

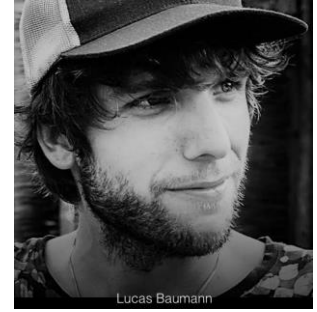
# Retex: HappyTogo project

12th to 17th of February 2019



# Actors of the project

- HappyTogo or Glück für Togo is a Swiss NGO led by Lucas Baumann
  - Environmental Scientist specialised in smallholder farming systems
  - Co-founder of the project and since 5 years enthusiastically working on the development of a model farm to promote sustainable farming techniques that benefits the poor smallholders of the region
- Étoile verte,
  - Official partner of Happy Togo & responsible for the local development of the modelfarm
  - Togolese experts in rural Sociology, Agroforestry, Permaculture, Fish Farming and marketing
- Donomadé village and community



Dr. Adjanke Amakoé

Hayppy Attiogbe



Attisso Agbéwanou

Djifa Agboli

# Actors of the project

- Support from the Ministry of Environment and Forestry (flight and import authorization)
  - They lead a huge ecovillage project financed by UNDP and plan to install several hundreds of eco-villages all over Togo,
  - Donomade belongs to one of the two pioneer Eco-villages from the initial testing phase
  - They are responsible for the protected Togodo forest nearby the Modelfarm and plan to develop eco-tourism,
- Project secured by Local Military Team
  - In action here ->
- Wingtra: initiative from Max, Alex and Guillaume on site, assisted by the support team

## Farm location and plan



# WingtraOne Missions

## Donomadé Model Farm

- 197ha, 1.5cm/px GSD, 2 flights at 120m altitude with RXR11
- 1763ha, 5.5cm/px GSD, 2 flights at 400m altitude with RX1R11
- 209ha, 9cm/px GSD, 2 flights at 400m with MicaSense

## Ministry of Environment and forestry areas

- 737ha of protected forest, 5cm/px GSD , 2 flights at 600m altitude with RX1R11
- Aweve town, protected forest and river border with Benin 3900ha, 17cm/px GSD, 5 flights at 600m altitude with QX1 15mm



# Challenges to face

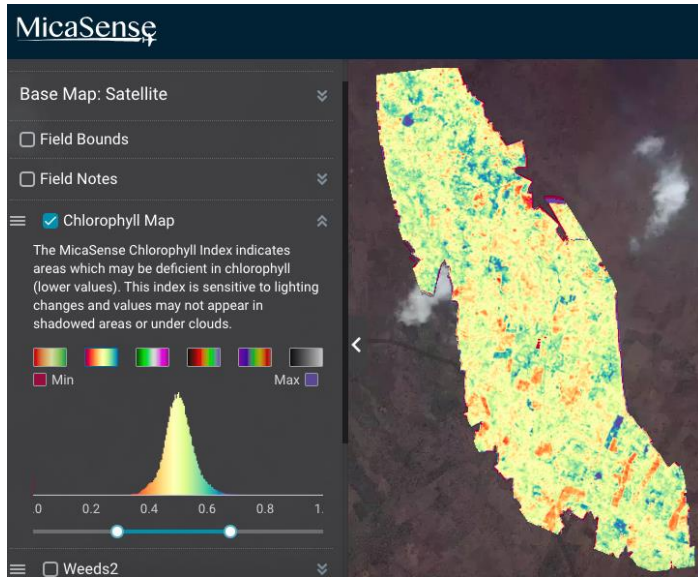
- Weather conditions: +35 degrees Celsius, harmattan (dust and sand wind from Sahara)
  - Battery charger blew up and smoked when first battery charge attempt. Finally use only the car battery cables.
  - 3h walk in the forest to fly Togodo forest, when arrived : low battery radio and redEdge topcover missing + some buffalo trap on the way
  - Fire in the bushes
  - Wingtraone on a motorcycle
- 
- + EKF interference before takeoff, even in the savanna
  - + BVLOS flights = RC and Telemetry loss = lot of stress
  - + Take-off from tight area and even a house's terrasse

# A lot of fun and positiveness

- Very instructive and fun to work with Lucas for the Donomadé Model Farm mission, awesome man, awesome project !
- Wingtra was expected in Togo , incredible smooth welcome and organisation on the different sites we've been : Lomé, Donomadé Farm, Avevé, Lomé.
- Private welcoming concert from locals
- Meetings with experts, sharing experience and knowledge
- In love with Togo, breathtaking landscape, hot weather, tropical forests, warm people and no malaria!
- Team up with Alex and Lucas, end up with new African names : Yovo Kokou & Yovo Kodjo given by Togbui Adodo, Tomety Kondji village chief (Donomadé Canton)

# Missions results and final use of the data

## Donomadé model farm results MicaSense



Final use of the data, Quoted from **Lucas Baumann** :

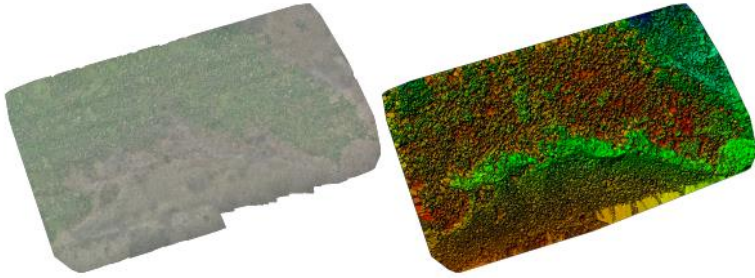
- Snap-Shot of the current state of the farm and the region to compare to a retake in 2-5 years and visualize/measure the impact of the project
- Create interactive maps: strong communication/planification tool
- Optimization of transport-logistics
- Evaluate agricultural potential of region
- Basis to define the water management plan for the farm and the entire region
- Strong dataset to attract interesting research partnerships with ETH and other institutions

The results are of great value to the entire project. The association Happy Togo is very thankful for this fruitful partnership with Wingtra.

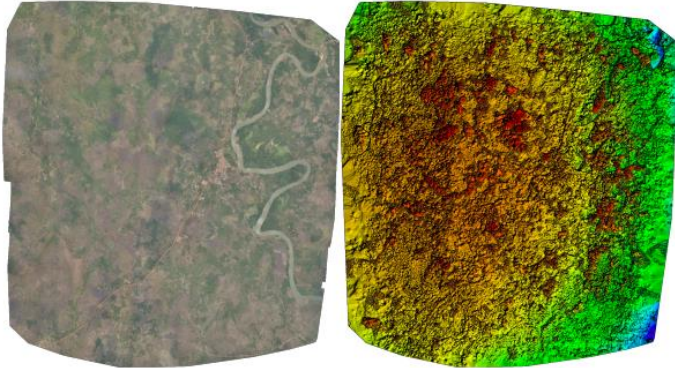
Multi spectral results will be analysed with assistance of the ETH group "Crop Science" later in this year to identify potential of such measurements in the context of qualitative crop/soil analysis on a larger scale

# Missions results and final use of the data

## Togodo Forest



## Aveve Town



Final use, quoted from **Gilles K. ETSE, Biologist & Environmentalist Specialized in Remote Sensing and GIS** for **Ministry of Environment and Forestry**:

“The orthophotos acquired during the flights will be used for the development of a management plan of the flood zone in Mitragyna in the canton of Aklakou (3000 ha) in the context of the implementation of priority options for the restoration of forest landscapes in the prefecture of the Lakes“

“ For this purpose, a land use map will be produced and management maps will also be produced from the data acquired.“

Togodo Forest Data will be used to identify trees composition in order to install a small model forest on the model farm







# Conclusion

- WingtraOne rocks !
- Pro Bono projects such as HappyTogo always worth it
- Great new maps for marketing use
- Potential upcoming business with Ministry of Environment and Forestry in Togo

Now, Who's next for taking the challenge ?

***Thank You***

