**Mystery Epicenter**  
**Group # 0 - Example**

1. Mark the first arrival of the P-wave on each seismogram.
2. Mark the first arrival of the S-wave on each seismogram.
3. Write down your data in the box to the right of each seismogram.
4. Get the “distance from the epicenter” from the graph you made earlier using the “S-P lag time” that you recorded at your seismic station.

**Station A**

<table>
<thead>
<tr>
<th>Arrival time P-wave</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrival time S-wave</td>
<td></td>
</tr>
<tr>
<td>S-P lag time (s)</td>
<td></td>
</tr>
<tr>
<td>Distance from epicenter (km) (kilometers)</td>
<td></td>
</tr>
</tbody>
</table>

**Station B**

<table>
<thead>
<tr>
<th>Arrival time P-wave</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrival time S-wave</td>
<td></td>
</tr>
<tr>
<td>S-P lag time (s)</td>
<td></td>
</tr>
<tr>
<td>Distance from epicenter (km) (kilometers)</td>
<td></td>
</tr>
</tbody>
</table>

**Station C**

<table>
<thead>
<tr>
<th>Arrival time P-wave</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrival time S-wave</td>
<td></td>
</tr>
<tr>
<td>S-P lag time (s)</td>
<td></td>
</tr>
<tr>
<td>Distance from epicenter (km) (kilometers)</td>
<td></td>
</tr>
</tbody>
</table>

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http://earthguide.ucsd.edu  
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Updated: July 30, 2009
Mystery Epicenter
Group #1

1. Mark the first arrival of the P-wave on each seismogram.
2. Mark the first arrival of the S-wave on each seismogram.
3. Write down your data in the box to the right of each seismogram.
4. Get the “distance from the epicenter” from the graph you made earlier using the “S-P lag time” that you recorded at your seismic station.

Station A
Arrival time
P-wave ____________

Arrival time
S-wave ____________

S-P lag time (s) ____________

Distance from epicenter (km) (kilometers) ____________

Station B
Arrival time
P-wave ____________

Arrival time
S-wave ____________

S-P lag time (s) ____________

Distance from epicenter (km) (kilometers) ____________

Station C
Arrival time
P-wave ____________

Arrival time
S-wave ____________

S-P lag time (s) ____________

Distance from epicenter (km) (kilometers) ____________

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Mystery Epicenter
Group #2

1. Mark the first arrival of the P-wave on each seismogram.
2. Mark the first arrival of the S-wave on each seismogram.
3. Write down your data in the box to the right of each seismogram.
4. Get the “distance from the epicenter” from the graph you made earlier using the “S-P lag time” that you recorded at your seismic station.

Name (s): ________________________________

Date: ________________________________

Station A
Arrival time
P-wave

Arrival time
S-wave

S-P lag time (s)

Distance from epicenter (km)
(kilometers)

Station B
Arrival time
P-wave

Arrival time
S-wave

S-P lag time (s)

Distance from epicenter (km)
(kilometers)

Station C
Arrival time
P-wave

Arrival time
S-wave

S-P lag time (s)

Distance from epicenter (km)
(kilometers)

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Mystery Epicenter
Group #3

1. Mark the first arrival of the P-wave on each seismogram.
2. Mark the first arrival of the S-wave on each seismogram.
3. Write down your data in the box to the right of each seismogram.
4. Get the "distance from the epicenter" from the graph you made earlier using the "S-P lag time" that you recorded at your seismic station.

Station A
Arrival time
P-wave
Arrival time
S-wave
S-P lag time (s)
Distance from epicenter (km) (kilometers)

Station B
Arrival time
P-wave
Arrival time
S-wave
S-P lag time (s)
Distance from epicenter (km) (kilometers)

Station C
Arrival time
P-wave
Arrival time
S-wave
S-P lag time (s)
Distance from epicenter (km) (kilometers)

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Group #4

1. Mark the first arrival of the P-wave on each seismogram.
2. Mark the first arrival of the S-wave on each seismogram.
3. Write down your data in the box to the right of each seismogram.
4. Get the “distance from the epicenter” from the graph you made earlier using the “S-P lag time” that you recorded at your seismic station.

Name(s): ______________________________

Date: ______________________________

Station A
Arrival time
P-wave

Arrival time
S-wave

S-P
lag time (s)

Distance from
epicenter (km)
(kilometers)

Station B
Arrival time
P-wave

Arrival time
S-wave

S-P
lag time (s)

Distance from
epicenter (km)
(kilometers)

Station C
Arrival time
P-wave

Arrival time
S-wave

S-P
lag time (s)

Distance from
epicenter (km)
(kilometers)

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Mystery Epicenter
Group #5

1. Mark the first arrival of the P-wave on each seismogram.
2. Mark the first arrival of the S-wave on each seismogram.
3. Write down your data in the box to the right of each seismogram.
4. Get the “distance from the epicenter” from the graph you made earlier using the “S-P lag time” that you recorded at your seismic station.

Name(s): ____________________________

Date: ________________________________

Station A
Arrival time
P-wave

Arrival time
S-wave

S-P lag time (s)

Distance from epicenter (km) (kilometers)

Station B
Arrival time
P-wave

Arrival time
S-wave

S-P lag time (s)

Distance from epicenter (km) (kilometers)

Station C
Arrival time
P-wave

Arrival time
S-wave

S-P lag time (s)

Distance from epicenter (km) (kilometers)

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Mystery Epicenter
Group #6

1. Mark the first arrival of the P-wave on each seismogram.
2. Mark the first arrival of the S-wave on each seismogram.
3. Write down your data in the box to the right of each seismogram.
4. Get the “distance from the epicenter” from the graph you made earlier using the “S-P lag time” that you recorded at your seismic station.

Name (s): ________________________________
Date: ________________________________

Station A
Arrival time
P-wave

Arrival time
S-wave

S-P
lag time (s)

Distance from
epicenter (km)
(kilometers)

Station B
Arrival time
P-wave

Arrival time
S-wave

S-P
lag time (s)

Distance from
epicenter (km)
(kilometers)

Station C
Arrival time
P-wave

Arrival time
S-wave

S-P
lag time (s)

Distance from
epicenter (km)
(kilometers)

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Mystery Epicenter
Group #7

1. Mark the first arrival of the P-wave on each seismogram.
2. Mark the first arrival of the S-wave on each seismogram.
3. Write down your data in the box to the right of each seismogram.
4. Get the “distance from the epicenter” from the graph you made earlier using the “S-P lag time” that you recorded at your seismic station.

Name(s): __________________________
__________________________________
__________________________________

Date: _____________________________

Station A
Arrival time
P-wave
Arrival time
S-wave
S-P lag time (s)
Distance from epicenter (km) (kilometers)

Station B
Arrival time
P-wave
Arrival time
S-wave
S-P lag time (s)
Distance from epicenter (km) (kilometers)

Station C
Arrival time
P-wave
Arrival time
S-wave
S-P lag time (s)
Distance from epicenter (km) (kilometers)

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Mystery Epicenter
Group #8

1. Mark the first arrival of the P-wave on each seismogram.
2. Mark the first arrival of the S-wave on each seismogram.
3. Write down your data in the box to the right of each seismogram.
4. Get the "distance from the epicenter" from the graph you made earlier using the "S-P lag time" that you recorded at your seismic station.

1. Mark the first arrival of the P-wave on each seismogram.
2. Mark the first arrival of the S-wave on each seismogram.
3. Write down your data in the box to the right of each seismogram.
4. Get the "distance from the epicenter" from the graph you made earlier using the "S-P lag time" that you recorded at your seismic station.

Station A
Arrival time P-wave
Arrival time S-wave
S-P lag time (s)
Distance from epicenter (km) (kilometers)

Station B
Arrival time P-wave
Arrival time S-wave
S-P lag time (s)
Distance from epicenter (km) (kilometers)

Station C
Arrival time P-wave
Arrival time S-wave
S-P lag time (s)
Distance from epicenter (km) (kilometers)

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Mystery Epicenter
Group #9

1. Mark the first arrival of the P-wave on each seismogram.
2. Mark the first arrival of the S-wave on each seismogram.
3. Write down your data in the box to the right of each seismogram.
4. Get the “distance from the epicenter” from the graph you made earlier using the “S-P lag time” that you recorded at your seismic station.

Name(s): ____________________________

______________________________

______________________________

Date: ____________________________

Station A
Arrival time
P-wave
Arrival time
S-wave
S-P lag time (s)
Distance from epicenter (km) (kilometers)

Station B
Arrival time
P-wave
Arrival time
S-wave
S-P lag time (s)
Distance from epicenter (km) (kilometers)

Station C
Arrival time
P-wave
Arrival time
S-wave
S-P lag time (s)
Distance from epicenter (km) (kilometers)

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Mystery Epicenter
Group #10

1. Mark the first arrival of the P-wave on each seismogram.
2. Mark the first arrival of the S-wave on each seismogram.
3. Write down your data in the box to the right of each seismogram.
4. Get the “distance from the epicenter” from the graph you made earlier using the “S-P lag time” that you recorded at your seismic station.

Seismogram - Group #10 - Station A

Seismogram - Group #10 - Station B

Seismogram - Group #10 - Station C

Station A
Arrival time
P-wave
Arrival time
S-wave
S-P lag time (s)
Distance from epicenter (km) (kilometers)

Station B
Arrival time
P-wave
Arrival time
S-wave
S-P lag time (s)
Distance from epicenter (km) (kilometers)

Station C
Arrival time
P-wave
Arrival time
S-wave
S-P lag time (s)
Distance from epicenter (km) (kilometers)

Name(s): __________________________

Date: __________________________

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Mystery Epicenter
Group #11

1. Mark the first arrival of the P-wave on each seismogram.
2. Mark the first arrival of the S-wave on each seismogram.
3. Write down your data in the box to the right of each seismogram.
4. Get the “distance from the epicenter” from the graph you made earlier using the “S-P lag time” that you recorded at your seismic station.

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<th>Name (s): ______________________________</th>
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<td>Date: _________________________________</td>
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<th>Station B</th>
<th>Arrival time P-wave</th>
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<th>Distance from epicenter (km)</th>
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<table>
<thead>
<tr>
<th>Station C</th>
<th>Arrival time P-wave</th>
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</thead>
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</tbody>
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<table>
<thead>
<tr>
<th>Distance from epicenter (km)</th>
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<tbody>
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</tbody>
</table>

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Updated: January 31, 2011.
Mystery Epicenter
Group #12

1. Mark the first arrival of the P-wave on each seismogram.
2. Mark the first arrival of the S-wave on each seismogram.
3. Write down your data in the box to the right of each seismogram.
4. Get the “distance from the epicenter” from the graph you made earlier using the “S-P lag time” that you recorded at your seismic station.

Name(s): __________________________

________________ ______________

Date: ____________________________

Station A
Arrival time
P-wave
Arrival time
S-wave
S-P lag time (s)
Distance from epicenter (km) (kilometers)

Station B
Arrival time
P-wave
Arrival time
S-wave
S-P lag time (s)
Distance from epicenter (km) (kilometers)

Station C
Arrival time
P-wave
Arrival time
S-wave
S-P lag time (s)
Distance from epicenter (km) (kilometers)

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**Mystery Epicenter**

**Group #13**

1. Mark the first arrival of the P-wave on each seismogram.
2. Mark the first arrival of the S-wave on each seismogram.
3. Write down your data in the box to the right of each seismogram.
4. Get the "distance from the epicenter" from the graph you made earlier using the "S-P lag time" that you recorded at your seismic station.

---

**Station A**

- Arrival time P-wave
- Arrival time S-wave
- S-P lag time (s)
- Distance from epicenter (km) (kilometers)

---

**Station B**

- Arrival time P-wave
- Arrival time S-wave
- S-P lag time (s)
- Distance from epicenter (km) (kilometers)

---

**Station C**

- Arrival time P-wave
- Arrival time S-wave
- S-P lag time (s)
- Distance from epicenter (km) (kilometers)

---

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Mystery Epicenter
Group #14

1. Mark the first arrival of the P-wave on each seismogram.
2. Mark the first arrival of the S-wave on each seismogram.
3. Write down your data in the box to the right of each seismogram.
4. Get the “distance from the epicenter” from the graph you made earlier using the “S-P lag time” that you recorded at your seismic station.

Name(s): ____________________________

____________________________________

Date: _______________________________

Station A
Arrival time P-wave __________
Arrival time S-wave __________
S-P lag time (s) __________
Distance from epicenter (km) (kilometers) __________

Station B
Arrival time P-wave __________
Arrival time S-wave __________
S-P lag time (s) __________
Distance from epicenter (km) (kilometers) __________

Station C
Arrival time P-wave __________
Arrival time S-wave __________
S-P lag time (s) __________
Distance from epicenter (km) (kilometers) __________

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