

# Philippines

# Current Situation in UAV Technology

- ▶ Difficulties and problems
  - Limited UAV experts especially in data analysis
  - Some drones and sensors are too expensive (perspective of users)
  - Difficulties in monitoring drones (stricter implementation of regulations)

# Current Situation in UAV Technology

- ▶ Rules and laws of UAV in the Philippines
  - Licenses (Pilot license, UAV registration, and company registration)
  - Rules and regulations are established by the Civil Aviation Authority of the Philippines
  - Currently drafting policies with the use of UAV in surveying (cadastral, topographic, as-built) and other industries patterned after US regulations

# Current Situation in UAV Technology

- ▶ Requirements on UAV technology development
  - Expert on UAV assembly and operation
  - Expert on UAV data analysis
  - Knowledge on free and open-source software
  - Center for training and development of UAV technology
  - Integration of UAV technology in secondary and tertiary education
  - Standardization of rates for UAV services in coordination with all concerned parties

# Current Situation in UAV Technology

- ▶ UAS Mapping Association of the Philippines (U-MAP)
  - Organization in the Philippines for drone users
  - Venue for collaborative efforts

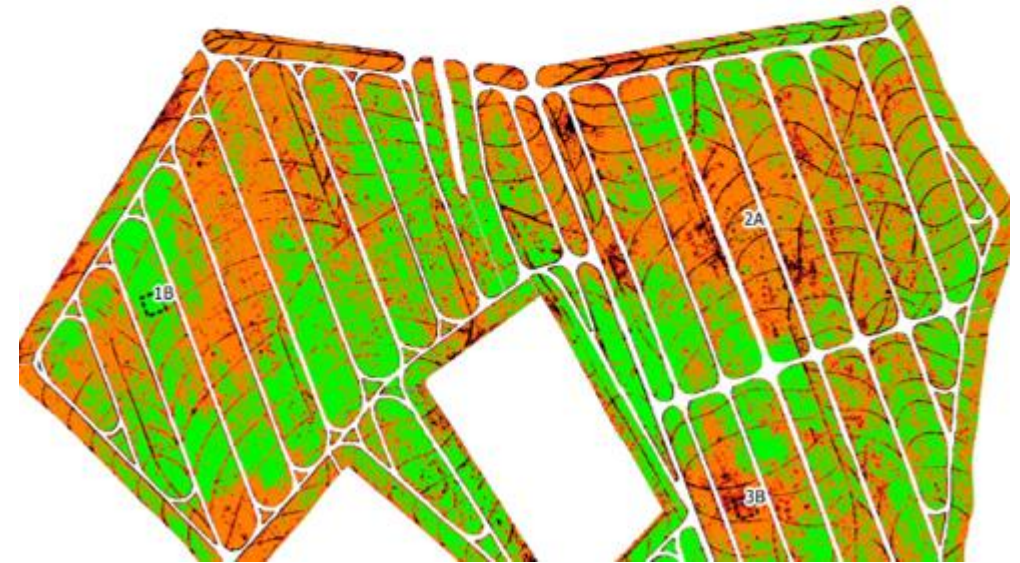
# Current Situation in UAV Technology

- ▶ Weddings, films, and commercials
- ▶ Agricultural crops (corn, sugarcane, coconuts, & pineapple) monitoring, different vegetation index maps are also used for crop yield modelling, forecasting, and monitoring
- ▶ Coastal and aquatic resources monitoring
- ▶ Security (use of thermal sensors)
- ▶ Disaster management and monitoring
- ▶ Requirement for government permits

## **NDVI Map of F22A**


MAP: 14.7

Date Taken: Oct.7, 2016



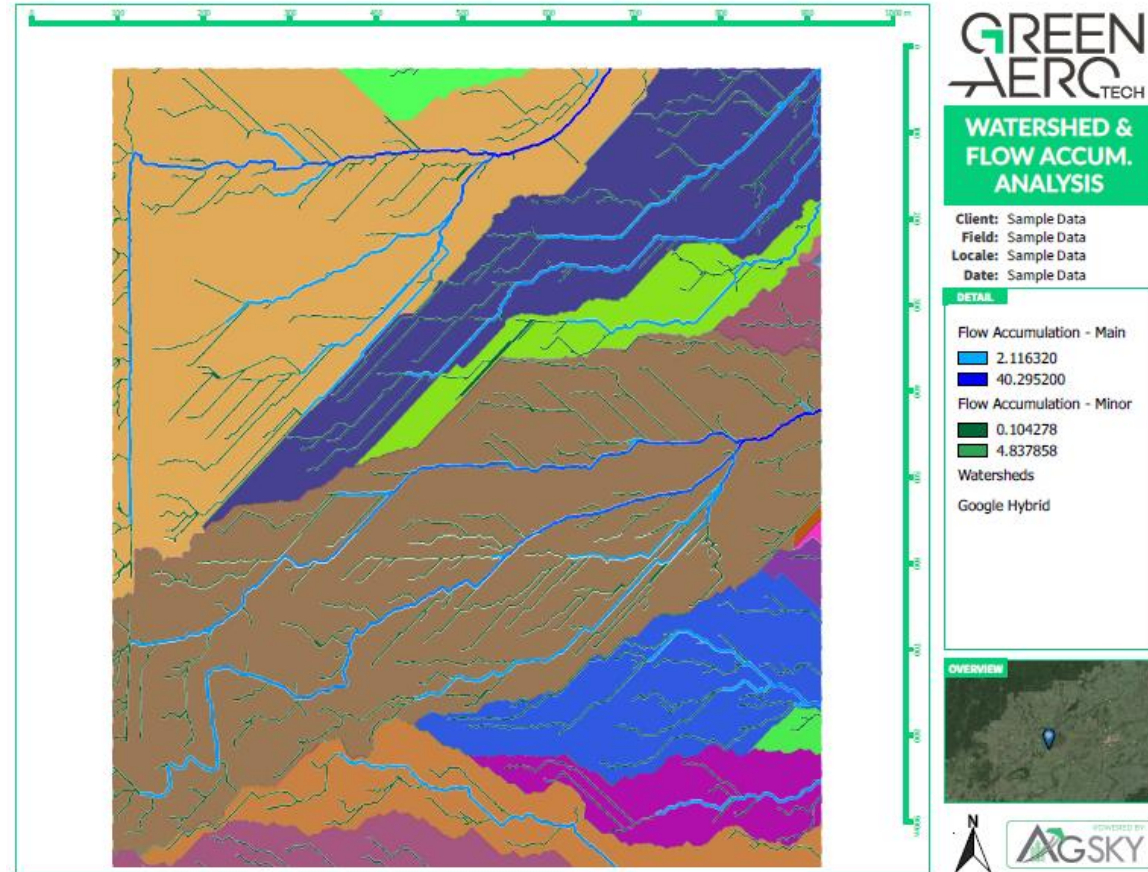


# Strengthening and Enhancing UAV Image Processing

- ▶ Educational campaigns on the use and benefits of UAV in different sectors (industries, government, and academe)
  - ▶ Strengthening ties of UAV operators and researchers with the help of a national organization (U-MAP)
  - ▶ Purpose-driven research collaborations for UAV which involves the different sectors
- 


# Potential/Opportunity for UAV Projects

- ▶ Logistics support
- ▶ Development planning
- ▶ Surveying
- ▶ Environmental preservation
- ▶ Mining pits and soil health monitoring
- ▶ Priority agricultural plot projects (rubber, coffee, and cocoa)
- ▶ Air dispersion modelling
- ▶ Traffic monitoring





# Potential Projects on Regional Collaboration

- ▶ Data and processing framework sharing for disaster-related events and other regional frontiers
  - ▶ Establishment of an ASEAN UAV community
  - ▶ Regional conferences and ideathon for use of UAV and other unmanned vehicles
- 

THANK YOU 😊