

# REMOTE SENSING APPLICATION ON FORESTRY



Forest ecosystem is one of the most important and complex ecosystems in the earth. Forest carbon stock and productivity are important index to study.

Remote sensing application on forestry can cover different aspects such as diseases and insect pests monitoring and valuation, resource monitoring and management; in the study of forest environment ground measurement assistance is needed, where can represent extensive work. Therefore forestry needs long cycle observations to have a clear idea of its behavior. It is possible to use RS sources like optics, SAR and LiDAR to accomplish the examination of the forests.

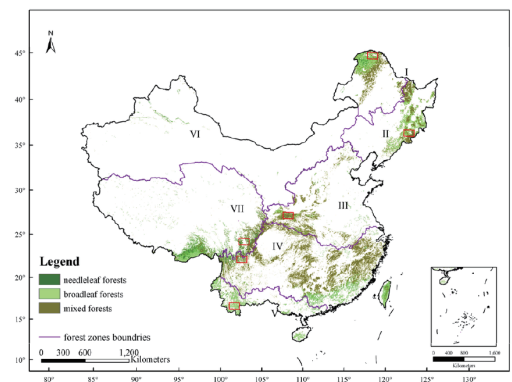
## OUR PROPOSAL

SSTC has long experience giving support to Chinese government's institutes such as Meteorological Administration and State Seismology Bureau. We can provide professional thematic maps and analysis of data services worldwide with the highest quality in the required frame time.

SSTC's systems will help you to get all the information to be able to manage a disaster situation better, and even prevent it. We offer services that can predict the potential, including the time range and scale; make disaster monitoring more timely and accurate, and monitor almost every kind of disasters, especially floods, droughts and earthquakes. As well our services and products will help you in the assessment of disaster damage, planning and progress monitoring of post-disaster reconstruction .



Forest patch map



Distribution map of chinese forest types

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Remote Sensing application on forestry provides strong technical support for government decisions.

## TAS CHARACTERISTICS FOR FORESTRY APPLICATIONS

### Multi-source remote sensing

GF-1,GF-2,GF-3,HJ-1A,HJ-1B,Landsat7,Landsat8, Thaichote-1, MODIS, CBERS-4 , NOAA-18 are supported. It is possible to support other satellites.

### Forest classification

Regional or national forest resources can be classified, which provides effective data support for the comprehensive monitoring and management of forestry.

### Forest change monitoring

To perform periodical and dynamic monitoring of forest resources in region or national level, fast and automatic forest identification, to recognize illegal logging areas and provide information support for national forest monitoring.

### Fire monitoring

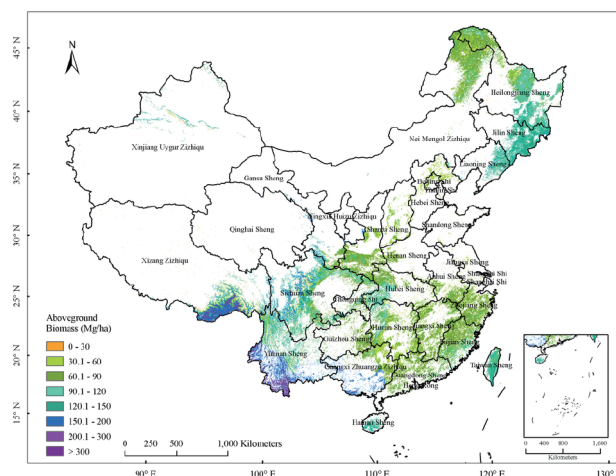
Monitor wide range of fire situation and its dynamic evolution.

### Fire area monitoring

Generate grid and vector thematic maps, which can be used to support post-fire relief and regional environmental restoration.

## PERFORMANCE

- Automatic image processing: less than 5 minutes per 100 MB of data
- Source data: less than 1GB
- Reliability: greater than 99%
- Forest classification, change monitoring, change cycle assessment errors: less than 20%
- Automatic fire point identification accuracy: better than 90%
- Fire area identification accuracy: better than 80%
- Wetland estimation error: less than 20%



Map of aboveground biomass of Chinese forest