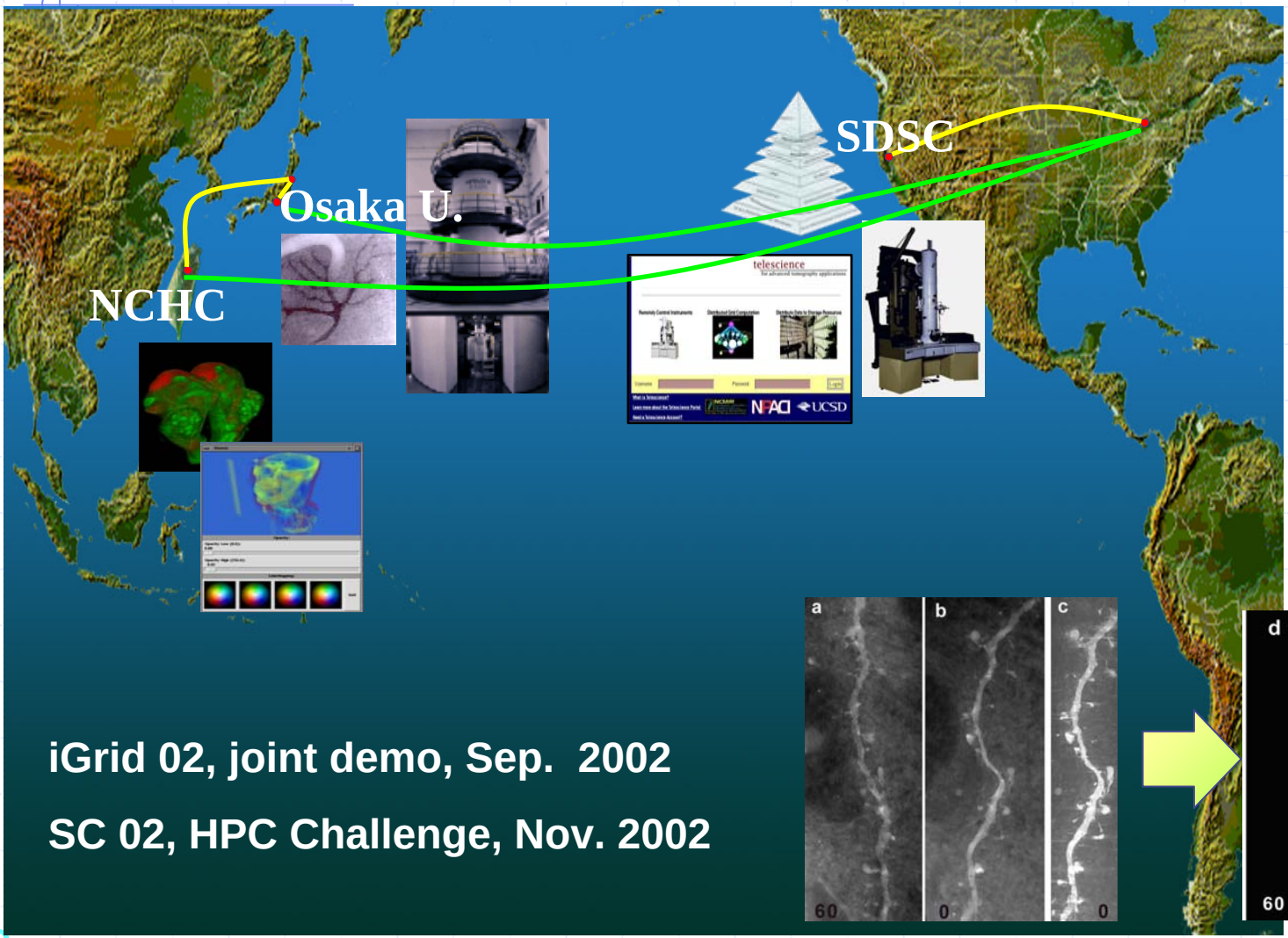
Telescience Update

Shinji Shimojo
(Susumu Date)
Fang-Pang Lin

Tele-science on Tomography



iGrid 02, joint demo, Sep. 2002

SC 02, HPC Challenge, Nov. 2002

Pacific

Rim

Application

Grid

Middleware

Assembly

I

in

Provided by Dr. Naoko Yamada (NCMIR)

Chalk Lake, Ontario, Canada

Lake Kinneret, Israel

Trout Lake, Wisconsin, USA

Yuan Yang Lake, Taiwan

Background Image: Fallison Lake, Wisconsin, USA

GLEON

global lake ecological observatory network

Further Information

lakemetabolism.org • *gleon.org*

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Sponsors

National Science Foundation (USA)
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Taiwan Forest Research Institute
Foundation for Research, Science and Technology (NZ)
The Israel Water Commissioner
Ontario Ministry of the Environment

global lake ecological observatory network

GLEON

gleon.org

- Global Lake Environmental Observatory Network (GLEON)
  - GLEON 4 held at Lake Paarjarvi, Lammi, Finland, March 2-5, 2007 (with RCN pre-meeting)
  - Lake Erken of Sweden joins GLEON.
  - Special session in SIL 2007, Montreal, Canada, August 12-18, 2007.
- Global Coral Reef Observatory Network (CREON)
  - Joint meeting of Coral Lab NMMBA, Polyp Lab CSUN, and MCR-LTER Lab UCSB.

Global Lake Environmental Observatory Network

RCN initiative: Yellow are existing GLEON Sites or Participants

GLEON 4 at Lammi, Finland


Source: Whey-Fone Tsai
Finland Sauna
To jump in, or not: PRAGMA's WAY…

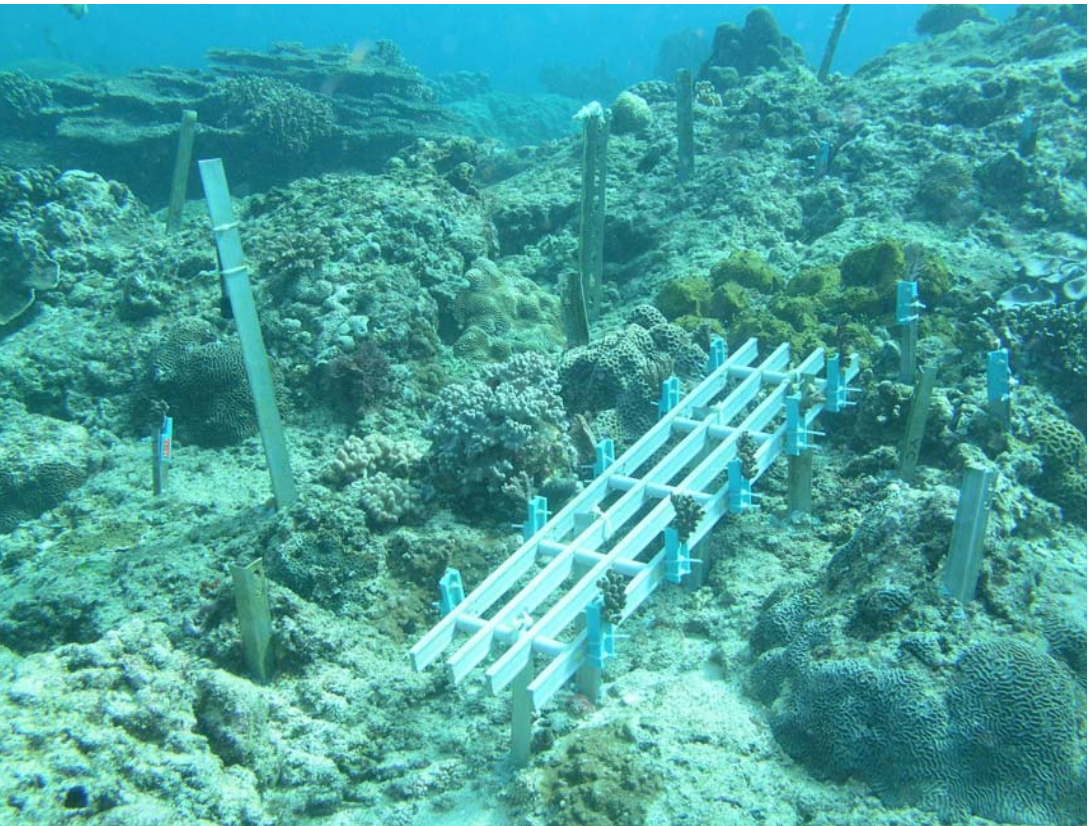
Lake Erken, Sweden

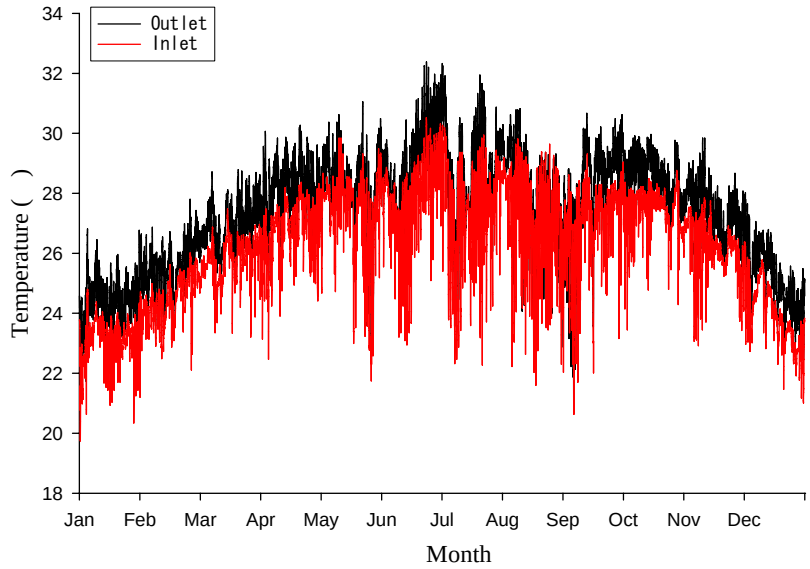
Source: Whey-Fone Tsai

Coral Reef Environmental Observatory Network (CREON)

Performance of key functional groups across a range of temperature regimes

Peter Edmunds (CSUN), Tung-Yung Fan (NMBMA), Stuart Kininmonth (AIMS)





Source: Tung-Yung Fan

Prof. Edmunds and graduate students conduct researches in NMMBA

彼德愛德蒙（左一）到墾丁調查珊瑚，由海生館研究員樊同雲（右一）陪同參觀珊瑚繁殖場。
記者宋耀光／攝影

調查墾丁珊瑚暖化威脅

美教授：受害情況不嚴重

【記者宋耀光／屏東縣報導】國科會邀請前來的美國加州立大學生物系教授彼德愛德蒙昨天在墾丁指出，全球氣溫暖化，使海底的珊瑚生存受到威脅，台灣將來也不能倖免，不過墾丁有一股「湧升流」，可降低水溫，而且落山風強勁，把高溫海水吹向外海，造成海水對流，目前受害的情況並不嚴重。

國立海洋生物博物館研究員樊同雲解釋說，墾丁的湧升流以南灣最強，夏天更是旺盛，就像地下冒出的強大地下水流，到墾丁潛水者常會感受到突然遇到冷水，夏天平均約降攝氏五度。

彼德是2名加州大學博士班研究生及1名碩士班研究生來墾丁作調查，來訪10天中，由樊同雲陪同在墾丁各重要珊瑚棲息地潛水作調查。

他說，全球暖化，已對地球生態產生影響，目前已有美國、澳洲及台灣在作暖化對珊瑚生態的調查，經費由國科會的組織提供。整體來說，墾丁珊瑚的保育比起太平洋的大溪地，澳洲的大堡礁差，但比大西洋的加勒比海好。因爲墾丁的海域有國家公園的保護，致後壁湖、香蕉灣等海域珊瑚覆蓋率高達70%以上，但觀光客多及當地居民爲了生活過度的捕撈，對珊瑚生存都造成壓力。

他表示，墾丁海域的珊瑚礁魚除了後壁湖保護區外，其他海底並不多，大魚也少，雖然海域旁都豎有禁止捕撈等，顯然民衆保育及執行單位並未落實。

他提出忠告，地球繼續暖化，如果不抑制二氧化碳的排放量，日後全球的珊瑚生存都可能受威脅，但墾丁有湧升流保護，可望成爲世界珊瑚的「避難所」。

Source: Tung-Yung Fan

Joint Meeting of Coral Lab NMMBA, Polyp Lab CSUN, and MCR-LTER Lab UCSB

Proceedings of Coral Lab NMMBA, Polyp Lab CSUN, and MCR-LTER Lab UCSB Joint Meeting
March 9 2007
NMMBA, Taiwan

Source: Tung-Yung Fan

Update From Pragma11

- Set up Mailing list (Thanks Ken) and Wiki (Thanks You!)
  - http://pragma-telesciences.ais.cmc.osaka-u.ac.jp/mywiki/Welcome
- We synthesize our effort on SC06 by *The optiportal (Thanks Phil and Peter)*
- We won the HPC Analytic Challenge finalist !!(Nozaki and Peltier)
- We set up two tiled display wall in Osaka University.
- We will briefly describe your tele-science infrastructure on Blog
- We will gradually come up with common architecture and infrastructure for telescience with help of other WG (especially Resource)
- Deployment of Sensor network in Japan is in progress.

HPC Analytics Challenge 2006

Chair: Dr Paul Fussell

Computational Oral and Speech Science on E-science Infrastructures

finalist

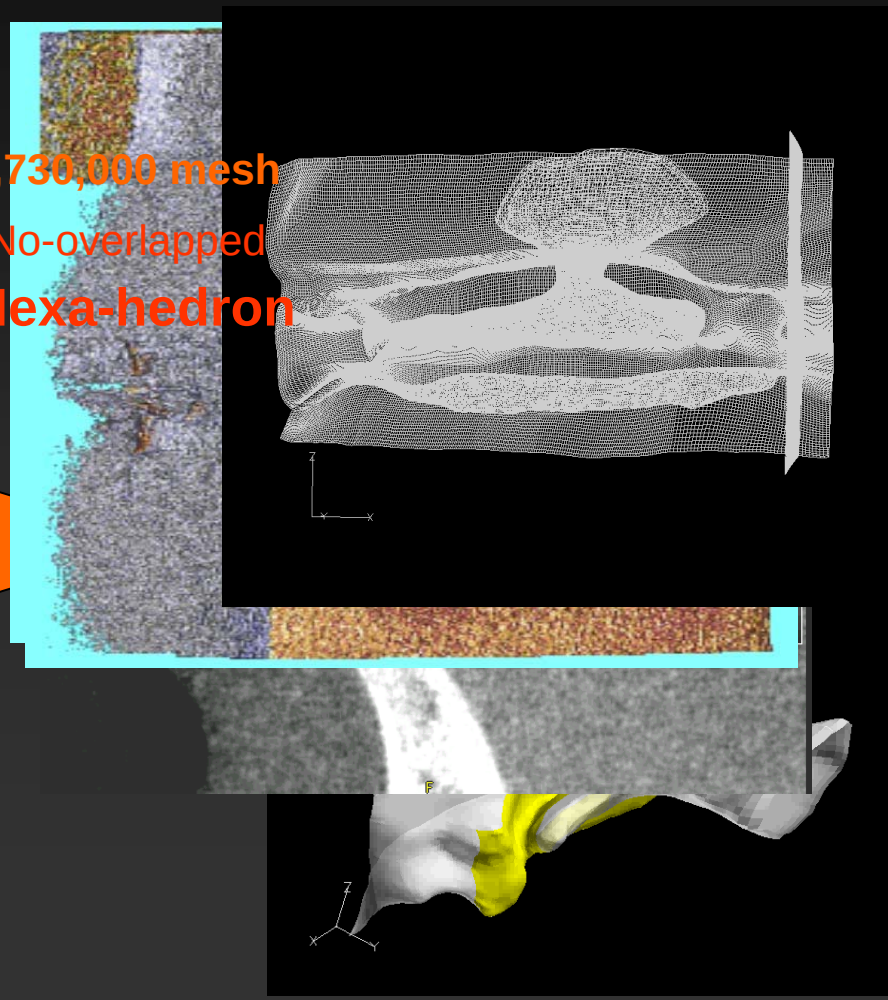
How to make the oral truct model?
- by using Cone Beam CT ?-

This experiment has been certificated by the ethics committee at Faculty of Dentistry , Osaka University

2,730,000 mesh

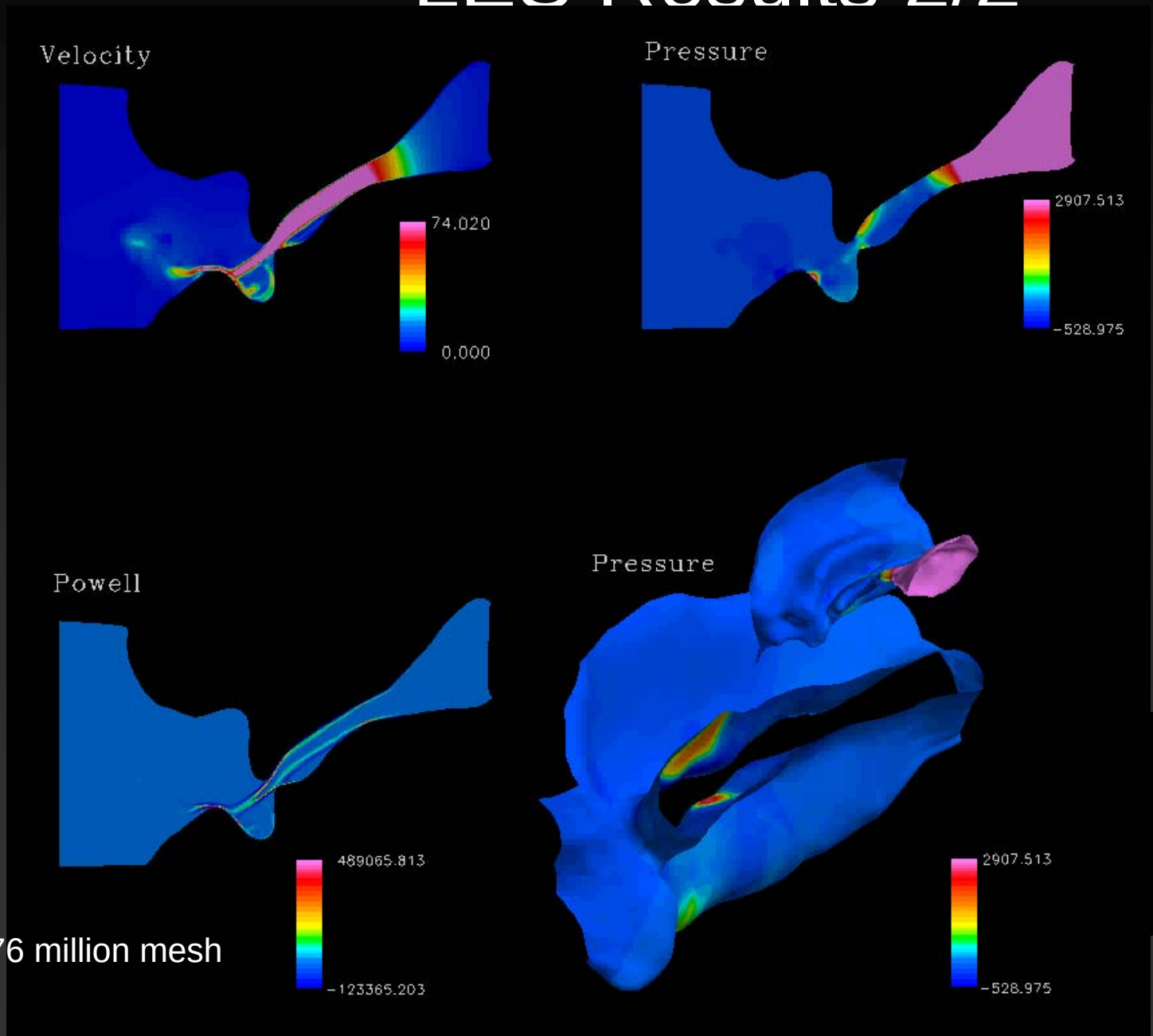
No-overlapped

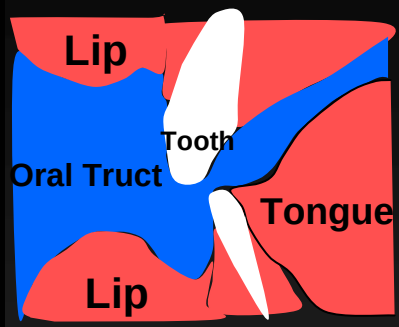
Hexa-hedron

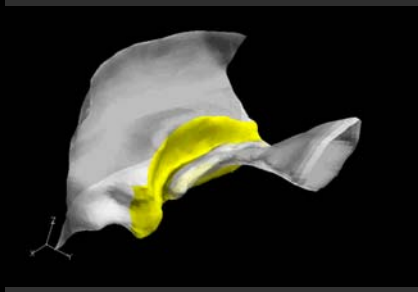


Orthogonal image **Volume rendering image** **Segmented image**

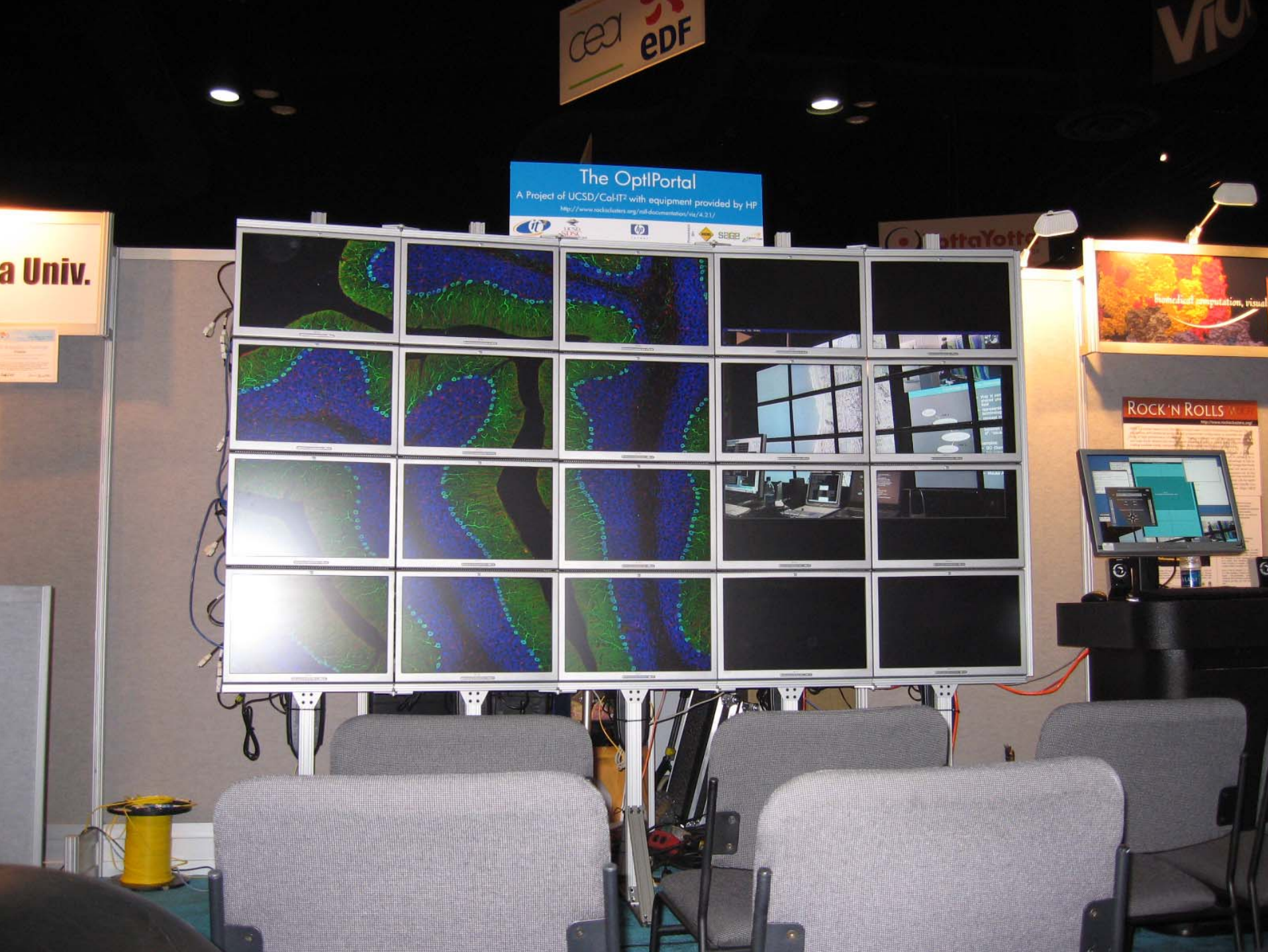
LES Results 2/2







276 million mesh


cea
EDF
The OptIPortal
A Project of UCSD/Cal-IT² with equipment provided by HP
ROCK 'N ROLLS

Today and tommorow(Room 2B)

- Fang Pang Lin
- Tuchida,
- “A Study on Event Control Module of User Input for SAGE” by Seiki Kuwabara
- “Tiled Display Activity report in JGN2 Osaka Research Center”, Yang Shuo
- “Sensor Network for Weather Forecast”, Tanaka Hirokazu
- “Research on Reputation System in Sensor Network”, Hiroaki Yamanaka
- “Telescience Wiki”, Yang Shuo
- Nway iHD500 by U. Wash.
- And more …