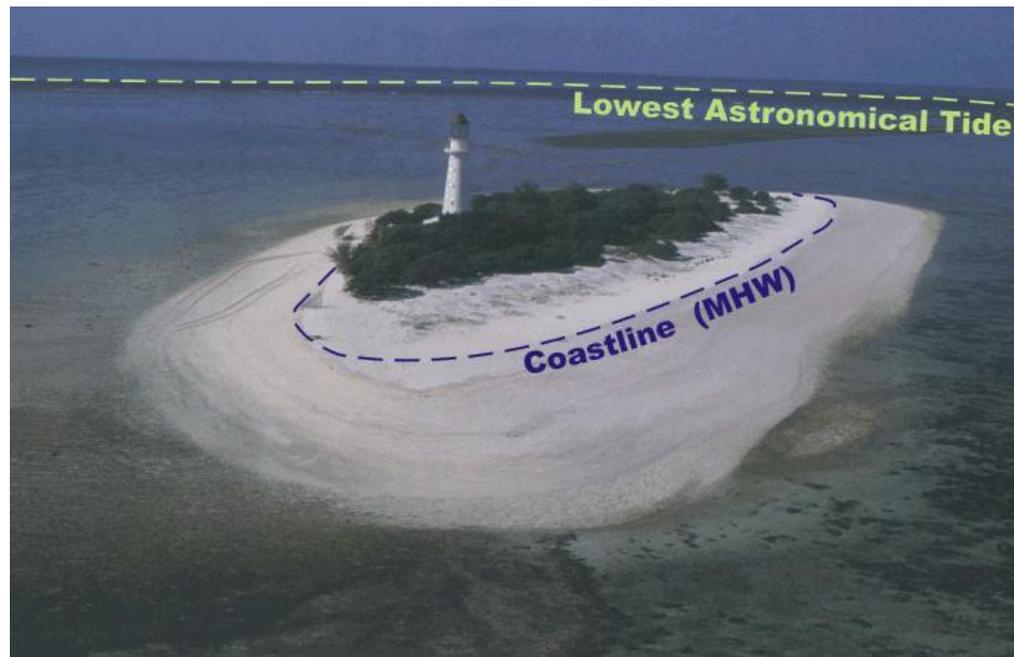


## Imaginary Islands?

Options to Preserve Maritime Jurisdictional Entitlements and Provide Stable  
Maritime Limits in the Face of Coastal Instability



I Made Andi Arsana and Clive Schofield



## Outline

- Introduction
- Climate change – Sea level rise
- Baselines and the law of the sea
- Ambulatory baselines and shifting maritime limits
- Islands and coasts under threats
- Response options



# Introduction



Seaward impacts:  
Change of baselines and maritime limits

Landward impacts:  
Coastal areas less habitable

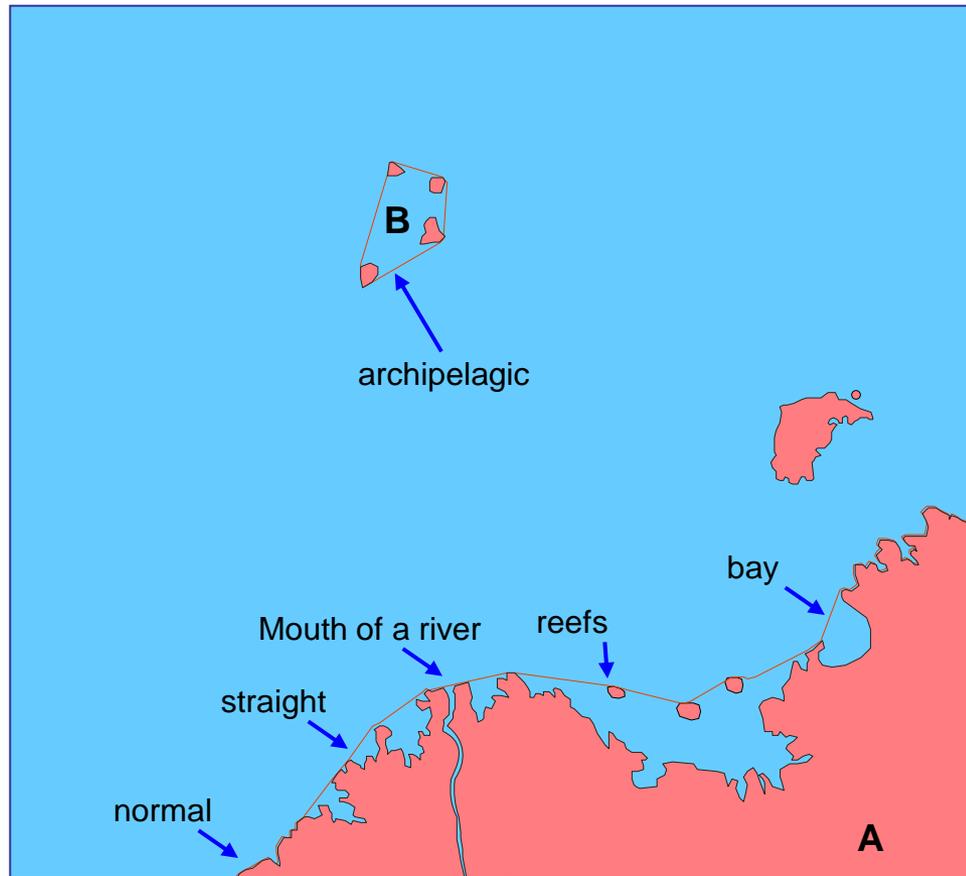


## Climate Change and Sea Level Rise

- Contested debates
- IPCC's estimated range of sea level rise: 0.38-0.59m by the end of the century?
  - An overly conservative prediction?
- Great uncertainty over the critical questions of how much and how quickly?
- Alternative explanations
  - Sea level rise vs. land subsidence
- Changing baselines and maritime limits



# Baselines and the law of the sea

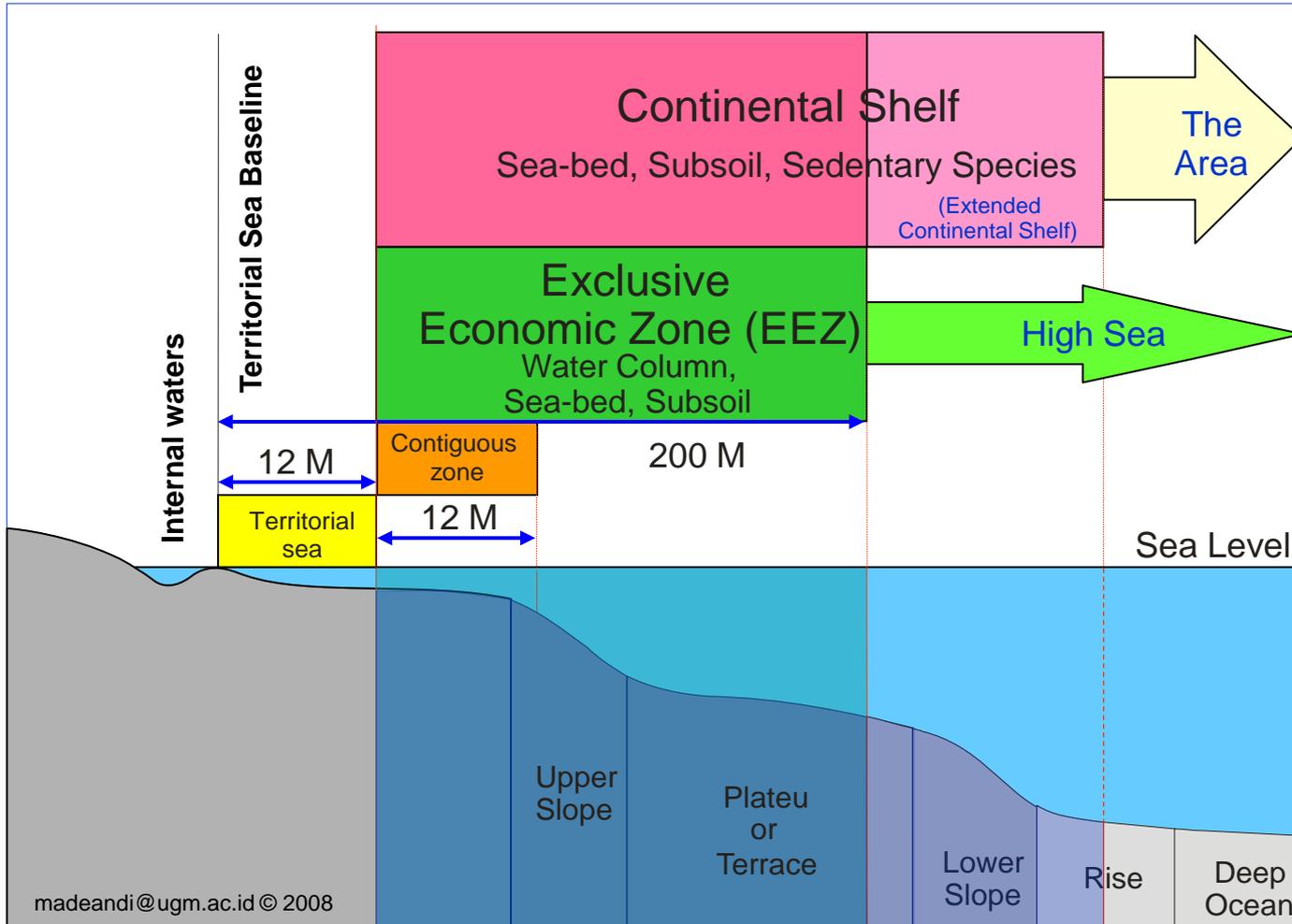


## According to UNCLOS '82

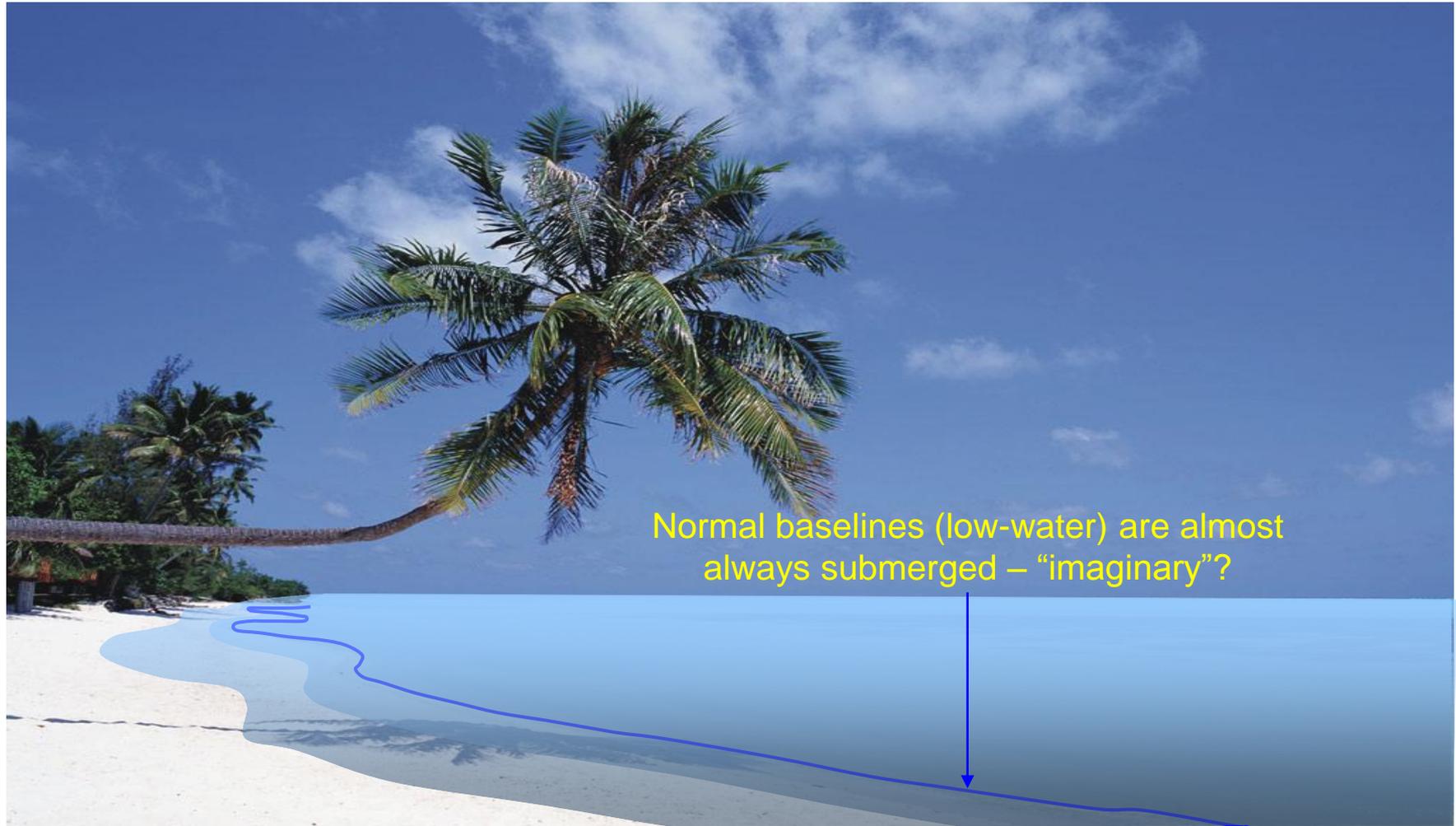
- Normal (Art. 5)
- Reefs (Art. 6)
- Straight (Art. 7)
- Mouths of rivers (Art. 9)
- Bays (Art. 10)
- Ports and roadstead (Art. 11 and 12)
- Combination of methods
- Archipelagic (Art. 47)



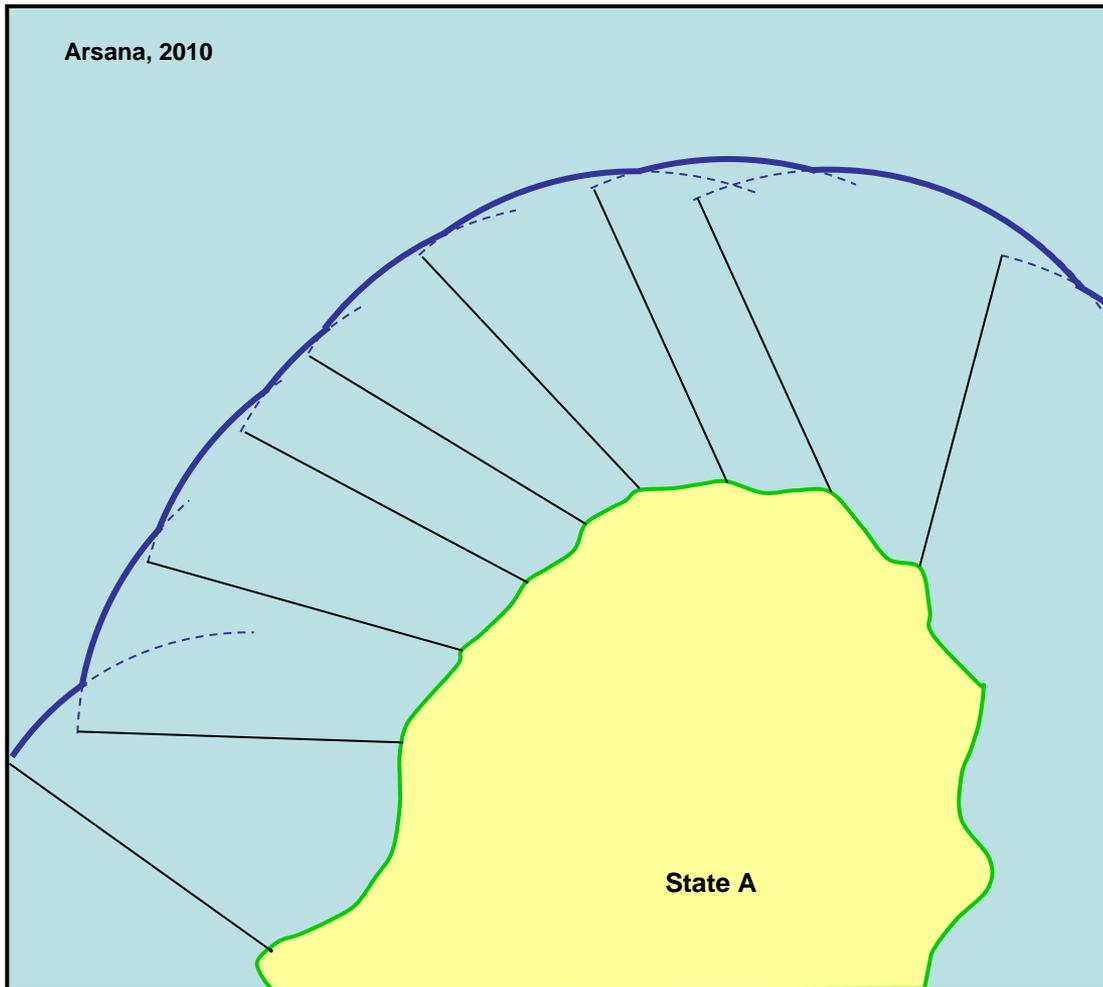
# Maritime Jurisdictional Zones



# Normal Baselines



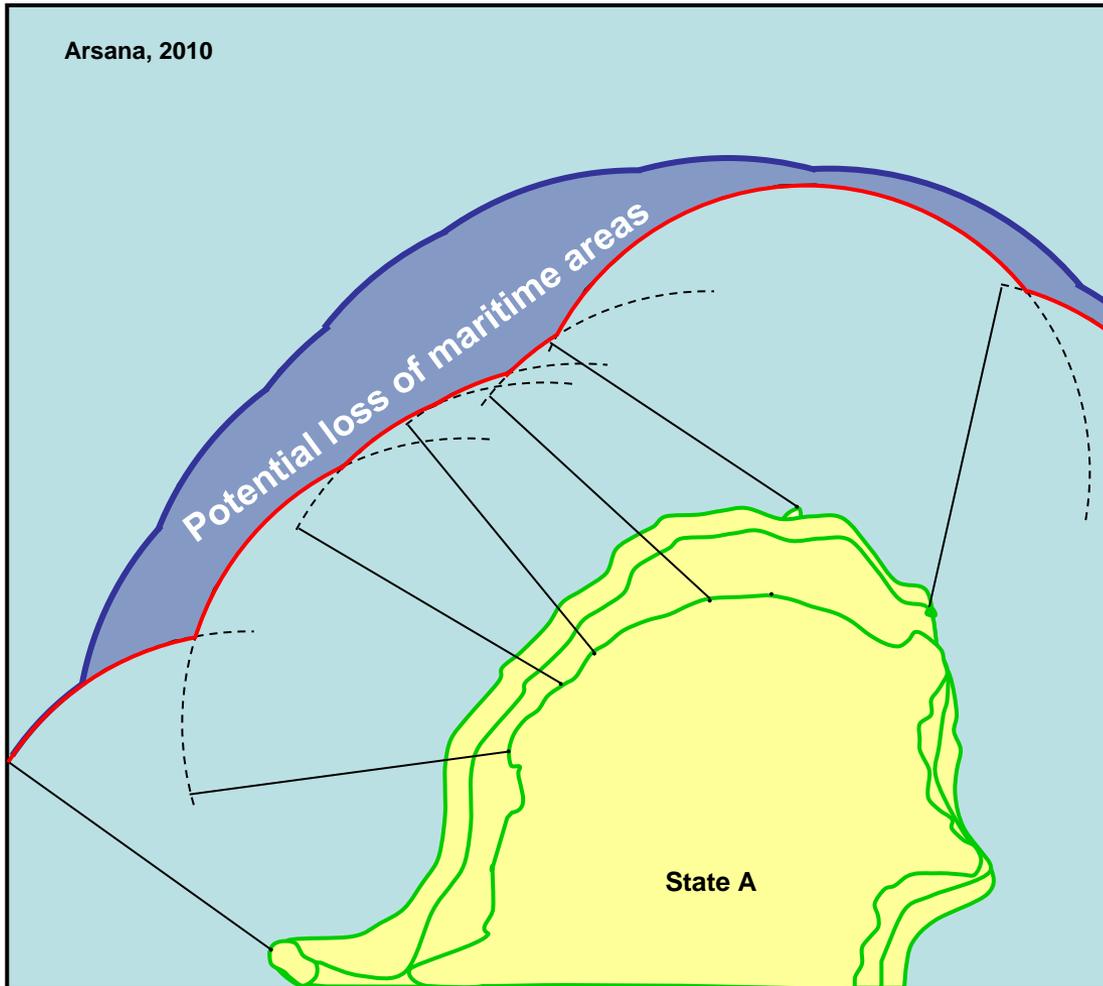
## Ambulatory baselines and shifting maritime limits



- Normal baselines (low-water line - LAT)
- Salient basepoints along baselines
- Maritime claim limits using the envelop of arcs method



# Ambulatory baselines and shifting maritime limits

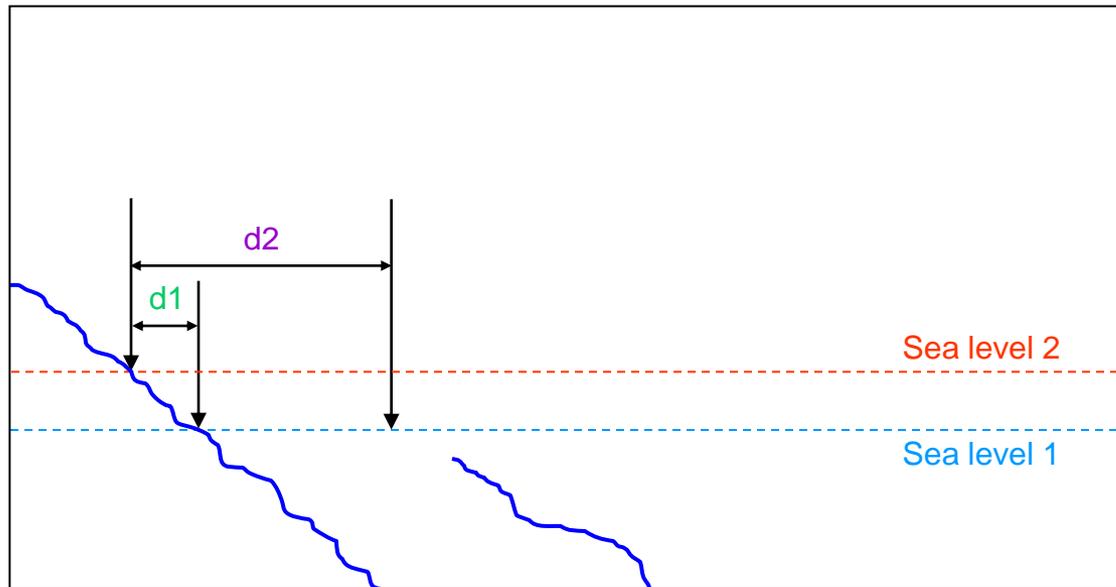


## IMPACTS:

- Extent and limits of maritime claims
- Enforcement issues
- Jurisdictional uncertainty
- Potential for conflict
- Loss of jurisdiction over valuable marine resources



## Uneven impacts – sea level changes related to different coast gradients

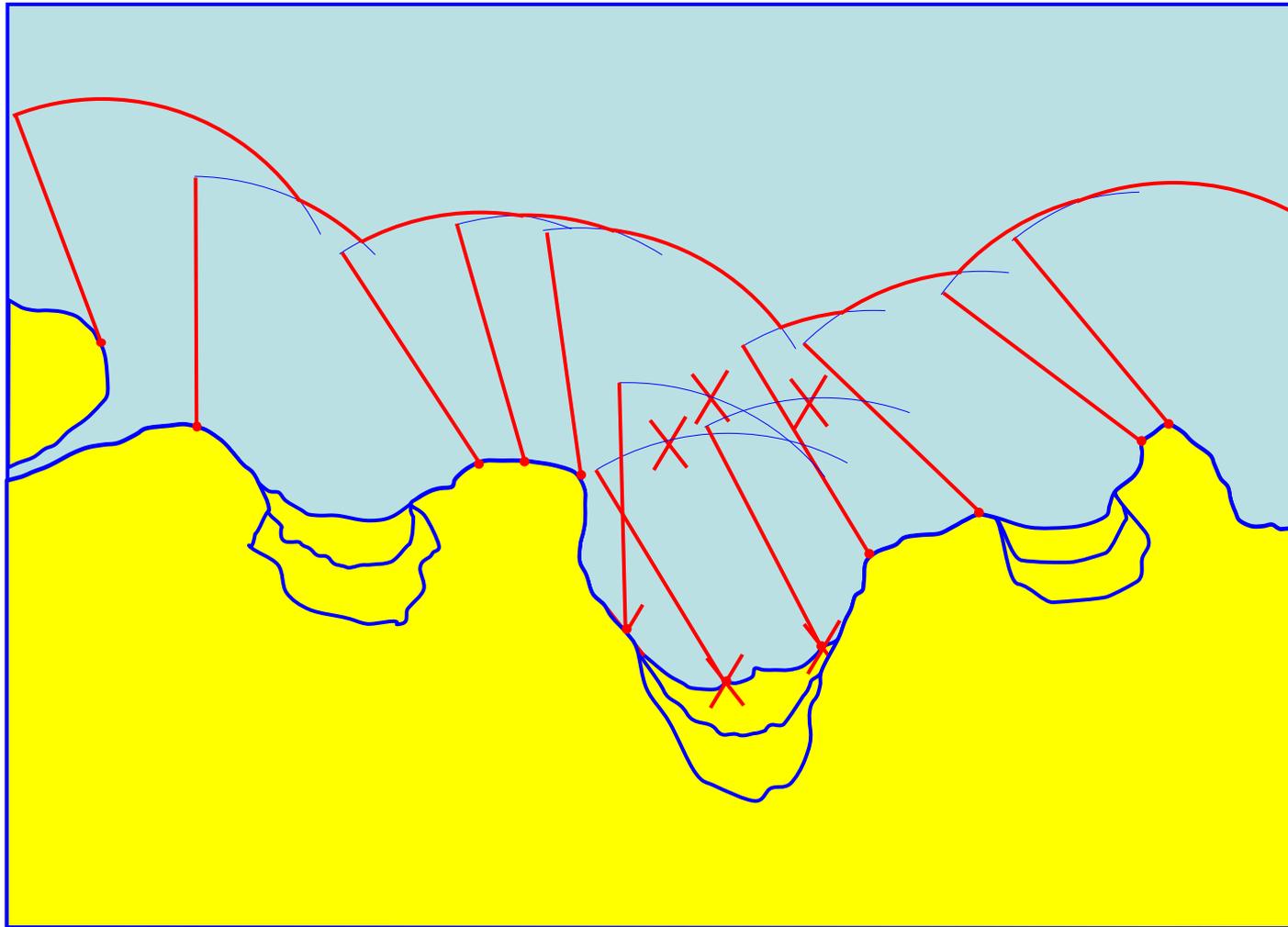


$d2$  is significantly longer than  $d1$

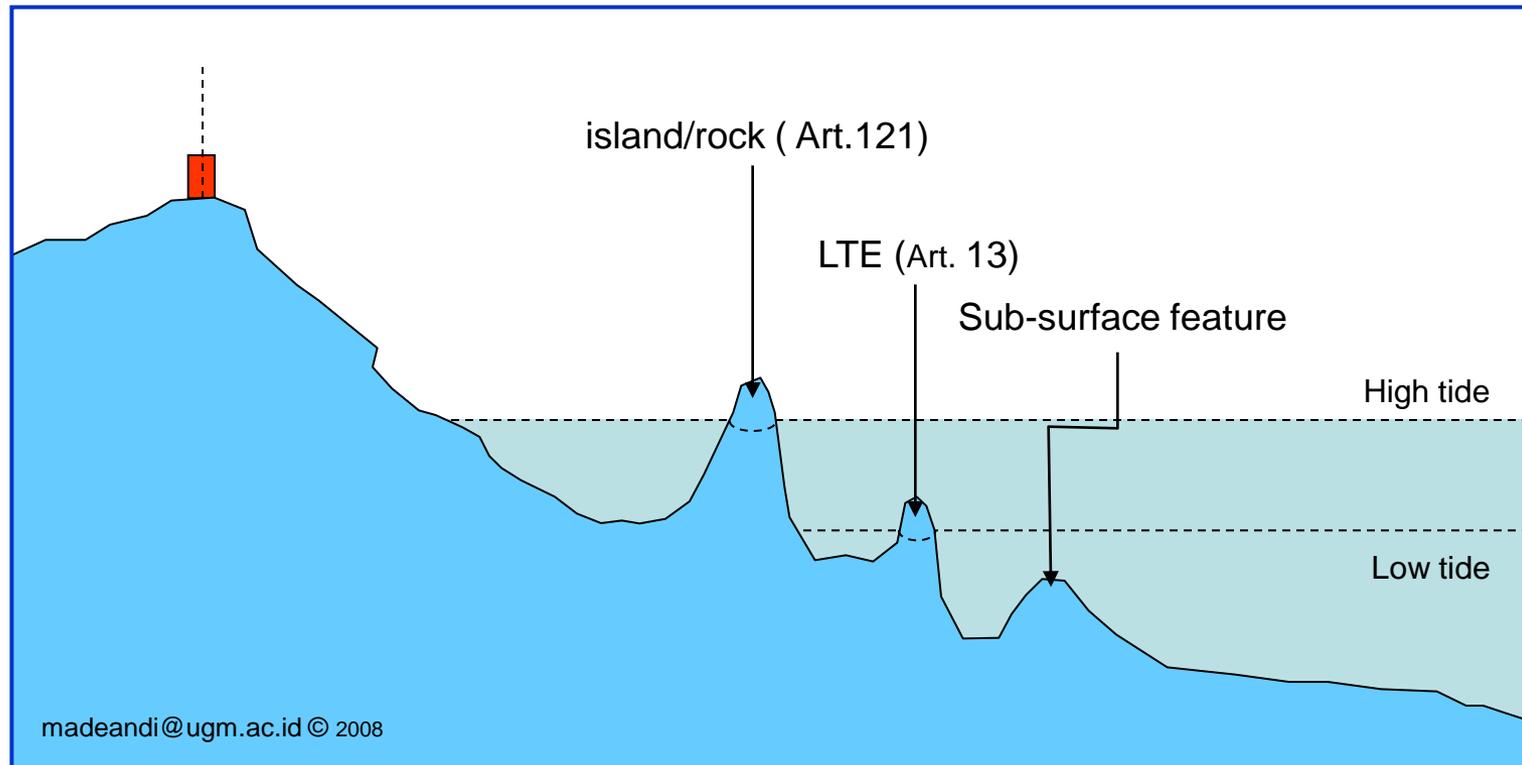
The more shallow the gradient of the coast vertically, the greater the impact will be horizontally



## Uneven Impacts - Baselines, basepoints and maritime limits



## Threats to insular status – islands/rocks/LTEs



The general use of LAT for baselines which may change  
Potential impacts on the classification of insular features  
'Knock on' impacts on capacity to claim maritime jurisdiction



## Threats – Disappearing islands[?]



**Island inundated?**

**Sea level rise or  
land subsidence?**

**Unconventional  
dispute  
resolution?**



## Response Options

- Fix normal baselines physically
  - Can key basepoints be preserved through sea defences, ‘building-up’ and/or reclamation?
  - Long tradition and an option for critical basepoints but unrealistic for long coastlines?
- Planned retreat
- Fix normal baselines legally
- Fix the limits of maritime zones



## Fix normal baselines physically – coastal protection



**Okinotorishima**



## Fix normal baselines physically – sea defences

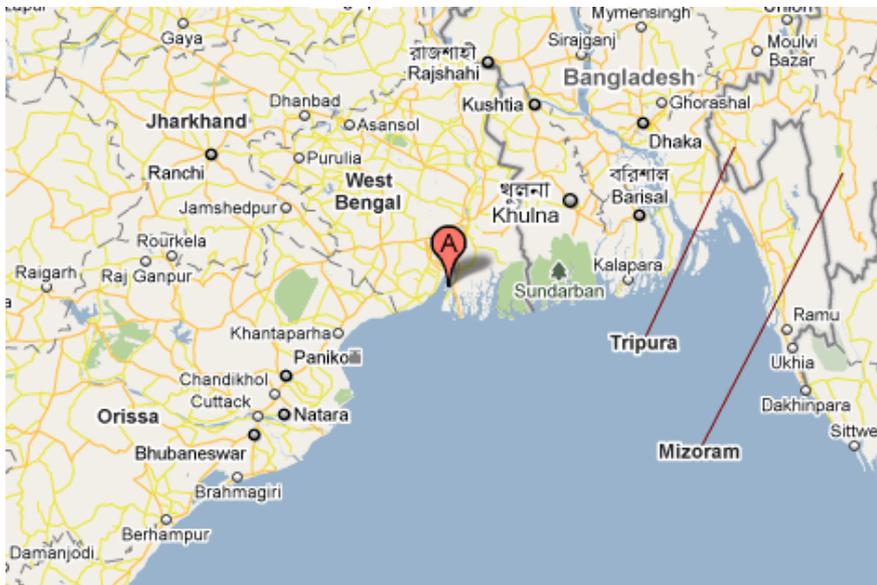


- **Physical defences unrealistic for long coastlines?**
- **Expensive**
- **Negative Environmental impact**



## Planned retreat and relocation

- Dynamic coastal area – responsive not resistant
- Abandonment of entire islands



**Lohāchāra Island, India**  
Evacuated “as a precaution” in 2006



**Carteret Island, PNG**  
2,600 inhabitants relocated in 2005  
Relocations ongoing



## Fixing Normal Baselines Legally

- Choice of chart depicting normal baseline left up to the coastal State (LOSC, Article 5)
- States choose their chart
  - legal document vs. reality
  - Chart for baselines vs. chart for navigation
  - Normal baseline deposition
- The drafters of the Convention did not anticipate sea level rise
- BUT: Ambulatory baselines may be fixed with straight baselines on unstable coasts



## Fixing Limits and Boundaries

- Once agreed maritime boundaries remain fixed even though the baselines used to construct them may regress
  - What if the territory in question disappears entirely?
- The outer limits of the continental shelf may also be fixed as “final and binding”
- Fix (declare) maritime limits
  - Provides the advantage of certainty and the preservation of existing maritime claims
  - BUT: Increasing tension between fixed limit and receding or disappearing normal baseline it is measured from



## Fixing Limits and Boundaries

- Will other states recognise allegedly fixed limits in the face of changing baselines?
- May be effective for domestic law, but potentially problematic for international law.
- Amend LOSC?
- UNCLOS IV unlikely BUT: a supplementary agreement, such as Fish Stock Agreement of 1995 that builds on the Convention is not an impossible solution

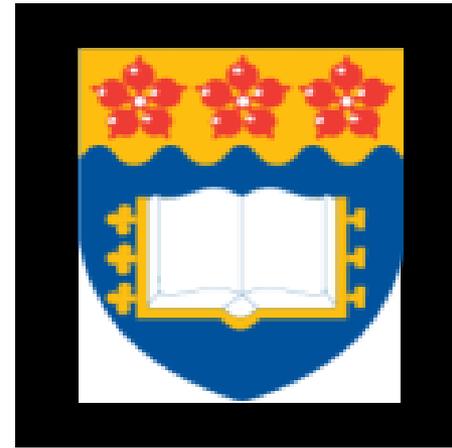


## Concluding thoughts



- Fixing baselines and/or maritime → preserving the existing rights, therefore arguably not excessive
- Especially the case for small islands States with little responsibility for climate change but potentially suffering disproportionate consequences
- Equitable approach to preserve rights over resources





**Terima kasih – Thank you**

