



# ***Advanced Sensor Technology***

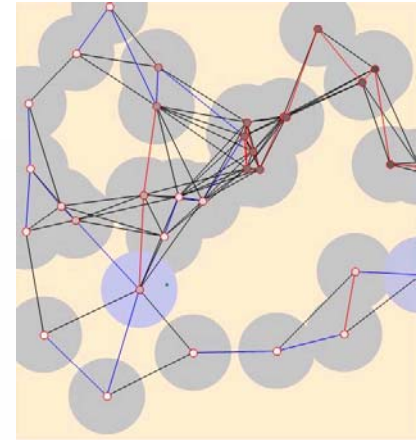
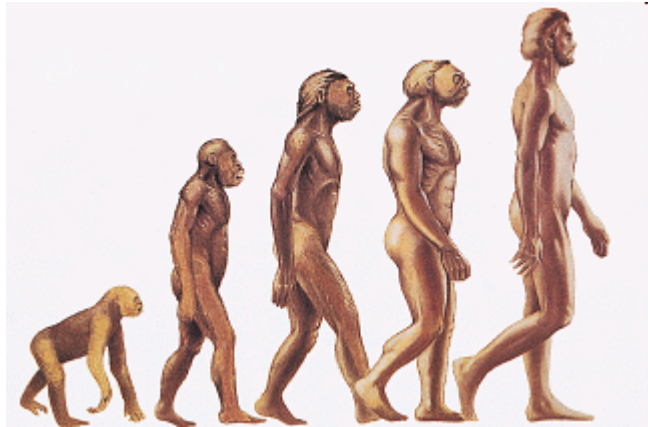
***Albin J. Gasiewski  
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Boulder, CO, USA***

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Yokohama, Japan***

**2008 JAFoE Symposium**

Kobe, Japan, November 17-19, 2008

# Evolution of Sensor Technology



<Mid 1900's

>Mid 1900's  
**Electronic Transducers**



~1990's

**Digital Conversion & Display**



~2000's

**Embedded Processing**

**CCD Imaging**

**Visualization**

~2010+  
**Sensor Networks**

**Distributed Sensing**

**MEMS & Novel Sensors**

**IPv4 → IPv6  
( $\sim 10^9$  to  $\sim 10^{38}$  addresses)**



***GPS on Every Roof***

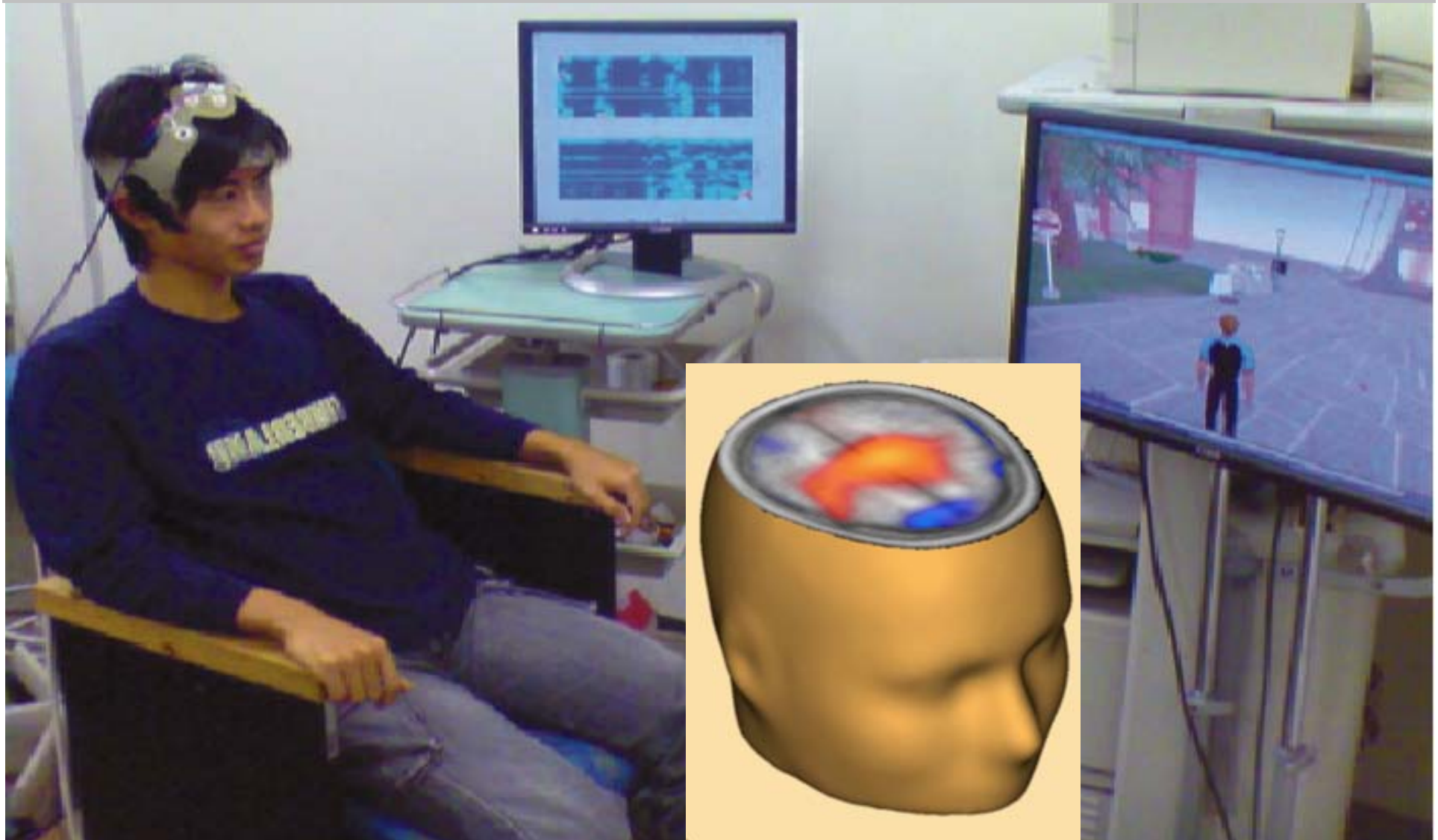
***Kenji Oguni  
University of Tokyo***

Google

# *A Sensing Mechanism for Brain-Machine Interface*

*Junichi Ushiba*

*Keio University*



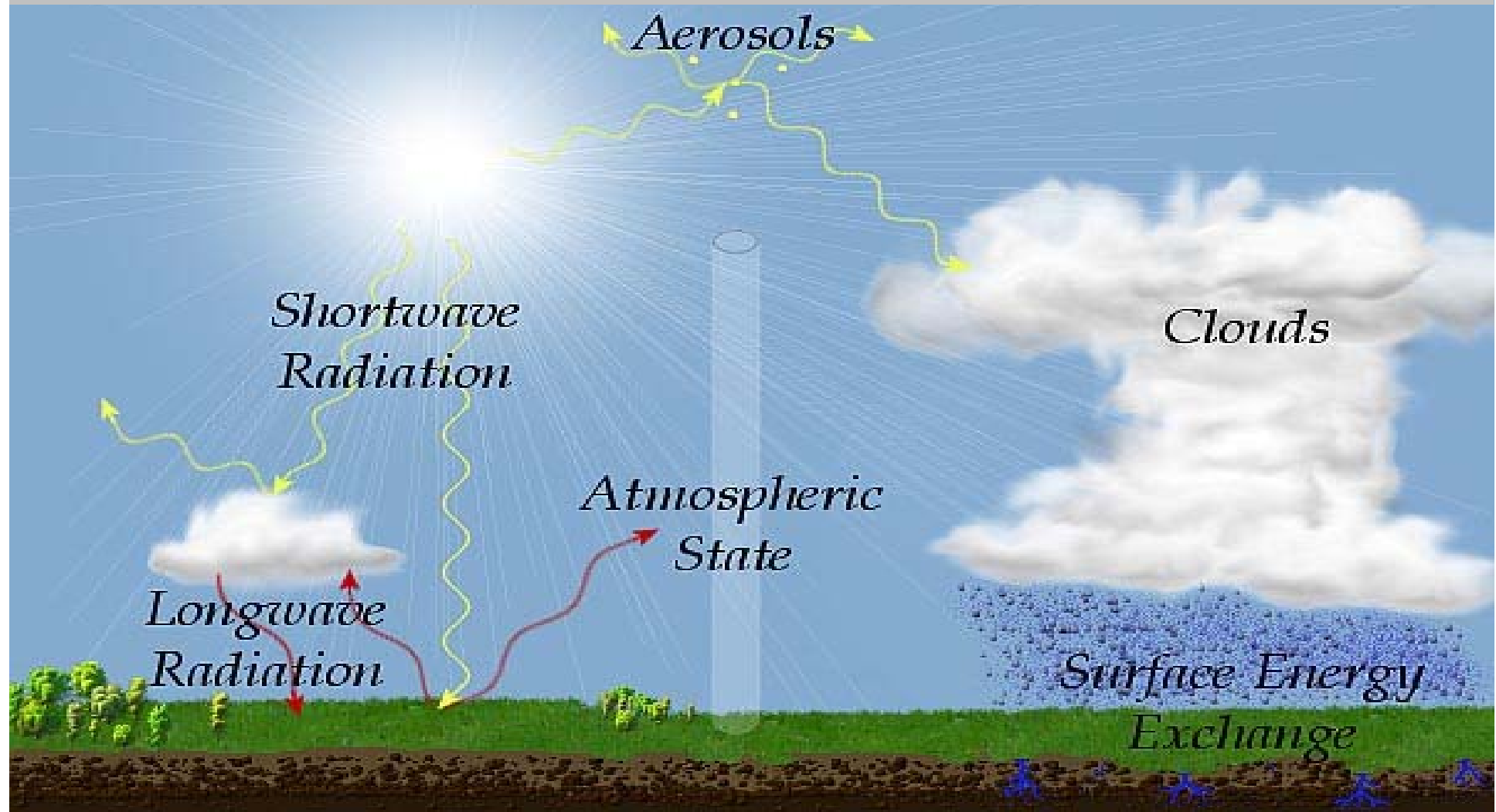
# GEOSS: A Global, Coordinated, Comprehensive and Sustained System of Observing Systems



# *Climate Observations from the Atmospheric Radiation Measurement (ARM) Program*

*Christine Chiu*

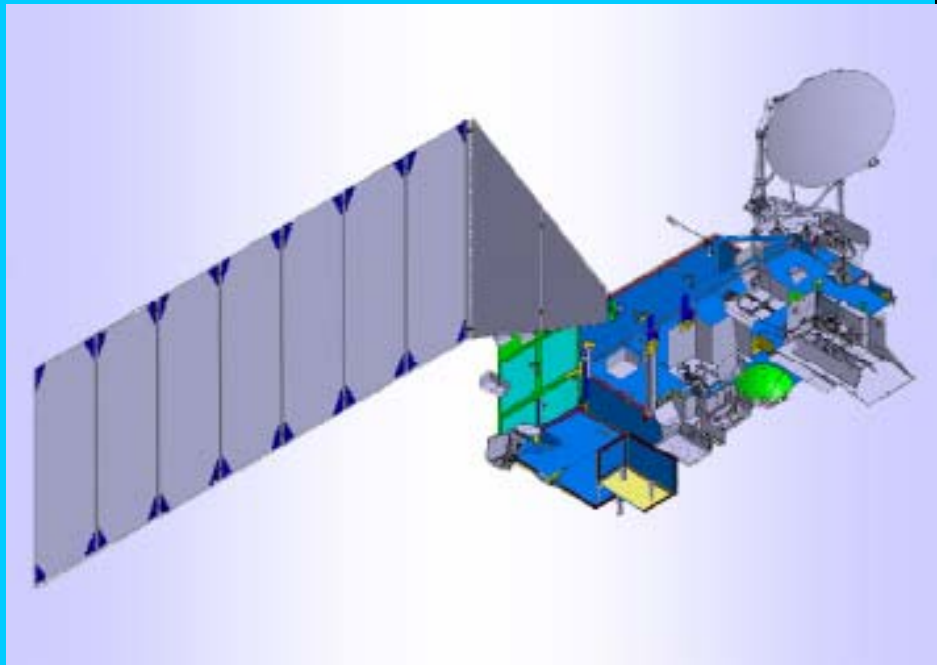
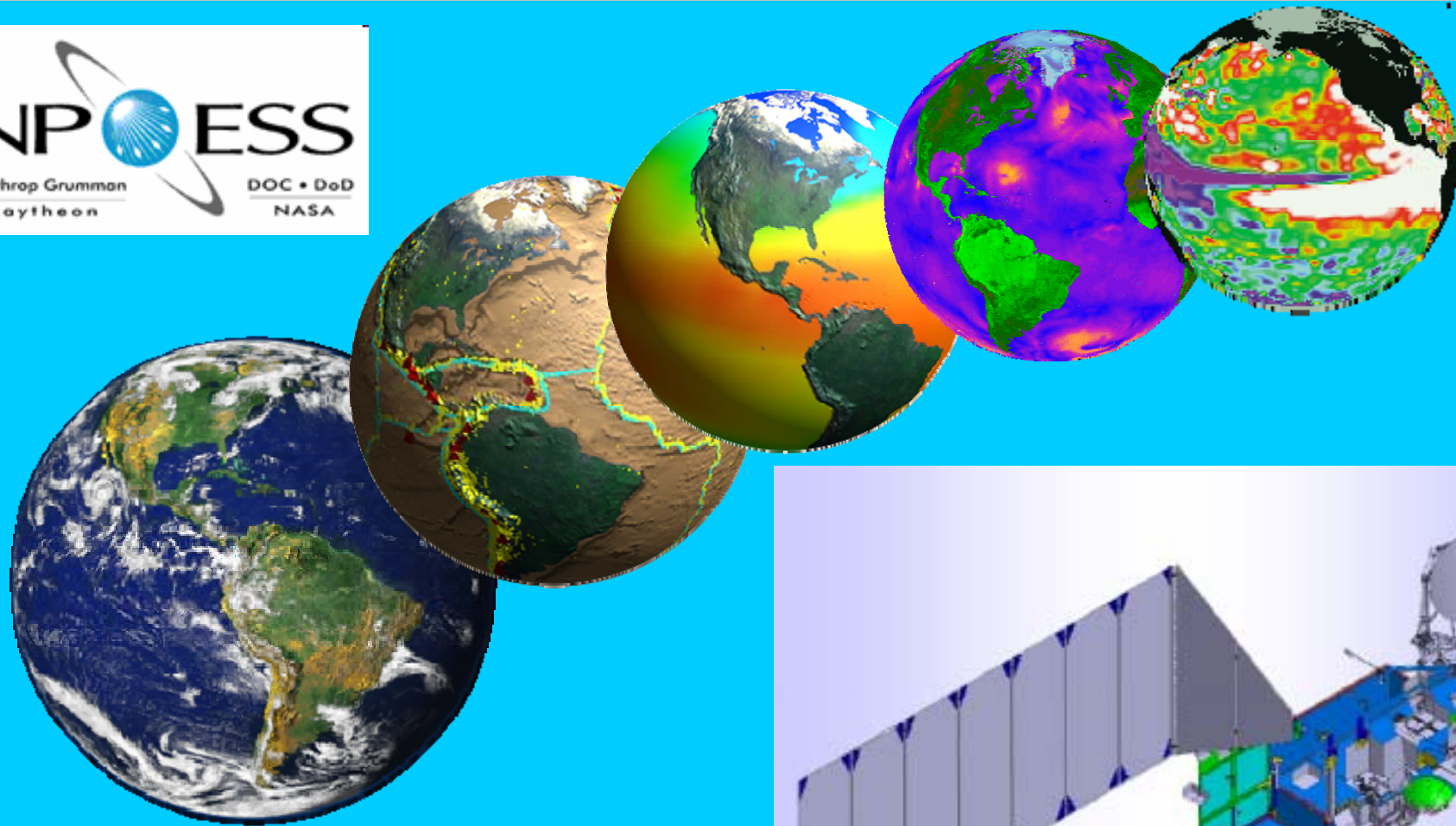
*NASA Goddard Space Flight Center  
& University of Maryland, Baltimore County*



# Next Generation Global Environmental Sensors

David Kunkee

The Aerospace Corporation



# Engineers Engage in the Development of GEOSS

IEEE becomes First Professional Engineering Organization  
to Join Group on Earth Observations – April 25, 2004



Your Session  
Co-Chair

Junichero Koizumi  
PM Japan

Earth Observation Summit II

April 25, 2004, Tokyo, JAPAN





# ***Thanks & Arigato***

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Japan Science and Technology Agency***