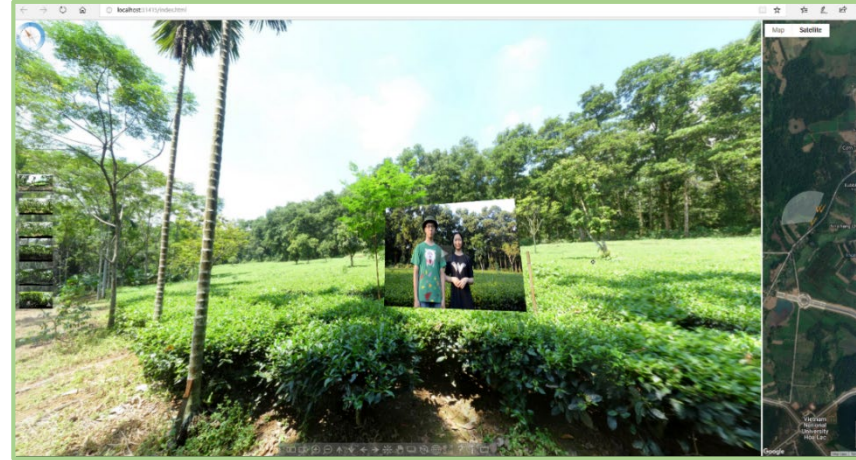


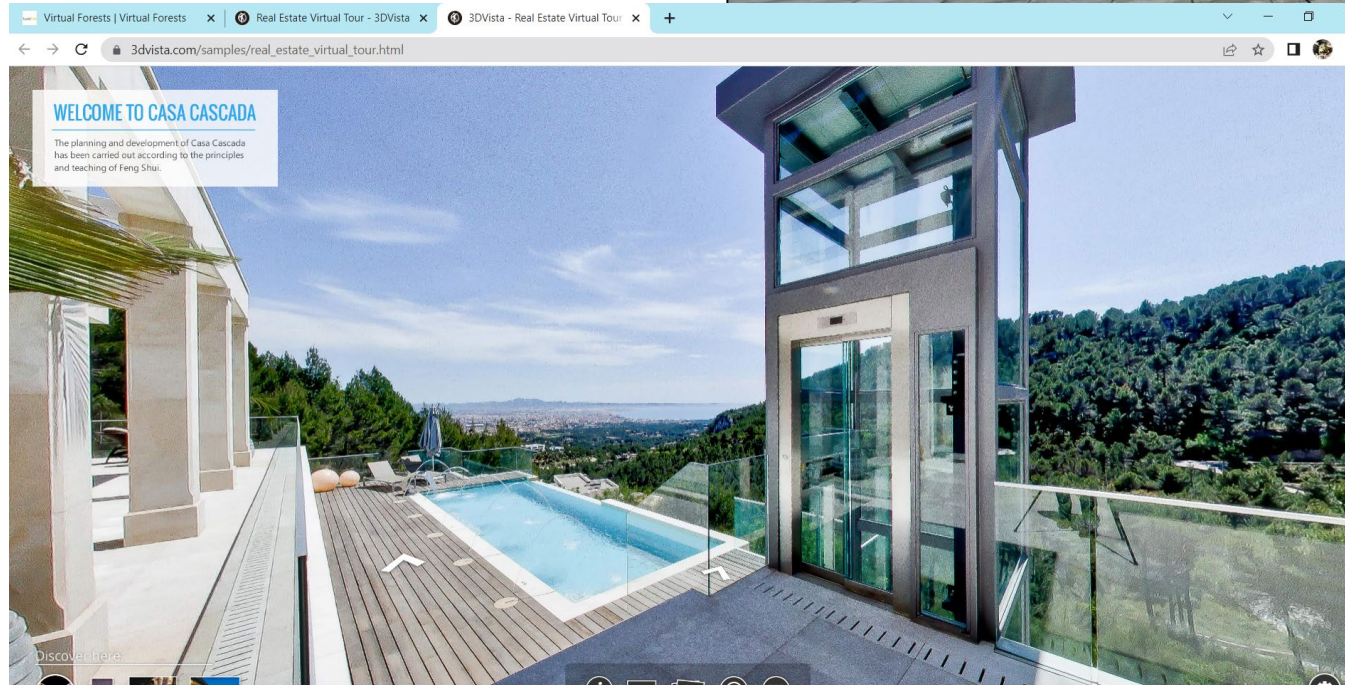
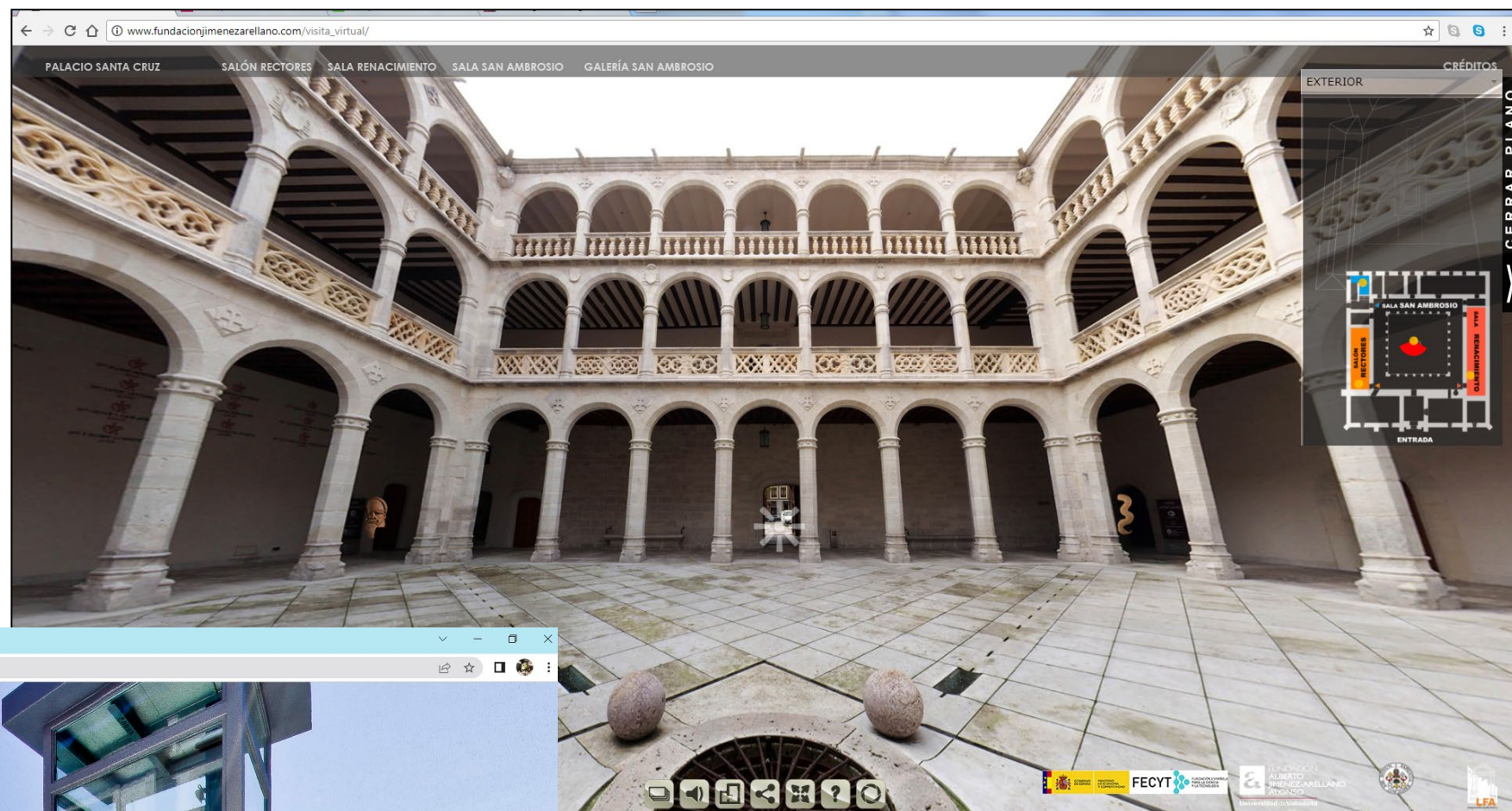
## Integrated Martelloscopes Virtual Forest Tours



Prof. José Reque Kilchenmann  
University of Valladolid



- Museums
- Turistic
- Real Homestate
- ...



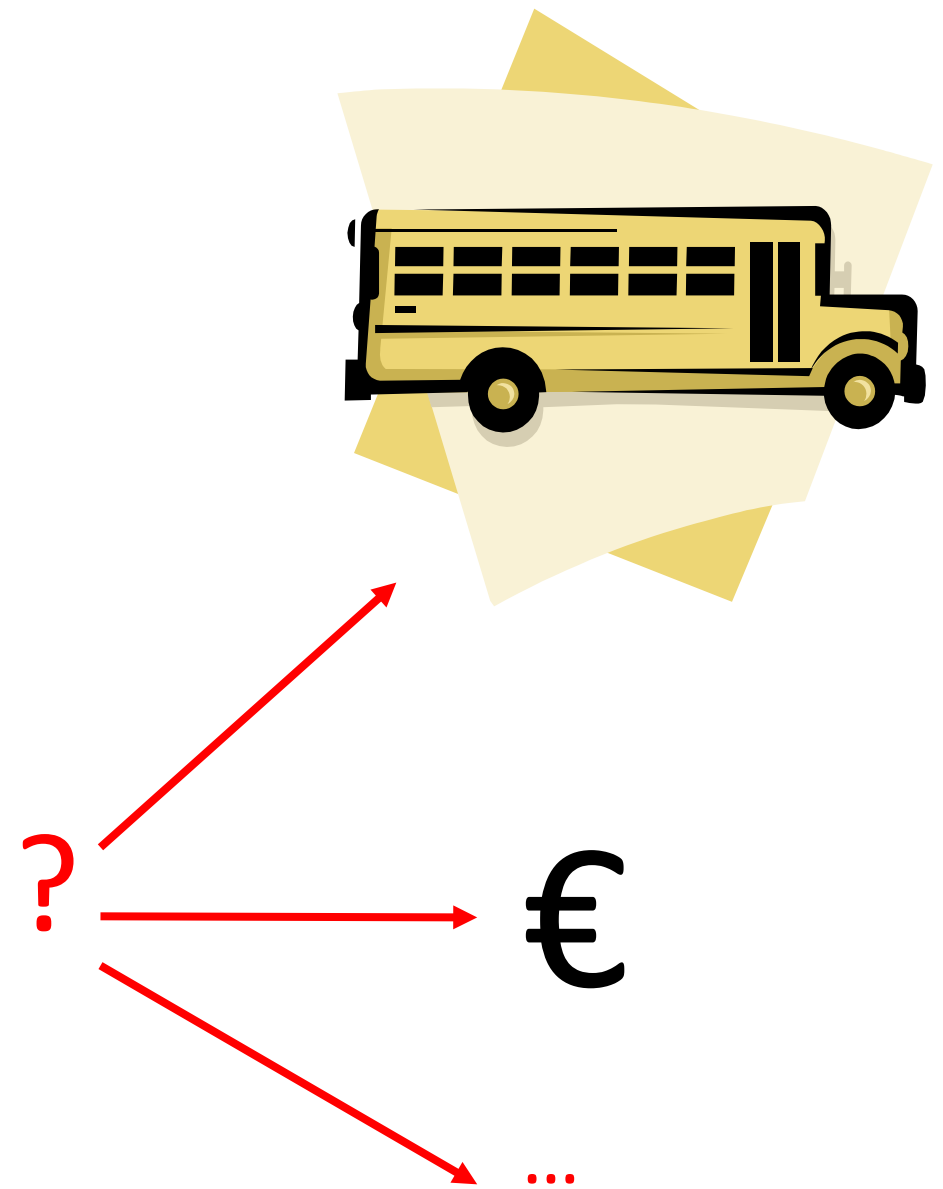
[http://www.fundacionjimenezarellano.com/visita\\_virtual/](http://www.fundacionjimenezarellano.com/visita_virtual/)

# Our goal





But????





# Our experience

Marteloscope Plot 4 | Virtual tour x +

No es seguro | uva.es

[http://sostenible.palencia.uva.es/rutas/Marteloscope\\_VNU/index.html](http://sostenible.palencia.uva.es/rutas/Marteloscope_VNU/index.html)

Mapa  
Satélite

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Google

atos de mapas | Términos de uso

BioEcoN

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Navigation icons: back, forward, home, search, etc.



## Virtual Forest Tours

Inicio » Nuestra actividad » Formación

Field trips are essential in didactics in forestry. Unfortunately, problems like accesibility, climatic conditions, class size, budget, etc. make it impracticable to develop an complete forest field trip program during the ordinary couses. The forest virtual tour program develops a set of virtual tours as an adjunct to placement field courses. The virtual tours are formed around online interactive forest walkthroughs in real forest realities. You can freely navigate through linked panoramas and are invited to deepen in the virtual forest world.

Find more information about our forest virtual tours and the project *Bringing the forest to the classroom* in our [blog](#) or take a look to the [video](#)



### DOCUMENTACIÓN BÁSICA

[Programa y organización](#)

### TIPO DE FORMACIÓN

[Materiales Didácticos](#)



# INTERCONNECTING FORESTS, SCIENCE AND PEOPLE

## DIVISIONS

### TASK FORCES

JOINT IUFRO-IFSA TASK FORCE ON  
FOREST EDUCATION

ACTIVITIES AND EVENTS

PUBLICATIONS AND REFERENCES

AFRICAN PUBLICATION PROJECT

FOREST EDUCATION DATABASE

GLOBAL COMPETITION ON BEST  
PRACTICES IN FOREST EDUCATION

OUTSTANDING PRACTICES IN  
FOREST EDUCATION

GOFB BLOG

TOOLBOX

MONITORING GLOBAL TREE  
MORTALITY PATTERNS AND TRENDS

FIRE\$: ECONOMIC DRIVERS OF  
GLOBAL WILDLAND FIRE ACTIVITY

FORESTS AND WATER INTERACTIONS  
IN A CHANGING ENVIRONMENT

GENDER EQUALITY IN FORESTRY

RESILIENT PLANTED FORESTS  
SERVING SOCIETY & BIOECONOMY

STRENGTHENING MEDITERRANEAN  
NURSERY SYSTEMS FOR FOREST

[Home](#) | [Task Forces](#) | [Joint IUFRO-IFSA...](#) | [Outstanding Practices in Forest Education](#)



## OUTSTANDING PRACTICES IN FOREST EDUCATION

### TF JOINT IUFRO-IFSA TASK FORCE ON FOREST EDUCATION

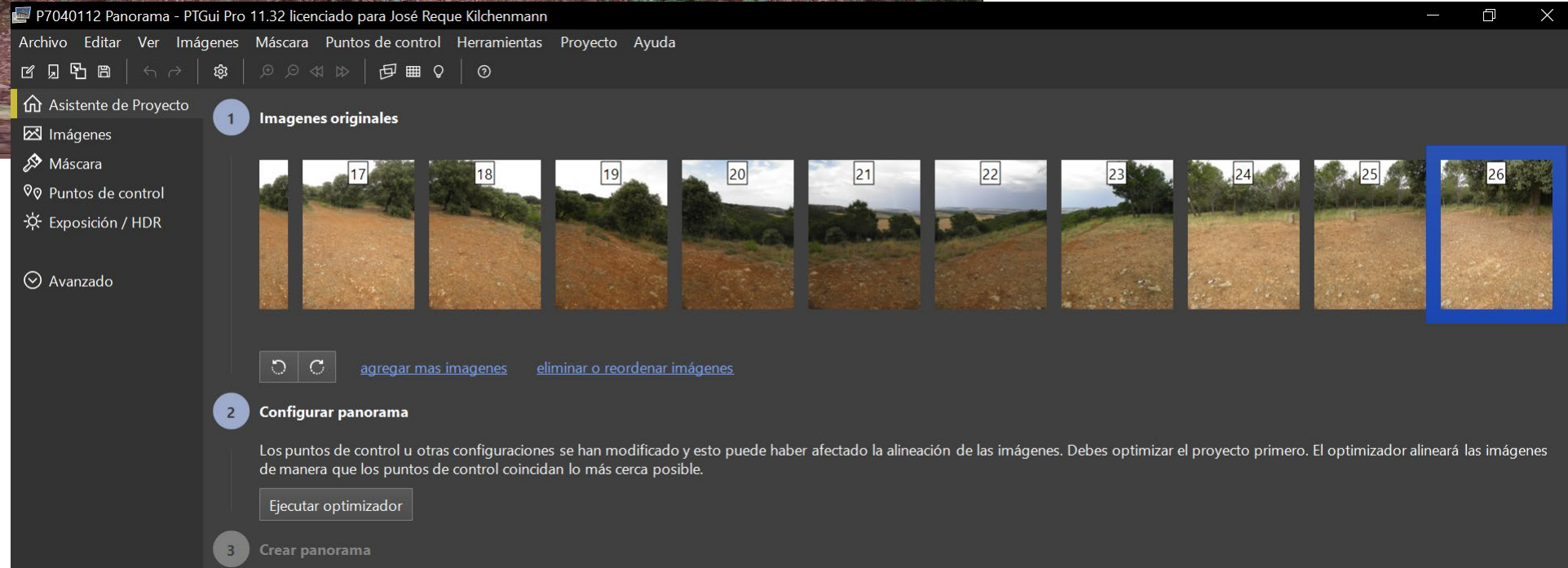
- > Activities and events
- > Publications and references
- > Young African Forestry Professionals  
Publication Project (YAFP)
- > Forest Education Database
- > Global Competition on Best Practices  
in Forest Education
- > Outstanding Practices in Forest  
Education
- > GOFB Blog
- > Toolbox
- > back to TF homepage

## INTRODUCTION

The Global Competition on Best Practices in Forest Education has provided us with some excellent examples of world-class methods and practices in Forest Education across countless schools and institutions.

[TOP](#) ↑









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[HOME](#) [NEWS](#) [WHY BIO-ECONOMY?](#) [BIOECON PARTNERS](#) [OPPORTUNITIES](#) [LEARNING MATERIAL](#) [IMPRINT](#) [CONTACTS](#)

## Virtual and innovative

The BioEcoN project aims to innovate higher education in all participating universities. Digital tools like virtual tours are only a first step towards a multi-disciplinary, up – to date curriculum.

"Welcome to our forest". Dan Manh Linh and Ngyyen Van, students from VNU-HUS, are our guides through the campus forest in Hanoi.



Together with Prof. Dr. José A. Reque Kilchenmann a group of VNU students produced a 360 degree video using simple equipment including a tripod, a nodal head and a digital camera. By stitching the images, a 360 degree virtual reality emerged . [A stroll in the Vietnamese forest is now only a mouse click way.](#) The virtual tours will be integrated into the

Search ...



### BIOECON ABOUT US

In the **BioEcoN** project six universities from Vietnam and Europe collaborate to develop innovative learning materials for a new, innovative Master programme on **sustainable bio-economy** .



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Explaining the camera work



Explaining the nodal head (left); Stichting images (right)

Prof. Dr. José A. Reque Kilchenmann benefitted from great engagement of VNU students and support from Prof. Dr. Jan-Peter Mund. Next to Dan Manh Linh and Ngyyen Van, Nguyen Hoang Nam and Pham Minh Anh took the photographs while Ngo Xuan Phong stitched the images.





# Optimal, but limited !!

- Strong stable Internet Access
- Strong PC
- Creation:
  - Time consuming
  - Expensive
- I.T. technical support
- Unagile
- ...

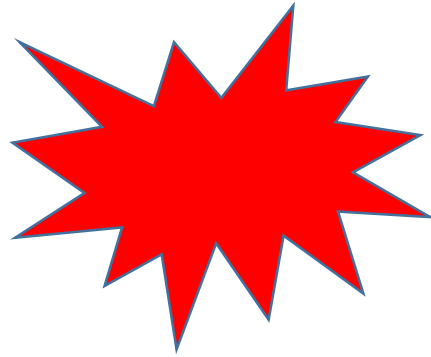


Optimal, but limited !!

Very complete and fancy  
• But too “*heavy*”



# Optimal, but limited !!



# COVID

- Slow internet at home
- Difficult contact with I.T. service
- Complicated adaptation of V.T.
- Synchronic <> Asynchronic didactic strategy
- ...

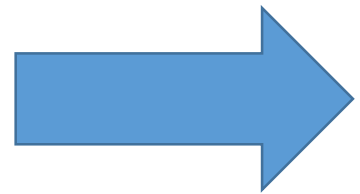


K.I.S.S.   VirtualForests

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of the European Union

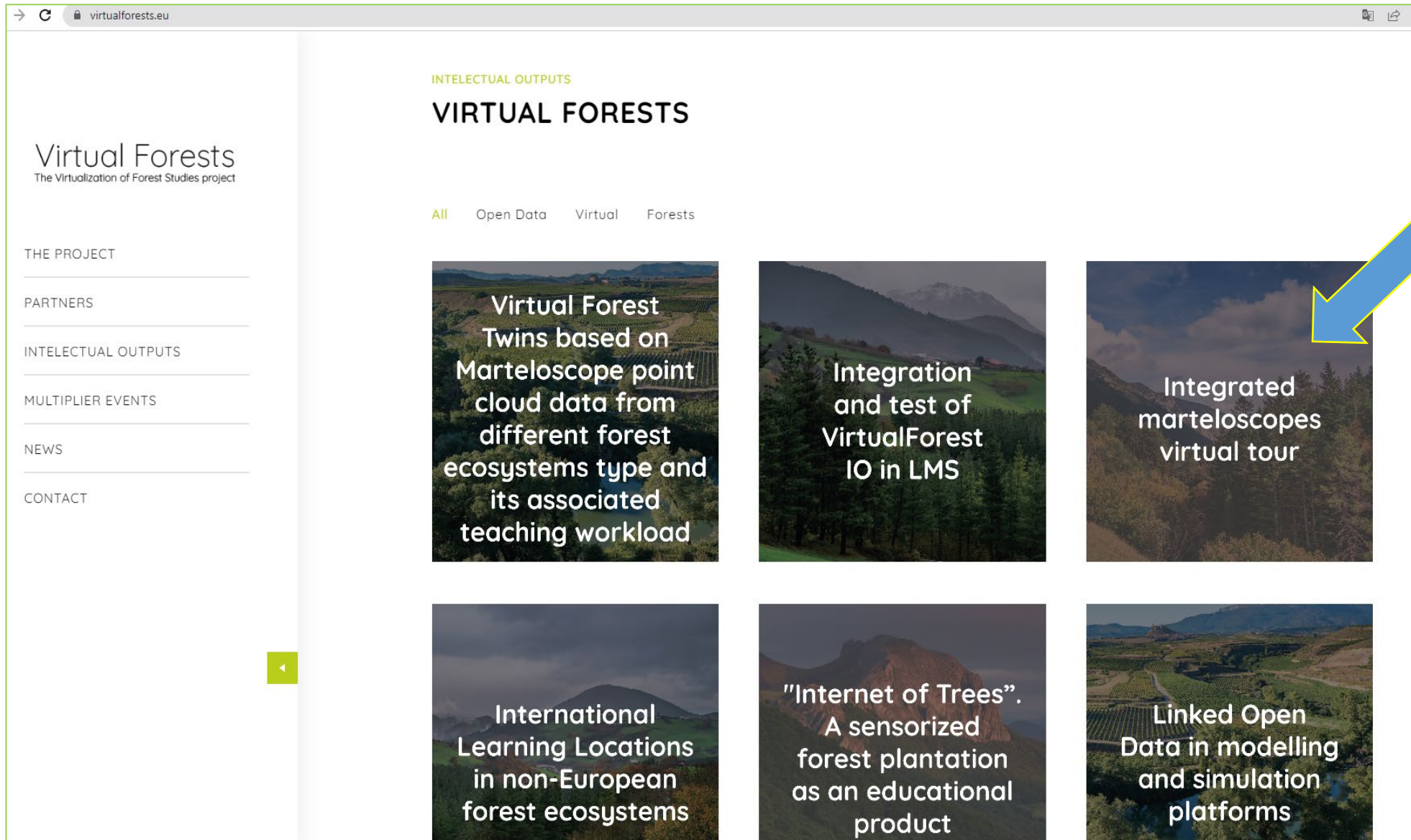


- Thinking on: (& lessons learned!)
  - Classroom with unstable internet access
  - Home  $\leftrightarrow$  confinement (COVID)
  - Online, blended learning, ...
  - Reduced technical expertise
  - ...

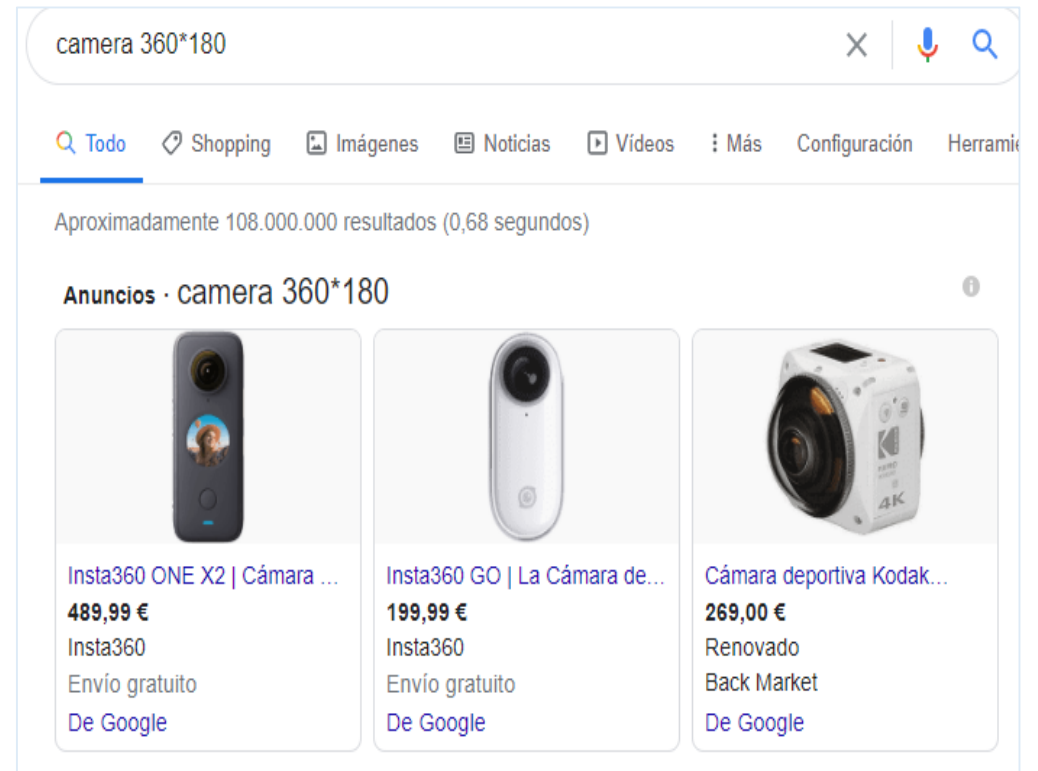


VirtualForests





<https://virtualforests.eu/>



I.T. support based hosting



Easy creation

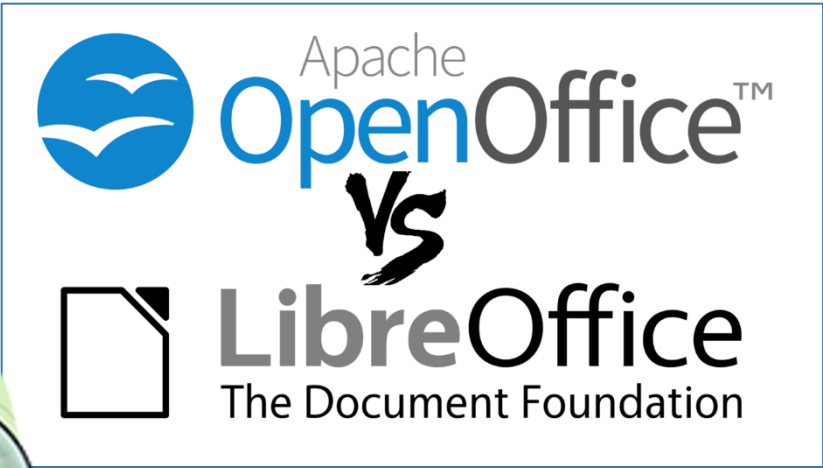
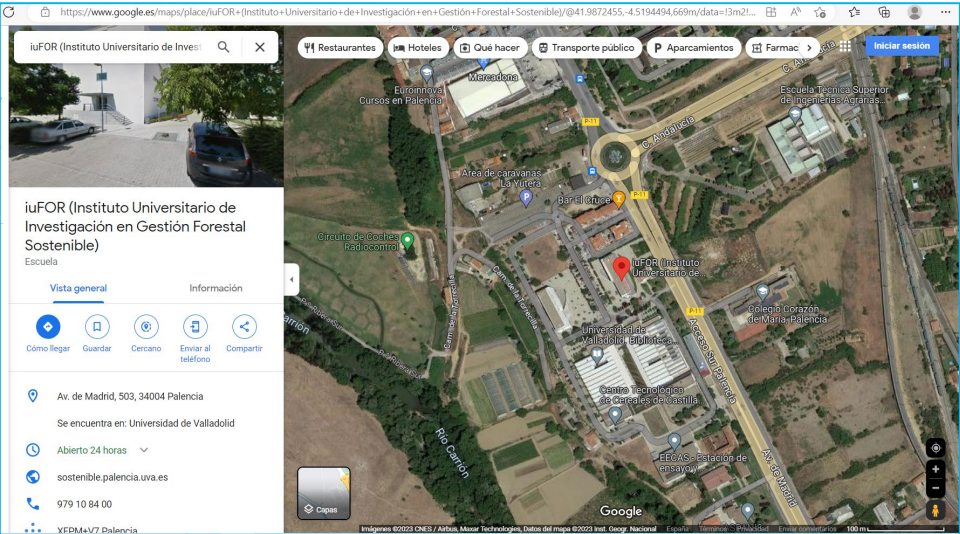
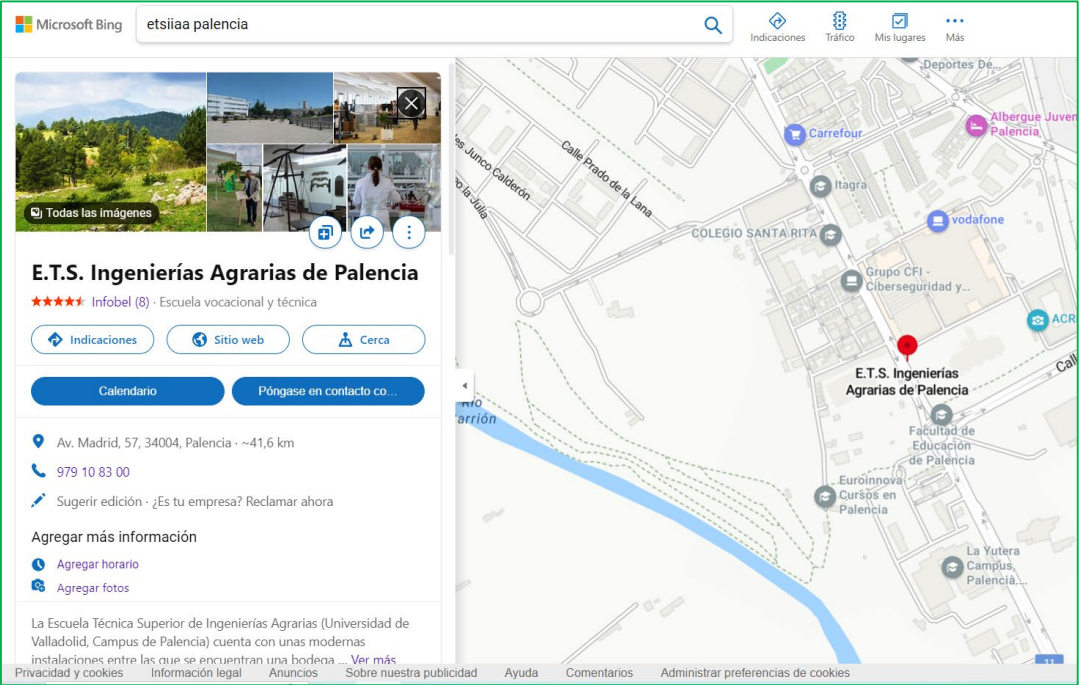
Commercial software



“Free USE”

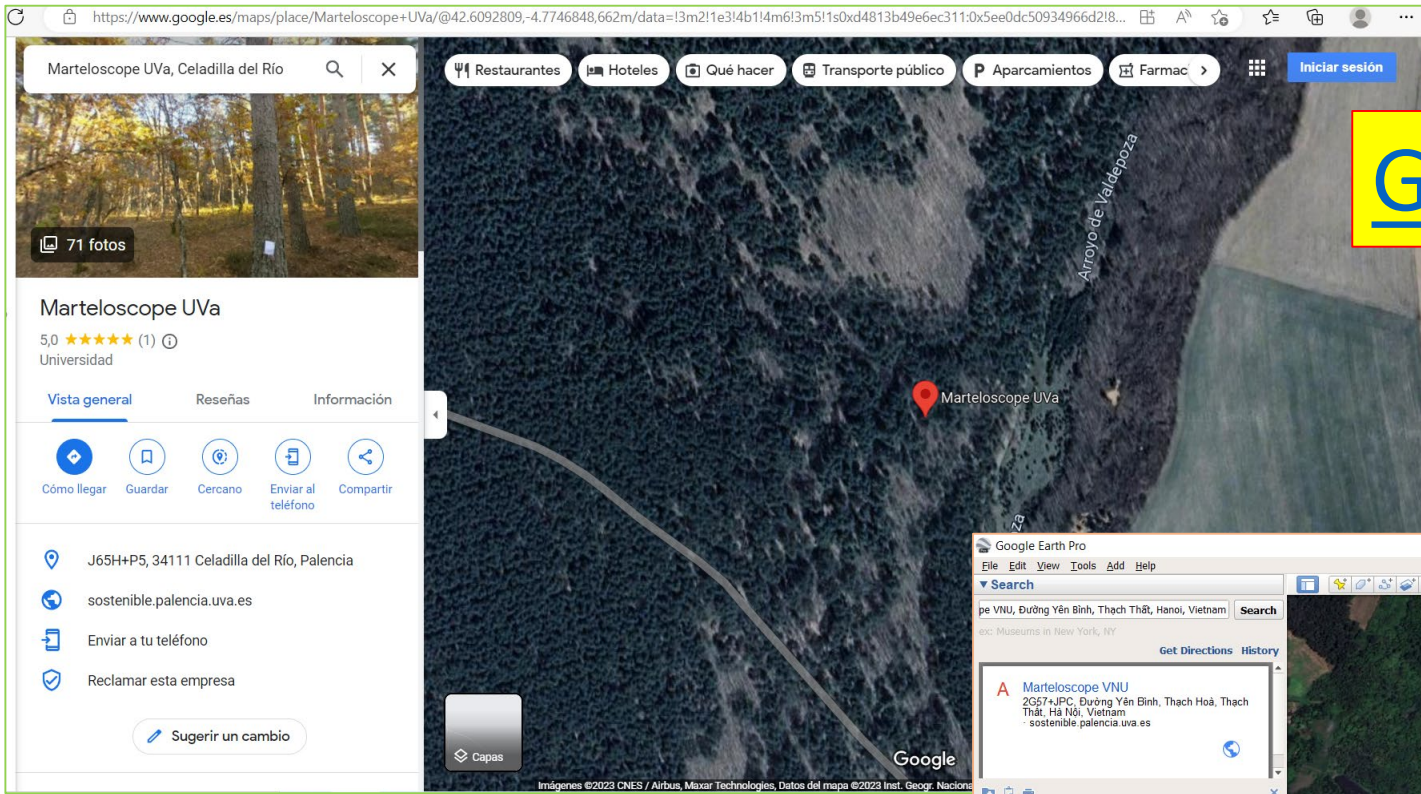


# Reflection: Free use – Free software – open source (code)



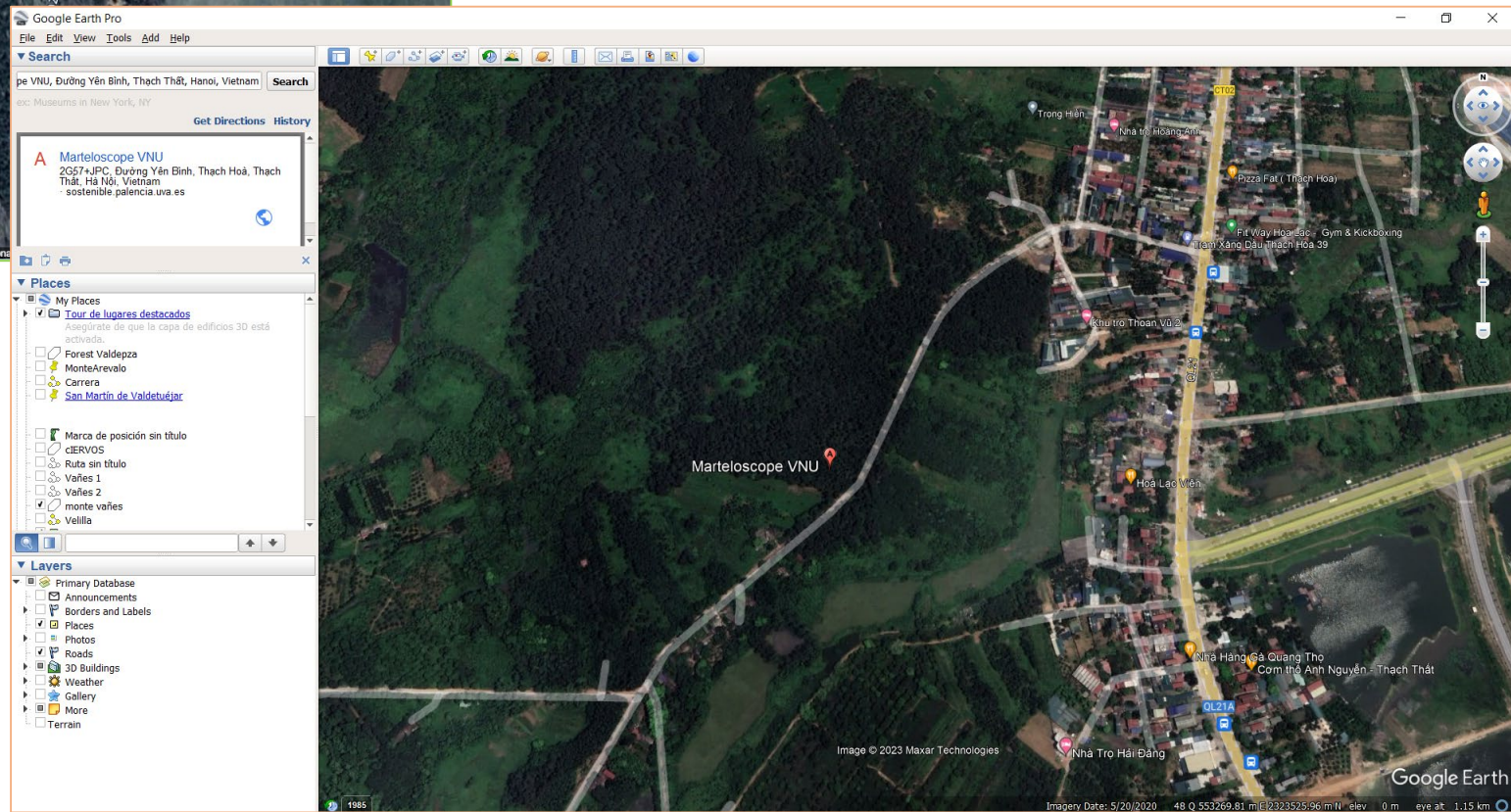
OpenStreetMap



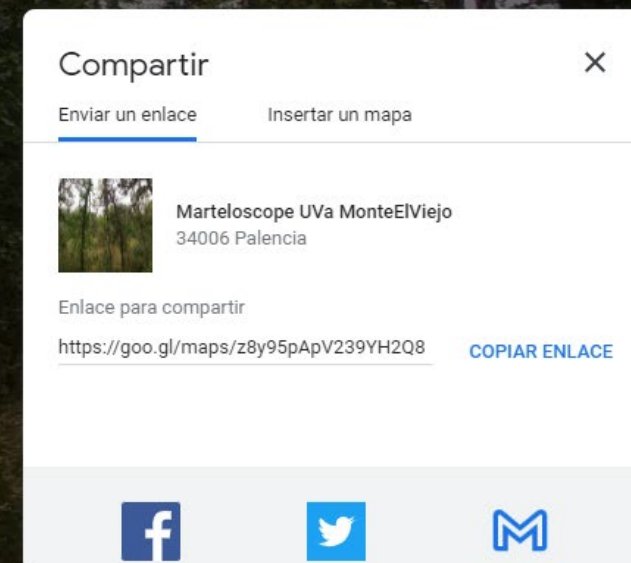
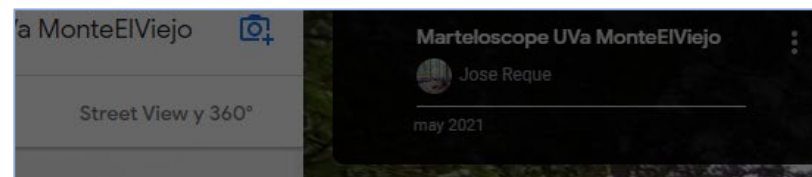
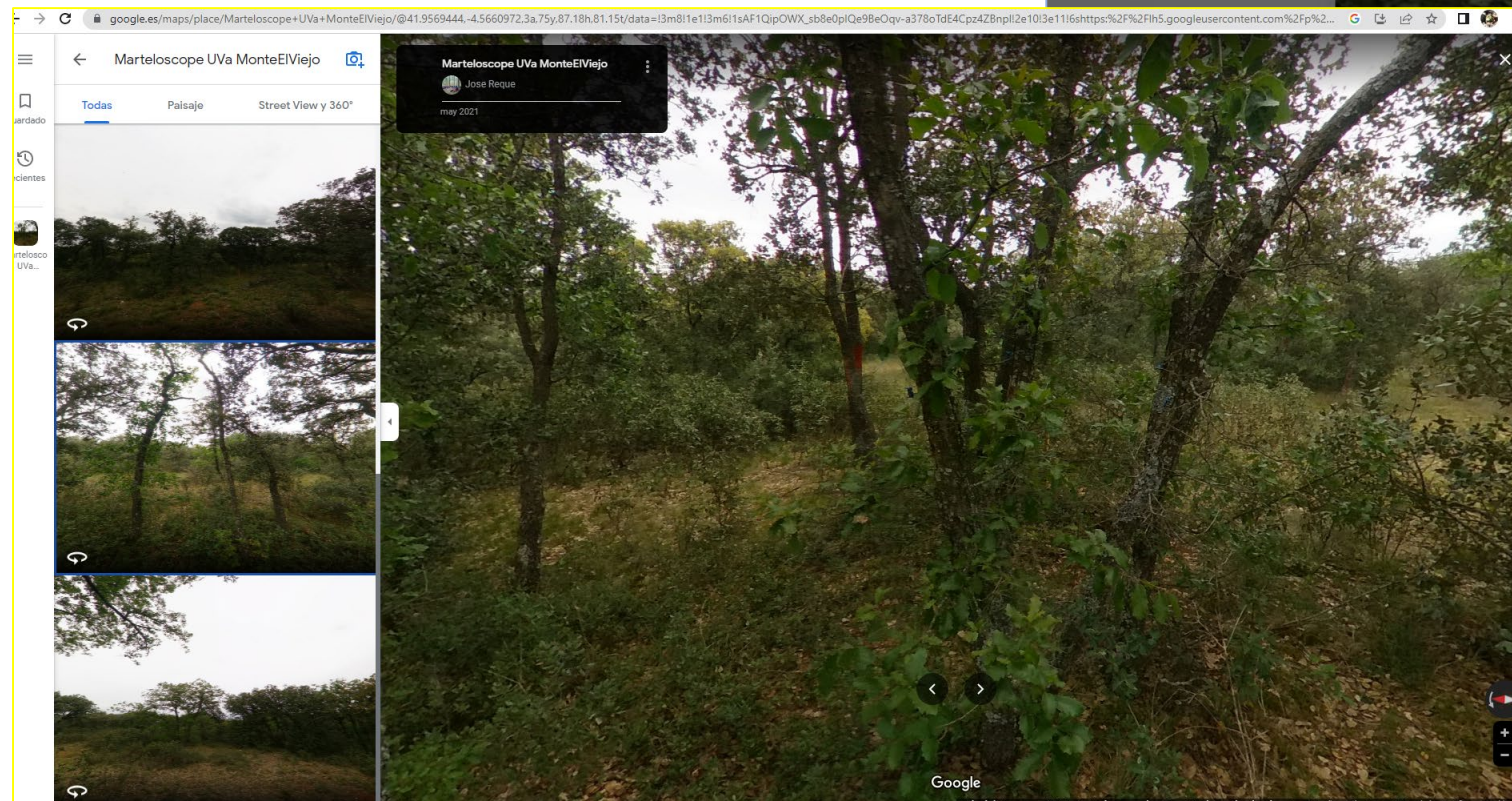


Google Maps

GoogleEarth









Friday, March 3, 2023

## Marteloscope Plot 1



silviweb.blogspot

Blog Archive

SILVIWEB.BLOGSPOT

- [SILVIWEB.BLOG \(Home\)](#)
- [silvicultura.uva.es](#)

Lip dub



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#### About Me



**Silviweb\_José Reque**

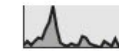
Proyecto Silviweb;  
Escuela Técnica Superior  
de Ingenierías Agrarias,  
Universidad de Valladolid,  
Spain

ETS Ingenierías Agrarias  
de Palencia (Universidad  
de Valladolid)  
<http://silviweb.wikispaces.com>  
<http://www.uva.es/>

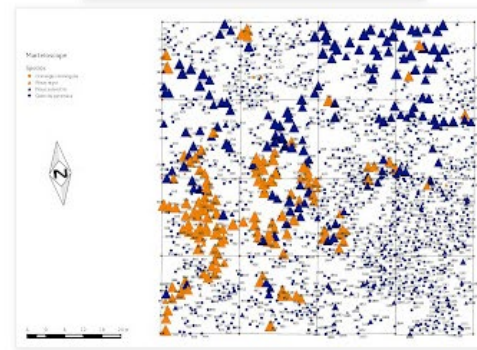
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[Enlace a MATERIALES  
DOCENTES SILVIWEB](#)

Total Pageviews



**38,439**



<https://marteloscopes.uva.es/visitas-virtuales/>

## Visitas virtuales

Aquí puedes encontrar nuestras visitas virtuales



Virtual Forest Tour: Marteloscope UVa, Celadilla del Río, 2022 [google maps] (Palencia), SPAIN

Virtual Forest Tour: Marteloscope UVa, Celadilla del Río, 2019 [panotour] (Palencia), SPAIN

Biomass and diversity indices dataset from Valdepoza (Palencia) and Llano de San Marugán (Valladolid) marteloscopes, SPAIN

«Dendrometric data»

Master Degree Mediterranean Forestry and Natural Resources Management (MEDFOR)