

WorldWind Exercise: Coastal & Wind 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.

Wind direction for dunes is indicated in italics. Remember that a *W* wind blows *from* the west.

- 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 evidence of longshore drift and a beach extended toward a tombolo, or you might note wave patterns or breaking waves that help to interpret why the landform has occurred there. Really anything visible that contributes to the interpretation might be good to label.*

Hibbard, NSW, Australia	-31.81747, 152.74750
worldwind://goto/world=Earth&lat=-31.81747&lon=152.74750&alt=80379	
Keti Bandar, Pakistan (Pseudo, GeoCover 2000)	24.03856, 67.49957
worldwind://goto/world=Earth&lat=24.03856&lon=67.49957&alt=139131	
Cape Hatteras/Pamlico Sound, North Carolina (Pseudo, GeoCover 2000)	35.14896, -76.23182
worldwind://goto/world=Earth&lat=35.14896&lon=-76.23182&alt=183253	
Galveston, Texas (Pseudo, GeoCover 2000)	29.23640, -94.90524
worldwind://goto/world=Earth&lat=29.23640&lon=-94.90524&alt=141376	
Ocean City, New Jersey (USGS 1m Ortho)	39.28646, -74.55267
worldwind://goto/world=Earth&lat=39.28646&lon=-74.55267&alt=4854&dir=-25.3	
Santa Cruz, CA	36.955781, -122.101436
worldwind://goto/world=Earth&lat=36.95578&lon=-122.10143&alt=1009644	
off Cape Melville, Queensland, Australia	-13.96881, 144.65845
worldwind://goto/world=Earth&lat=-13.96881&lon=144.65845&alt=225000	
Banda Sea, Indonesia	-5.74940, 124.19011

worldwind://goto/world=Earth&lat=-5.74940&lon=124.19011&alt=83035	
small island near Celebes, Indonesia worldwind://goto/world=Earth&lat=-5.60010&lon=122.51088&alt=46534	-5.60010, 122.51088
near Bali, Indonesia worldwind://goto/world=Earth&lat=-8.34835&lon=116.05144&alt=24522&dir=99.2&tilt=58.7	-8.34835, 116.05144
Long Point, Cape Cod, Massachusetts, USA worldwind://goto/world=Earth&lat=42.03116&lon=-70.16938&alt=14920	42.03116, 70.16938
Gwadar, Pakistan worldwind://goto/world=Earth&lat=25.10269&lon=62.33516&alt=67740	25.10269, 62.33516
Western Algeria worldwind://goto/world=Earth&lat=29.76262&lon=-3.17197&alt=32342	29.76262, -3.17197
Southern Arabian Peninsula <i>NE</i> worldwind://goto/world=Earth&lat=18.45429&lon=48.56359&alt=364673	18.45429, 48.56359
Grand Erg Oriental worldwind://goto/world=Earth&lat=30.42851&lon=9.50686&alt=168515	30.42851, 9.50686
Callender, California (USGS 1m Ortho) <i>W</i> worldwind://goto/world=Earth&lat=35.05695&lon=-120.62553&alt=8441	35.05695, -120.62553
White Sands, NM <i>W</i> worldwind://goto/world=Earth&lat=32.76637&lon=-106.20153&alt=33303	32.76637 -106.20153
Thar Desert, India (Pseudo, GeoCover 1990) <i>SW</i> worldwind://goto/world=Earth&lat=25.99292&lon=70.41863&alt=24370	25.99292, 70.41863
Now go NW to Thar Desert, Pakistan . Make sure that Planet Inertia (View menu) is turned on to go slow, then paste: worldwind://goto/world=Earth&lat=26.31721&lon=69.72236&alt=24370	26.31721, 69.72236

Tombolo Evidence:	Location: _____
Groynes Evidence:	Location: _____
Barrier Reef Evidence:	Location: _____
Fringing Reef Evidence:	Location: _____
Delta Evidence:	Location: _____
Barrier Island Evidence:	Location: _____
Recurved Spit Evidence:	Location: _____

Zetaform Coast Evidence:	Location: _____
Coastal Terrace Evidence:	Location: _____
Atoll Evidence:	Location: _____
Longitudinal Dune Evidence:	Location: _____
Barchan Dune Evidence:	Location: _____
Parabolic Dune Evidence:	Location: _____
Transverse Dune Evidence:	Location: _____
Star Dune Evidence:	Location: _____