

EARTH OBSERVATION

THE OCEAN FLOOR



Ocean wide observatories



European observatory



Regional observatory

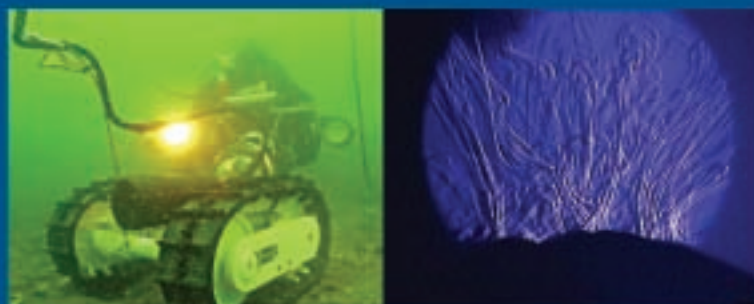
Cabled observatories linked by satellite, moorings and floats are essential components of recent international strategies for ocean-wide research. This infrastructure enables comprehensive investigation of Earth and ocean processes such as structure and seismic behaviour of ocean crust, early detection and precise localization of natural hazard events, control on seabed chemistry, ocean climate change, effects on marine life and diversity of deep-sea ecosystems

RESEARCH NEEDS

- ▶ to improve strategies for ocean-wide research
- ▶ to coordinate efforts in assisting developing countries
- ▶ to exchange data recorded in situ, by aircraft and satellite



European Ocean Observatory provides strategic long-term monitoring in all marine disciplines



Regional cabled observatories place crawlers at cold-seeps, hot-vents, coral-mounds, reefs

Local observatories:
Visualization of groundwater discharge by schlieren-optics;
Field = 20 cm across