



The Status of current and future CNSA Earth Observing System

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Introduction

- CNSA is devoting to construct an Earth observing system (EOS) for continuously and stably observing the Earth from the space
- CNSA is making great efforts to improve the EOS serving capability so as to push operational services forward.
- CNSA is also boosting actively the international co-operation and servings of satellite dataset.

Current Earth Observing system

Nine satellites are operating in orbit, including FY-3A, FY-3B

Satellites	Space Agency	Equator Crossing Time + Altitude	Launch Date	Instrument	Status, applications and other information
HY-1B	CNSA	10:30 (D) 798 km	04/07	4-band CCD camera Ocean Colour and Temperature Scanner	Ocean monitoring
HJ-1A	CNSA	10:30 (D) 650 km	06/09/2008	Two 4-band CCD camera, Hyperspectral camera	Land, resource and environment monitoring
HJ-1B	CNSA	10:30 (D) 650 km	06/09/2008	Two 4-band CCD camera, IR camera	Land, resource and environment monitoring
HY-2A	CNSA	06:00 (D) 964 km	16/08/2011	Altimeter, MW radiometer, Scatterometer	Ocean dynamics environment monitoring
ZY-3	CNSA	10:30(D) 506 km	01/09/2012	3 parachromaic camera 4-band CCD camera	Surveying and mapping Land, resource
HJ-1C	CNSA	06:00 (D) 500 km	11/19/2012	S-band SAR	Land monitoring S band SAR
GF-1	CNSA	~10:30(D) 600-700Km	04/26/2013	2m pan/8m multi camera 16m wide view camera	Surveying and mapping Land, resource agriculture

Future Earth Observing System

Seven satellites will be launched in the future, including FY-4, **CBERS-04,GF-2,GF-3,GF-4,GF-5 and CFOSAT.**

Satellites	Space Agency	Equator Crossing Time + Altitude	Launch Date	Instrument	Status, applications and other information
CBERS-04	CNSA +AEB	10:30 (A) 778 km	2014	PAN CCD camera, MUX CCD camera IRMSS, WFI	Phase D Land, resource and environment monitoring
GF-2	CNSA	10:30(D) 600~700Km	2014	1m pan/4m multi-spectral camera	Phase D Land, resource and environment monitoring
GF-3	CNSA	~6:00(D)	2015	multi-polarized C-band SAR	Phase C Land, ocean environment monitoring
GF-4	CNSA	GEO	2015	50m staring camera	Phase C Land, Atmosphere and environment monitoring
GF-5	CNSA	~10:30(D) ~700Km	2016	six types of payloads	Phase C Atmosphere ,land and, environment
CFOSAT	CNSA+ CNES	07:00(D) ~600Km	2018	SCAT (Scatterometer) SWIM (Directional Wave spectrum form)	Phase C Ocean dynamics environment monitoring

Conclusion

- China Earth observation satellite system is playing an important role in the national development, environmental protection, disaster detection.
- CNSA currently works at the transition stage of changing R&D satellite to operating satellite. A set of R&D satellites are gradually converting into operational mode.
- CNSA is very glad to communicate and share our experiences with others by CGMS.
- CNSA is devoted to explore new EOS technology and sensors, and make more contributions for the optimization of global EOS.

Thanks for your attentions !

