SAN FRANCISCO STATE UNIVERSITY
Department of Geography & Human Environmental Studies
Geog 312, Geography of Landforms

WorldWind Exercise: Structure, Karst, & Glacial Landforms

The instructions are the same as with the previous set:

- Your task in this exercise is to explore locations that include examples of landforms you've studied in class and in the readings. You'll use World Wind to see views of these features, and you should use the navigation tools to get different angles and visualize the topography – the *form* is obviously important to a *landform.* Your goal will be to complete a *Landform Scavenger Hunt* so you may want to skip ahead to see what you're looking for.

- For the following locations, use Ctrl-C to copy the code from this document – I'll also put this part on the web page as a word document – then in World Wind, paste it with Ctrl-V (or if this doesn't work, use Paste Coordinates in the Edit menu). Make sure you get the entire text string that starts with "worldwind://" and ends with the number after "&tilt=". Unless indicated otherwise, ***use a vertical exaggeration of 2.0*** – this is an especially important setting since it is part of what determines where the central cross-hair target is located. ***The feature we're looking for should be in the cross-hairs.*** Unless otherwise indicated, use NLT Landsat7 Visible as the image to display (turn off other images). Zoom out and rotate around to see the regional context; paste again if you get lost.

- Then, select one of the sites you visited, *and another you need to find,* and copy a screen shot to a word processor (we have MS Word in the lab), by using Alt-Print Screen (hold the Alt key down, then click the Print Screen button on your keyboard, near the upper right), then paste (Ctrl-V) into the document. Add text identifying the location, and then print each on a separate page. For each, interpret the landscape, labeling the relevant features. Identify at least four features on each printout. *Note that these features need not be from the list, but are just things you can see in the image that help you interpret them; for example, you might see moraines and crevasses (features in the list) but also an outwash stream (not one of the features in the list) flowing away from a glacier you've identified in the image. Really anything visible that contributes to the interpretation might be good to label.*

Sheep Mountain, Wyoming 44.63810, -108.18313 worldwind://goto/world=Earth&lat=44.63810&lon=-108.18313&alt=8796&dir=-48.1&tilt=50.6
Near Platdrift, Western Cape Province, South Africa -33.57158, 20.61576 worldwind://goto/world=Earth&lat=-33.57158&lon=20.61576&alt=50929&dir=103.9&tilt=36.5
Rest and Be Thankful, Jamaica (Geocover 1990 pseudocolor) 18.33274, -77.61144 worldwind://goto/world=Earth&lat=18.33274&lon=-77.61144&alt=11026&dir=-0.8&tilt=45.5
near Cave City, Kentucky (USGS 1m Digital Ortho) 37.13534, -85.89794 worldwind://goto/world=Earth&lat=37.13534&lon=-85.89794&alt=3583
Grassy Cove, Tennessee (USGS 1m Digital Ortho) 35.85342, -84.92961 worldwind://goto/world=Earth&lat=35.85342&lon=-84.92961&alt=10496&dir=-44.1&tilt=44.8
Observatorio de Arecibo, Puerto Rico (USGS 1m Digital Ortho) 18.34403, -66.75266 worldwind://goto/world=Earth&lat=18.34403&lon=-66.75266&alt=5126
Winter Haven, Florida (Pseudocolor GeoCover 2000, USGS 1m Digital Ortho) 27.97936, -81.70436 worldwind://goto/world=Earth&lat=27.97936&lon=-81.70436&alt=106749 (zoom in for USGS 1m)
Yangshuo, China 24.76746, 110.47375 worldwind://goto/world=Earth&lat=24.76746&lon=110.47375&alt=3671&dir=-133.5&tilt=66.7
Eldridge, Alaska: 63.06966, -150.25563 worldwind://goto/world=Earth&lat=63.06966&lon=-150.25563&alt=5860&dir=-69.2&tilt=57.7
East Side Sierra, near Mono Lake: 37.89456, -119.141388

worldwind://goto/world=Earth&lat=37.84202&lon=-119.22718&alt=12462&dir=-123.3&tilt=54.9
Yosemite, Inspiration Point View (USGS 1m Digital Ortho): 37.716995, -119.646686 worldwind://goto/world=Earth&lat=37.72438&lon=-119.59052&alt=6108&dir=80.6&tilt=58.9
Greenland, 62.5°N 50°W: 62.52924, -50.00373 (alt: 100 km) worldwind://goto/world=Earth&lat=62.52924&lon=-50.00373&alt=118736&dir=78.2&tilt=27.0
South Island, New Zealand, SW coast (use GeoCover 2000 imagery): -45.13854, 167.06882 (alt: 30 km) worldwind://goto/world=Earth&lat=-45.13854&lon=167.06882&alt=13356&dir=-32.1&tilt=43.3
Columbia, British Columbia/Alberta border: 52.153214, -117.309496 worldwind://goto/world=Earth&lat=52.12887&lon=-117.36150&alt=29523&dir=-124.7&tilt=43.9
Ruth Glacier, AK 62.8957, -150.638 worldwind://goto/world=Earth&lat=62.89570&lon=-150.63800&alt=939961
Arctomys Valley, Alberta: 51.955420, -116.99 (alt 20 km) worldwind://goto/world=Earth&lat=51.95104&lon=-117.01518&alt=8859&dir=-124.3&tilt=63.0
Caldron Lake, Alberta: 51.69697, -116.56286 (alt 20 km) worldwind://goto/world=Earth&lat=51.68279&lon=-116.61992&alt=15911&dir=-112.2&tilt=39.9
Chattooga River, GA/SC 34.71447 -83.35556 worldwind://goto/world=Earth&lat=34.71447&lon=-83.35556&alt=73524

plunging anticline Evidence:	Location: _____
homoclinal ridge Evidence:	Location: _____
elbow of capture Evidence:	Location: _____
cockpit karst Evidence:	Location: _____
tower or mogote karst Evidence:	Location: _____
polje Evidence:	Location: _____
doline karst Evidence:	Location: _____

fjord Evidence:	Location: _____
medial moraine Evidence:	Location: _____
crevasse Evidence:	Location: _____
hanging valley Evidence:	Location: _____
outlet valley glacier Evidence:	Location: _____
lateral moraines from a past glacier Evidence:	Location: _____
highland ice cap Evidence:	Location: _____
cirque and tarn Evidence:	Location: _____
glacial trough Evidence:	Location: _____