



# Working towards the Mission Concept Review of an International Cooperative Space Project

a Mesoamerican CubeSat

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### Background







### **O**bjective

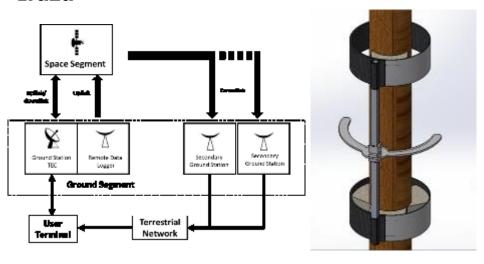
Become the cornerstone of cooperation in space technology to the service of the development goals of the area.





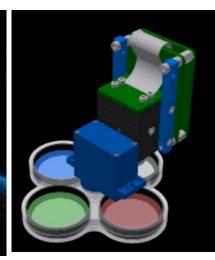
#### Advantages: Experienced teams!

#### Irazú



#### Quetzal-1





Started in 2013: Cubesat 1U First Costarrican satellite

Started in 2014: Cubesat 1U First Guatemalan satellite

Mission: Store and forward of data from Mission: tree growing in remote locations.

motorize

Mission: Monochromatic sensor with motorized carrousel for water color monitoring

Current status: in operation

Current status: Assembly and test currently in execution.

2/26/17





### **Opportunity**

- Two trained teams
- Two operating CubeSats by 2019.
- Same language/ culture
- Geographical closeness





Same necessities to be solved!





#### Challenges

- Small countries = small budgets
- No active space government organization in Central America





# How do we take advantage of the opportunities and overcome the challenges?





## cooperate!





### Fine, let's cooperate. Why should we do it?











































### The mission: Forest mapping\*









### SUSTAINABLE G ALS



















#### The mission: how?

- Mission was defined via a methodology developed in UVG
- Makes use of developments from Irazú and Quetzal
- High potential of international support



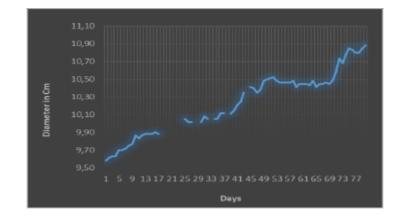


### Ok, we get the idea. What are you people doing next?

• Add stakeholders in Central America (all countries are invited) and partners internationally, with special focus on Latin America (Mexico is here!).



- Complete the process where the possible users of the technology help shape the mission:
  - Environmental organizations
  - Agricultural organizations
  - Emergency committees
- Define what is the risk/development ratio to be used



Unite everything to make the MDR in 2019





We think our success and lessons learned may be applied to even more ambitions multinational missions!





### Do you want to help or have questions? Talk to us!

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### Thank you very much!