

Distance to the Away Game Using Google Earth

Distance is a very important concept in Geography. Also distance can be exact or relative. To understand how close or how far things, places or people are from each other is necessary. Before we think about how far India is from Japan lets figure out how far Sports teams have to go when there game is away. The location of the game can influence how the players play. There are many influential factors like climate, altitude, culture and others. Using Google Earth, lets see where the players are going.

Objectives

The students will be able to find distance from place to place on earth.
The students will be able to find latitude and longitude of any place.

Materials

Computer
Google Earth Free Download
Major news paper

Procedure

Scan through the sports section of any major news paper. Pick a sport. Then highlight the stadiums that are mentioned and note there location. Example “FSU wins at Doak Campbell stadium in Tallahassee”. Try to find at least 4 stadium locations, if you have to mix football with baseball that is ok for this exercise. Through this activity we will measure the distance between your school and sports stadiums. Now we are ready to go to the Google Earth.

- 1.) Start Google Earth on your computer.
- 2.) Finding the first stadium:
 - a. **Zoom in** on the state that the stadium is in.
 - b. **Zoom in** on the city
 - c. **Zoom in** a little closer so you can make out shapes of buildings.
 - d. **Search** for your stadium. Look for baseball diamonds and the rectangle shape of football fields...ect. Major stadiums will have a lot of infrastructure around them where as most high school fields will not. Your

stadium may have a roof on it such as the Astro-Dome; this will look like a large white circle.

- e. Once you have found it now we can add a place mark.

3.) Add place mark.

- a. On the top right of your screen you will see a yellow thumbtack with a plus sign next to it. **Click “Add Place mark”**
- b. A screen will appear and a yellow place mark will now be near the stadium. **Click** on the place mark and **drag** it until it is over the field.
- c. Now **name** the place mark its rightful name; example: “Doak Campbell”. Notice that the screen gives you the exact latitude and longitude of the stadium.

4.) Repeat steps 2 and 3 for the other stadiums.

Now let’s assume that you are the home team and your school is the home field

5.) Find and place mark your school:

- a. You can use the method in step 2 or type in your schools address into the search box located on the top of the side bar.
- b. **Place mark** your school and **name** it.

6.) Find the latitude and longitude of each place mark:

- a. **Right click** on the place mark of your school. A window will pop up. At the bottom of the window **click properties**. This will show you the latitude and longitude of the place mark. **Record** on the sheet below.

Repeat for all the place marks.

We can use Google Earth to measure distances from place to place. This step will measure the distances from your school to the stadiums that you place marked.

7.) Find the distance from your school to the stadium.

- a. **Zoom in** to your school.

- b. On the top of your screen, 4 icons to the left of the place mark icon there will be a ruler icon. **Click Ruler**. A ruler window will pop up. Chose the “**Path**” tab and be sure that the “**Mouse Navigation**” box is checked.
- c. Now there will be a square cross hairs that is your cursor. Place the cross hairs over your school and **click once**. A small red dot should appear.
- d. In the top right hand corner there are navigation tools. By **clicking on the minus sign** at the bottom of the vertical bar, this will zoom you out. You can **click on the center star** and use it as a joystick to move you around. **Find** the first place marked stadium. **Zoom in** using the navigation tools. Then, place the square crosshairs over the stadium and **click**. A line should now be drawn from your school to the stadium. If you have messed up, simply click clear on the ruler window and start step (d.) again.
- e. In the ruler window the distance from your school to the stadium will now be shown. **Record** the distance. Note: the units of measurement can be changed by clicking the arrow drop down box next to the units.
- f. Repeat steps a-e

You can now see how far sports teams may have to travel to an away game.

8.) Record the stadium name, the latitude and longitude, and the distance from your school to the stadium.

School Name _____

Latitude _____ Longitude _____

Stadium 1 Name _____

Distance to School _____

Latitude _____ Longitude _____

Stadium 2 Name _____

Distance to School _____

Latitude _____ Longitude _____

Stadium 3 Name _____

Distance to School _____

Latitude _____ Longitude _____

Stadium 4 Name _____

Distance to School _____

Latitude _____ Longitude _____