

## Spatial cover

The study area which is coastal zone of Mekong Delta extends for about 600 km length and lies between 8°32'-10°22' N latitude and 104°26'-106°47'.

## Temporal scale

Multitemporal remote sensing data of Landsat Multispectral Scanner (MSS), Landsat Thematic Mapper (TM), Landsat Enhanced Thematic Mapper (ETM+) and Landsat Operational Land Imager (OLI) from 1973, 1990, 2000, 2010, 2015 is archived on U.S. Geological Survey (<http://earthexplorer.usgs.gov>). Due to coastline length of 600km, five adjacent Landsat images (path 124, 125, 126 and row 53, 54) are needed to cover entire Mekong deltaic coast.

## Methodology

Process Step	Process Name	Description
1	Download and Extract Images	USGS EROS DATA CENTER
2	Atmospheric correction	Sun + radiometric correction
3	Normalized Difference Vegetation Index (NDVI)	Red and Near Infrared Bands
4	Normalized Canopy Index (NCI)	Green band and Short wave infrared band
5	Developing approach for land cover creation by combining NDVI and NCI	Unsupervised classify by iso cluster algorithm to create 50 classes
6	Classify 5 classes: aquaculture, mangrove, plant, bare soil, water.	Supervised classify from 50 classes to 5 classes by maximum likelihood algorithm
7	Change detection analysis	Characteristic difference of pixel change between images from two dates