

Monitoring network built by mouth of Yangtze River

- [Source: Global Times](#)
- [\[08:24 April 06 2011\]](#)
- [Comments](#)

By Liu Sheng in Shanghai

To boost the safety of the Yangtze River estuary shipping channels and marine engineering projects, Shanghai is building a 40 million yuan (\$6.1 million), 20-kilometer undersea observation network in the East China Sea, its project director announced Tuesday.

It's a first for China, said Wang Pinxian, a professor at the Chinese Academy of Sciences in Shanghai. The project would be completed in three years, he said.

"By laying undersea optical cable and observation equipment on the seabed, we can observe directly from the bottom of the sea upward or down into the ground, sending back real-time information from undersea observers every 10 seconds," Wang said.

The network will mostly monitor movements of sand and mud sediments from the estuary of the Yangtze River, he explained.

"Lots of marine engineering projects like sea drilling platforms need to be planted in the seabed so it's important to forecast internal waves and sediment movements," Wang said.

The project will also include earthquake monitoring, said Dong Liwan, a marine professor from Shanghai Marine University Tuesday.

"After the Japan earthquake and tsunami, we should be more aware of sea observation and protection," Dong told the Global Times Tuesday, "and this project could help a lot in disaster prevention and reduction."

Project designer the Shanghai Ocean Science and Technology Center will cooperate on collecting data from the 20-kilometer observation network when it is completed.

Their monitoring could also provide timely warnings of what Chinese experts call "red tides" that consume oxygen and cause marine wildlife catastrophes.

The project team already has a one-kilometer experimental seafloor observatory at Xiao Qushan in the East China Sea that collects data.

Scientists first started to observe the ocean through remote sensing technology in the 1960s, Wang said. "At the moment we can send ships to observe the sea environment every few days, but that's still not fast enough in cases of emergency sea pollution incidents like red tides."

RELATED

- Scientists refix sources of Yangtze and other major rivers
- Glacier thawing speeds up in Yangtze River sources
- Discover the Yangtze River Delta
- Cargo ship carrying gas explodes in Yangtze River, 12 rescued
- Project to preserve Yangtze River ecosystem