**HYSPLIT Trajectory Exercise - Smoke into Western WA/OR, August 22-23, 2015**

1. Open your browser and navigate to <http://ready.arl.noaa.gov/HYSPLIT.php>
2. Select “Run HYSPLIT Trajectory Model”
3. Select “Compute archive trajectories”
4. Select “Normal” for Type of Trajectory, click Next
5. Scroll to “HRRR 3km (sigma, U.S., 06/2015 - present)”, enter lat/lon

Latitude 46.1 N  
Longitude 121.4 W

Click Next

1. Scroll to “hysplit.20150822.12z.hrra”, click next
2. Set the time for year = 2015, month = 8, day = 22, hour = 17 (1000 am PDT)
3. Set Zoom factor = 30
4. Enter heights: 50, 500, 2000
5. (Optional) Under Display options, select “Google Earth (kmz)”
6. Select the “Request Trajectory” button
7. Save your output

Re-do steps 3-9 (tip: use the back button on your browser instead of “return to main menu”)  
- Start a new trajectory every 3 hours  
- Maximum number of trajectories = 9  
- Level 1 height = 50  
- Select the “Request Trajectory” button  
- Save your output

Re-do steps 3-9 (tip: use the back button on your browser instead of “return to main menu”)  
- Level 1 height = 2000  
- Select the “Request Trajectory” button  
- Save your output

**Question**: What are the differences between trajectories that start at 50 m, 500 m, 2000 m?

**Question**: Do trajectories released near the ground always stay low? Do trajectories released higher in the atmosphere always stay aloft?

**Question**: Do you think smoke at ground level and smoke aloft always are carried in the same direction?

**Question**: Could towns on the west side of the Cascades experience your smoke?