**Group 1**

**Andes - Pampa luxar**

 **Clue 1.1** Rock: Andesite

 **Clue 1.2** Lat/Long: [20º51'S; 68º12'W](http://maps.google.com/maps?t=k&q=-20.85,-68.2&ie=UTF8&ll=-20.844695,-68.228188&spn=0.177752,0.232086&z=12&iwloc=addr)Satellite: <http://www.ersdac.or.jp/ASTERimage/Image/057_Cerro.jpg>
 Topo: [http://es.wikipedia.org/wiki/Archivo:Bolivia\_Topography.png](http://es.wikipedia.org/wiki/Archivo%3ABolivia_Topography.png)
 Snowline: x meters

 **Clue 1.3** a. Corn
 b. Stardust aircraft debris
 c. Ice mummy

 **Unused**

<http://www.jpl.nasa.gov/spaceimages/details.php?id=PIA02654>
<http://volcano.oregonstate.edu/oldroot/CVZ/luxsar/index.html>
<http://volcano.oregonstate.edu/oldroot/CVZ/luxsar/iinfo.html>
[**http://maps.google.com/maps?hl=en&rls=com.microsoft:en-us:IE-SearchBox&bav=on.2,or.r\_gc.r\_pw.r\_qf.,cf.osb&biw=1368&bih=846&wrapid=tlif133116908884110&q=Pampa+Luxsar+topographic+map&um=1&ie=UTF-8&hq=&hnear=0x9154dee5d25baebf:0x59f01553b8b2afd7,Pampa+Luxsar&gl=us&t=p&ei=SAdYT\_WjGqfZiQLNgpCPCw&sa=X&oi=geocode\_result&ct=title&resnum=1&ved=0CB4Q8gEwAA**](http://maps.google.com/maps?hl=en&rls=com.microsoft:en-us:IE-SearchBox&bav=on.2,or.r_gc.r_pw.r_qf.,cf.osb&biw=1368&bih=846&wrapid=tlif133116908884110&q=Pampa+Luxsar+topographic+map&um=1&ie=UTF-8&hq=&hnear=0x9154dee5d25baebf:0x59f01553b8b2afd7,Pampa+Luxsar&gl=us&t=p&ei=SAdYT_WjGqfZiQLNgpCPCw&sa=X&oi=geocode_result&ct=title&resnum=1&ved=0CB4Q8gEwAA)

**Andes - Chaiten**

Lat/Long:[42°49′58″S 72°38′45″W](http://toolserver.org/~geohack/geohack.php?pagename=Chait%C3%A9n_(volcano)&params=42_49_58_S_72_38_45_W_region:CL-LL_type:mountain)

 **Satellite:**

[**http://en.wikipedia.org/wiki/Chait%C3%A9n\_(volcano)**](http://en.wikipedia.org/wiki/Chait%C3%A9n_%28volcano%29)

[**http://www.volcano.si.edu/volcanoes/region15/andes\_s/chaiten/3305cha1.jpg**](http://www.volcano.si.edu/volcanoes/region15/andes_s/chaiten/3305cha1.jpg)

**Stardust**

[**http://en.wikipedia.org/wiki/BSAA\_Star\_Dust\_accident**](http://en.wikipedia.org/wiki/BSAA_Star_Dust_accident)

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**Group 2**

**Mid-Atlantic Ridge - Lost City**

 Lat/Long:
Satellite: <http://www.ersdac.or.jp/ASTERimage/Image/057_Cerro.jpg>
 Topo: [http://es.wikipedia.org/wiki/Archivo:Bolivia\_Topography.png](http://es.wikipedia.org/wiki/Archivo%3ABolivia_Topography.png)

 Unused:

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**Group 3**

**Sunda Trench**

 Lat/Long:
Satellite:
 Topo:

 Unused:

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**Group 4**

**Hawaii**

 Lat/Long:
Satellite:
 Topo:

 Unused:

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**Group 5**

**Iceland**

 Lat/Long:
Satellite:
 Topo:

 Unused:

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**Group 6**

**Mid-Atlantic Ridge - Lost City**

 Lat/Long:
Satellite:
 Topo:

 Unused:

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**Group 7**

**Galapagos**

 Lat/Long:
Satellite:
 Topo:

 Unused:

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**Group 8**

**Cascadia**

 Lat/Long:
Satellite:
 Topo:

 Unused:

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**Group 9**

**Himalayas**

 Lat/Long:
Satellite:
 Topo:

 Unused:

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**Group 10**

**East African Rift**

 Lat/Long:
Satellite:
 Topo:

 Unused:

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**Group 11**

**Yellowstone**

 Lat/Long:
Satellite:
 Topo:

 Unused:

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**Group 12**

**Japan**

 Lat/Long:
Satellite:
 Topo:

 Unused:

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**Group 13**

**Montserrat**

 Lat/Long:
Satellite:
 Topo:

 Unused:

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**Group 14**

**Arkansas**

 Lat/Long:
Satellite:
 Topo:

 Unused:

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**Group 15**

**Gulf of California**

 Lat/Long:
Satellite:
 Topo:

 Unused:

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**Group 16**

**Clipperton Fracture Zone**

 Lat/Long:
Satellite:
 Topo:

 Unused:

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**Group 17**

**Juan de Fuca Ridge**

 Lat/Long:
Satellite:
 Topo:

 Unused:

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**Group 18**

**Vesuvius**

 Lat/Long:
Satellite:
 Topo:

 Unused:

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**Group 19**

**Arenal**

 Lat/Long:
Satellite:
 Topo:

 Unused:

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**Group 20**

**Sierra Nevada**

 Lat/Long:
Satellite:
 Topo:

 Unused:

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**Group 21**

**Santa Barbara Basin**

 Lat/Long:
Satellite:
 Topo:

 Unused:

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**Group 22**

**Mid-Atlantic Ridge - Lost City**

 Lat/Long:
Satellite:
 Topo:

 Unused:

**Mt. St. Helens**

Satellite photo

<http://earthobservatory.nasa.gov/NaturalHazards/view.php?id=14034>

<http://www.dnr.wa.gov/ResearchScience/Topics/GeologicHazardsMapping/Pages/volcanicash.aspx>

<http://serc.carleton.edu/NAGTWorkshops/careerdev/AcademicCareer2010/activities/40981.html>

Ash http://pubs.usgs.gov/fs/2005/3024/

<http://eoimages.gsfc.nasa.gov/images/imagerecords/0/606/mt_st_helens_lrg.jpg>

http://vulcan.wr.usgs.gov/LivingWith/Historical/LewisClark/Info/summary\_mount\_st\_helens.html

**Mid atlantic ridge**

Siphonophore

http://www.photolib.noaa.gov/htmls/expl2277.htm

http://www.photolib.noaa.gov/brs/nuind46.htm

http://www.nefsc.noaa.gov/press\_release/2009/SciSpot/SS0907/index.html

http://oceanexplorer.noaa.gov/edu/learning/player/lesson02/l2la1.htm

http://oceanexplorer.noaa.gov/explorations/05lostcity/background/overview/overview.html

http://oceanexplorer.noaa.gov/explorations/05lostcity/logs/photolog/photolog.html

**East Pacific Rise**

http://oceanexplorer.noaa.gov/explorations/05galapagos/logs/photolog/photolog.html

 **Himalayas**

**http://earthobservatory.nasa.gov/IOTD/view.php?id=2499**

**http://www.guardian.co.uk/environment/2011/oct/12/everest-waste-toilets**

**http://www.werc.usgs.gov/outreach.aspx?RecordID=57**

**Iceland**

**http://nasa-satellites.blogspot.com/2010/05/nasa-satellite-eyes-iceland-volcano.html**

**Galapagos**

**http://www.geology.wisc.edu/courses/g112/volcano.html**

**Hawaii**

**http://upload.wikimedia.org/wikipedia/commons/8/88/Bathymetry\_image\_of\_the\_Hawaiian\_archipelago.png**

Geography

Elevation and Latitude

Elevation

Snowline .....

Topo map vs. photo

Elevatio n and

Latitude Seasonal comparison

Marine

Depth

Fish - swim bladder or not

Topo

Artifact or animal

Goose

Rare shark