AG Situation in Japan:
Toward Entertainment Grid

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Self Introduction of
GTRC, AIST

- **AIST** **National Institute of Advanced Industrial Science and Technology**
  - ▶ A kind of national laboratory supported by METI
    (Ministry of Economy, Trade and Industry).
  - ▶ Japan's largest research organization with 3,200 employees and over 60 research units.
  - ▶ located at Tsukuba being 60 km away from Tokyo.
- **GTRC** **Grid Technology Research Center**
  - ▶ A research unit in AIST dedicated to Grid Technologies.
  - ▶ established in Jan 2002.
  - ▶ has about 60 staff and directed by Satoshi Sekiguchi
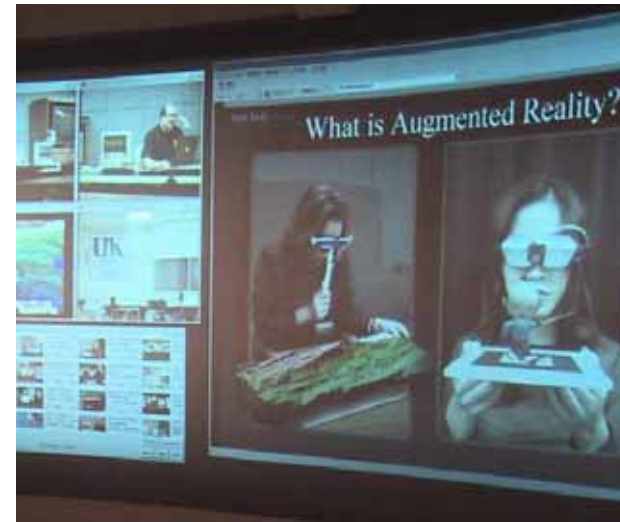   (a member of GFSG, GGF).

SC Global 2001 (Nov 2001)

- **We started working on AG to make a contribution to SC Global early in the year 2001.**
- **SC Global is the first (?) globe-wide distributed conference making use of AG.**
  - held in conjunction with SC (Supercomputing) conference, which is one of largest conference in High Performance Computing and Networking area.

Showcase node

Demonstration of ARToolkit
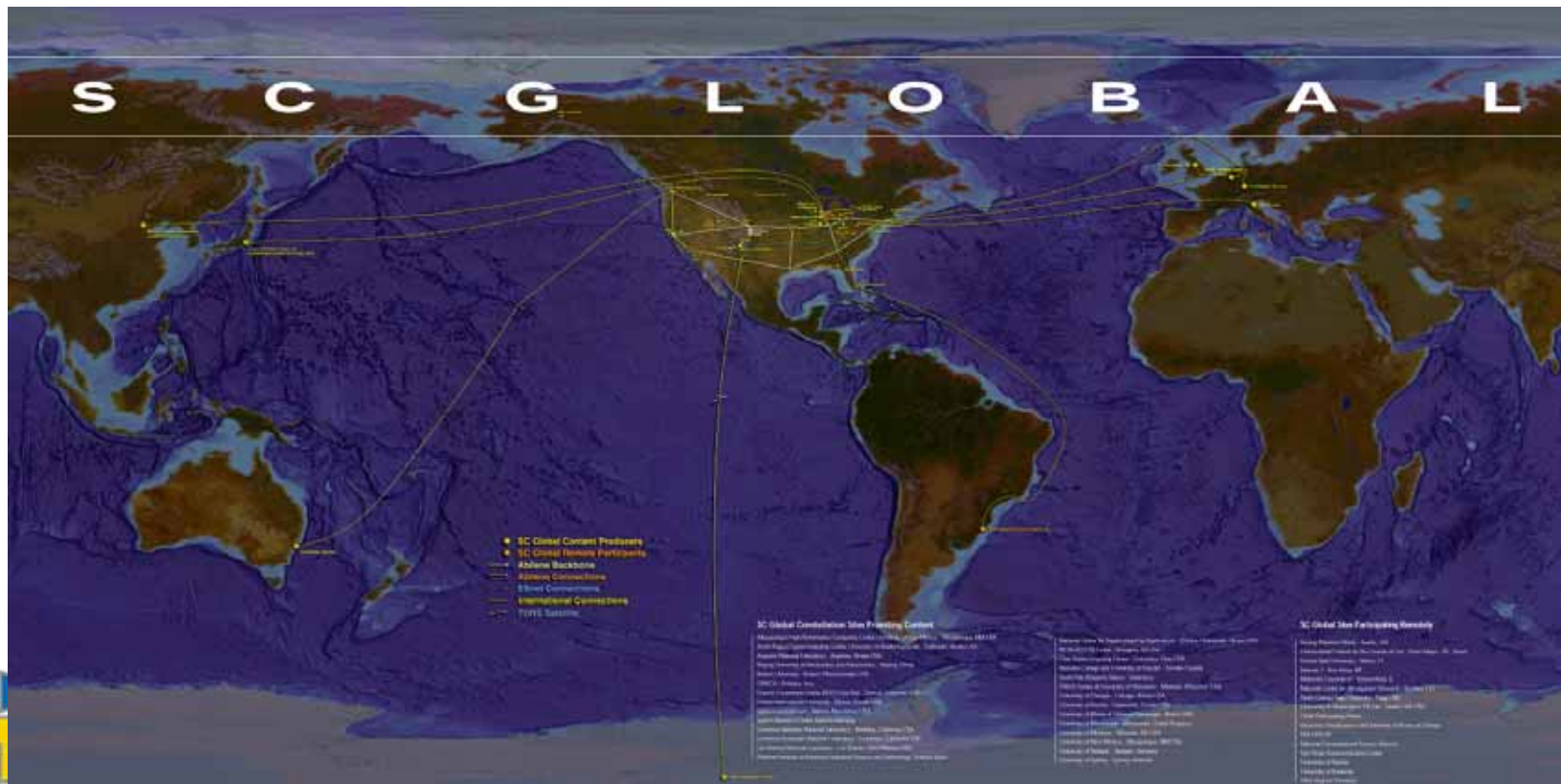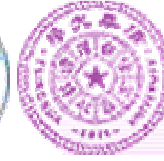©Grid Technology Research Center, 2003

SC Global 2001

- **43 participating sites** from **6 continents**.
  - ▶ mainly from North America and Europe, but there are several participants from Asia-Pacific countries, South America and the Antarctic Continent.

SC Global 2001

Sydney VisLab · Tsinghua University

- **Participants from Asia-Pacific area**
  - ▶ Australia
    - Sydney VisLab (The U. of Sydney) actively participated in SCG sessions.
  - ▶ China
    - Admire group in BUAA (Beijing University) operates an AG node since 2001.
    - Tsinghua U. hosts a Workshop titled "WS on Advanced Network and Application Research in China".
  - ▶ Japan
    - AIST, TITECH, Kyushu U. and KEK.

Tsinghua U. Workshop as viewed at AIST

Picture courtesy of Sydney VisLab

Contribution from Asia-Pacific region

@We planned and managed a panel discussion as a kick-off event of ApGrid.

- The panel was titled "Can the Asia Pacific Grid Contribute to the Science and Technology".
  - The subject is focused on the characteristics of the AP region.
- There are motivated participants from various countries.
  - Australia (Sydney VisLab), Japan, Korea (KISTI), Taiwan (NCHC), Thailand (NECTEC) and US (SDSC).
- ApGrid (www.apgrid.org) is a partnership in the Asia Pacific region. It is initiated in the year 2000 and now consists of 41 organizations from 15 countries.

ApGrid Panel as viewed at AIST.

as viewed at Sydney VisLab.
Picture Courtesy of VisLab

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Contribution from Japan

- 🌐 **AIST**, **TITECH**, **Kyushu U**. **and** **KEK** **took part in SCG01.**
  - ▶ Besides the ApGrid panel, we contributed to a number of sessions.
    - ❷ Data Grid panel
      - ✦ Prof. Yoshiyuki Watase (KEK)
    - ❷ Shrinking the Pond (panel)
      - ✦ Satoshi Sekiguchi (AIST)
    - ❷ AG Middleware Requirements
      - ✦ Yoshio Tanaka (AIST)

AG Middleware Requirements

Panel:
Shrinking the Pond

Technical Contribution

- **Researches on user interface (in TITECH).**
  - ▶ It is hard to distinguish the speaker due to many windows which AG can show.
  - ▶ TITECH has developed a framework to control the position and size of windows in response to audio/video traffic.
- **Mobile / Portable nodes.**
  - ▶ PDA-based node
    - @ Independent of Motorola's and EVL's activities.
  - ▶ Cameras for portable nodes
  - ▶ Portable and full-featured nodes

Built-in camera of
SONY Picturebook

USB camera

Delivery Grid

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Business Activities

The 1st Generation
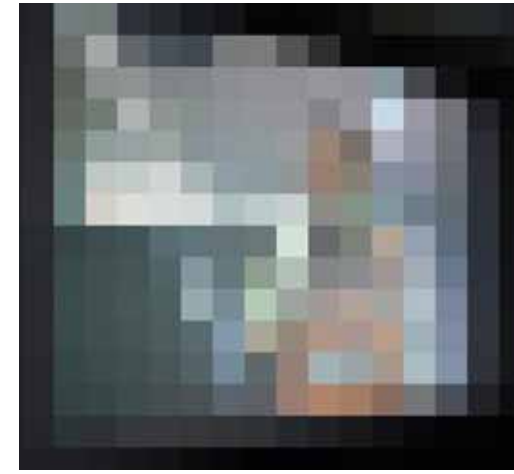

The 2nd Generation

A venture, Grid Research Inc. has been established based on intellectual properties related to AG.

▶ They are doing business with Grid and PC cluster technologies including AG in association with InSORS (An AG venture in the US).

▶ AIST and Grid Research Inc. have been developing Delivery Grid, which is a portable and full-featured AG node.

Business Activities (cont'd)

- **Entertainment companies** are working on the application of AG technologies to their business in cooperation with us.
  - ► We will have a session in the upcoming SC Global 2003 !
    - ℮ The tentative title of the session is "Transpacific Synergistic Entertainment" --- These words bring almost no information.
      - ✛ Because we are preparing for patents and have to keep them secret.
    - ℮ We will solicit you for kind cooperation and participation.

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SC Global 2003 --- the 2nd SC Global in Nov 2003

- A link among the Phoenix Civic Plaza and AG nodes worldwide.
- Integrated to SC2003 (Supercomputing 2003) as a component of Technical Program.
- Preliminary Program has already been published.
- Please register by September 15 as Satellite Sites.
  - Satellite Sites are AG locations which participate in an interactive way.
- The success of SC Global as a truly international event heavily depends on our contribution from Asia-Pacific area.

Research Center, 2003

Thanks for your efforts on this workshop and providing this precious opportunity.