

# Training School 1

## Lecture 1

### INTRODUCTION TO ARCHAEOLOGICAL PROSPECTION & ARCHAEOGEOPHYSICS

by Carmen Cuenca García



## The study of past humanity & cultures

- Through its cultural material= excavation
- ...and proxy data= direct measurements

## How do we find sites?

- Serendipity...sometimes

'Finding Altamira' (2016) by Hugh Hudson

Altamira Paleolithic paintings, Spain (between 35,559 - 15,204 cal BP)



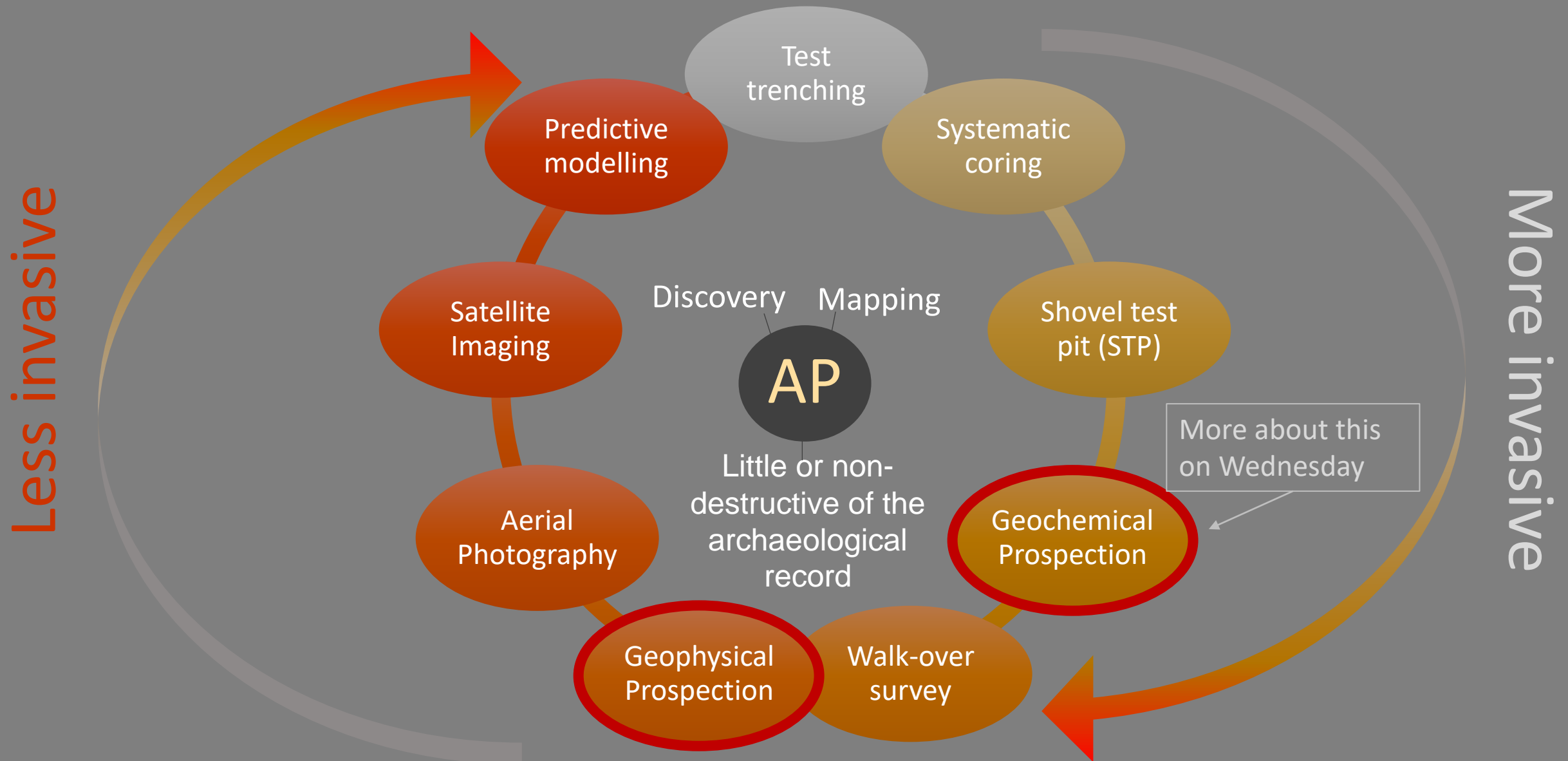
## How do we find sites?

- Serendipity...sometimes
- A research question





# Archaeological Prospection



# Archaeo-geophysics

A powerful discipline in archaeology



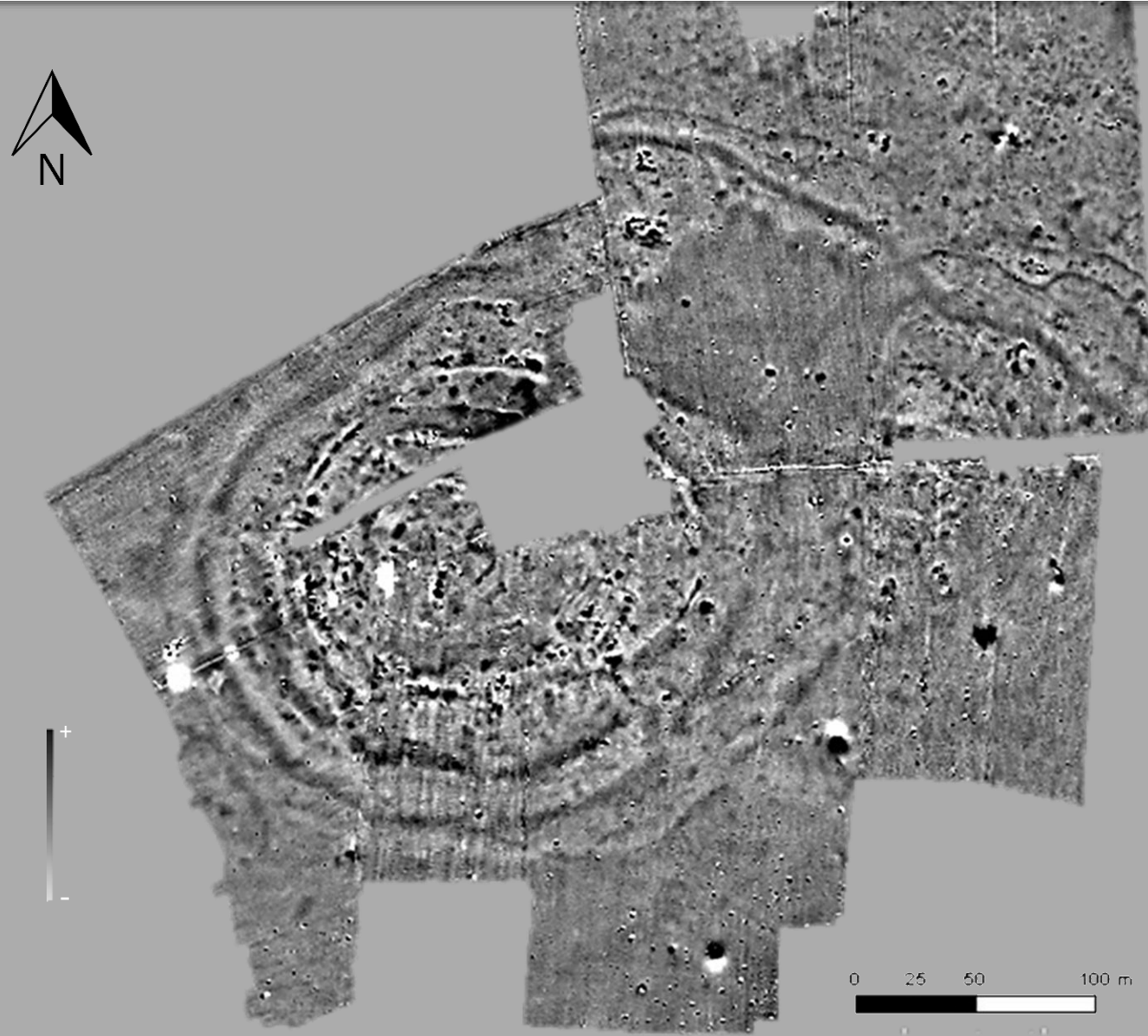


# Archaeo-geophysics

to map &  
characterise  
subsurface  
archaeological  
sites

Magnetometer survey @ magoula Rizomilos (Thessaly, Greece)

*Sarris, Apostolos, et al. "Opening a New Frontier in the Study of Neolithic Settlement Patterns of Eastern Thessaly, Greece." Communities, Landscapes, and Interaction in Neolithic Greece. Berghahn (2017).*





# Archaeo-geophysics

- Non-destructive
- Rapid
- High-resolution





# Archaeo-geophysics





# Archaeo-geophysics





# Archaeo-geophysics





# Archaeo-geophysics

...now to a landscape level



GPR survey @ Austrått Manor, Ørlandet, Trøndelag, February 2018  
(3D-RADAR GeoScope Mk IV GPR system)

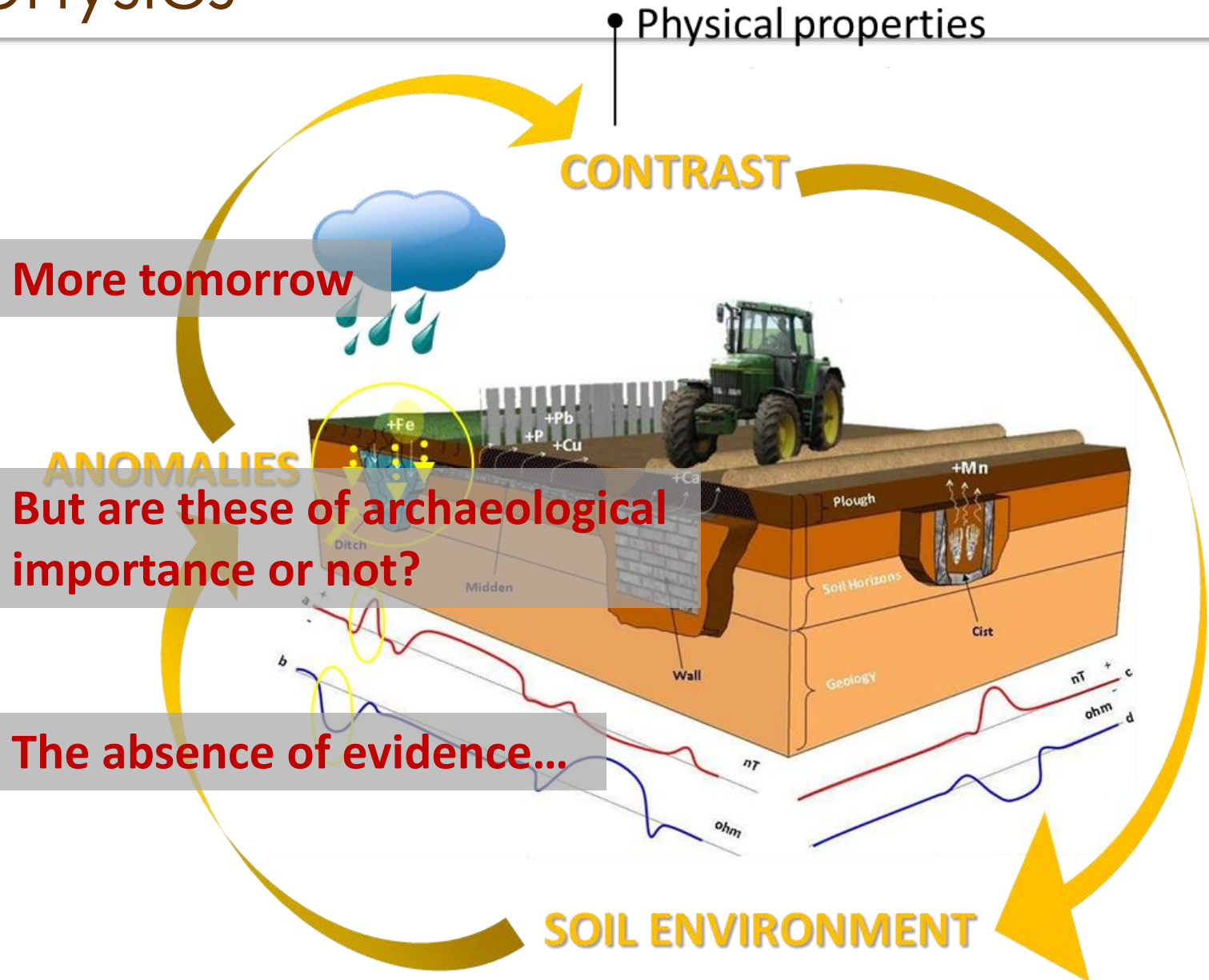
Google

Google Data SIO, NOAA, U.S. Navy, NGA, GEBCO IBCAO Landsat / Copernicus TerraMetrics Kamera : 89 m 63°42'11"N 9°44'24"E 17 m 10



# Archaeo-geophysics

- Map spatial variations of physical properties of the subsoil that may be representative (the proxies) of subsurface features
- Integrating several geophysical techniques is the ideal
- All is about contrast



The logo consists of three concentric, semi-circular arcs in a light blue color, positioned to the left of the word "Summary".

# Summary

- Archaeology = cultural material + proxy data
- Archaeological prospection = location of sites, wide range of methods
- Archaeo-geophysics = locate and characterise buried archaeology
  - Best approach to survey sites is applying more than 1 techniques
  - Importance of geophysical contrast to detect buried archaeology



# Closing Session

# Training School 1



Organisation

Presentations

Hands on sessions

Topic for future TS?



The  
Good

The  
Bad

To  
Keep

To  
Change



Wrap up/remarks



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 Next SAGA Activities?

# SAGA Workshop 1

29 Sep-1 Oct 2019

Prague

