Spatial tools for conservation planning in remote spaces: end of project workshop

Establishing a legacy for future monitoring & empowering local stakeholders – reflecting on the Coastal Habitat Mapping EO Training Workshop

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Produced as part of the Darwin DPLUS065 Coastal Habitat Mapping project

DPLUS065 Coastal Mapping Project – Grant aided by the Darwin Initiative through UK Government funding - Satellite image courtesy of Digital Globe Foundation

What I’m going to talk about?

1. Who attended?
2. Take you through the training that was delivered
3. Learning outcomes
4. Workshop feedback
5. Future monitoring

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Who attended?

- Falklands Islands Government
- South Georgia Government
- Falklands Conservation
- SAERI and visiting researchers
- Shallow Marine Survey Group
- High school students
- Other stakeholders

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The training delivered – Day 1, Session 1 [AM]

1. Basics of Earth Observation (EO)
2. Tour of the technology using examples
3. Advantages and limitations of EO

How to make decisions when it comes to using EO

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The training delivered – Day 1, Session 1 [AM]

Aimed at:

- non-technical users
- anyone who wants to learn more about EO
- managers and decision-makers

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The training delivered – Day 1, Session 2 [PM]

- Drone demonstration!
- Practical on spatial resolution
  - Drawing pixels outside
  - Looking ad different types of imagery in a GIS
- Practical on spectral resolution

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The training delivered – Day 1, Session 2 [PM]

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The training delivered – Day 1, Session 2 [PM]

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The training delivered – Day 1, Session 2 [PM]

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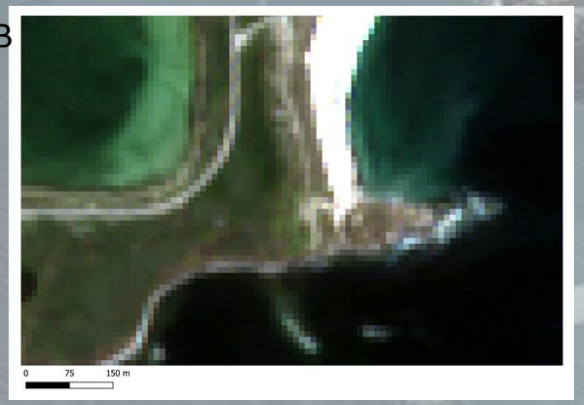

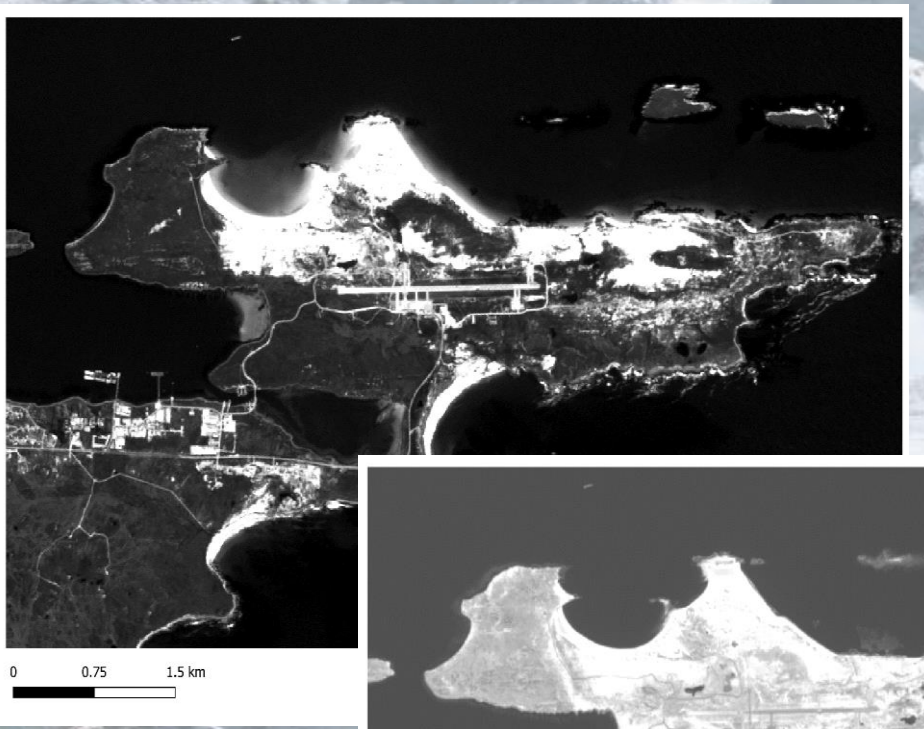

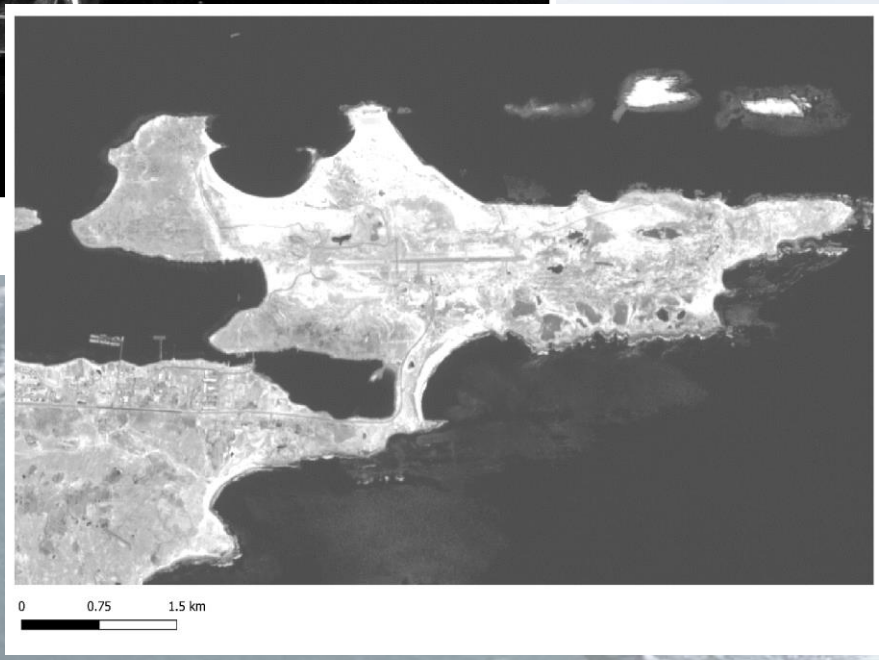

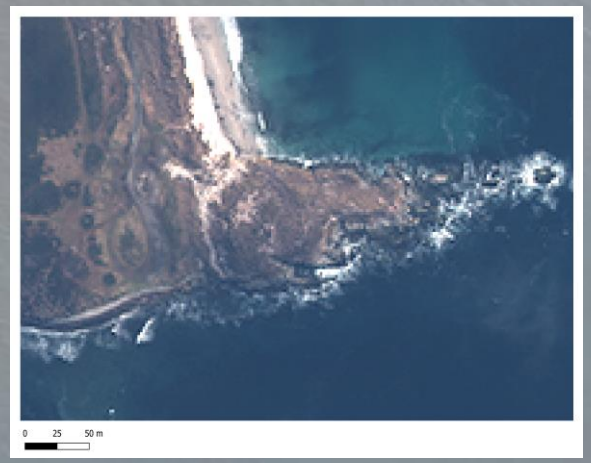

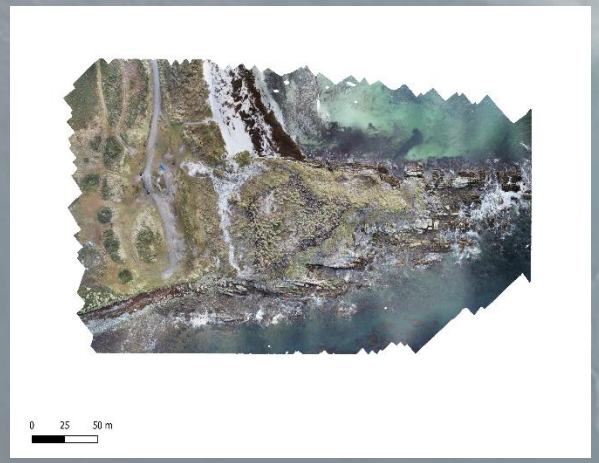

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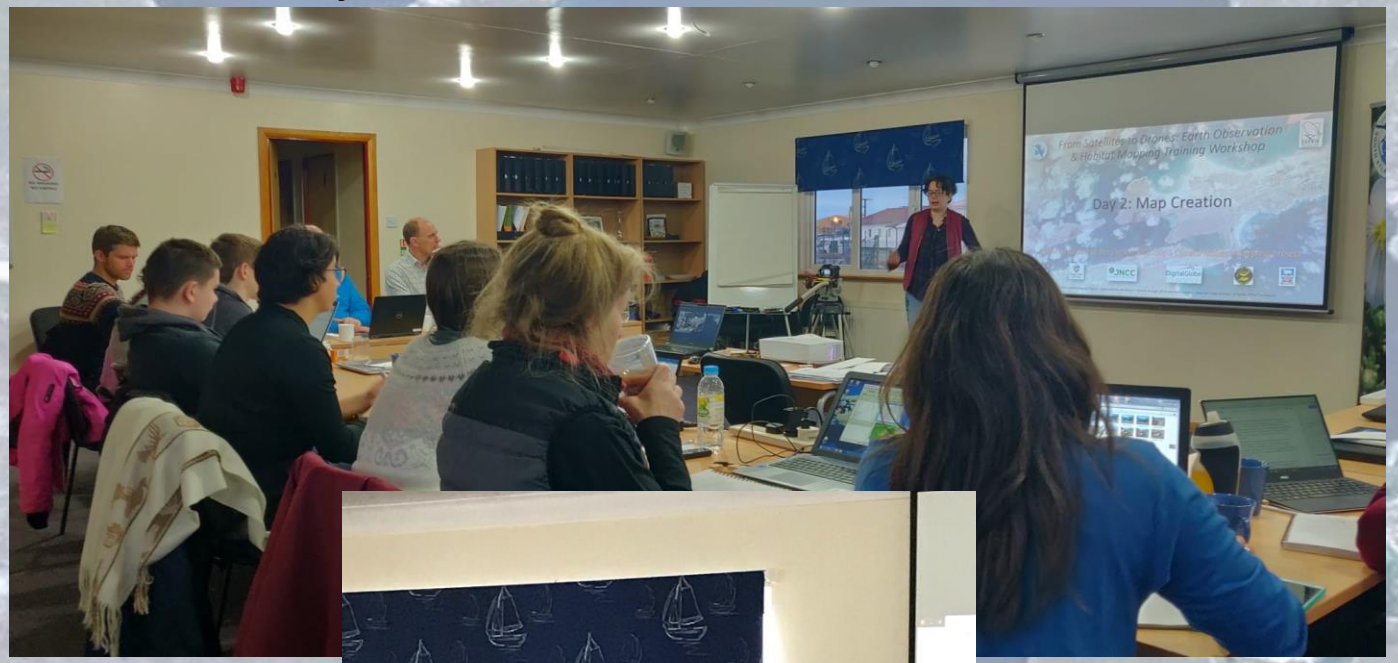
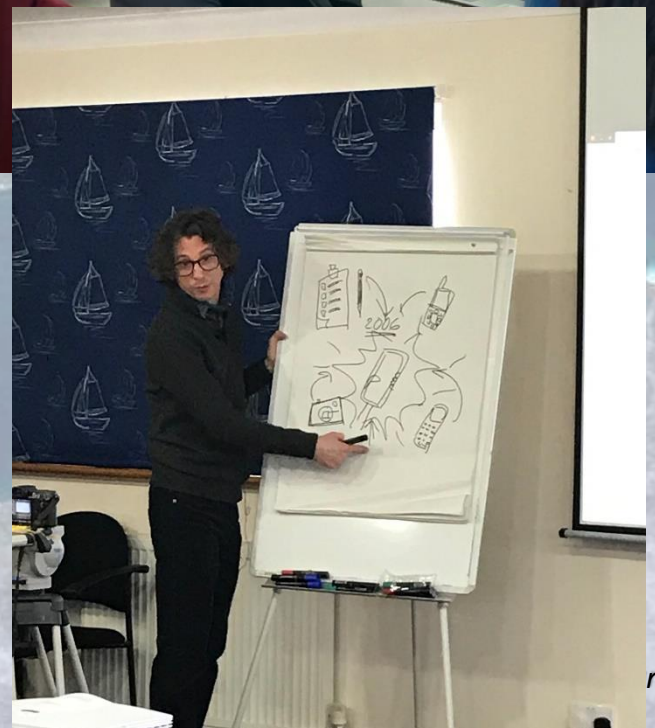
The training delivered – Day 2, Session 1 [AM]

- How to create a map
- What are classifiers?
- The importance of groundtruthing
- Open Data Kit – a tool to help with collecting field data?
- Assessing map uncertainty





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The training delivered – Day 2, Session 2 [PM]

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The training delivered – Day 3, Session 1 [AM]

- Showcase Google Earth Engine workflow for broad-scale mapping
- Showcase python scripts for fine-scale mapping
- Create your own classification

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The training delivered – Day 3, Session 2 [PM]

- Discussion on integration of project outputs with other initiatives in the territories
- How outputs can influence future work
- Quiz!

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Learning outcomes

- How to use QGIS and SAGA (open source GIS)
- Understanding of a variety of image types (satellite and drone) and their limitations (e.g. cloud, coverage)
- Regulations around flying drones
- Suitability of field work data collection for analyses with EO
- How to visualise imagery using QGIS
- How to segment images into meaningful objects
- How to run a simple classification process
- Understanding of the mapping process in GGE and python

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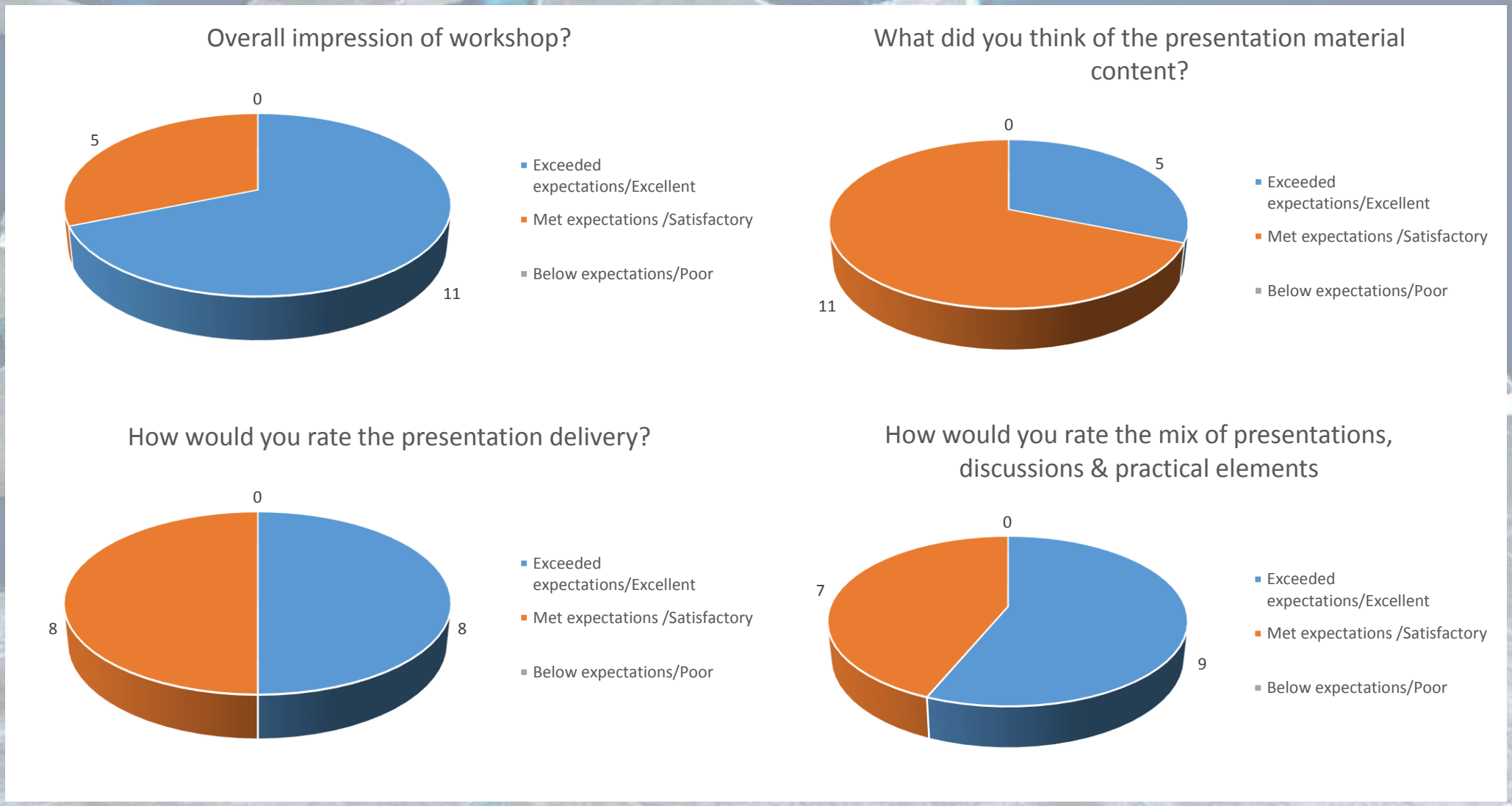
Feedback from participants



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Future monitoring?

‘changes/improvements to the old aerial photos’

‘how you can then use maps/images etc. for different kinds of analysis’

‘build on the workshop’s training in ground truthing’

‘further support in use of SAGA and QGIS’

‘creating an user manual for new updates of the basemaps’

‘more work needed on defining habitat categories for FL’

There was interest in re-running this training workshop on a regular basis

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Any questions?

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