An atlas of the breeding birds of the Comoro Islands

Michel Louette, Danny Meirte, Patricia Mergen,Garin Cael, Bart Meganck

Africa
slands Brace For
Possible Lava Flow
Comoros
Mozambique
Madagascar
Indian
Ocean
REUTER

0 30
0 30
Indian Oce
MORONI
Grande Comore
(Njazidja)
Moutsamoudou
Anjouan
(Nzwani
Mohéli
(Mwali)
Fomboni
Domoni
Mozambique
Channel
May
Administ
claimed

Africa

Target : compile info into an atlas with maps

info from various Comoro expeditions,
as early as 1980's

various locality indications :
- GPS (minority)
- map references by name (mostly)
- old maps with unknown “datum”

various types of observation :
- bird counts in transects
- spot observations

Africa

-> much work cleaning up dataset :

- retrace transects, georeference points (relative heights, forest/non-forest)

- control : data point swapping

analysis :
- ecological parameters
- interpolation
- SRTM-3 altitude measurements

chosen grid : 900m horizontally, 50m vertically

per grid cell :

- min/max/mean height
- % surface land/sea
- height differences (cliffs)

from maps :

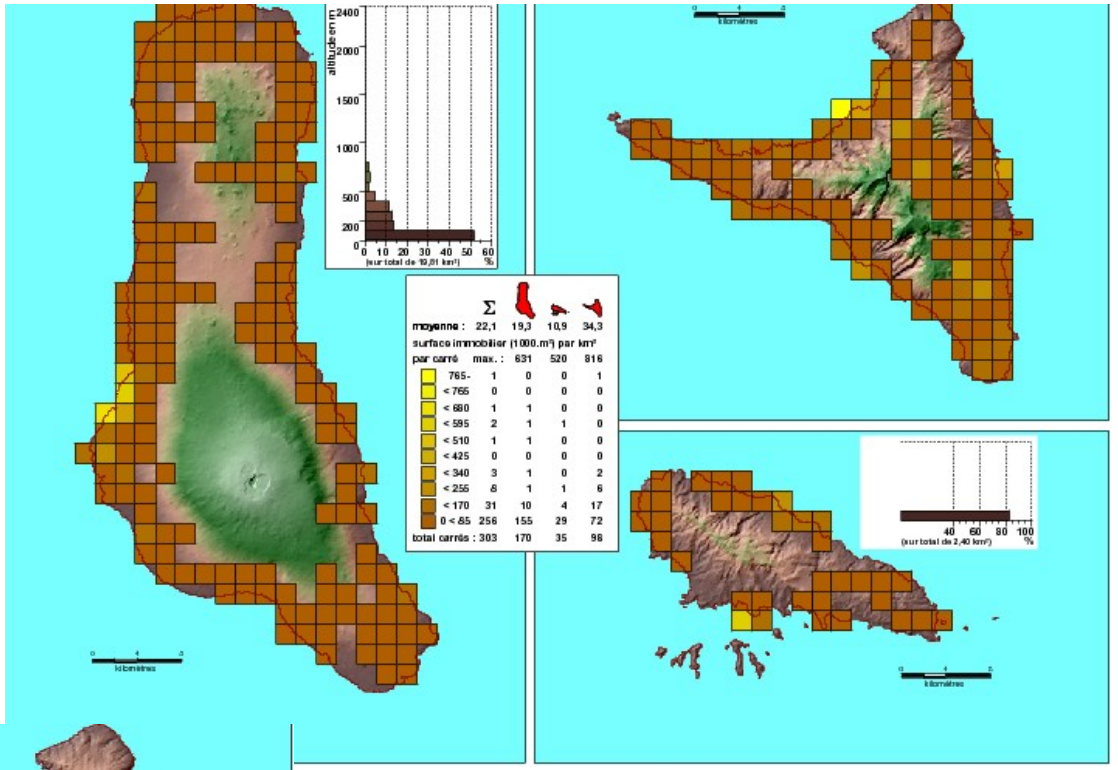
houses & buildings (contours) -> % human activity
rivers, roads : idem

Africa

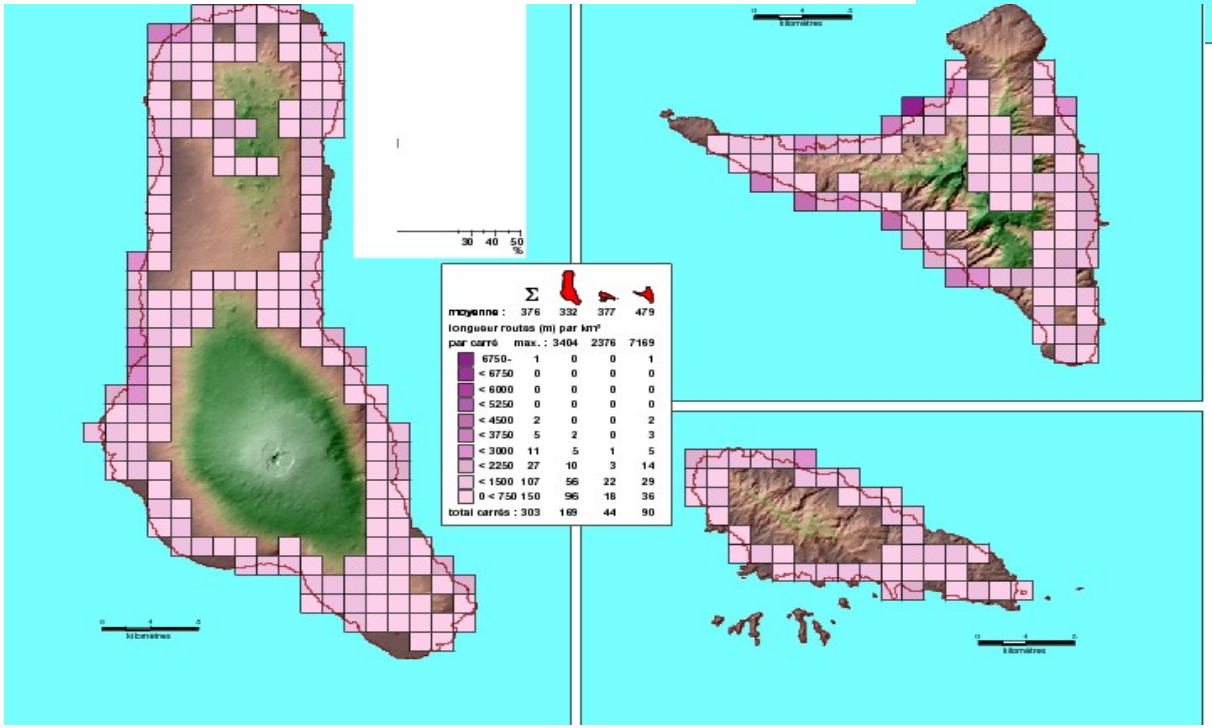
rainfall : isohyetes map, interpolation, correction with actual weather station data

conclusions : zones of maximal importance (conservation), index of rarity of species

Africa

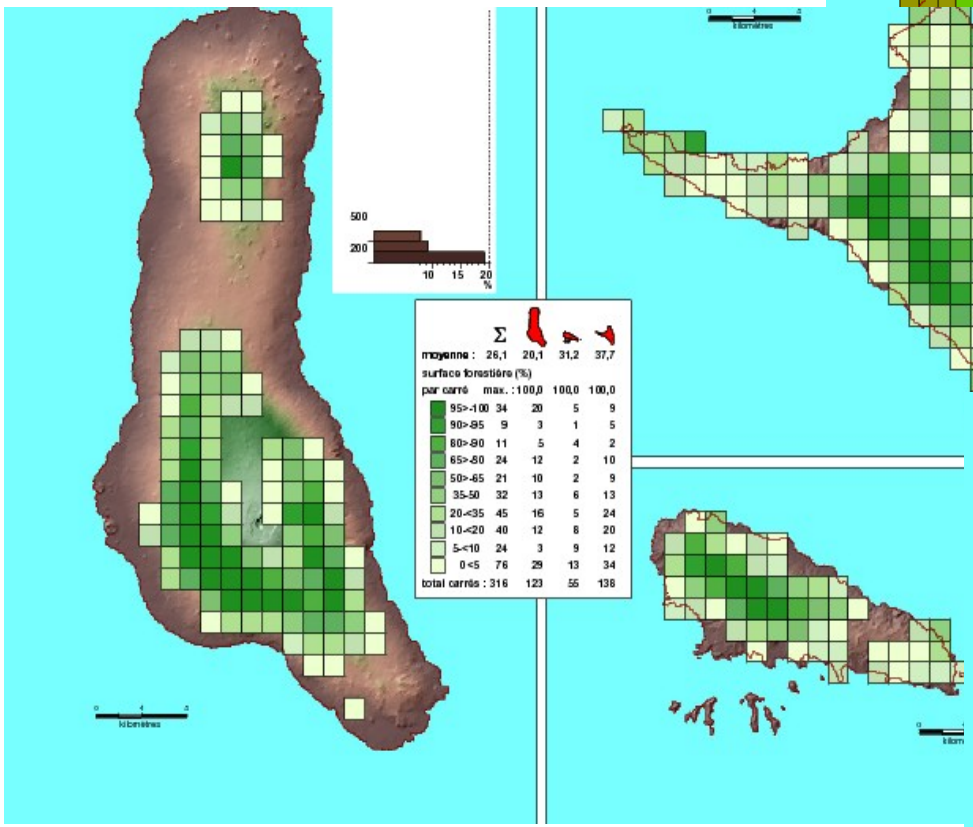


roads

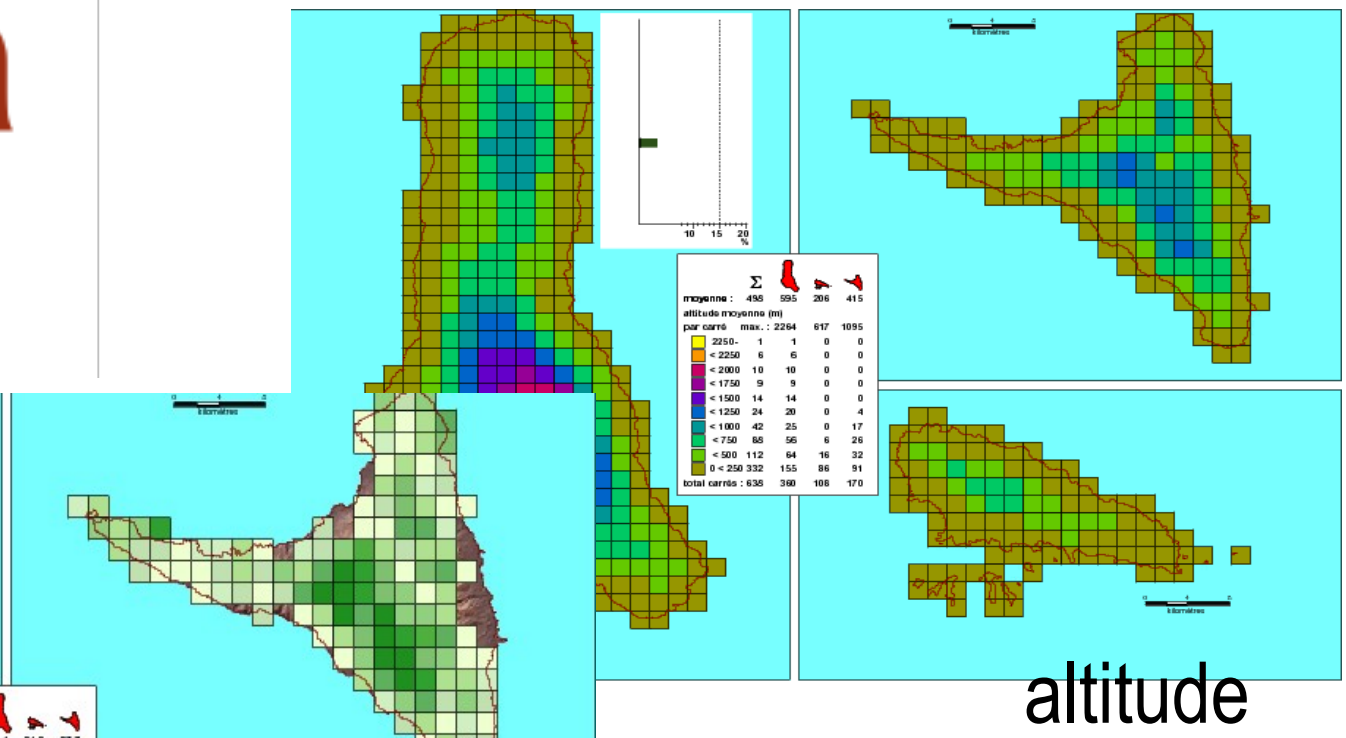


buildings

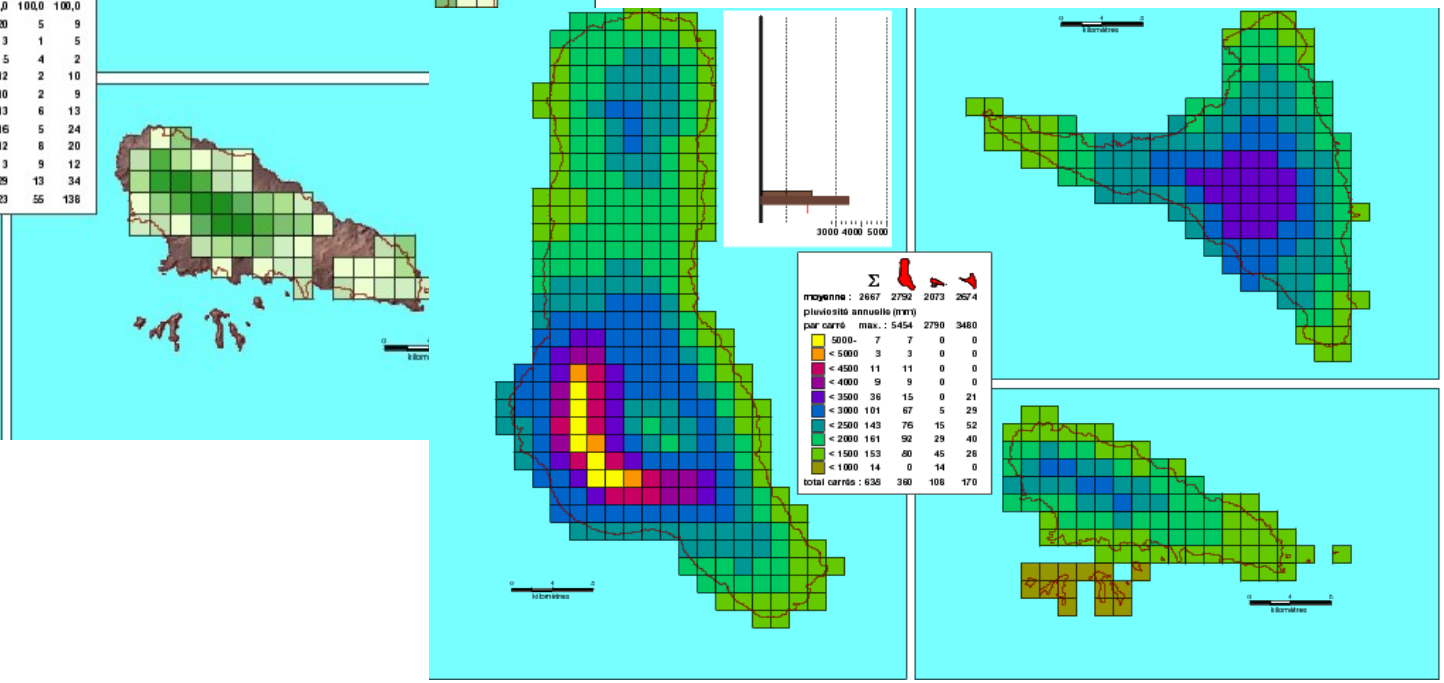
Africa



forests

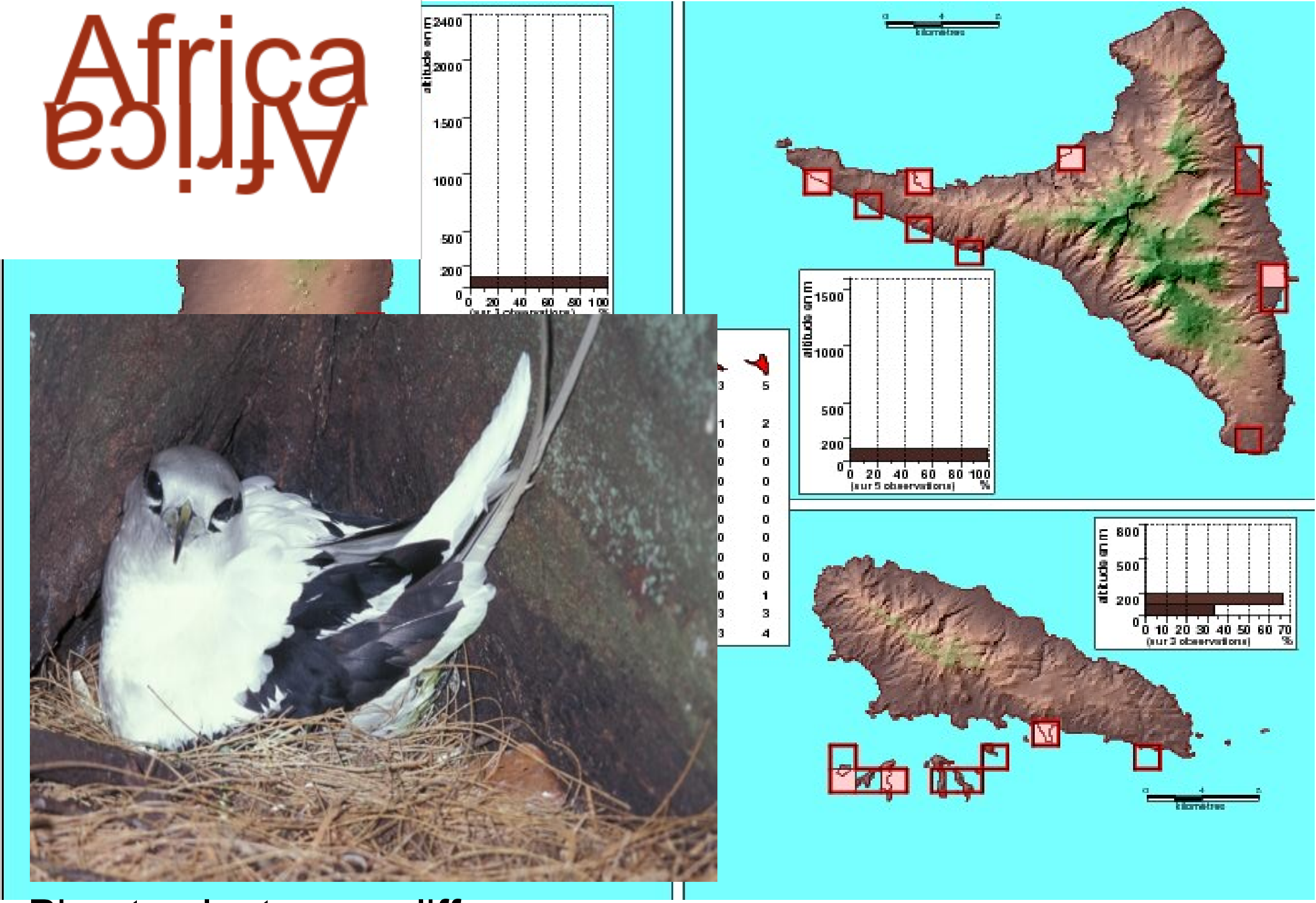


altitude

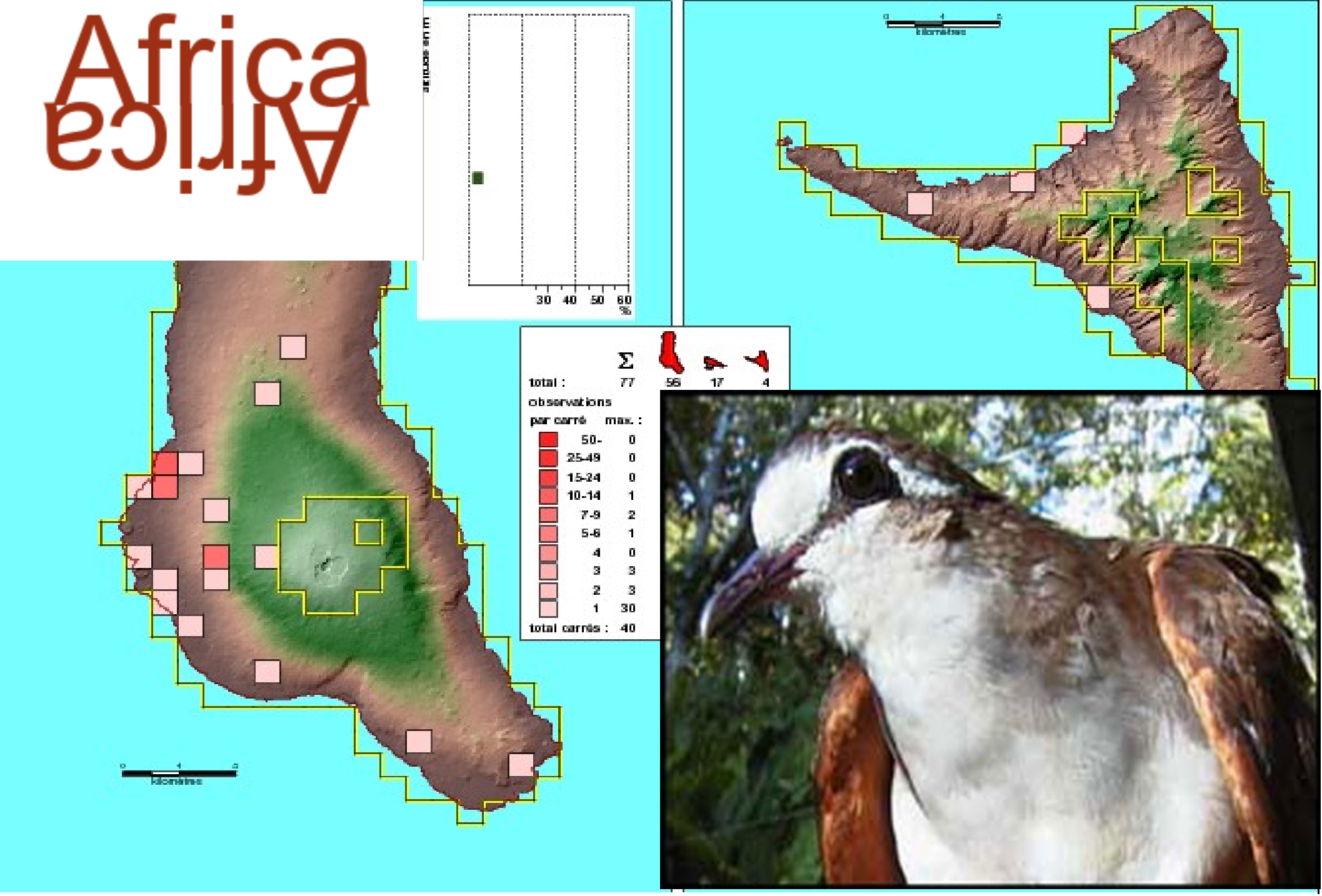


rainfall

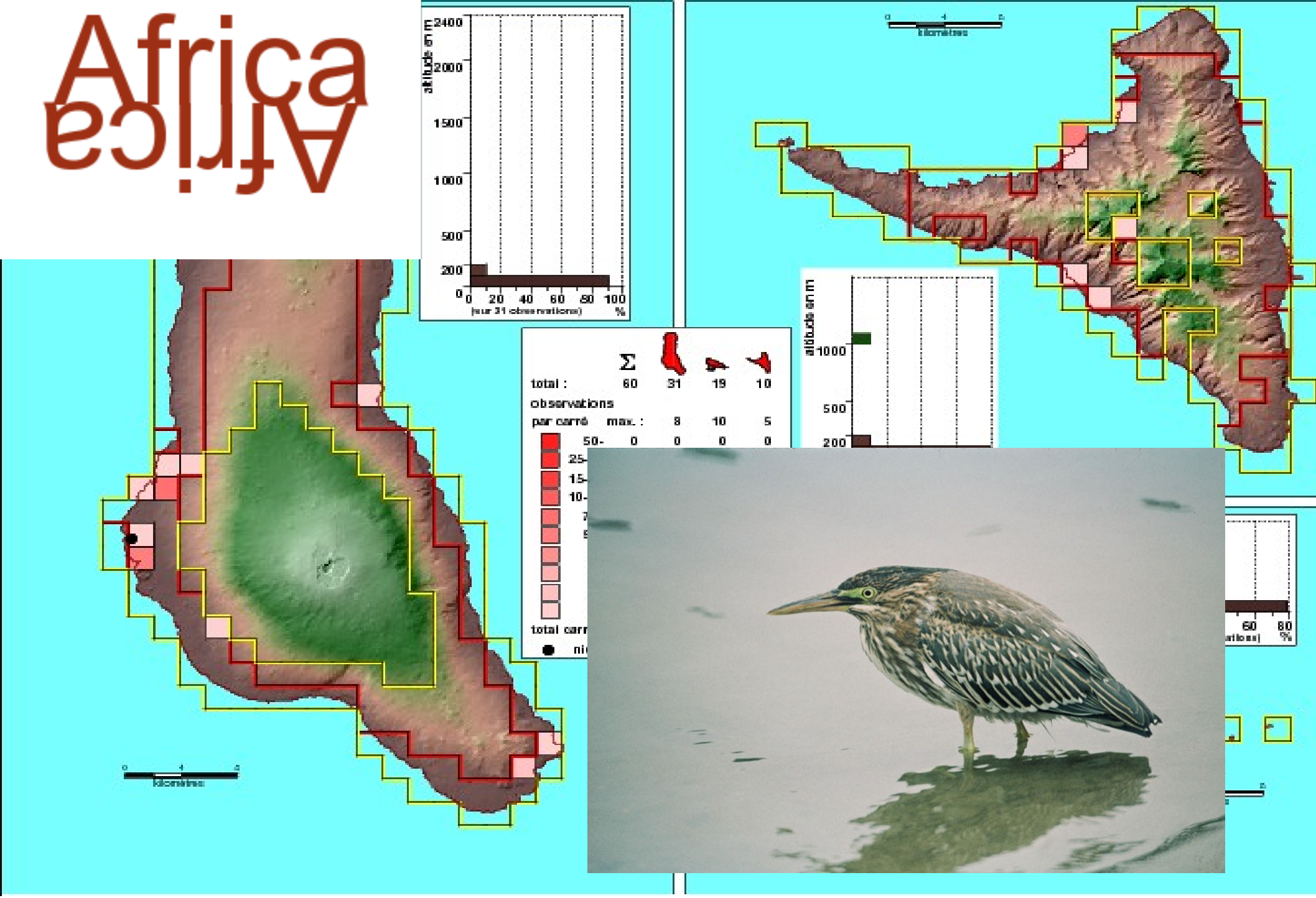
Africa



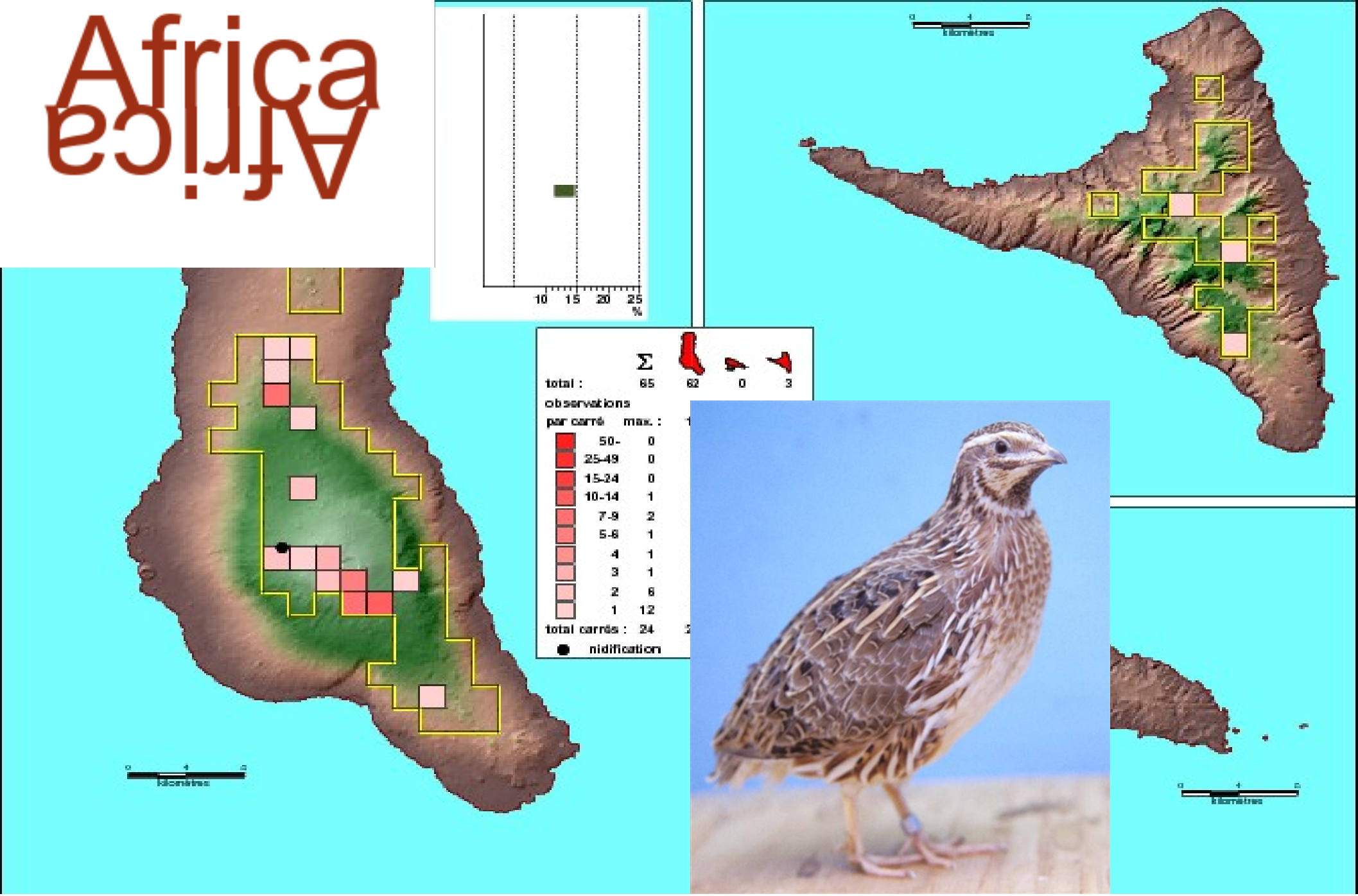
Phaeton lepturus : cliffs



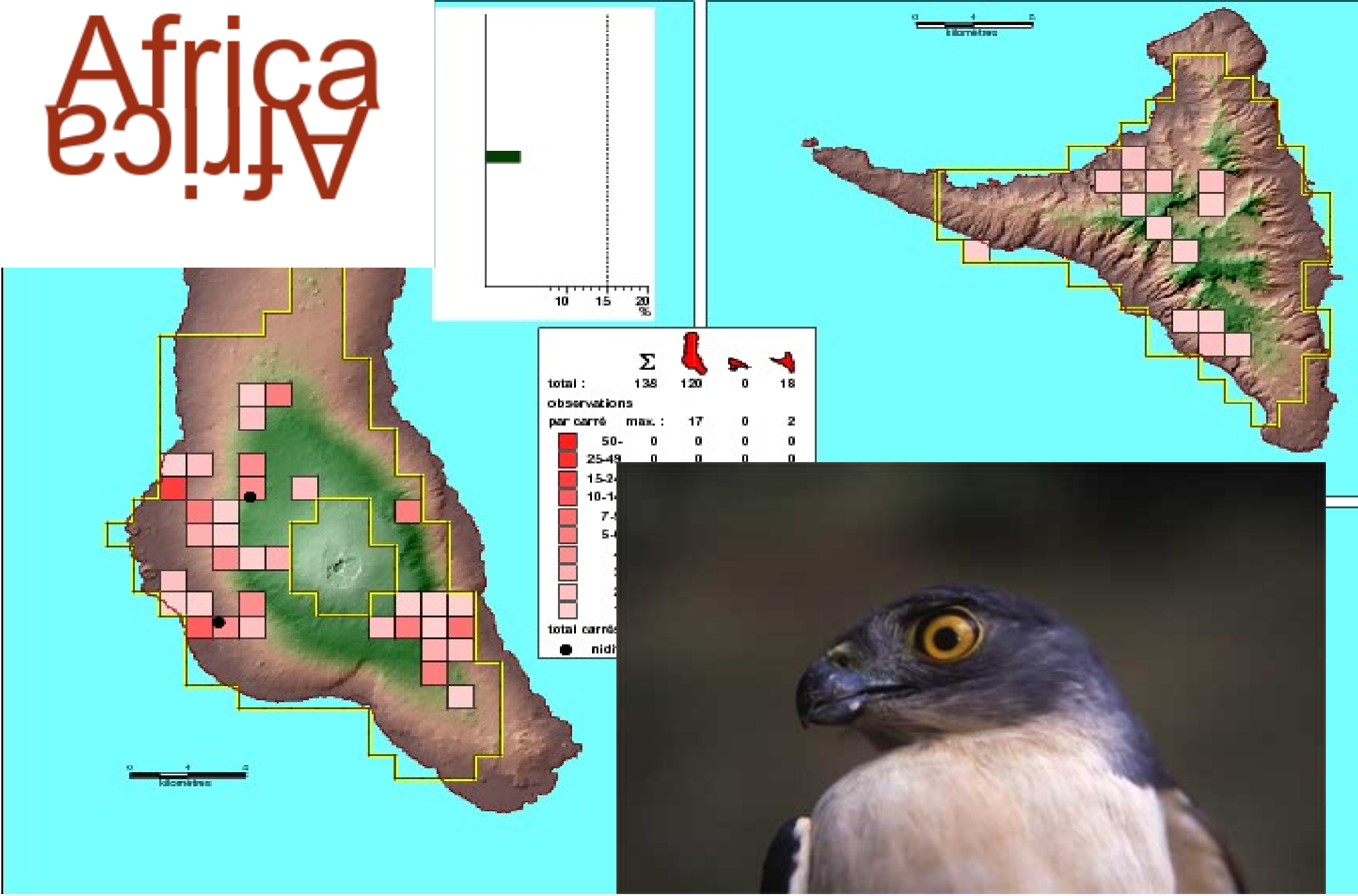
Turtur tympanistria : woodlands with not much rain



Butorides striatus : coastlands & rivers



Coturnix coturnix : open spaces at high altitudes



Accipiter francesiae : rain

Africa

the DeeGree link

RMCA has been using DeeGree since 2005

many GIS projects with web connection :

SYNTHESYS “Itineraries”
HerpNet (herpetology : amphibians & reptiles)
EDIT GeoPlatform webtool

after publication, Comoro data will be served to the Web through a WMS

Applications Places System
Thu May 22, 10:25 AM
dataset preview - Firefox
File Edit View History Bookmarks Tools Help
http://synthesys.africamuseum.be/itin/preview.php
Google
Getting Started
Latest BBC Headlines
Geoplatform MNCN - Map vi...
dataset preview

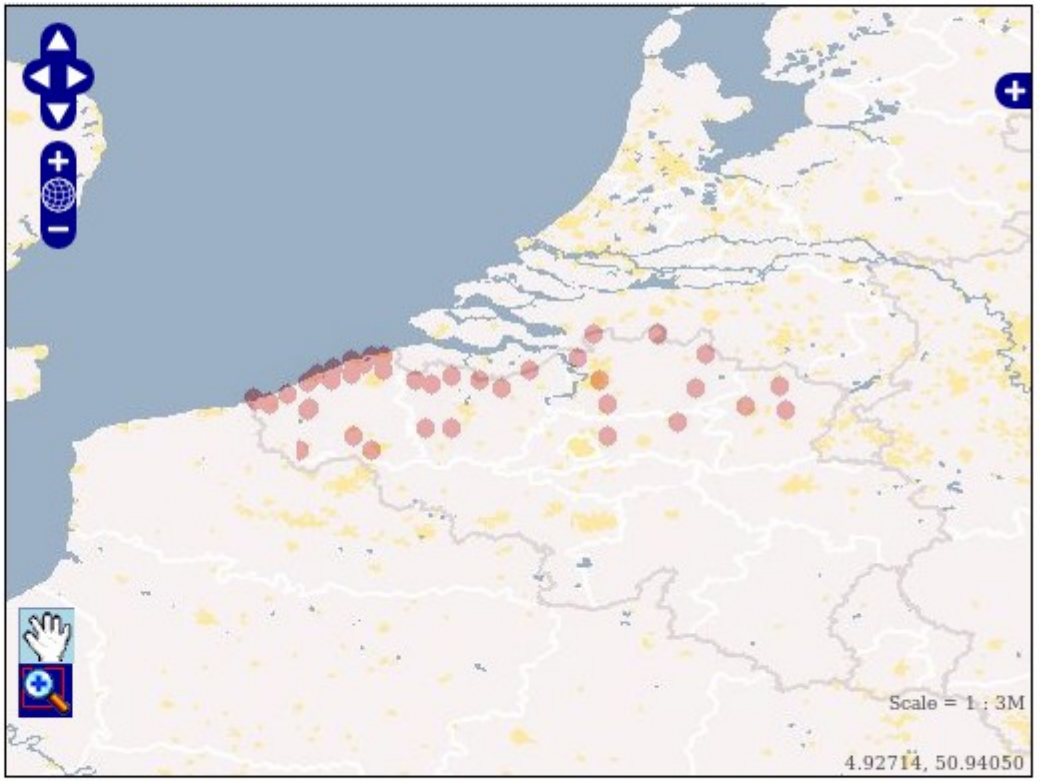
ItinTool results preview

Home
ItinTool home

SYNTHESYS NA-D
The EU synthesis of systematic resources

EDIT WP5
The European Distributed Institute of Taxonomy

RMCA
The Royal Museum for Central Africa



The following layers are plotted on this map :

A base layer directly from the Matacarta WMS service:

Done
boite_d... Re: abo... Directio... *C5.56_... about t... dataset... Downl... Deskto... Starting...

Applications Places System Thu May 22, 10:41 AM

Geoplatform MNCN - Map viewer (prototype) - Firefox

File Edit View History Bookmarks Tools Help

http://edit.csic.es/edit_geo/prototype/edit_project.html

Google

Getting Started Latest BBC Headlines

Geoplatfo... dataset pre... MapServer ... http:...vmap0 file://...rv.htm file://...erv(2) file://...erv(3)

Context/Extent . . . (projection)

Surface Units

Environmental Variables

Remote WMS

Enter a search parameter

Some ideas: NASA, FAO, Brasil, SPOT, flora...

This tool searchs in wms-sites.com

May be they don't have what you are looking for...

search

EDIT WMS

load it

Enter a WMS GetCapabilities URL:

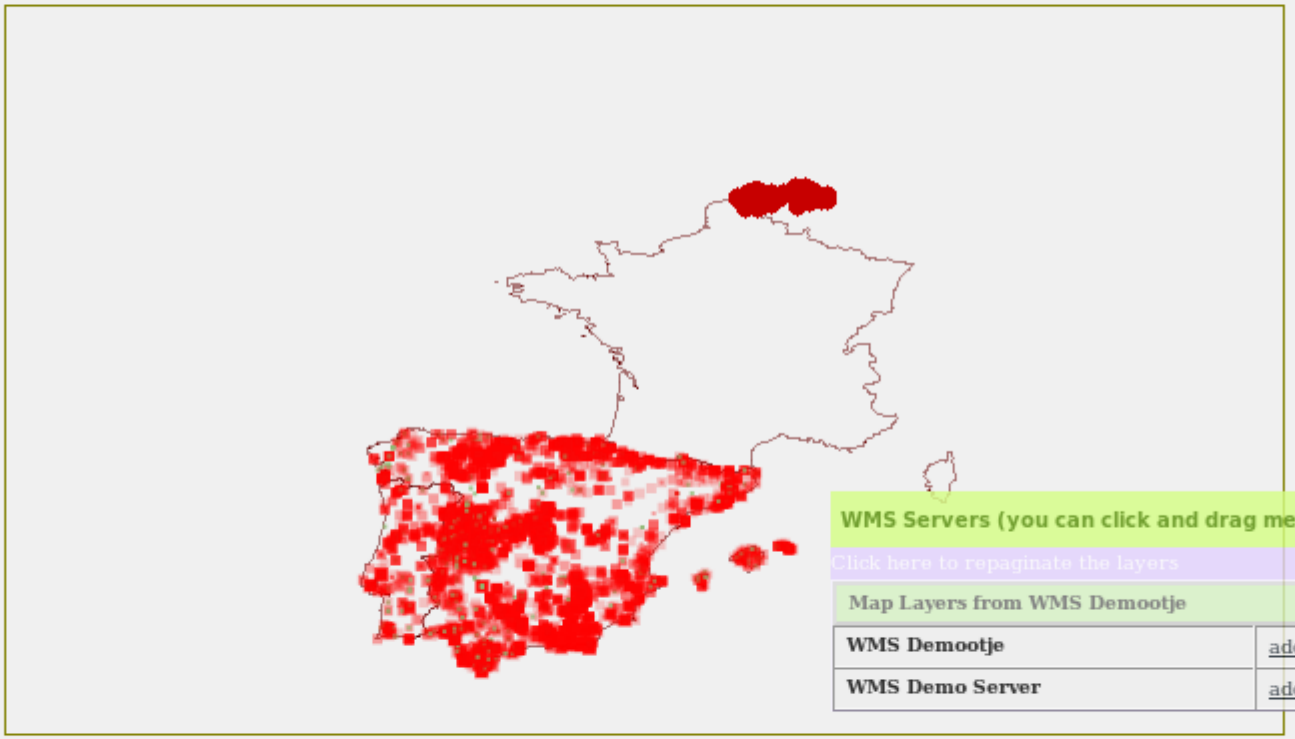
http://edit.csic.es/geoserver/wms?reque

load it

Remote WMS layers

Geoplatform MNCN

x: y:



WMS Servers (you can click and drag me)

Click here to repaginate the layers

Map Layers from WMS Demootje	
WMS Demootje	add to map
WMS Demo Server	add to map

2000 km

You can change the scale... scale 1: 25,489,057

Home

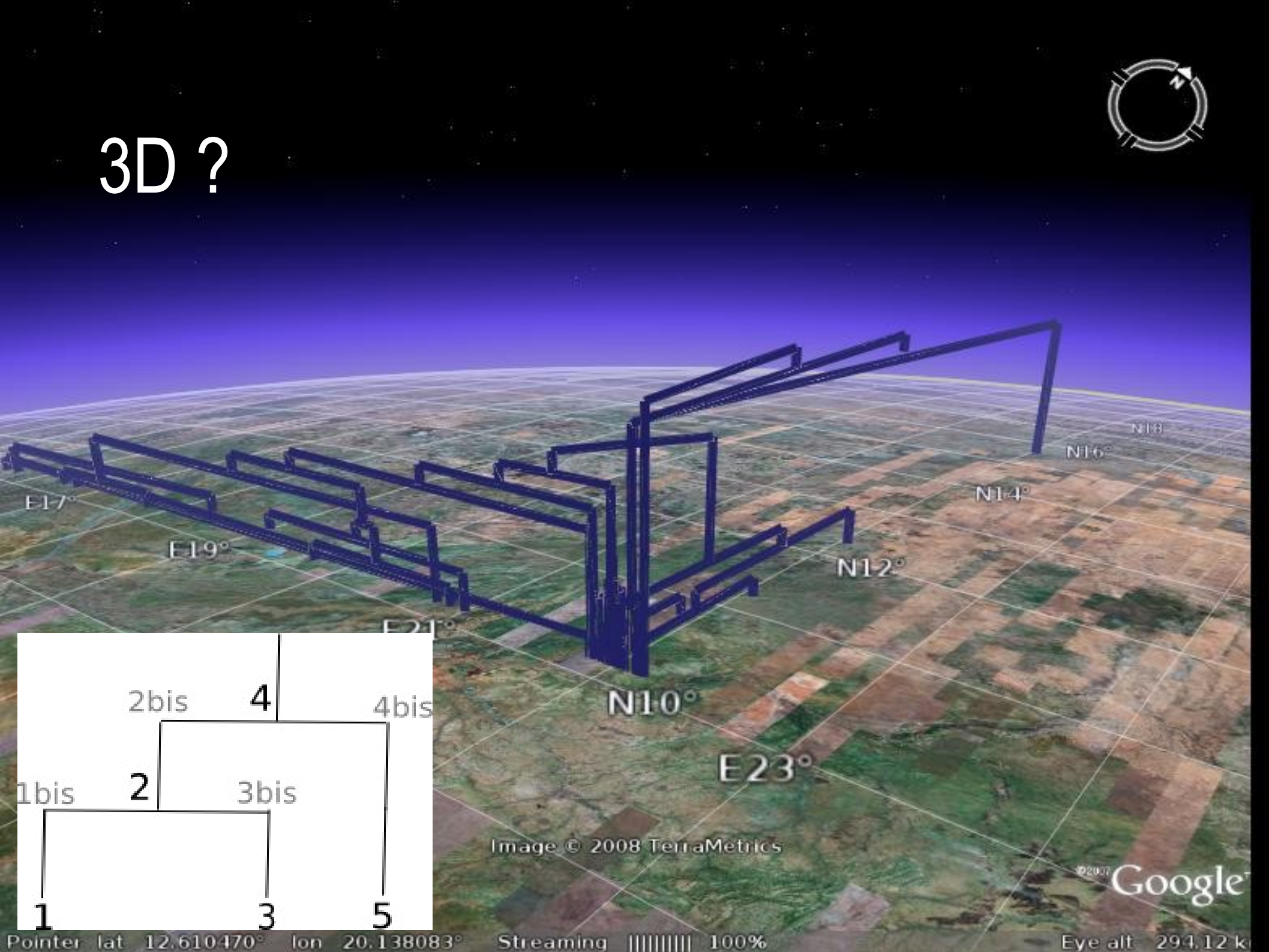
GIS layers description - Surface units & Environmental variables

GIS Downloads

javascript:config.objects.zoomOut.select()

boite_de_... Re: about ... Directions... C5.56_rep... about the... Geoplatfo... Desktop -... Starting T...

3D ?


E17°
E19°
N10°
N12°
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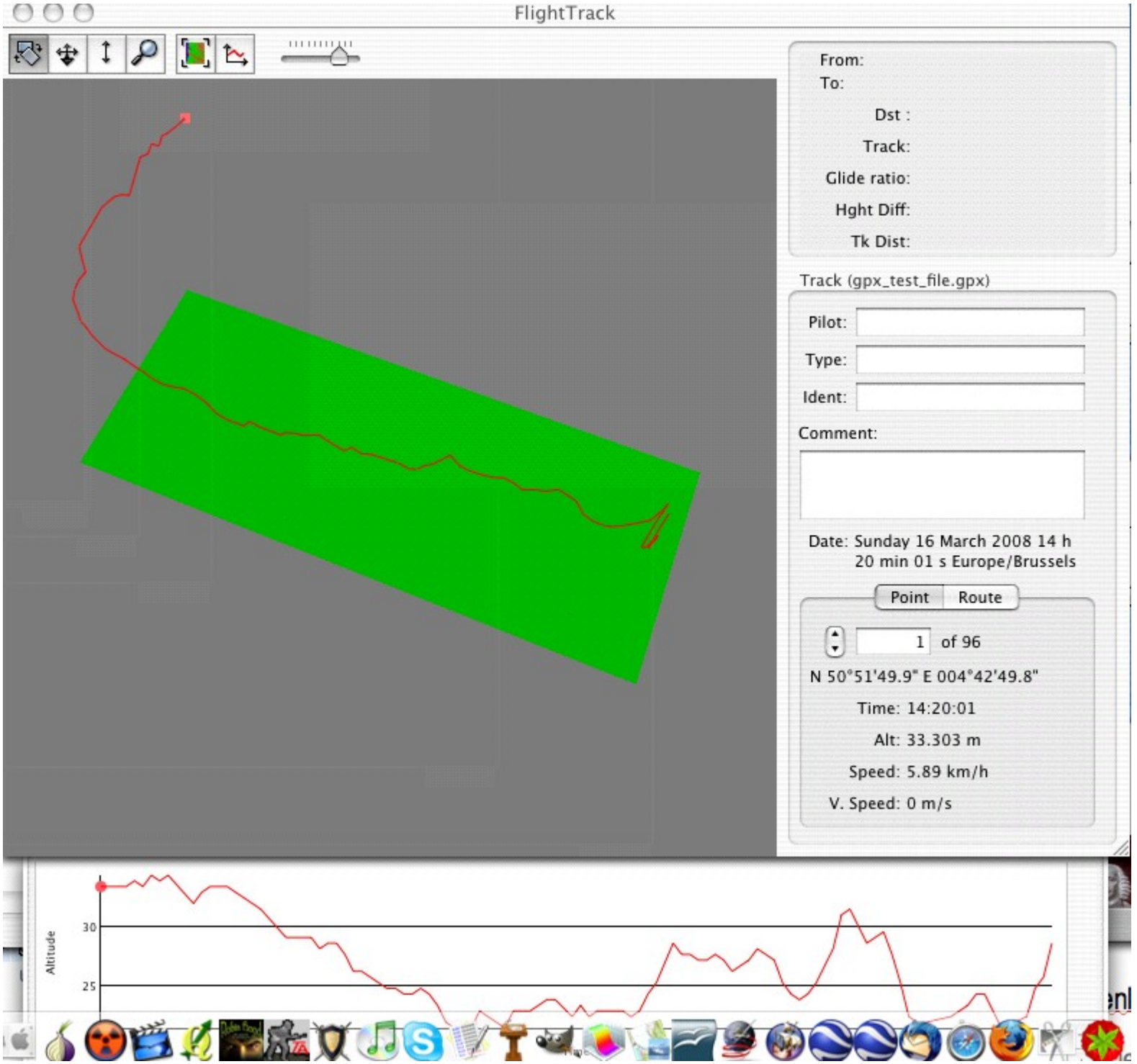
N16°
E23°
Image © 2008 TerraMetrics
Google
Pointer lat 12.610470° lon 20.138083°
Streaming 100%
Eye alt 294.12 k

2bis
4
4bis
1bis
2
3bis
1
3
5


FlightTrack
From:
To:
Dst :
Track:
Glide ratio:
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Track (gpx_test_file.gpx)
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Type:
Ident:
Comment:
Date: Sunday 16 March 2008 14 h 20 min 01 s Europe/Brussels
Point
Route
1
of 96
N 50°51'49.9" E 004°42'49.8"
Time: 14:20:01
Alt: 33.303 m
Speed: 5.89 km/h
V. Speed: 0 m/s
Altitude
30
25

3D ?

many technologies, one thing in common :
OGC standard compliance -> it all works together

PostGreSQL / PostGIS database

WMS/WFS : DeeGree / MapServer

visualisation : DeeGree iGeoPortal, Openlayers

GIS & editing : QuantumGIS, MapInfo, DeeJUMP, GRASS, ...

Thanks...

Michel Louette, Danny Meirte, Patricia Mergen, Garin Cael, Franck Theeten, Kim Jacobsen,...

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