Locating Global Event Data

The following are the dates of 5 global events recorded by an AS-1 station WLIN in West Lafayette, Indiana. Your assignment is to use AmaSeis to view these events and determine the time of the P wave arrival at station WLIN. Additionally, by identifying P and S arrivals, you can use the travel time curve to determine the distance between the event and the station.

Instructions:

- Launch AmaSeis
- AmaSeis will start, and the helicorder screen will appear. (If there is not an instrument connected to the computer AmaSeis will display a warning message- Click OK to proceed.)
- In the File Menu choose Settings > Go to Date-Time
- Enter the Year, Month and Day of the first event in the list. Set the Hour to 23 to view an entire day of data in the helicorder screen.
- Click OK. The data for the selected day are now displayed. Record your observations about the event.
- Highlight the earthquake and select the 'Extract Earthquake' button
- Record the time of the first (P) arrival
- Select the 'Pick Arrivals' button and mark your picks for the P and S wave arrivals
- Select the 'Travel Time Curves' button and drag your seismogram around to match your picks with the travel time curve, once aligned, the distance in degrees is reported along the Y axis
- Do your picks and your alignment make sense with your initial observations of the earthquake?
- After completing the above steps for all the earthquakes, we will search NEIC/IRIS for the earthquake location and magnitude.

Date	Observations	First Arrival Hour / Minute	Distance (deg)	Region / Magnitude
02-21-2008 (2nd event)				
07-15-2008				
05-23-2008				
07-05-2008				
12-06-2008 (1st event)				

