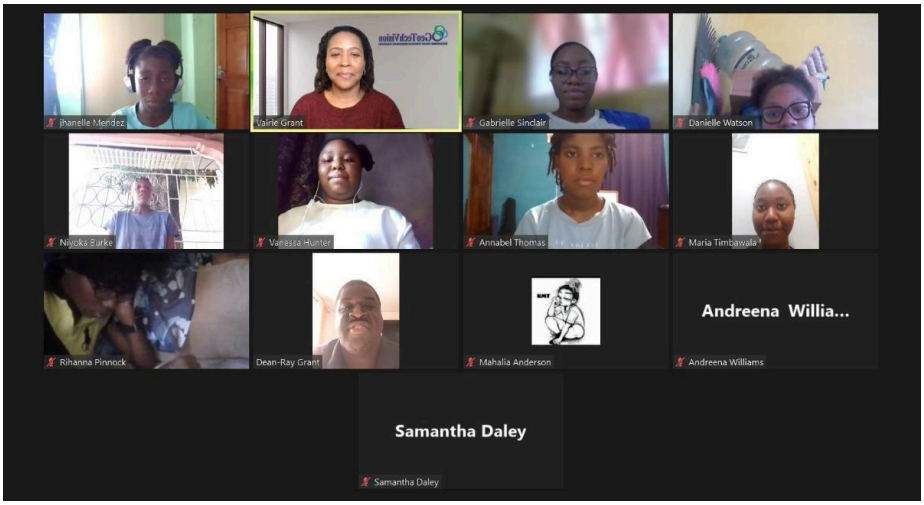
Girls in GIS: Our Community, Our Earth

Girls Flying Drone

Group of Students from Charlemont High School with their Certificates of Participation



A screengrab from the Virtual Training Session

OVERVIEW	
Flying Labs	Jamaica Flying Labs
Location	Kingston, Jamaica
Date	October 30, 2023 - December 9, 2023
Length (number of days)	10 days

Sector program (optional)	YouthRobotics
Format	Online and In-Person
Co-organizer if applicable	EduTechAid, Humanitarian OpenStreetMap Team (HOT)
SDGs	GOAL 4: Quality Education GOAL 5: Gender Equality GOAL 10: Reduced Inequality GOAL 11: Sustainable Cities and Communities GOAL 13: Climate Action GOAL 15: Life on Land GOAL 17: Partnerships to achieve the Goal

SCOPE & OUTCOMES	
Type of training	Youth/STEM training
Goal of the training	1. Create drone awareness 2. Develop drone data acquisition skills 3. Develop drone data analysis skills 4. Develop data literacy/interaction skills 5. Train and empower youth and the workforce of the future 6. Using Technology for Climate Action
Expected outcome for participants	1. To learn the fundamentals of GIS 2. To learn to use National Geographic Map Maker 3. Learn to use OpenStreetMap 4. To fly a drone and capture, download and process data
Confirmed outcome after training	● Students were introduced to the fundamentals of Geographic Information System(GIS) and learnt how to use National Geographic Map Maker, Esri ArcGIS Online and story maps. ● They learnt how to use OpenStreetMap (OSM) and contribute to the OSM Community. They also learnt how to fly a drone for data capture, how to download and process the information. The participants further indicated that the knowledge gained from the training will be useful in their School Based Assessment (SBA).

Eventual next steps	• In Summer, 2024 the girls will be invited to participate in a Summer Camp for further training. • Continuous mentorship through Jamaica Flying Labs. • Collaboration with the National Emergency Response GIS Team (NERGIST) for real-world disaster response scenarios. • Inclusion in Jamaica Flying Labs' broader endeavors for continued experience and growth.

PARTICIPANTS	
Profiles and number of participants	15 School children (13-18 years old)
Name of participants' organizations	• Charlemont High School • Ewarton High School • McGraw High School • Glemuir High School • University of the West Indies, Mona
Gender ratio	15 Female : 0 Male
Who paid for the training?	HOT, EduTechAid and GeoTechVision
Participant fee rate (if applicable)	Not applicable
Scholarships offered?	None

CONTENT	
Training components	• Introduction to the program and its objectives • Overview of GIS, OSM, and UAV technologies • Introduction to OpenStreetMap • Hands-on mapping exercises • GIS techniques and tools • Case studies and real-world applications • Basics of drone technology and piloting • Safety protocols and best practices • Hands-on drone exercise

	• Data collection and analysis exercises
Training resources used	• National Geographic Map Maker https://mapmaker.nationalgeographic.org/home • Esri ArcGIS • OSM Task Manager and ID Editor OpenStreetMap • Drones • Tablets
Approaches and methods used	• Need-based: The training was adapted based on user needs to ensure everyone kept paced and followed along with exercises. • Hands-on: Students were taught to use the various software in class and were given homework such as maps and reports to submit. They also participated in a 4-hour mappathon one Saturday. They participated in hands-on drone exercises and data processing in the field. • The students were able to create their own Maps. Additionally, many have indicated that they will use the new skills learnt for Social Studies and Geography projects.