

**Demystifying 'Science' Graphics**  
**GEOTRACES**  
 Margie Turrin, LDEO

**What can you learn from this graphic?**

**INITIAL IMPACT:** What was your immediate response to the graph? \_\_\_\_\_

**ANNOTATE:** Start by writing your questions and observations directly on the graphic. Then use this chart for further analysis:

<p><b>IDENTIFY:</b></p> <ul style="list-style-type: none"> <li>• <b>Title</b> – what is being measured or shown?</li> <li>• <b>Subtitle:</b> If there is a sub title what is it?</li> <li>• <b>Caption:</b> If there is a caption or text what does it say summarized in your own words.</li> <li>• <b>Key or Scale</b> - If there a map key or scalebar what is the range?</li> <li>• <b>Axes</b> – If there are axes on the image identify what X and Y represent</li> <li>• <b>Time Period</b> – What time period is covered?</li> </ul>	<p><i>Title: A radioactive Nightmare (General Spread of Radioactivity - Dispersed)</i></p> <p><i>Subtitle: Dispersion of Radioactivity</i></p> <p><i>Caption: Long arm of radioactive pollution</i></p> <p><i>No key or scale</i></p> <p><i>No axes</i></p> <p><i>No timeperiod provided</i></p>
<p><b>CONSIDER:</b></p> <ul style="list-style-type: none"> <li>• <b>Describe</b> what you are seeing – what is the information?</li> <li>• <b>Notice</b> - Find something small but interesting to jot down</li> <li>• <b>What is the 'action'?</b> What is happening to the item being looked at over the period shown?</li> <li>• Describe the <b>shape</b> of the 'action'?</li> <li>• <b>The Cause</b> - What do you think is causing the action? Pose a hypothesis.</li> </ul>	<p><i>Describe: Spread of radioactivity in the Pacific</i></p> <p><i>Notice: How it is being spread and the locations of stations</i></p> <p><i>Action: The spreading</i></p> <p><i>Shape: Fan shaped</i></p> <p><i>Cause: Current, Wind, Effluent- The current pattern in pacific is questionable</i></p>
<p><b>Discuss:</b></p> <ul style="list-style-type: none"> <li>• <b>Unfamiliar?</b> Describe anything that is unfamiliar or that you can't identify</li> <li>• <b>Unexpected?</b> What do you notice that you didn't expect</li> <li>• <b>Can't Explain?</b> What can't you explain? What is confusing to you?</li> </ul>	<p><i>Unexpected: The tapering off</i></p> <p><i>Can't Explain - type of spreading</i></p>

## Demystifying 'Science' Graphics

### GEOTRACES

Margie Turrin, LDEO

<p><b>ANALYZE:</b></p> <ul style="list-style-type: none"><li>• <b>Goal</b> – What do you think is the main goal of the graphic? What information do you think it was intended to deliver?</li><li>• <b>Understand</b> - Did the graphic help you understand the topic?</li><li>• <b>Creator</b> -Who do you think made the graphic? Did they have a specific viewpoint?</li><li>• <b>Audience?</b> Who is the intended audience? scientists, general public?</li><li>• <b>Important?</b> What do you think is important in this graphic?</li></ul>	<p><i>Goal - To alarm - possibly inform?</i></p> <p><i>The graphic did not help with understanding the topic</i></p> <p><i>Audience - General Public</i></p> <p><i>Graph is very dramatic</i></p>
<p><b>CONSIDER:</b></p> <ul style="list-style-type: none"><li>• <b>Create</b> - If you were asked to make this graphic how would you change it?</li><li>• <b>Expand</b> - If this information were expanded by one more time period (hour, year etc.) what would it look like?</li><li>• <b>OR</b> if this piece were to be expanded by range what would it look like?</li></ul>	<p><i>Change it by including scale, keys, better labels, start &amp; end points of exposure, time frame</i></p>
<p><b>MAKING YOUR OWN GRAPHIC:</b></p> <ul style="list-style-type: none"><li>• <b>Goal</b> – What is the main goal of the graphic?</li><li>• <b>Take Home Message</b>- What do I most want people to learn?</li><li>• <b>Consider the audience</b> – what do they know?</li><li>• <b>Scaffolding?</b> How much scaffolding or additional information will they need</li></ul>	