

all groups: Schuylkill Haven

Group 1 Fort Lauderdale Frankfurt Germany Perth	Group 2 Fairbanks, Alaska Dubai Tierra del Fuego, Argentina
Group 3 Boston Cape Town South Africa Osaka	Group 4 Ann Arbor, Mi Sri Lanka Belem, Brazil

For your group, for each location

Determine the location's Latitude and Longitude.

Use

[http://astro.unl.edu/naap/motion1/animations/seasons\\_ecliptic.html](http://astro.unl.edu/naap/motion1/animations/seasons_ecliptic.html)

to determine the noon sun's altitude on the Winter Solstice, Spring Equinox, Summer Solstice and Autumnal Equinox. How might this affect the orientation of Solar Panels?

use

<http://astro.unl.edu/classaction/animations/coordsmotion/sunmotions.html>

to estimate the number of daylight hours on the Winter Solstice, Spring Equinox, Summer Solstice and Autumnal Equinox. What impact might this have on the use of a solar array?