# Article information:

Twenty-First Century Levee Overtopping Projections from inSAR-Derived Subsidence Rates in the Sacramento-San Joaquin Delta, California: 2006-2010  
<https://escholarship.org/uc/item/3w14m0mr>

# Article summary:

1. The research team performed InSAR on 35 radar scenes from the Envisat platform acquired from 2006–2010 to assess vertical land motion rates in the Sacramento-San Joaquin Delta.

2. The average rates of subsidence were ~1-2 millimeters per year (mm/yr), slightly lower than the ~3-5mm/yr rates from 1995–2000.

3. The study used the updated ground-motion rate map and sea-level rise predictions to project when Delta levees will subside below high-water design thresholds, with most Delta levees likely falling below design thresholds by 2100.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy, as it provides a detailed overview of the research conducted by the team and presents their findings in an unbiased manner. The article does not contain any promotional content or partiality, and all claims are supported by evidence provided in the text. Furthermore, possible risks associated with the findings are noted, such as the potential for levees to fall below design thresholds by 2100.

However, there are some points of consideration that are missing from the article. For example, while it mentions that Roberts Island experienced uplift during this period, it does not explore why this occurred or what implications this may have for future studies of subsidence in the Delta region. Additionally, while it mentions that there is a need to develop a physical model for the Delta based on these results, it does not provide any further information on how this could be achieved or what benefits such a model would bring. Finally, while both sides of an argument are presented equally throughout most of the article, there is no mention of any counterarguments or alternative explanations for why certain phenomena may have occurred during this time period.

# Topics for further research:

* Delta region subsidence
* Causes of Delta region uplift
* Benefits of physical models for Delta region
* Counterarguments to Delta region subsidence
* Alternative explanations for Delta region subsidence
* Design thresholds for levees in Delta region

# Report location:

<https://www.fullpicture.app/item/70bc376f9aa7107b07c602a18e4029c1>