



Marine Information Technology Introduction

Ocean Collage
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Cellular Ser





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Outline



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- What is Marine Information Technology?
- What are Marine Information Technology's objectives?

What is Marine Information Technology?



- Marine information technology is a technology leveraging **data management**, **probabilistic**, and **various applications** to store, arrange, and utilize marine information.

海洋信息技术

编辑

本词条缺少信息栏、名片图，补充相关内容使词条更完整，还能快速升级，赶紧来编辑吧！

中文名称	海洋信息技术
英文名称	marine information technology
定 义	对海洋信息进行科学管理、统计分析及综合服务的技术。
应用学科	海洋科技（一级学科），总论（二级学科），一级分支学科名词（三级学科）

以上内容由全国科学技术名词审定委员会审定公布

海洋科技总论

▪ 海洋科学	▪ 海洋学	▪ 物理海洋学	▪ 海洋物理学	▪ 海洋气象学
▪ 海洋生物学	▪ 海洋化学	▪ 环境海洋学	▪ 海洋地质学	▪ 海洋地理学
▪ 海洋地球物理学	▪ 区域海洋学	▪ 极地科学	▪ 海洋技术	▪ 海洋工程
▪ 海洋矿产资源开发技术	▪ 海水资源开发技术	▪ 海洋生物技术	▪ 海洋能开发技术	▪ 海洋水下技术
▪ 海洋观测技术	▪ 海洋遥感	▪ 海洋环境预报预测	▪ 海洋信息技术	▪ 海洋环境保护技术

其他科技名词

GET IN TOUCH 词条标签： 科学

What is Marine Information Technology (MIT)?



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- Oops, cannot find it in GOOGLE;
- **Information technology (IT)** is the application of computer to **store, study, retrieve, transmit, and manipulate data, or information**. IT also includes other information distribution technologies and associated with **computer hardware, software, electronics, semiconductor, internet, telecommunication, and e-commerce**;

Marine Information Technology (MIT) is Marine IT

Information Technology from Marine Corps University



- Mission: Provide an information and education technology environment that advances the core missions of Marine Corps University and facilitates the operational processes that support these missions;
- Statement of Purpose: The IT Directorate **plans, develops, acquires and maintains the information and communications** tools that enable and facilitate development and support of the professional competence of Marine, other service, international and civilian students, faculty and staff
- Vision Statement: Technology solutions will provide effective and efficient storage of and **transparent access to information.**

Information, information, information → transparency

Marine Information Research Center (MIRC, Japan)

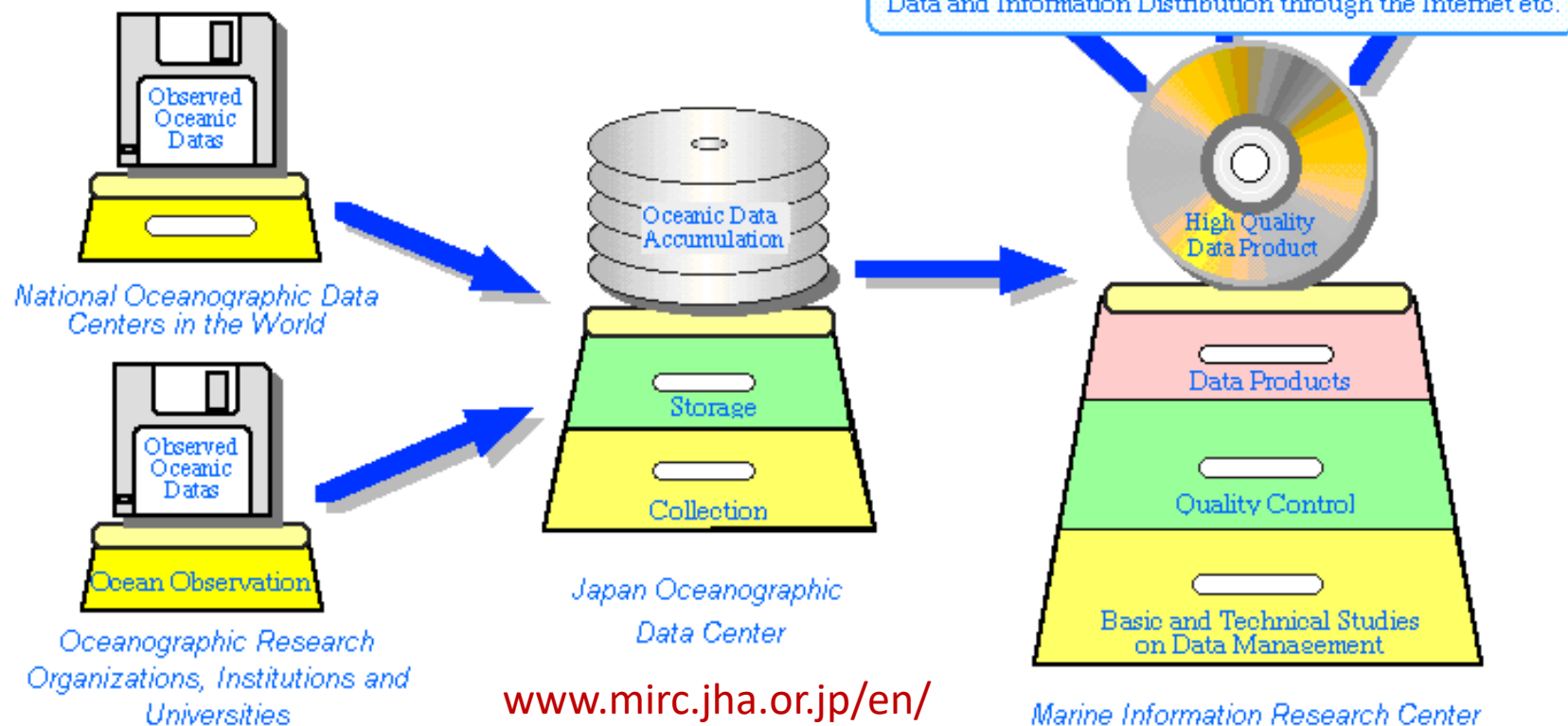


Task of Marine Information

Research Center

To produce high quality data set or data products available for various users: researchers on oceanic sciences, engineers on ocean exploitation and utilization, enthusiasts on marine sports and so on. The products will be distributed speedily through electronic communication systems like the Internet.

To contribute the researchers and engineers of the global environmental problems and of the sustainable utilization of oceans.



Marine Information Research Group Australia



- The first objective is to provide **clear and concise information** on the state and the occurring events in the oceans surrounding Australia, in order to increase public awareness.
- The second objective of MIRG Australia is to be actively involved in marine research and conservation

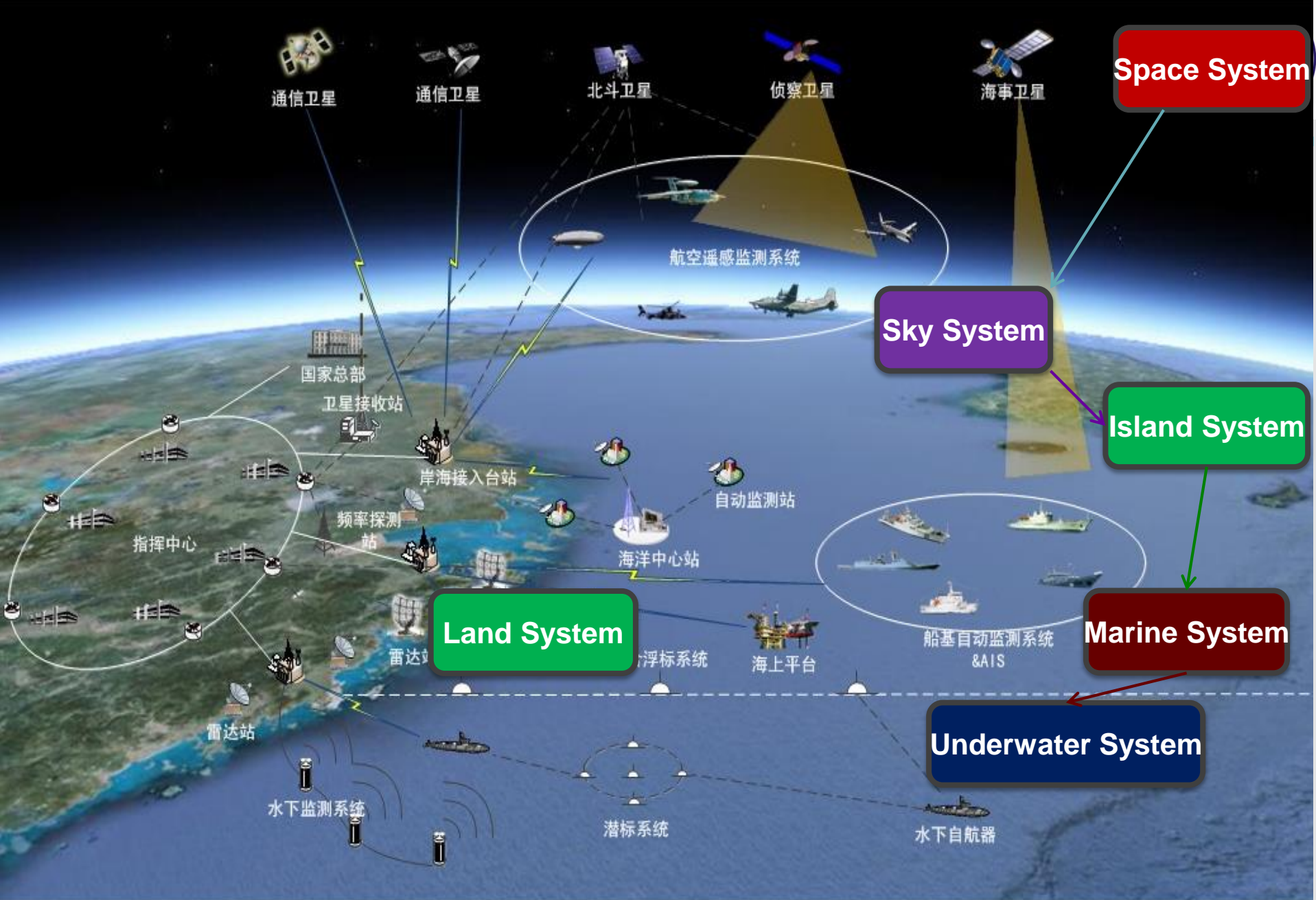
What is really MIT?



- Marine information technology is **an emerging discipline** in recent years.
- From scientific and technological point of view, information of the Earth science progressed from satellite remote sensing technology, geographic information systems, information highway, to the “**Digital Earth**” era.
- Facing international challenges in marine information technology and the needs of developing China’s maritime strategy, establishing the China’s marine information systems and developing “**Digital Ocean**”, have become the only way of national marine informatization.

What does Marine Information include ?





Marine Information has both depth & width

Marine Information System



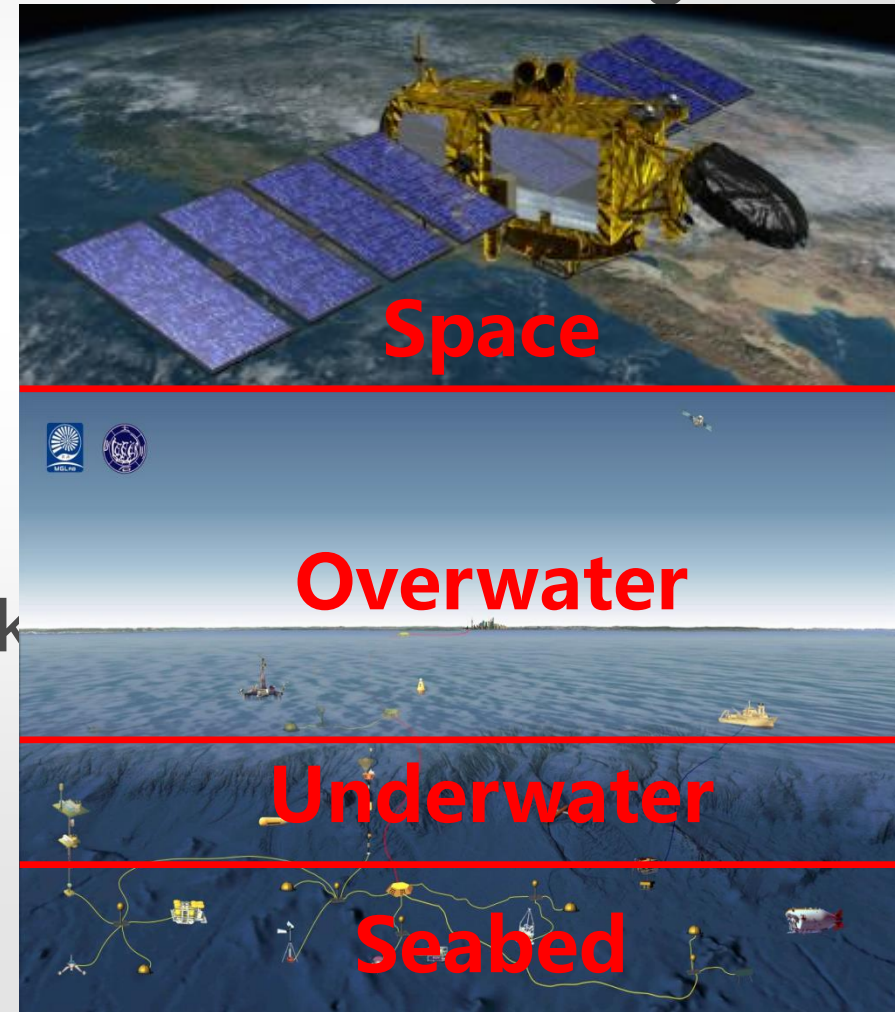
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➤ Definition: the technology to **collect, transfer, and process** marine information, including:

- Sensing and collecting
- Transfer and networking
- Processing and fusion

➤ Objects:

- Sensing network
- Broadband comm network
- Marine big data

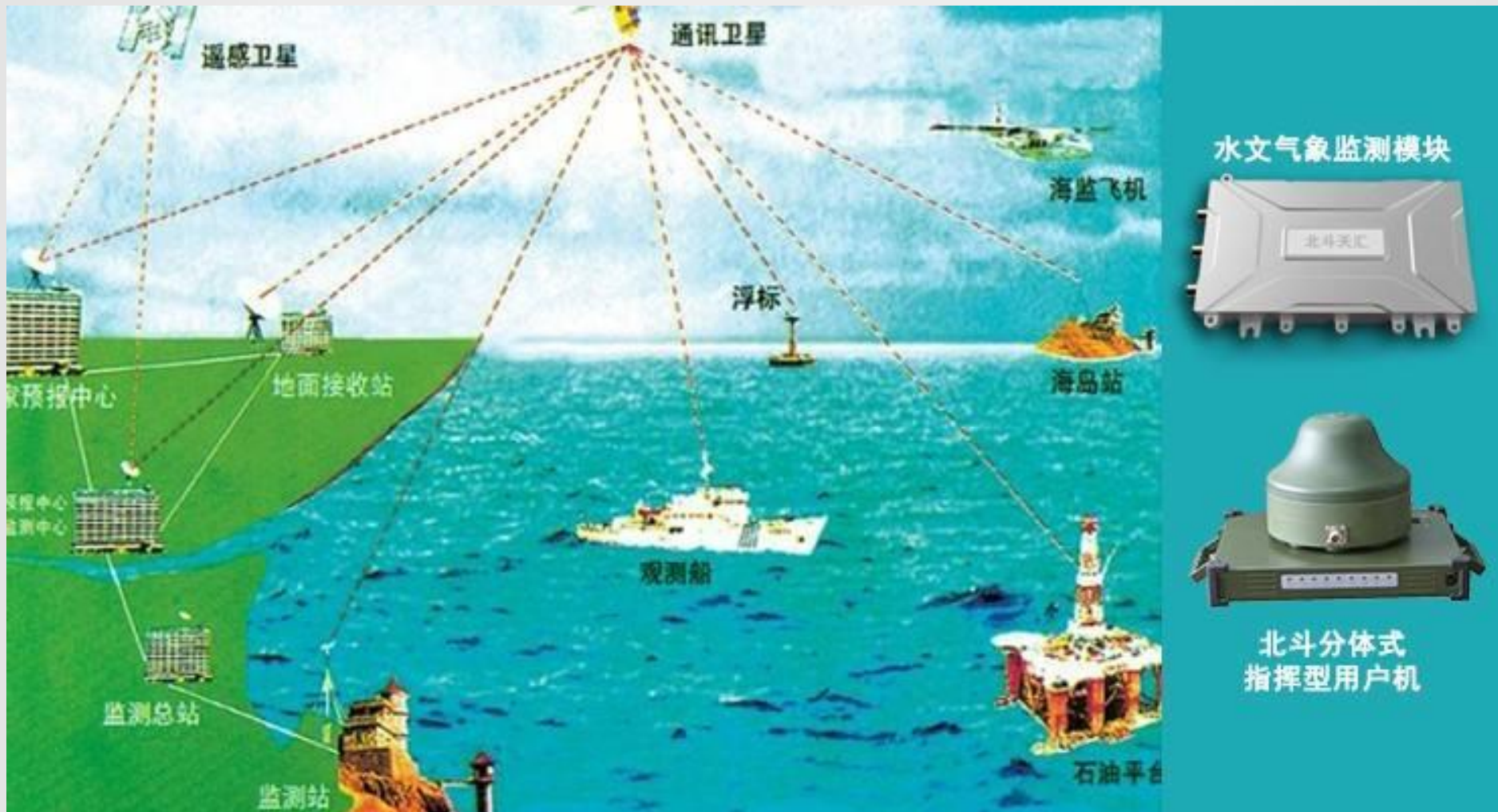


Outline



- What is Marine Information Technology?
- What are Marine Information Technology's objectives?

Ocean observation



Ocean Investigation



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● 波浪骑士

测量波高、波向及波周期

● CytoSUB流式细胞仪

长时间监测水下微型/微微型浮游生物群落

● YSI剖面仪

测定水温、水深、电导、盐度、pH、溶解氧、浊度、叶绿素和cDOM

● ADCP海流剖面仪

测量不同深度层海流的流速、流向

● 声学释放器

一旦仪器脱离，通过声学释放器的信号可及时找回

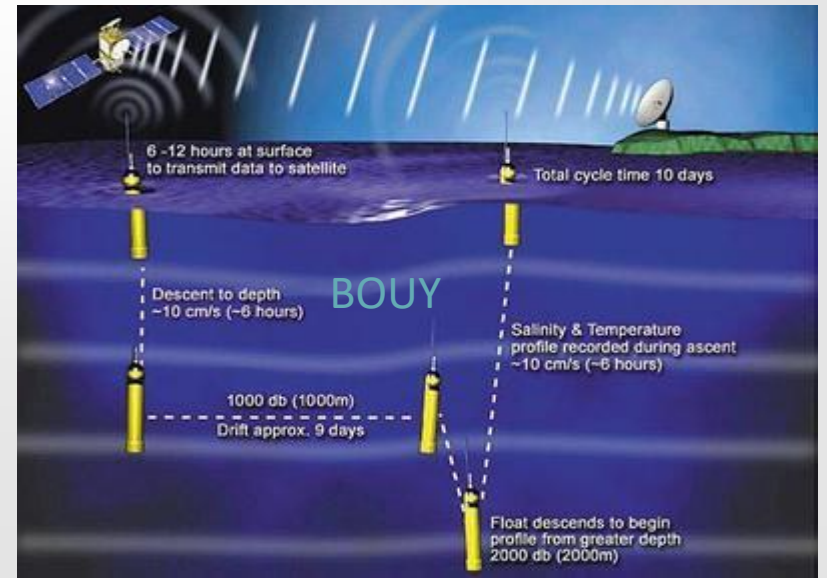
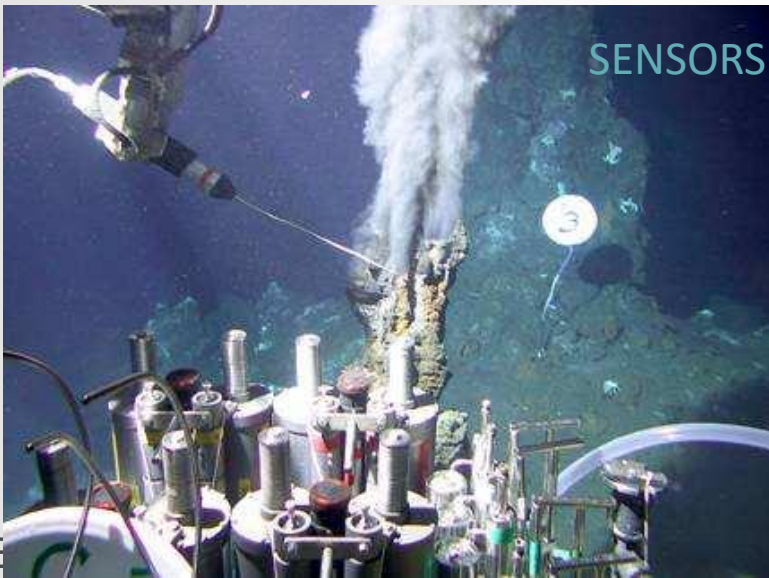
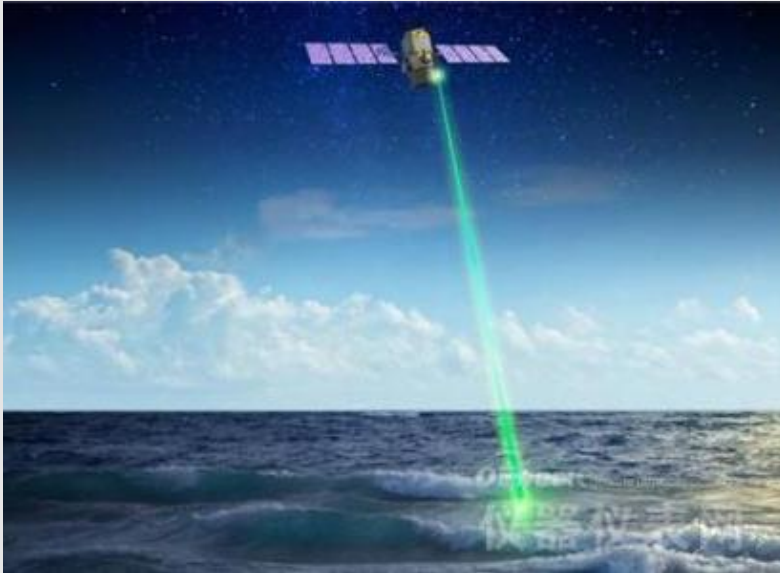
● 气象仪

监测气温、气压、风速、风向、相对湿度等

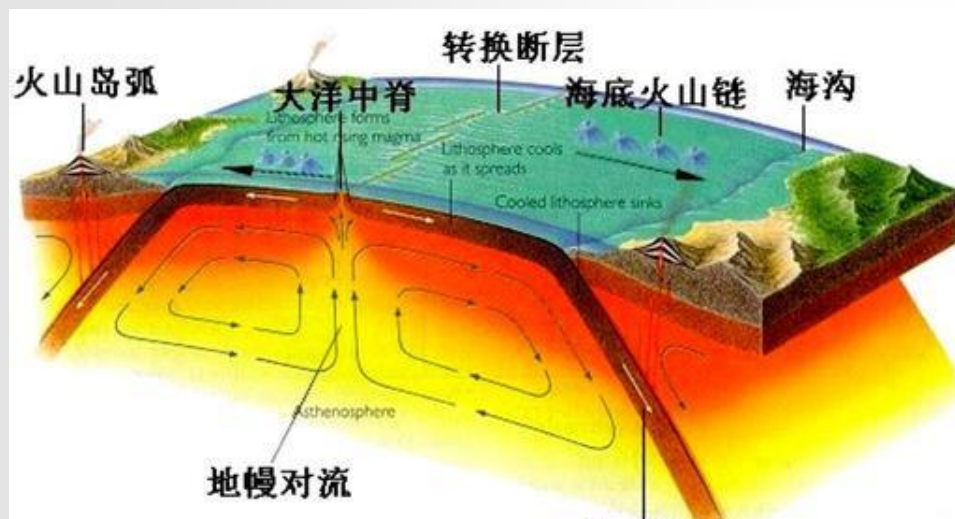
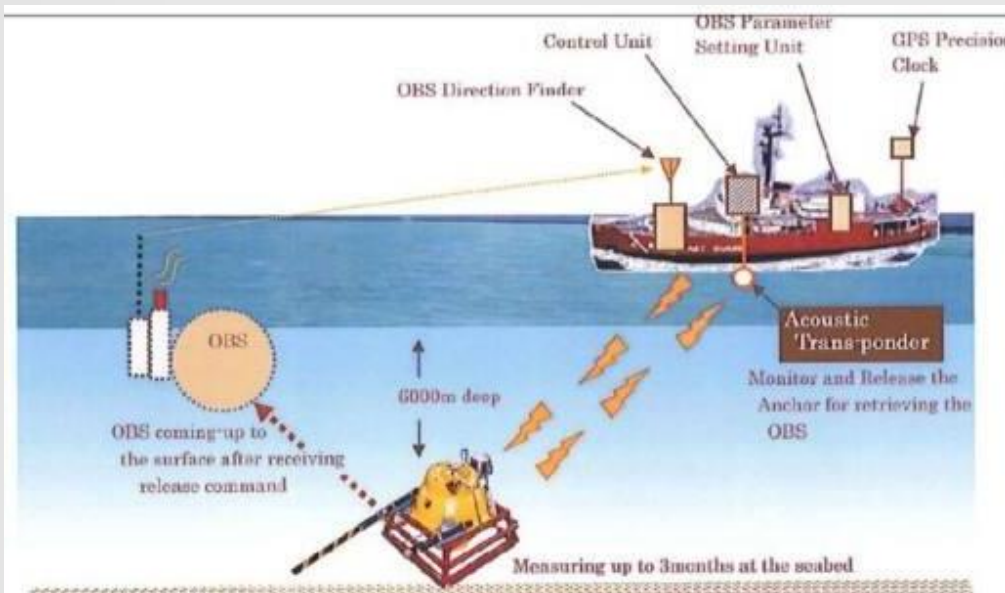
● LOBO浮标

测定温度、盐度、叶绿素、浊度、溶解氧、硝酸盐和cDOM

Ocean Understanding

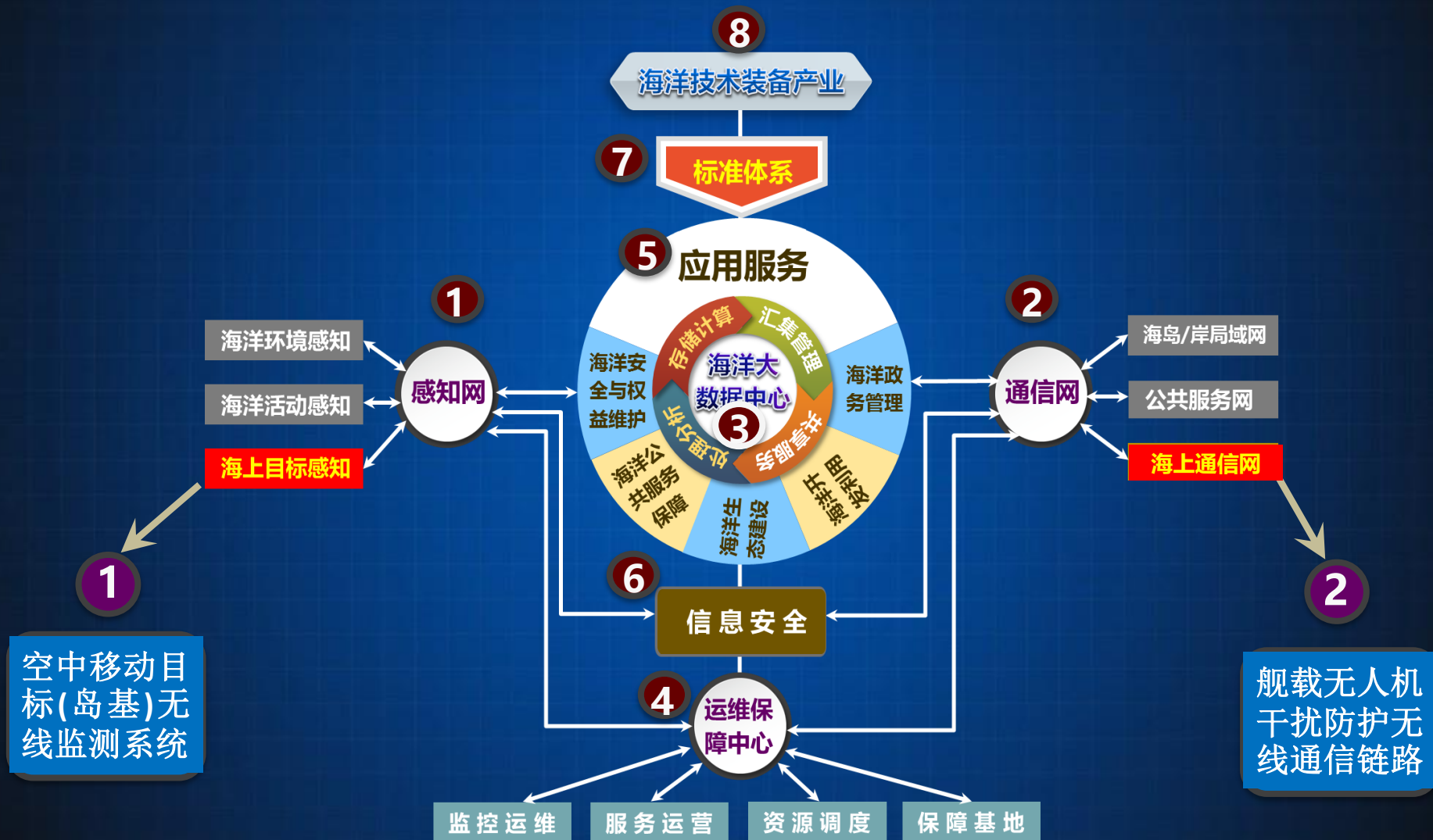


Ocean Interpretation



Foundation for Ocean Science

Ocean Development



Ocean Management

