
**Space Technology Buildings will be Completed by Mid 2023** 









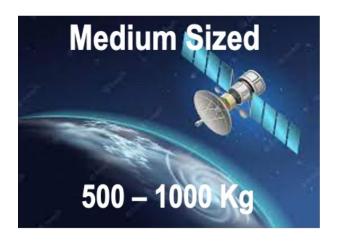




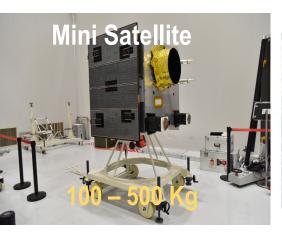
Hotel

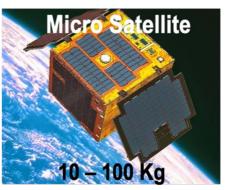
2025 - 2030

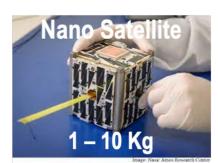


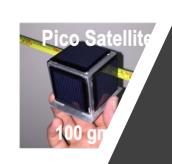


#### **Development of Satellite Technology**

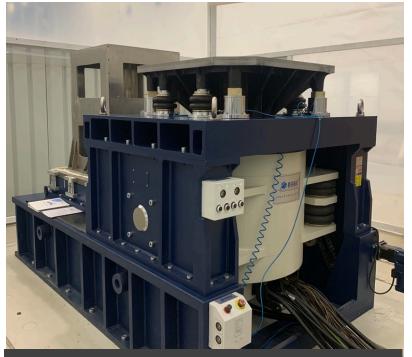






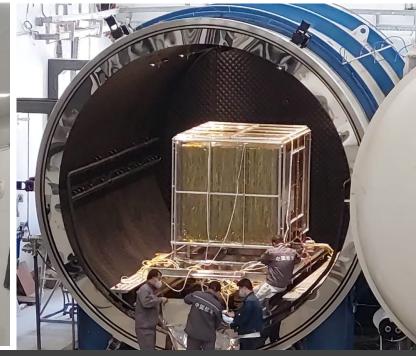


2020 - 2025



Shaker: Random, Sin and Shock Vibration Tests





Thermal Vacuum Chamber for Satellite Environmental Testing Up to 600 Kg (Volume of Seattleite 1m<sup>3</sup>)



**Anechoic Chamber for EM Compatibility Up to 18 GHz** 

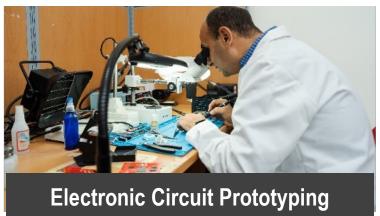
**Assembly Integration and Testing Center** 





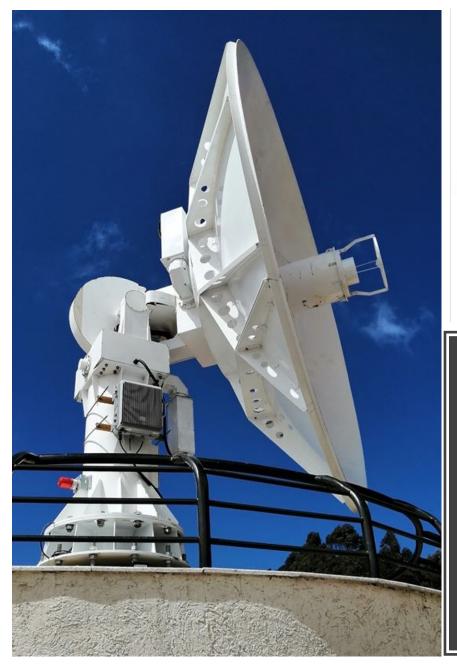








#### **Research and Development Labs**





## **Universal Ground Control Stations**

Control a Broad Range of Satellites (Will be Ready by Q2 2023)

#### Missions to be Launched in 2023

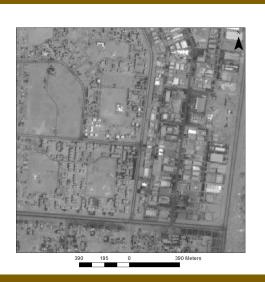
#### **NEX Sat 1 (Experimental Satellite)**

Micro Satellite (68 Kg)

Launching Date: June 2023

Resolution: 5 m Panchromatic

Lifetime: 6 Months



**Jointly Developed by German Partner** 

#### Misr Sat 2 (Operational Satellite)

Mini Sat (350 Kg)

Launching Date: Q4 of 2023

Resolution:

• 2 m Panchromatic

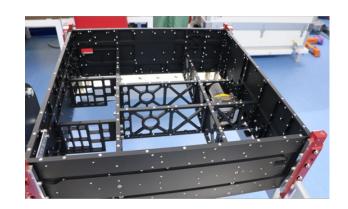
• 8 m Multispectral

Lifetime: 5 Years



**Jointly Developed by Chinese Partner** 

#### Assembly and Integration of NexSat 1



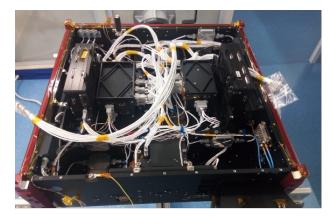
October 18, 2022



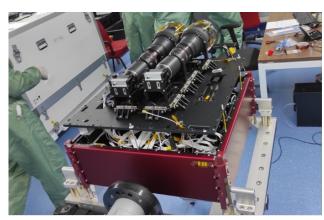
October 23, 2022



**January 12, 2023** 

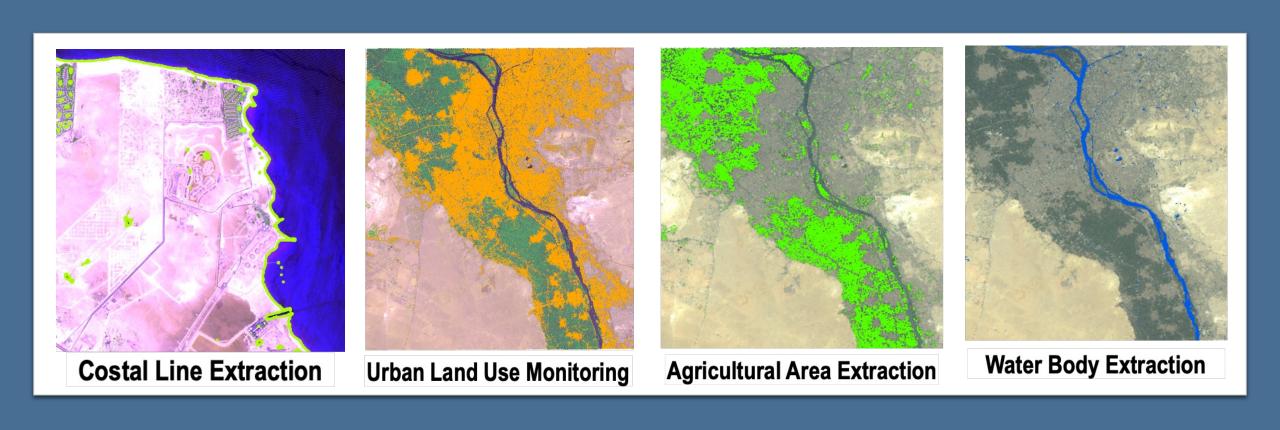


November 24, 2022



**December 15, 2022** 

#### **Applications for Misr Sat 2**



#### Missions to be Launched in 2024

#### Nano Sat (13 Kg)

Launching Date: Q1 of 2024

Resolution:

• 7 m Panchromatic

30 m Multispectral

Lifetime: 24 Months

**Earth Observation** 

**Fully Developed in Egypt** 



#### Nano Sat (11 Kg)

Launching Date: Q2 of 2024

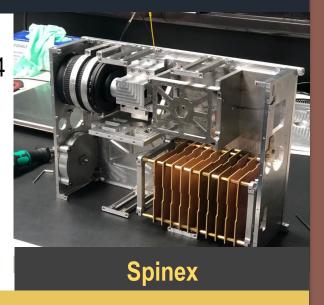
Resolution:

10 m Panchromatic

Lifetime: 24 Months

Studying Plasma in

Atmosphere



**Fully Developed in Egypt** 

# Accessing Space with the ISS Bartolomeo Platform (Clim Cam)



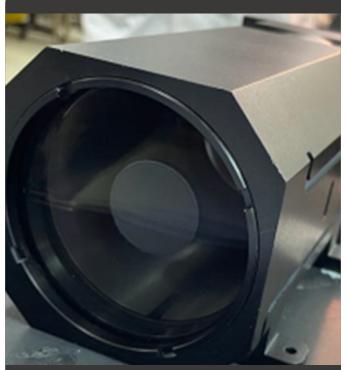
#### **AIRBUS**







Bartolomeo is an application platform on board the European Columbus module of the ISS located on its outer shell- built by Airbus



Bartolomeo Mounted – Remote Sensing Camera System for Monitoring Weather, Floods, and Climate Change Effects in East Africa

## Offering Training Opportunities to African Countries





EgSA Offered a Two Weeks Training to 16 Specialists from Eight Different African Countries













https://en.wikipedia.org/wiki/File:NSAU\_Logo1.svg





## International Collaboration



**Visits to Schools** 



**Astronomy Workshop** 



**Mission Design Workshop** 



#### **Space Awareness**

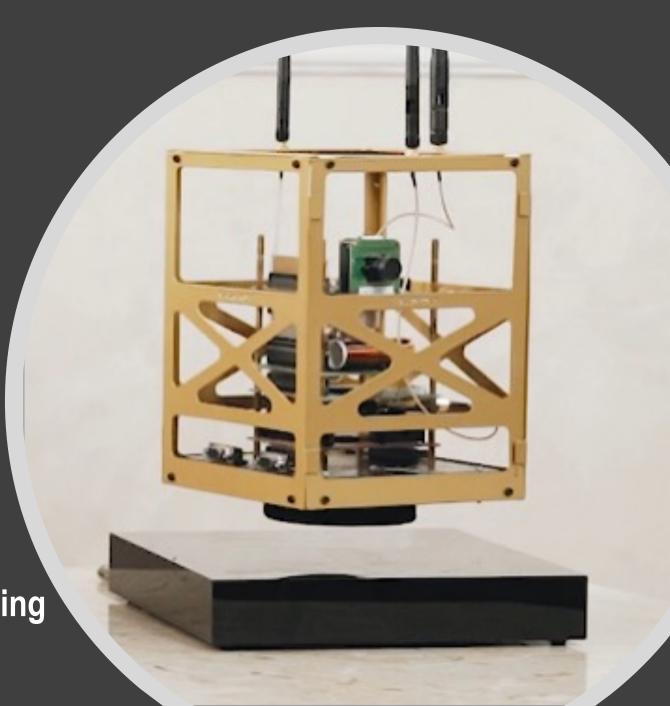
#### **Space Capacity Building**

#### **Space Keys Platform**

**Cub Satellite Educational Platform** 

Used for Training Undergraduate Students Build, Test and Operate Different Satellite Subsystems

26 Different Universities are Benefiting out of this Program



### Thank you

