



# Offshore Sand Resources South Shore of Oahu



Waikiki 2005 Imagery



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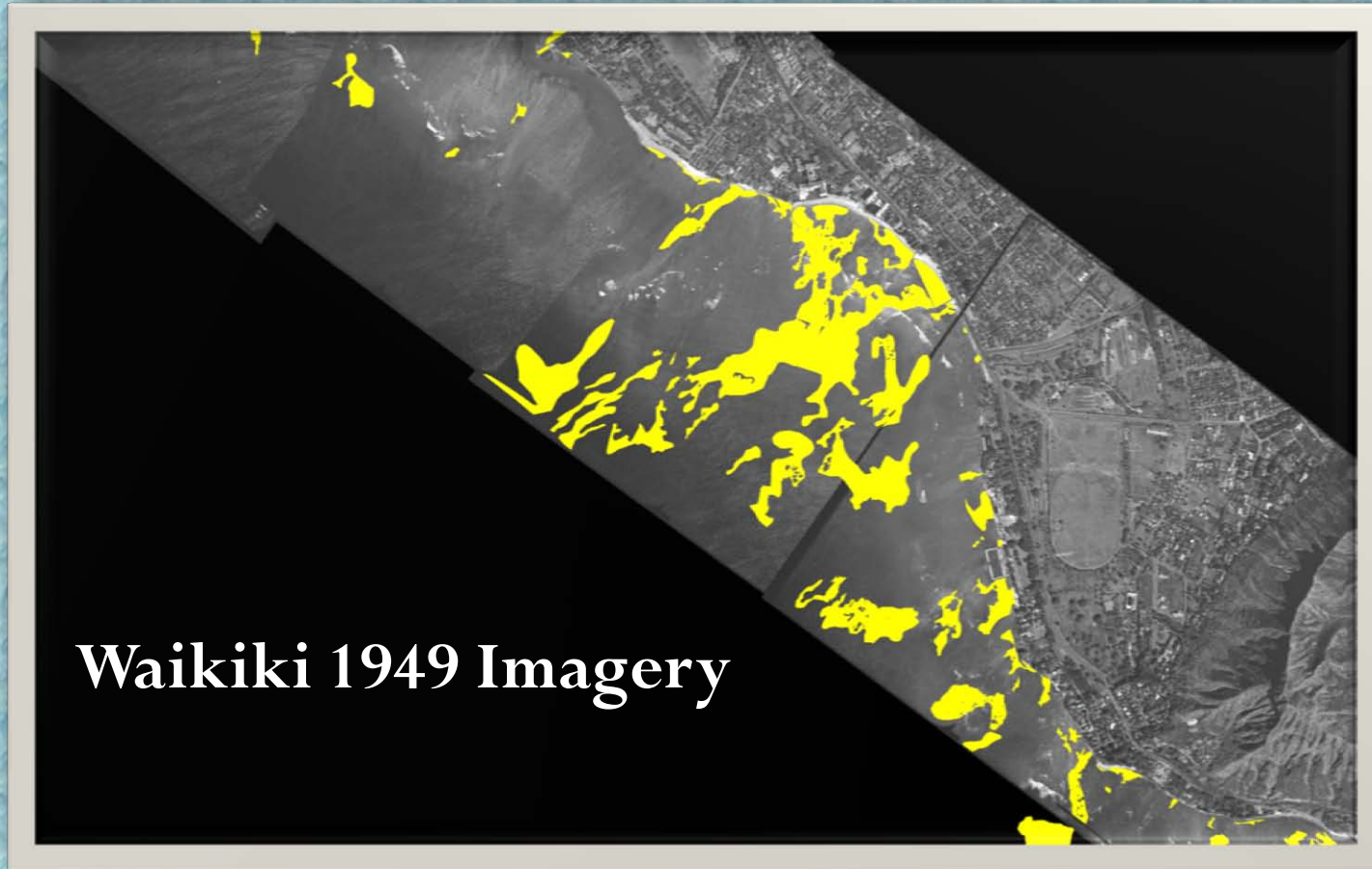
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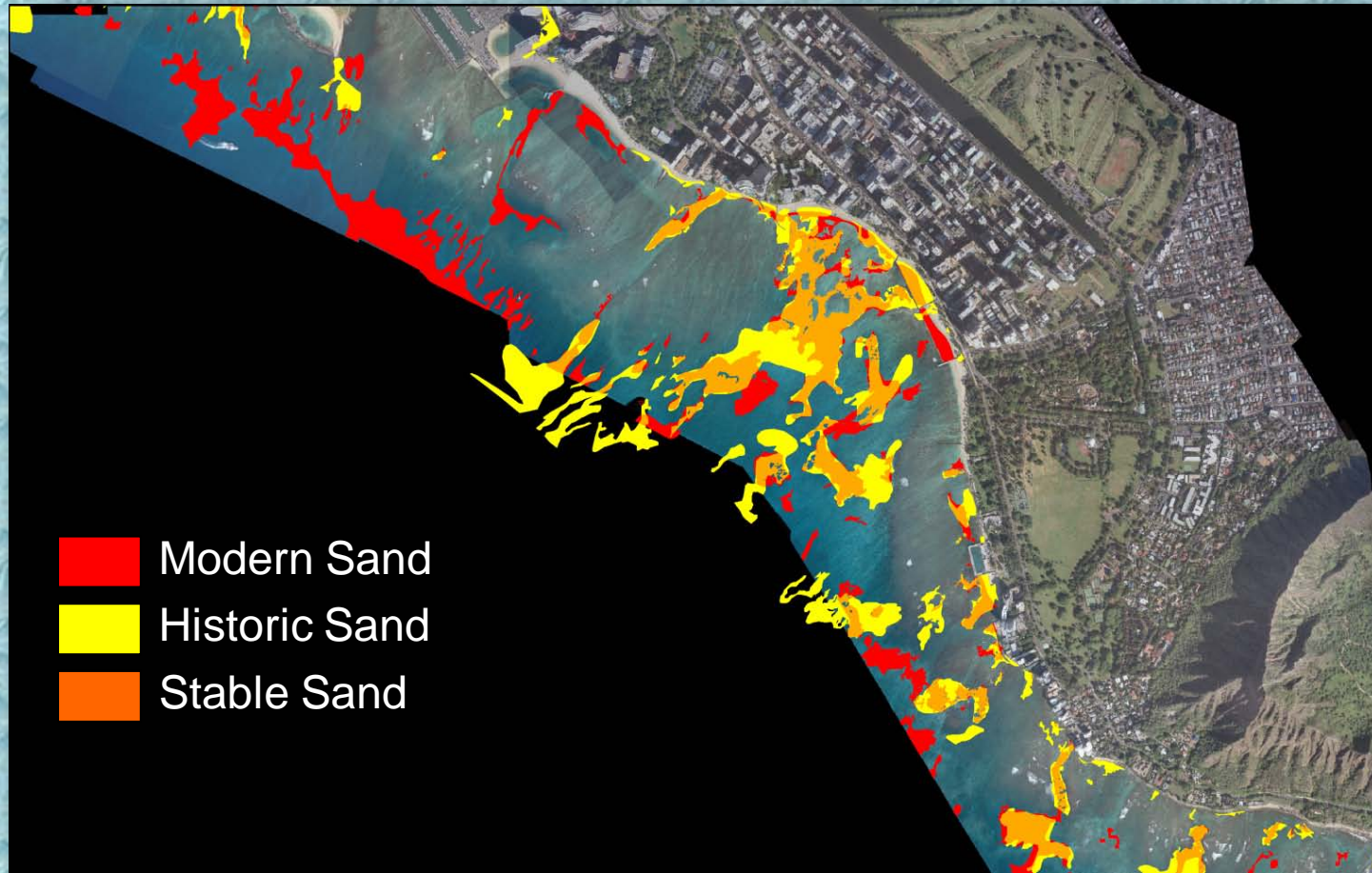
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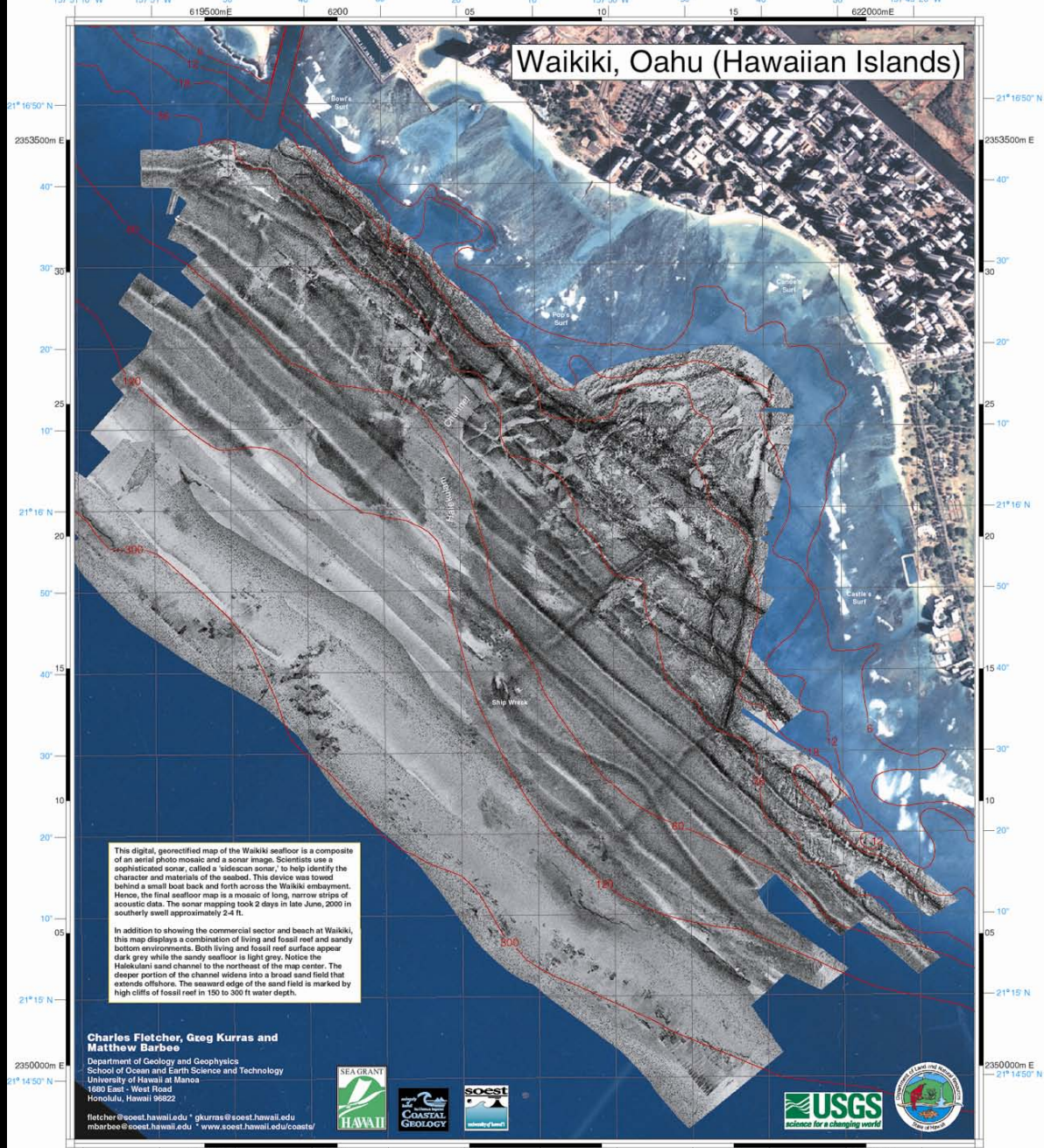
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# Waikiki, Oahu (Hawaiian Islands)



This digital, georectified map of the Waikiki seafloor is a composite of an aerial photo mosaic and a sonar image. Scientists use a sophisticated sonar, called a 'side-scan sonar', to help identify the character and materials of the seabed. This device was towed behind a small boat back and forth across the Waikiki embayment. Hence, the final seafloor map is a mosaic of long, narrow strips of acoustic data. The sonar mapping took 2 days in late June, 2000 in southerly swell approximately 2-4 ft.

In addition to showing the commercial sector and beach at Waikiki, this map displays a combination of living and fossil reef and sandy bottom environments. Both living and fossil reef surface appear dark grey while the sandy seafloor is light grey. Notice the Halekulani sand channel to the northeast of the map center. The deeper portion of the channel widens into a broad sand field that extends offshore. The seaward edge of the sand field is marked by high cliffs of fossil reef in 150 to 200 ft water depth.

**Charles Fletcher, Greg Kurras and Matthew Barbee**  
 Department of Geology and Geophysics  
 School of Ocean and Earth Science and Technology  
 University of Hawaii at Manoa  
 1680 East - West Road  
 Honolulu, Hawaii 96822  
 fletcher@soest.hawaii.edu \* gkurras@soest.hawaii.edu  
 mbarbee@soest.hawaii.edu \* www.soest.hawaii.edu/coasts/

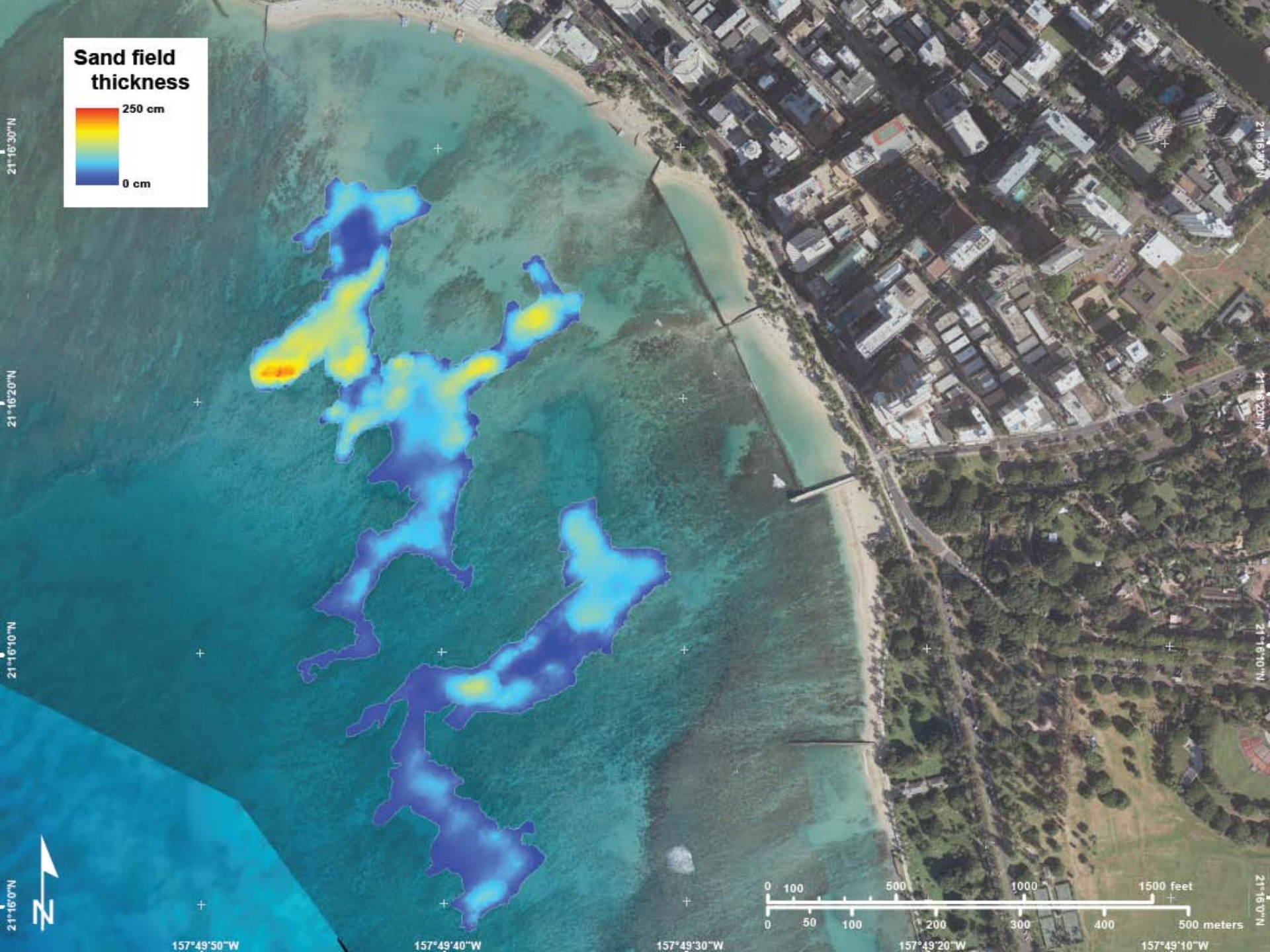
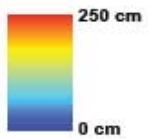


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# Sand field thickness





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# Ewa Stable Sand Fields



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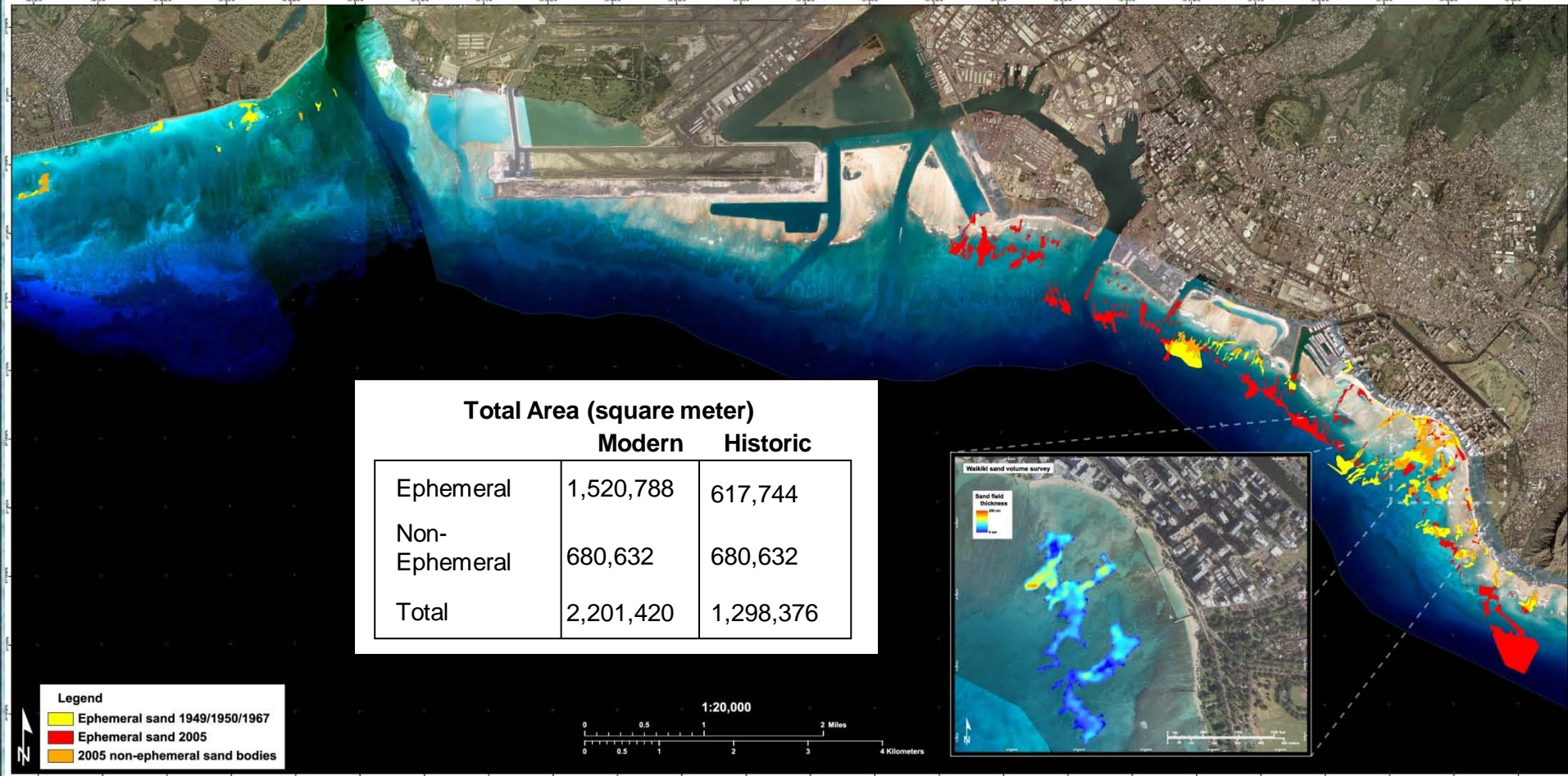
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	Total Area (square meter)	
	Modern	Historic
Ephemeral	1,520,788	617,744
Non-Ephemeral	680,632	680,632
Total	2,201,420	1,298,376

- Legend**
- Ephemeral sand 1949/1950/1967
  - Ephemeral sand 2005
  - 2005 non-ephemeral sand bodies

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