Monthly International Workshop on Science Exhibits

Purpose

-To create Science Exhibits Network in SL for Remote Education/ Self-Learning.

-To develop Visualization of Science Contents and Contexts.

-To utilize Multi-user online 3D environment for Remote Collaboration and Self-directed Discovery and Intuition Development.

-To encourage Science Exhibits Providers by communication with Educators and Students

Remark

- I don't know English well enough.

- Speakers use Voice Chat in English.

- Participants use Text Chat in English. Please cut-off your Voice chat to reduce noise.

- Please detach your AO and re-sizable dresses to reduce script time of this region.

- Please use SL Viewer v.3 or its compatible today.

Can you see Video in SL?

1) If you can't see Web Site in SL,

→ Please use SL Viewer ver.3 or its compatible
viewer for Shared Media (Web on an Prim).

2) If you can see not video but black rectangle,

 a) Select "FireFox" or "Google Chrome" as your
primary web browser.

 n) Re-install "Above Flash Player" and
"Shockwave Player" again.

3) If you cannot see video even if above action,

→ Shailey will tell you URL of the web site.
Please see your web browser out of SL.

Title: A 3D virtual geology field trip:
Opportunities and Limitations

Speaker: Dr. Shailey Minocha

Centre for Research in Computing,

The Open University, UK

(Shailey Garfield in SL)

Can you see this Video?

1) If you can't see Web Site on this board in SL,

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Title: A 3D virtual geology field trip: Opportunities and Limitations

Speaker: Dr. Shailey Minocha, Centre for Research in Computing, The Open University, UK
 (Shailey Garfield in SL)

Abstract:

As a part of The OpenScience Laboratory (<http://www.open.ac.uk/blogs/openscience/>), an initiative of The Open University, UK and The Wolfson Foundation, we are developing a 3D simulation of a Geology field trip based around Skiddaw in the Lake District of UK, using the Unity 3D software (<http://unity3d.com/>).

During the session and through (video) demonstration of the 3D field trip, I plan to address: the role that a 3D virtual geology field trip can play in terms of preparation and reflection before and after a real field trip; and whether and how a 3D simulation helps in gaining geological fieldwork skills and what are the limitations of 3D virtual geology field trips. I will invite participants to comment on their individual perceptions of the opportunities, challenges and limitations of 3D virtual geology field trips.

Hajime Nishimura (Yan Lauria in SL)

Executive Assistant for Director-General

Data Research Center for Marine-Earth Sciences (DrC)

Japan Agency for Marine-Earth Science and Technology (JAMSTEC)

Science Fiction collector of Marine, Earth, Ecosystem theme

Organizer of Underwater Vehicle Competition for students

Contents of Today

- To find SL physical laws

- Sharing of view point

- Science Exhibits Network by One prim Teleport Hub

To find SL physical laws

Seesaw experiments

- Density: High and Low
- Volume: Solid and Hollow
- Material: Metal and Wood

Drop experiments from Sky platform

- Physics Prime
- Floaty Flexy linked with small physics Prim
- Avatar
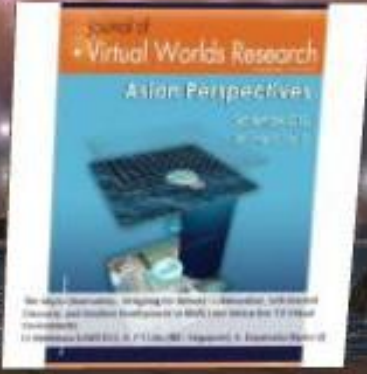
To find SL Solar system model

- What shape of SL Earth Surface?

  - Where is arctic region and equatorial region in SL?

  - Are there time zone difference in SL?

- What relation between Sun, Earth and Moon in SL?

  - Is SL Earth rotating?

  - Is SL Earth orbiting around Sun?

- Why 3 hours day and 1 hour night?

Why 3 hours day and 1 hour night?

- SL Earth is plane shape, fixed direction (Stars are fixed in the roof of heaven)

- Plan Earth is elliptically orbiting around Sun in only 4 hours Cycle!

- Sun, Plane Earth and Moon are in the same straight line.
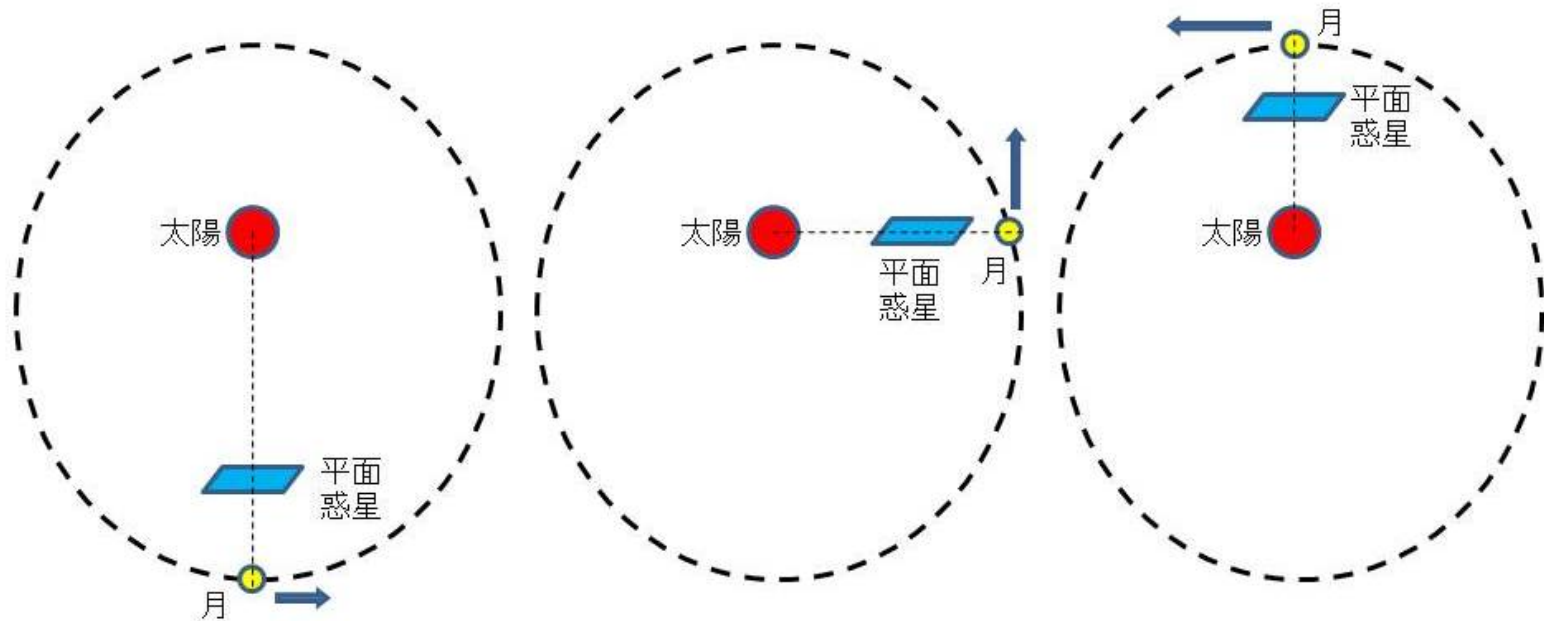
- When Plane Earth is at higher apsis, Earth is moving slow

  (3 hours day time)

- When Plane Earth is at lower apsis, Earth is moving fast

  (1 hour night time)

Ocean and Cloud Simulation on a Sphere

- GIF Animations on rotating spheres using "Shared Media (Web on a Prim)" function of Viewer 2.

- Cloud data is 49 MB and Ocean data is 15 MB

- Simulated by Earth Simulator of JAMSTEC and visualized by Daisuke Matsuoka (JAMSTEC/ESC).

Cloud Simulation (left)
- Global cloud resolving model "NICAM" (Nonhydrostatic ICosahedral Atmospheric Model).

- 5 days and 8 hours cloud motion with a interval of 160 minutes (48 scenes).

Ocean Simulation (right)
- Ocean general circulation model OFES (Ocean General Circulation Model for the Earth Simulator).

- 1 year ocean current motion at 100 m depth with a interval of 15 days (24 scenes).

One Prim Teleport Hub System

- System Development: Draceina Pinion
- Destinations and Categorize: Yan Lauria
- More than 260 places in 18 categories
- Easily update destinations and categories and remotely reflected to rezzed Hubs.

Resources and Contributors;
- Science related places (maintained by Troy McLuhan and Yan Lauria):
- Expedition Center (maintained by Cyrus Hush)
- Les Voyageurs InterSims (maintained by Darcy Mokeev) etc.

We hope;
- Rezzed at each destinations and public places.
- Feedback about destinations and categorization.

Next MIWoSE?

16 May (Thu), 7:00 PDT/ 15:00 BST/ 23:00 JST

Title: A Site Visit to the Field Studies Centre at Bowness

Speaker: Dr Kenneth Y T Lim, Office of Education Research, National Institute of Education, Singapore
Second Life: Veritas Raymaker

Location: the Field Studies Centre at Bowness

June: Center for Water Studies (Delia Lake, USA)

July: Exploratorium/ SploLand (Patio Plasma, Exploratorium in San Francisco, USA)

Bolinopsis mikado Moser

Thank you,

See you on next Workshop!