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| --- | --- | --- | --- |
| **Questions to ask for all the 7 types of visualization (7 \* (5 Extract/Confidence + 2 Affect) = 49 ) + more extra questions can be added** | | | |
| **Extract or Estimate Information** | **Confidence** | | **Affect** |
| Select the uncertainty level and concentration level of the plume at the marked location.  Find the location with the [low/mid/high] plume concertation but [low/mid/high] certainty.  What percentage of the plume area is highly concentrated? | General | How confident are you that the marked location has a [low/mid/high] plume concertation but [low/mid/high] certainty?  Which visualization do you find easier to interpret when trying to understand the status of a plume? | Does this visualization demonstrate good news, or bad news?  Does this [visualization/marked location] demonstrate a low risk, or a high risk situation?  Does this visualization make you feel calm, or stimulated?  To what extent does the visualization make you feel pleasant or unpleasant? |
| With property line | How confident are you that the plume is over the marked location beyond the property line?  [With nothing shown beyond the property line]  Draw the most likely plume boundary |
| **Extra Question** | **Confidence** | | **Risk and Affect** |
| The marked property is over a plume, but its concentration is below the guideline threshold. --- we now can ask the risk/affect questions | X | | Does this visualization demonstrate good news, or bad news?  Does this visualization demonstrate low risk, or high risk?  Does this visualization make you feel calm, or stimulated?  To what extent does the visualization make you feel pleasant or unpleasant? |
| **Extra Question** | **Confidence** | | **Risk and Affect** |
| What does this visualization represent?  *Example for small multiple or animation*  *The visualization shows*   1. *soil contamination observed at different timestamps* 2. *different predictions for soil contamination* 3. *uncertainty of the soil contamination* | X | | X |