

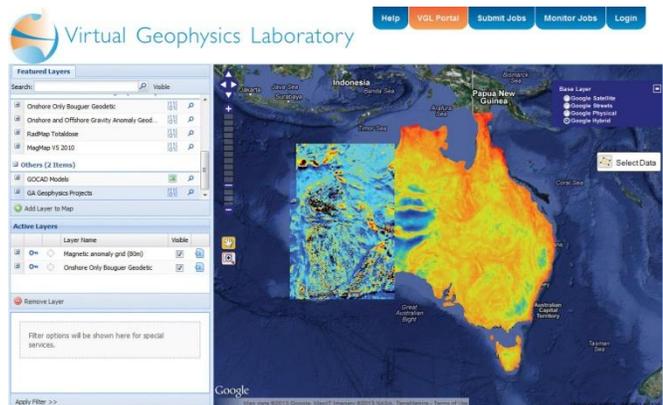


Weekly Wire East Asia and Pacific National Science Foundation Tokyo Regional Office July 23, 2013

AUSTRALIA: Geoscience Enters the Cloud

Geoscience data are collected by different organizations across Australia that use a variety of software and produce data in various formats that are often incompatible. This makes processing and the bringing together of data slow and expensive, even for relatively small queries. To solve this problem, cloud computing and one of the world's most powerful supercomputers were introduced to form the backbone of a national integrated geoscience data network being developed by Commonwealth Scientific and Industrial Research Organization, Geoscience Australia and AuScope.

<http://www.csiro.au/en/Portals/Media/Geoscience-enters-the-cloud-to-tackle-societys-biggest-challenges.aspx>



JAPAN: 24-hour Ocean Monitoring

The Government of Japan plans to launch 9 satellites in the next 5 years in order to monitor all world oceans 24 hours per day, compared with 8 hours per day in the current setup. The 24-hour monitoring will help prevent threat by pirates, record incursions into territorial waters, and better predict tsunamis. To initiate this project, the Cabinet Office will request a budget of Yen 30-40 billion (\$300-400 million) in JFY2014.

[Translation of a Nikkei article – July 7, 2013](#)

JAPAN: \$2 million Investment in Sensor Technology

The Innovation Network Corporation of Japan, a public-private partnership for promoting innovation, will invest Yen 200 million (\$2 million) into a venture company that has developed a technology that operates a TV or computer remotely without the use of a remote control unit. A camera attached to a TV or computer detects the movement of hands and/or fingers, and sends the message to the TV or computer by high-speed image processing technology. The technology was developed by a Tokyo University research team and is expected to be commercialized in 2014.

[Translation of a Nikkei article – July 6, 2013](#)

JAPAN: DARPA Model

Richard Van Atta of the Institute for Defense Analyses was invited by the Ministry of Education, Culture, Sports, Science and Technology to make a presentation on the Defense Advanced Research Projects Agency (DARPA). His talk focused on the DARPA Model, a unique system of empowered program managers that support high risk/high payoff research. The Japanese government is considering including the DARPA Model into the program that succeeds the Funding Program for World-Leading Innovative R&D on Science and Technology (FIRST: \$30 million/5 years). A decision will be made by the end of August 2013.

[Summary of a talk on July 10, 2013](#)

JAPAN: Brain Research

Charles Yokoyama of the RIKEN Brain Science Institute (BSI) gave an overview of brain research conducted at the BSI. BSI research focuses on anatomical neural circuit mapping; functional neural circuit mapping; genetic, epigenetic, and genome mapping; goal-directed behavior and decision making; and social cognition and reform psychology. Their objectives include: greater integration with universities in Japan and throughout the world; development of new technologies; and providing a world-class research and training environment. RIKEN’s BSI is Japan’s leader in brain research.

[Summary of a talk on July 10, 2013](#)

RIKEN Brain Science Institute: <http://www.brain.riken.jp/jp/>

KOREA: Partnership with Brazilian Universities



A delegation from the Brazilian Association of Rectors visited the Korea Advanced Institute of Science and Technology (KAIST) to observe the progress being made under Brazil’s science education initiative, Science without Borders (SwB), which sends about 30 students to Korea. KAIST is the partner university for

the SwB program.

http://www.kaist.edu/english/01_about/06_news_01.php?req_P=bv&req_BIDX=10&req_BNM=e_d_news&pt=17&req_VI=4332

KOREA: KAIST Innovation Office in California

The Korea Advanced Institute of Science and Technology (KAIST) established the KAIST Silicon Valley Innovation Platform in San Jose to support entrepreneurship of KAIST graduates, students and faculty. The platform collects information and analyzes emerging technologies; provides education on entrepreneurship and technology transfer; helps entrepreneurs engage with industry, academia and government organizations; and assists Korean startups to access the US and North American markets.

http://www.kaist.edu/english/01_about/06_news_01.php?req_P=bv&req_BIDX=10&req_BNM=e_d_news&req_VI=4328&req_PC=0&req_CG=&sCATE=&sCHAR=

SINGAPORE: New Micro-Electro-Mechanical Systems (MEMS) Device

The Institute of Microelectronics and OPUS Microsystems Corporation, a Taiwan-based company, have signed an agreement to refine and develop a MEMS scanning mirror by applying a pico-projector to smartphones. This would enable phones to project photos and videos on any surface regardless of the size.

<http://www.a-star.edu.sg/?TabId=828&articleType=ArticleView&articleId=1846>

