



Università Politecnica delle Marche
Scuola di Dottorato XIX ciclo –
IN AGRICULTURAL, FOOD AND ENVIRONMENTAL SCIENCES
Anno Accademico 2017/2018

“Methods and techniques for”

2° year Bibliographic seminar

PhD student
Name

Tutor
Prof. *Name*

Introduction

Location :

Definition

Identification of the general situation around the topic/problem and the factors that can orientate the methods choice



Definition.

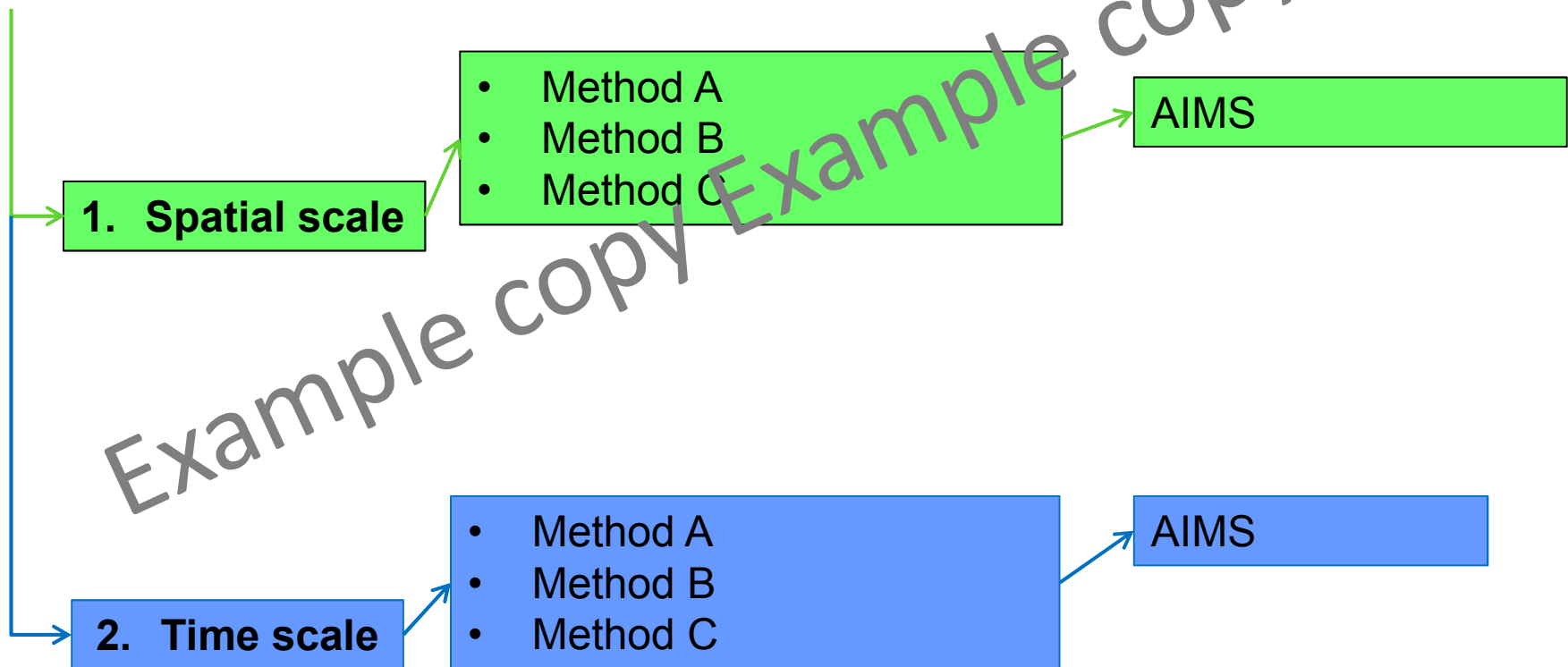
Bibliography.

Methodological framework

➤ Identification

➤ Characterization

For the identification , characterization, classification and diachronic analysis of these communities we need a **combination different methodologies**



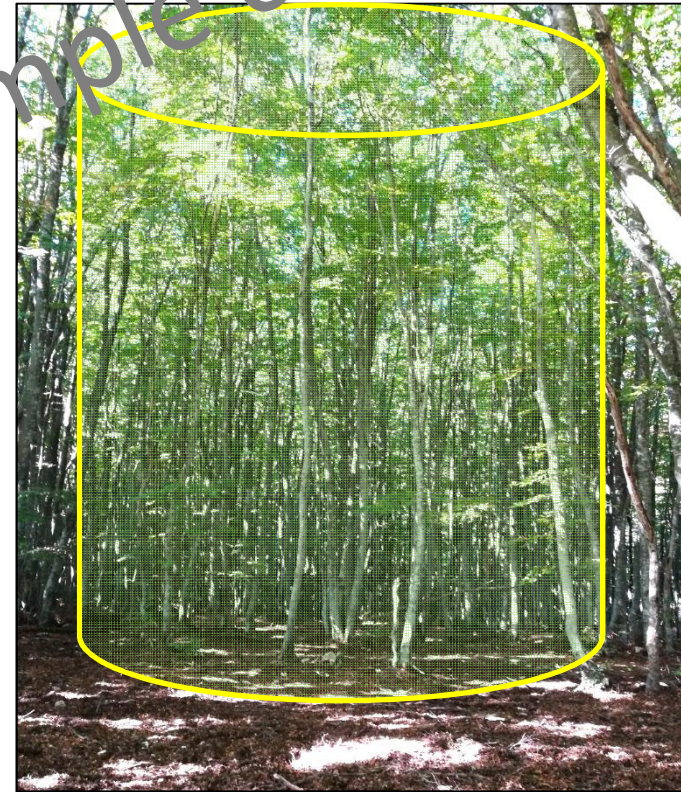
1. Spatial scale

How to determine the biodiversity ? SAMPLING

DEFINITION AND IMPORTANCE

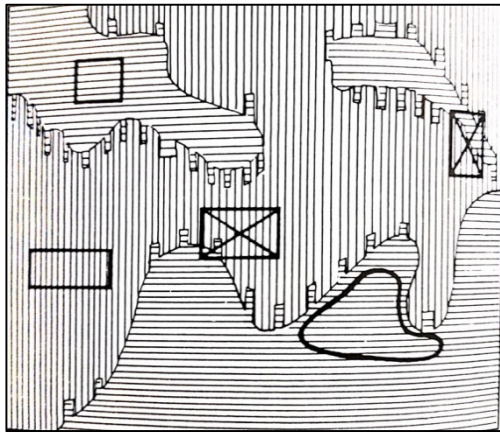
SAMPLE CHARACTERISTICS

- A
- B
- C
- D



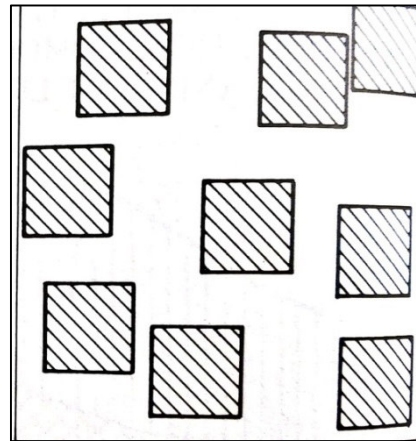
1. Spatial scale

Sampling distribution techniques



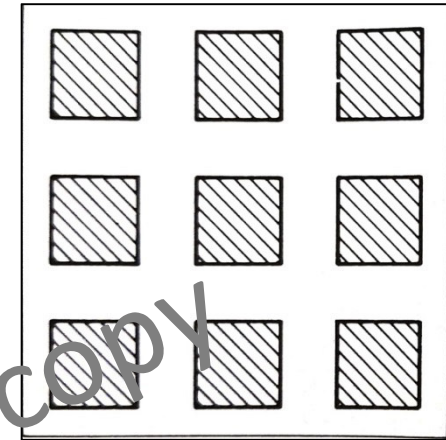
Selected areas (Centralized replicate)

DESCRIPTION



Random distribution

DESCRIPTION



Systematic distribution

DESCRIPTION

Example copy Example copy

1. Spatial scale

Method A

Description of the first method for the vegetation sampling. A little description of the development of the method and a focus on the field usage

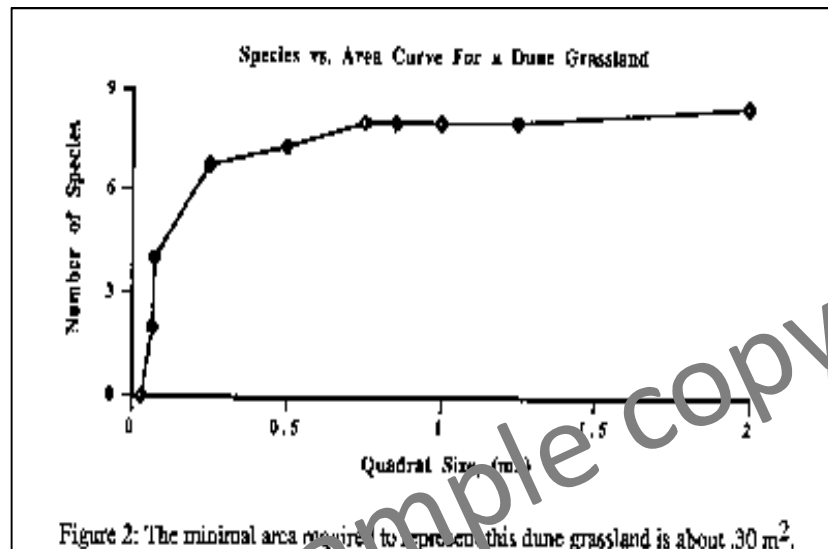


Table 9-1 Minimal areas for various vegetation types. From *Aims and Methods of Vegetation Ecology*. Mueller-Dombois and Ellenberg. Copyright © 1974 John Wiley and Sons, Inc. Reprinted by permission.

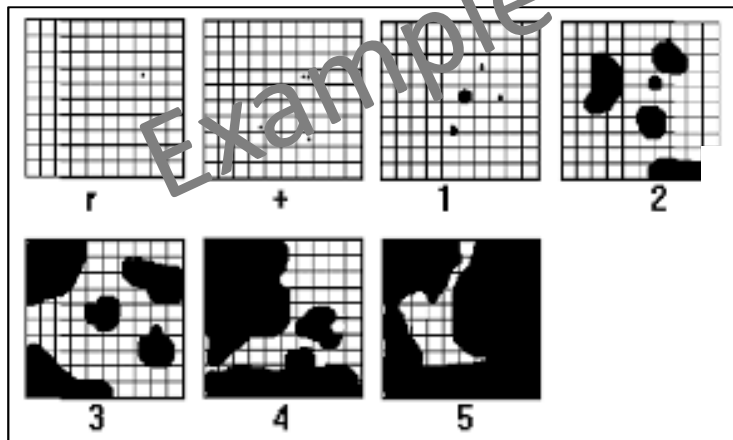
Type	Minimal area (m ²)
Tropical rain forest	1000–50,000
Temperate forest:	
Overstory	200–500
Undergrowth	50–200
Dry temperate grassland	50–100
Heath	10–25
Wet meadow	5–10
Moss and lichen communities	0.1–4

1. Spatial scale

Definitions and description of the field usage of the method A

Charachteristichs

- A
- B
- C
- D



Bibliography

1. Spatial scale

Positive and negative aspects of the method A

Positive aspects

- A
- B
- C
- D
- E
- F

Negative aspect

- A
- B
- C
- D
- E
- F

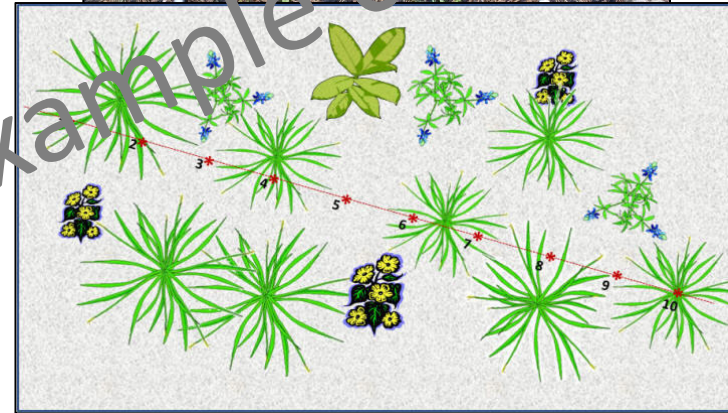
(citing literature that give scientific evidence against the negative aspects)

Bibliography
Bibliography
Bibliography

1. Spatial scale

Other sampling techniques

- Method A
- Method B
- Method C
- Method D



Positive aspects

- A
- B
- C

Negative aspect

- A
- B
- C

Bibliography.

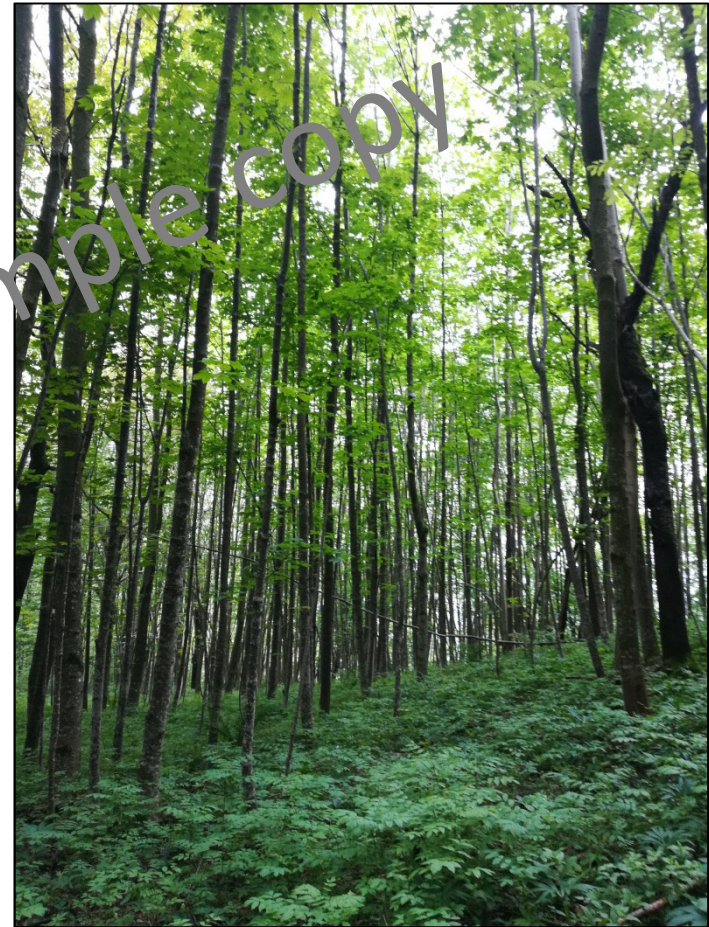
1. Spatial scale

Field survey method choice

To sample and analyze the research topic we choose the **method A**

Further motivations on the choice

- A
- B
- C



2. Time scale

For the second aspect of the analysis : **METHOD A**

XXX et. al. 2018 in “**Journal article title**” uses this technique (Method A)

AIM of the paper that you are focus in, for highlight the positive aspects of the method

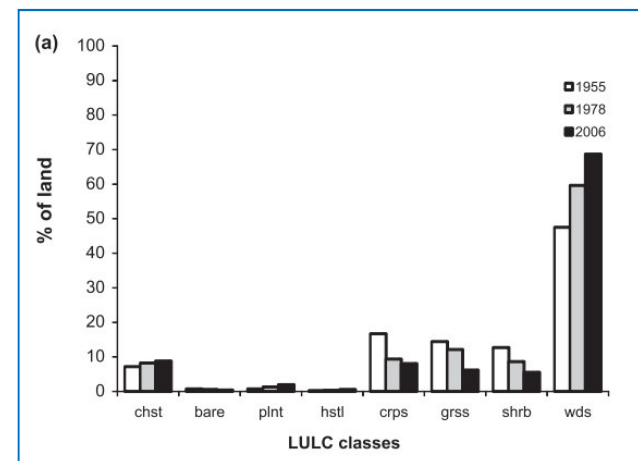
DEFINITIONS:

METHOD process description
(reported in the paper):

- **A**
- **B**
- **C**
- **D**

Some results

Bibliography



2. Time scale

For the second aspect of the analysis : **METHOD B**

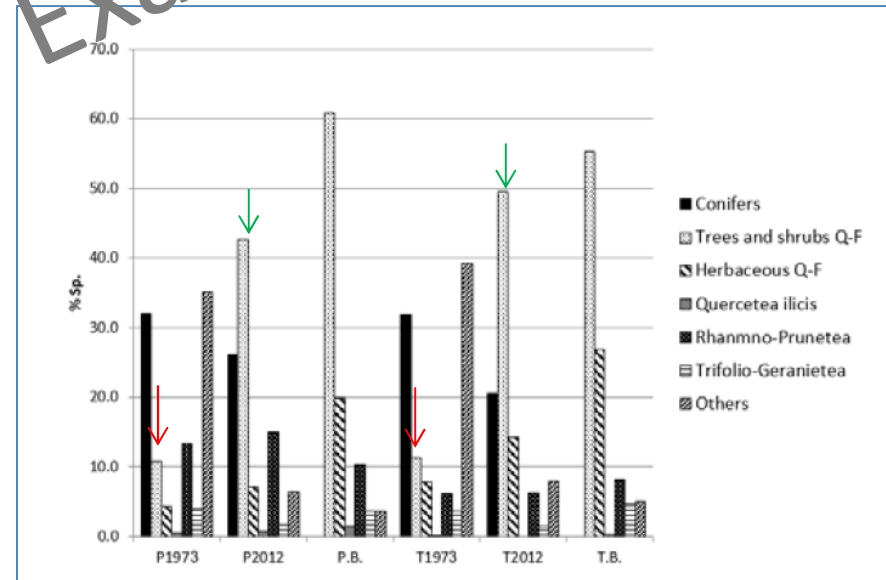
AIM of the paper that you are focus in, for highlight the positive aspects of the method

XXX et. al. 2018 in “**Journal article title**” uses this technique (Method B)

Description and consideration on this method

- A
- B
- C

Some results



Bibliography.

2. Time scale

Time scale analysis techniques

- **METHOD A (Bibliography)**

- **METHOD B (Bibliography)**

- **METHOD C**

- **METHOD D (Bibliography)**

- **METHOD E (Bibliography)**

Positive aspects	Negative aspects

Example copy Example copy

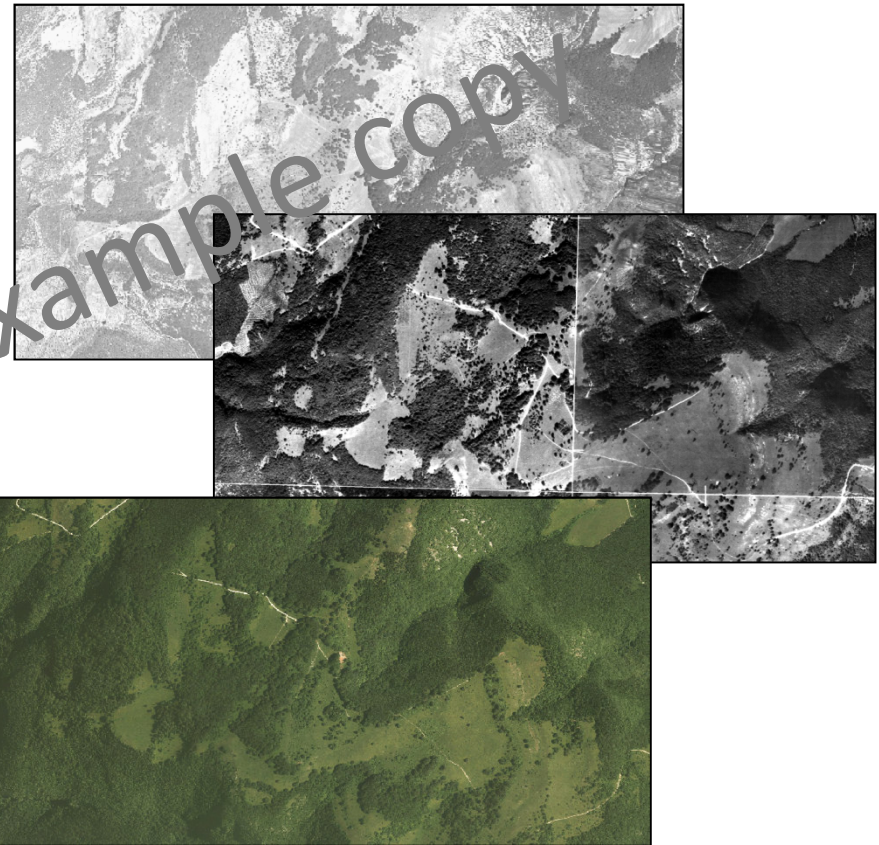
2. Time scale

Time scale analysis methods choice

To study the research topic in a time scale we choose the methods A and B (when it's possible)

Further motivations on the choice

- A
- B
- C



Bibliography

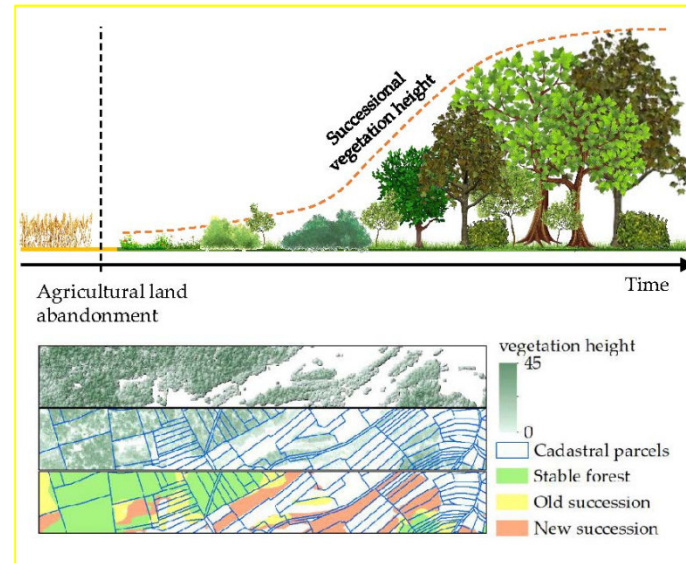
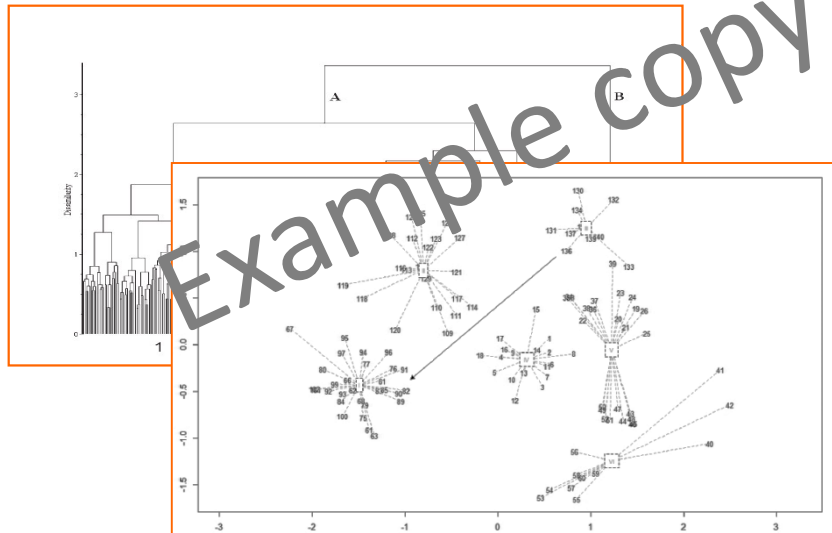
Some general remarks on other techniques (eg. Statistical analysis) that are studied and used but not included in this presentation

- A
- B
- C
- D

Possible future technique to be included in the research: with a deeper understanding of the technique

METHOD E (time scale analysis)

- REASON A
- REASON B
- REASON C



bibliography.

... in summary

method A as a basis for characterization of the

- A
- B
- C

METHOD A for the time scale analysis:

- A
- B
- C

When is possible **METHOD B**

References

- Allen T.F.H. 1987. Hierarchical complexity in ecology: a non Euclidean conception of the data space. In: Prentice I.C., van der Maarel E. (eds) Theory and models in vegetation science. Advances in vegetation science, vol 8. Springer, Dordrecht
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TAHNKS FOR THE ATTENTION

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