

GEOPHYSICS WITH DR JADRANKA ŠEPIĆ

TALKING POINTS

KNOWLEDGE:

1. How much has the global mean sea level risen since 1880?
2. How much do scientists estimate sea levels will have risen by the end of the 21st century?

COMPREHENSION:

3. Why is Jadranka specifically focusing her research on sub-hourly sea-level oscillations?
4. In what ways does Jadranka's research differ from other studies that have taken place previously?

APPLICATION:

5. What are the possible results and outputs from Jadranka's studies?

ANALYSIS:

6. Why is it important for scientists (and the general public) to understand exactly what causes sea level extremes? What are your thoughts concerning the expected increase in sea levels? Can you imagine what life may be like in the year 2100, if sea levels do indeed rise in line with expectations?

SYNTHESIS:

7. What do you think humans can do to slow the rate at which sea levels are expected to rise? Is there anything you personally could do to arrest the acceleration? Do some research to understand the efforts that are being made by people around the world to prevent this happening and see if there is anything you could get involved in!

EVALUATION:

8. There are those who claim rising sea levels are not that catastrophic and that people could just move inland. However, Jadranka's research helps to show that it is not only the direct impacts of sea level rises, but the indirect impacts that could adversely affect populations. What do you think of these ideas? How do they affect how you imagine the world of the future?

ACTIVITIES YOU CAN DO AT HOME OR IN THE CLASSROOM

- Write a one-minute speech explaining to your class why Jadranka's research is significant – remember to select key information and quotations from the article to support your ideas.
- Imagine the year is 2100 and sea levels have risen to the levels that are predicted. What does the world look like? In what ways has life changed? Think about cities like Venice and New York – what do they look like now? Perhaps, even draw an illustration of the world map to show the geophysical changes.

MORE RESOURCES

THE OCEAN GAME

Can you save your town? The *Los Angeles Times* has created a game where you try your best to save your town within eight turns. Have a go and see if you can help:

<https://www.latimes.com/projects/la-me-climate-change-ocean-game/>

WHEN SEA LEVELS ATTACK!

This fascinating visualisation demonstrates how many years it will be until a particular place is under water:

<https://informationisbeautiful.net/visualizations/when-sea-levels-attack-2/>