

<b>Title:</b>	Application of Remote Sensing for Long-term Monitoring of Coral Reefs in the Gulf of Thailand
<p><b>Abstract:</b>  <b>Max 250 words</b></p> <p>Your abstract <u>must</u> use Arial font size 11 and fit in this space</p> <p>Do <b>NOT</b> enter author and affiliation information on this document - you will be able to enter this information when submitting.</p>	<p>A study on capability of remote sensing techniques for long-term monitoring of coral reef conditions at Surat Thani Province in the Gulf of Thailand aimed to evaluate effectiveness of using LANDSAT 5 TM and LANDSAT 7 ETM+ for assessment of coral reef conditions and monitoring of coral community changes. Based on analysis of images in 1997, 1998, 2002 and 2005 at five study sites, i.e., Hat Sai Ri, Ao Mae Hat, Ao Chalok Ban Kao, Ao Thian and Ko Nang Yuan using band ratios and color composition of bands 3 2 and 1 (RGB), supervised classification with maximum likelihood classifier revealed that four components of coral reef were detected, i.e., live coral, other hard substrate component except coral, soft bottom in coral reef and sandy beach with the overall accuracy ranges 60 – 67%. Live coral areas decreased remarkably due to mainly the severe coral bleaching phenomenon in 1998. Recovery of coral reefs in 2002 and 2005 were different among the study sites. Live coral areas at Hat Sai Ri and Ko Nang Yuan increased considerably while those at Ao Chalok Ban Kao, Ao Thian and Ao Mae Hat were no change. The present study highlights the importance of coral reef monitoring by using remote sensing to assess coral recovery after coral reef bleaching.</p>