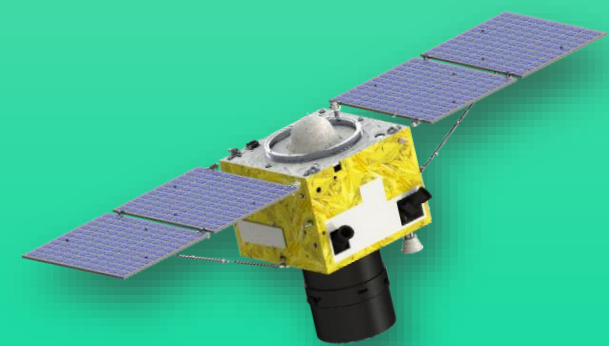


Why with Satellite Data?



Agricultural Applications: Planning with Satellites!

Time-Series Monitoring

Consistent monitoring of crop growth and weather conditions in agricultural plots for better decision making and resource allocation.



Cost-Effective

Monitor remote or inaccessible plotlands effortlessly.



Comprehensive

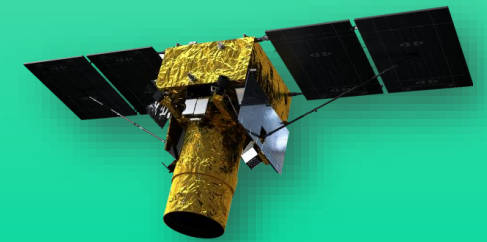
Acquire an overview of up to hundred square kilometers of plotland easily for land cover and crop management.



High Precision

Detailed and sub-meter level images capturing information of crop canopy for growth monitoring and yield prediction.





**A Cost-Effective and
Comprehensive
approach to Time-
Series Monitoring!**

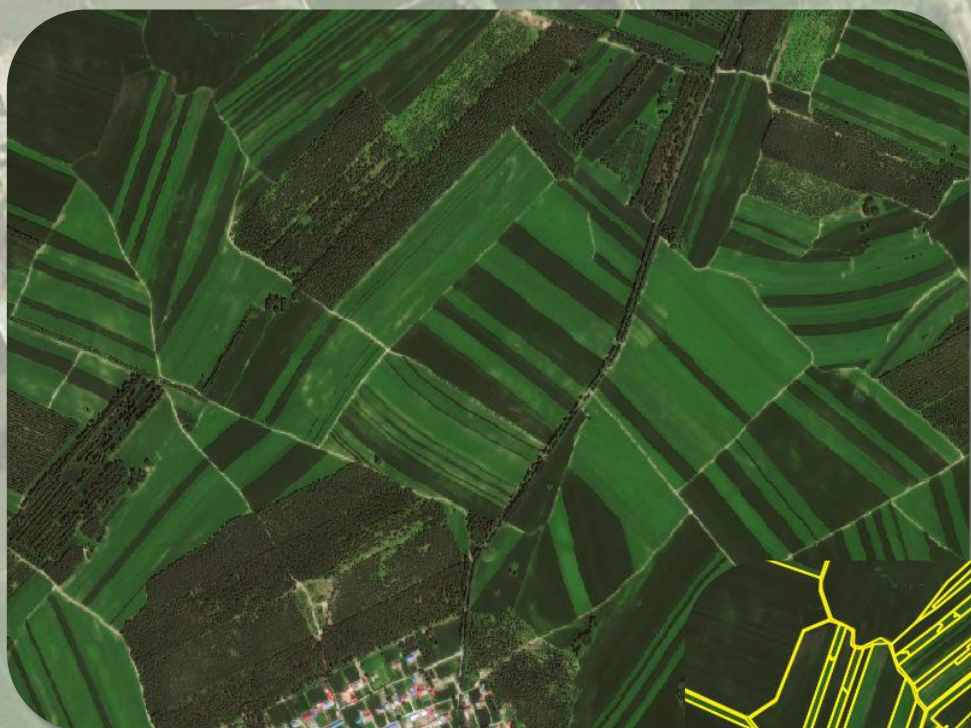


**Monitor large extents of croplands
for effective assessment, harvesting,
planning and planting!**

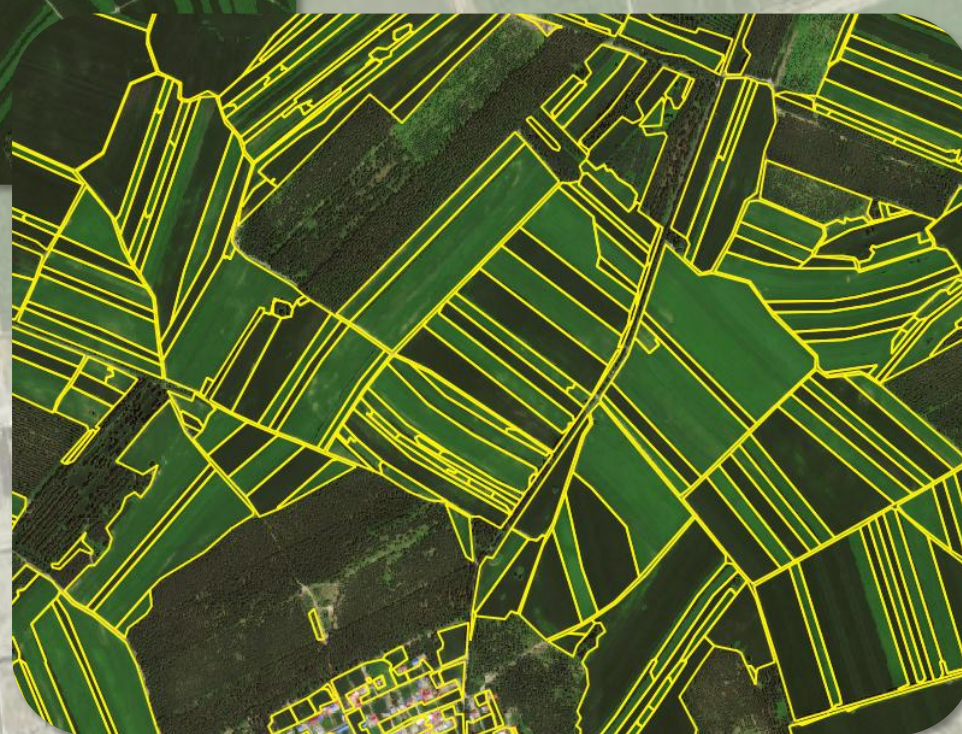


Applications Example: Plotland Extraction

Satellite Image



Satellite Image with Plot
Extraction

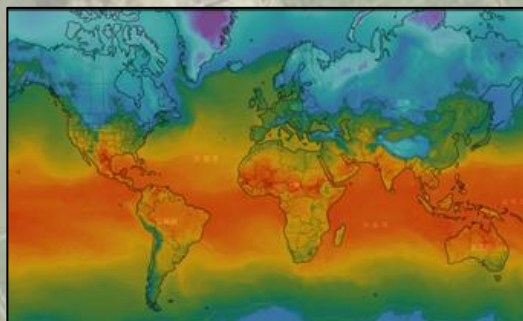
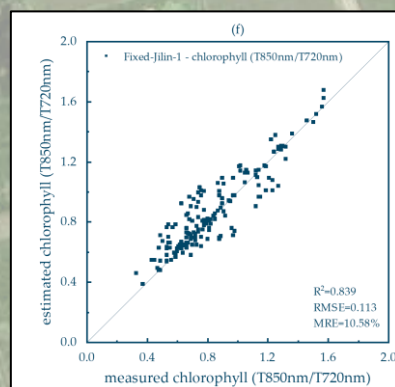
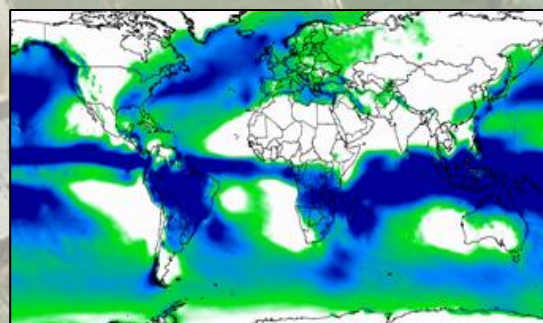


Apply feature
extraction to
acquire
agricultural
plotlands for Rice,
Wheat, Corn, etc.

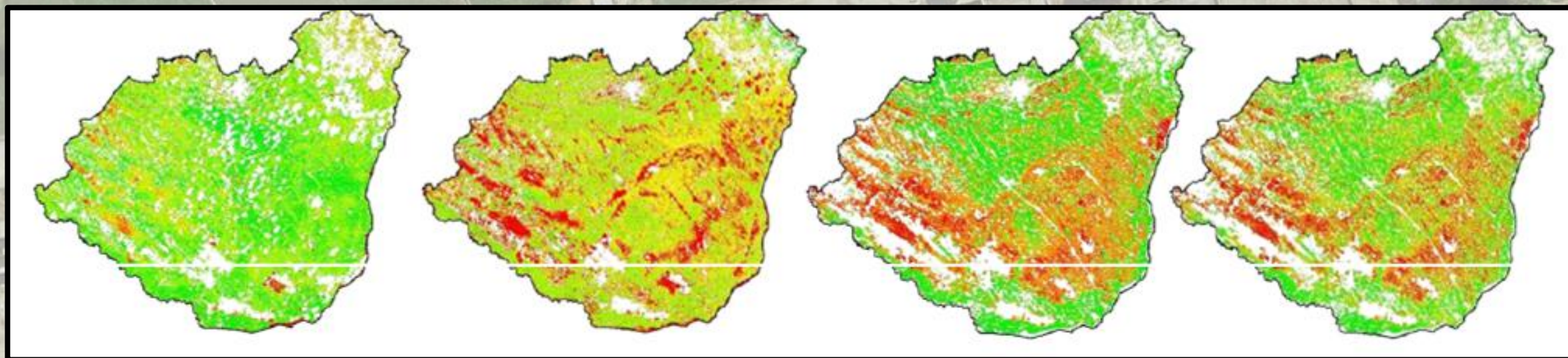
**Extract plotlands of specific crops for effective
cropland management and yield estimation.**



Applications Example: Yield Prediction



- Temperature
- Precipitation
- Satellite Imagery
- Field Data



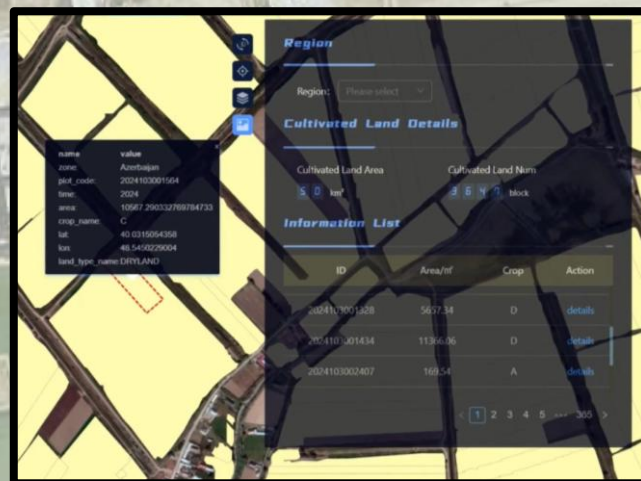
**Combine Multiple Data Sources with Satellite Imagery to
generate a Yield Prediction Distribution Map!**

Platform 1: Agricultural Management Platform for High- Level Decision Making



Key Functions

Cropland Inventory Management



Growth/Parameter Monitoring



Yield Prediction

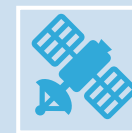


Platform 2: Adapting Agricultural Applications to Climate with Meteorological Data Platform

Key Features



**Interactive Weather
Maps for AOIs.**



**Multi-source Data
Integration from ground
& satellites.**



**Prediction Models: 1-
hour, 24-hour, 3-day
forecasts.**



**Standardised Climate
Indicators for tackling
climate change**

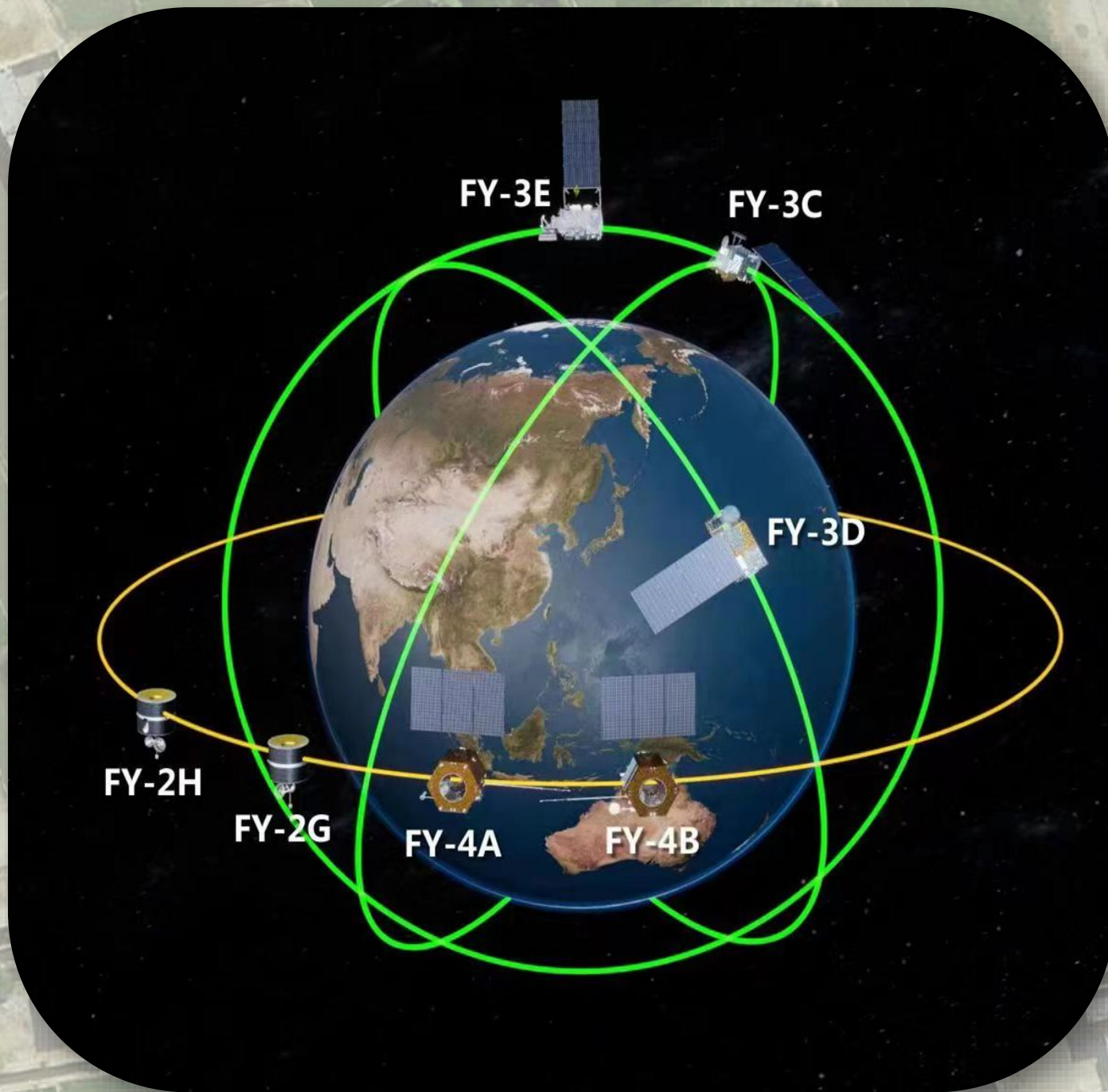


**Flood Monitoring
parameters for
emergency response**



**Weather Station List &
Time Series Analysis for
climate trends.**

Satellite Data Integration



1

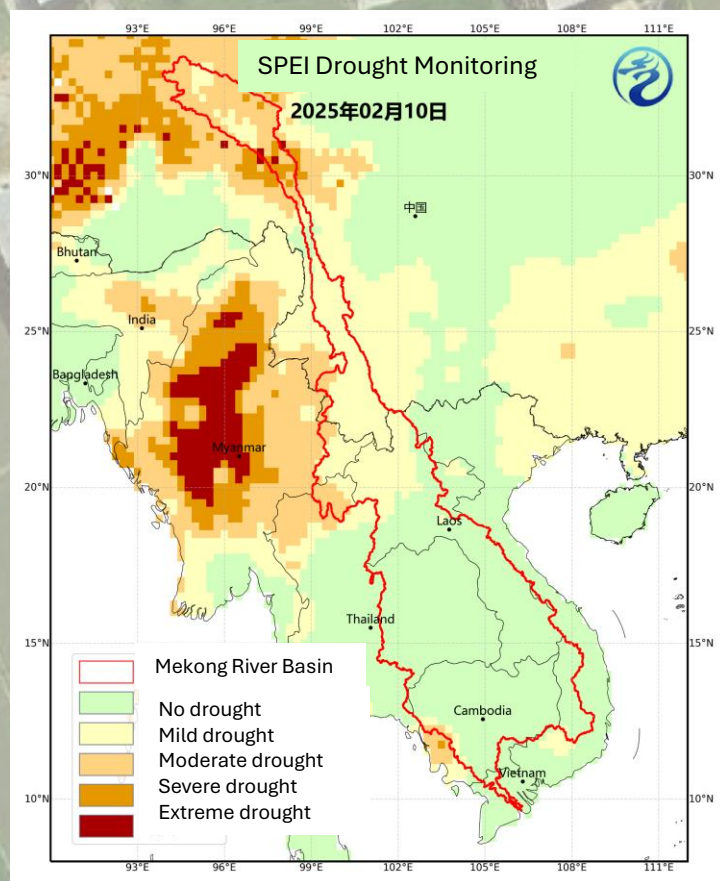
FY-4B (Geostationary): Real-time weather tracking, severe weather event monitoring

2

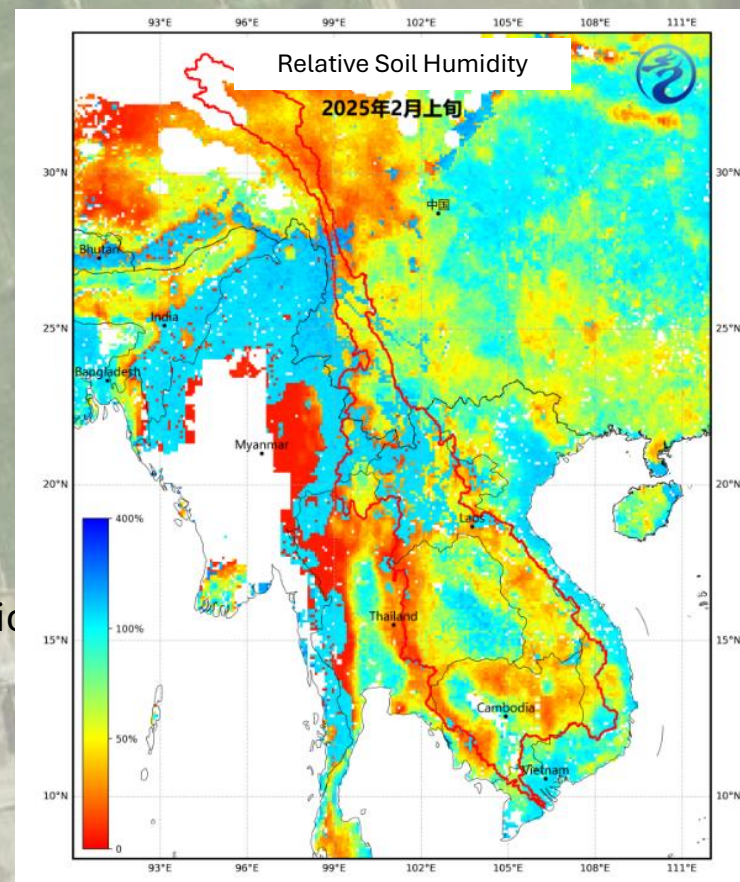
FY-3D (Polar-Orbiting): Climate observation, ocean monitoring, space weather analysis.

3

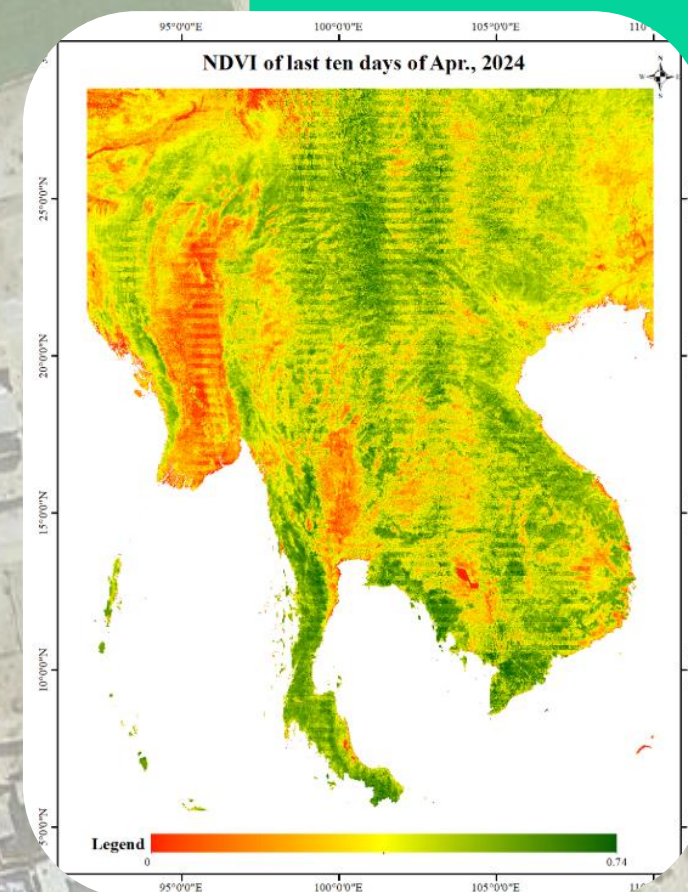
FY-3E (Polar-Orbiting): Wind field measurement, solar irradiance monitoring



SPEI Drought Monitoring
(Standardized Precipitation Evapotranspiration)



Relative Soil Humidity



Vegetation NDVI

**Mapping and Monitoring
Environmental
Parameters Essential for
Agriculture.**