LE:NOTRE *Institute*
Linking landscape education, research and innovative practice

Neapolis University Pafos

INTERNATIONAL STUDENT COMPETITION

The Akamas Landscape
Between Science and Myth

PRESENTATION OF THE FINALISTS

This International Student Competition was part of the 5th Landscape Forum of the LE:NOTRE Institute. This event was hosted by the Neapolis University in Paphos, Cyprus from 16th - 20th of March 2016.
The forum focussed on the north-western region of Cyprus including the peri-urban landscape of Paphos and the natural areas of the Akamas peninsula.

COMPETITION ORGANIZING COMMITTEE
LE:NOTRE Institute: Dr.-Ing. Ellen Fetzer
Neapolis University of Pafos, Cyprus:
Dr. Julia Georgi, Ass. Professor, Head of the Department Architecture, Land and Environment
Local experts:
Ing. Antonia Theodosiou, Architect & Environmental Engineer, Director of the Akamas Peninsula Project
Ing. Ioannis Koutsolambros, Board Member of Pafos 2017

INTERNATIONAL JURY
Professor **Teresa Andresen**, University of Porto, (PT)
Univ. Ass. **Werner Rolf**, landscape planner, TU Munich, (DE)
Jamie Liversedge, landscape architect, London, (UK)
Professor **Vera Tangari**, Federal University of Rio de Janeiro, (Brazil)
Dr. **Andreas Christou**, Forester-Environmentalist, Head of Forest Management Office (CY)
Dr. **Kyriakos Themistocleous**, architect, Board Member of Technical Chamber of Cyprus (CY)
and the winning team of the 2015 LE:NOTRE Competition: **Maria Alexandrescu** (master urbanism TU Delft), **Ioana Ionescu** (master urbanism TU Delft), **Claudiu Forgaci** (cand. PhD TU Delft)

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AIM OF THE COMPETITION

The LE:NOTRE International Student Competition aims to support integrated and holistic landscape approaches through multidisciplinary student teams elaborating planning and design proposals at various scales. This competition was implemented in close relation to the 'Akamas Action Plan for Sustainable Development of the Pensinsula' developed by the Akamas Peninsula Project (A. Theodosiou).

Tourism is Cyprus has typically developed along its coasts with the consequence of concentrating both environmental impact and economic development in these areas. In contrast, the rural hinterland changed in a much different way, facing an ongoing transition of rural lifestyles towards a still uncertain modernity. The objective of this competition was to conceive a landscape narrative from the sea to the rural hinterland. The proposed transect started at the coastline following the Avakas Gorge to the Pano and Kato Arodes Villages, situated at 500 m above sea level. Participating students were asked to explore the natural, cultural and socio-economic layers of this landscape, as well as its spatial and aesthetic values.

The task was to develop a concept around the overall themes of sustainable tourism and cultural heritage. However, wider interpretations of how a sustainable development of this landscape can be enhanced were also welcome. The detailing task was to design a park for amateur astronomy and star-watching, for which the area west of Kato Arodes village is reportedly very suitable.

Competition working period: 20.10.2015 – 31.01.2016 (23:59 CET)
Registered teams and/or individuals: 164 teams registered from 37 countries
Submissions received: 24, from 13 countries

FINALISTS

ID	Prize	University	Team
084	**1st**	University College Ghent, Belgium	Niels de Courvreur, Tobias van der Elst, Joren Jodts, Maarten Dox
015	**2nd (1)**	National School of Higher studies in Nature and Landscape Architecture-Blois, France, and Harvard Graduate School of Design, USA	Philippe Allignet Sophia Geller
056	**2nd (2)**	Sapienţa Hungarian University of Transsylvania, Romania	Patka Zsuzsa-Kincső, Lorant Kovacs, Botond Szabo, Emöke Gereb, Julia Nagy
083	**3rd**	University College Ghent, Belgium	Guillaume Vanden Avenne, Thomas Dreesen, Gus van Hoeck, Robin Vangheluwe
Honorable mention			
038		Huazhong Agriculture University, China	Luo Huan, Xu Xiaoyu, Wang Lun, Chen Wenshuang, Li Yuan, Guo Yue, Li Jiajia
085		University College Ghent, Belgium	Fleur Vergote, Nona de Baerdemaecker, Rinus Vanderlinden, Pepijn Verbeeck

1st Prize: DNA 4 AKAMAS

Authors: Niels de Courvreur, Maarten Dox**,** Tobias van der Elst, Joren Jodts
University: University College Ghent, Belgium

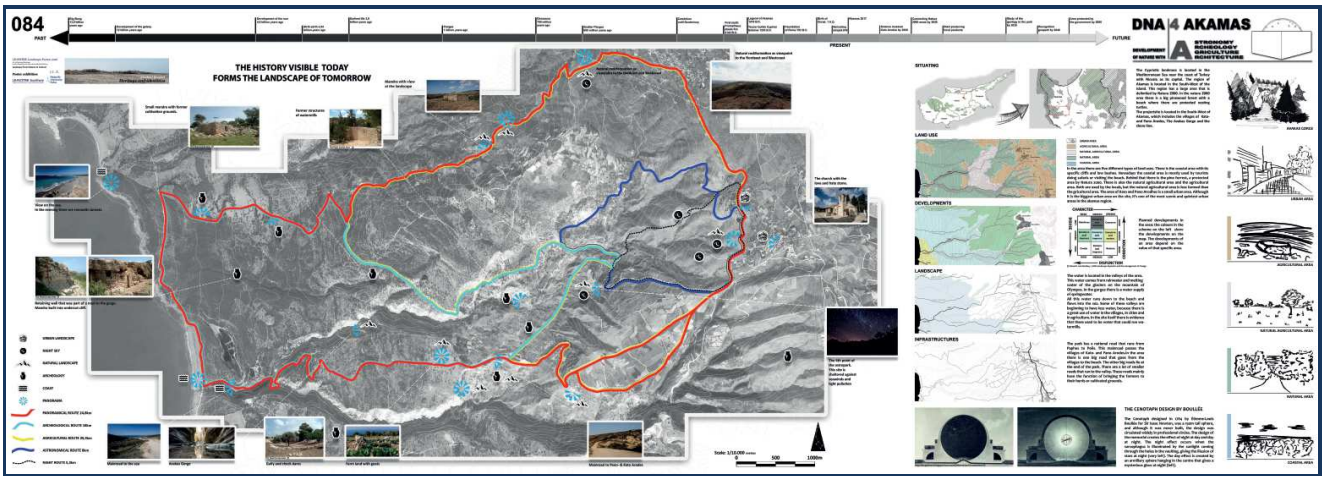
Project description

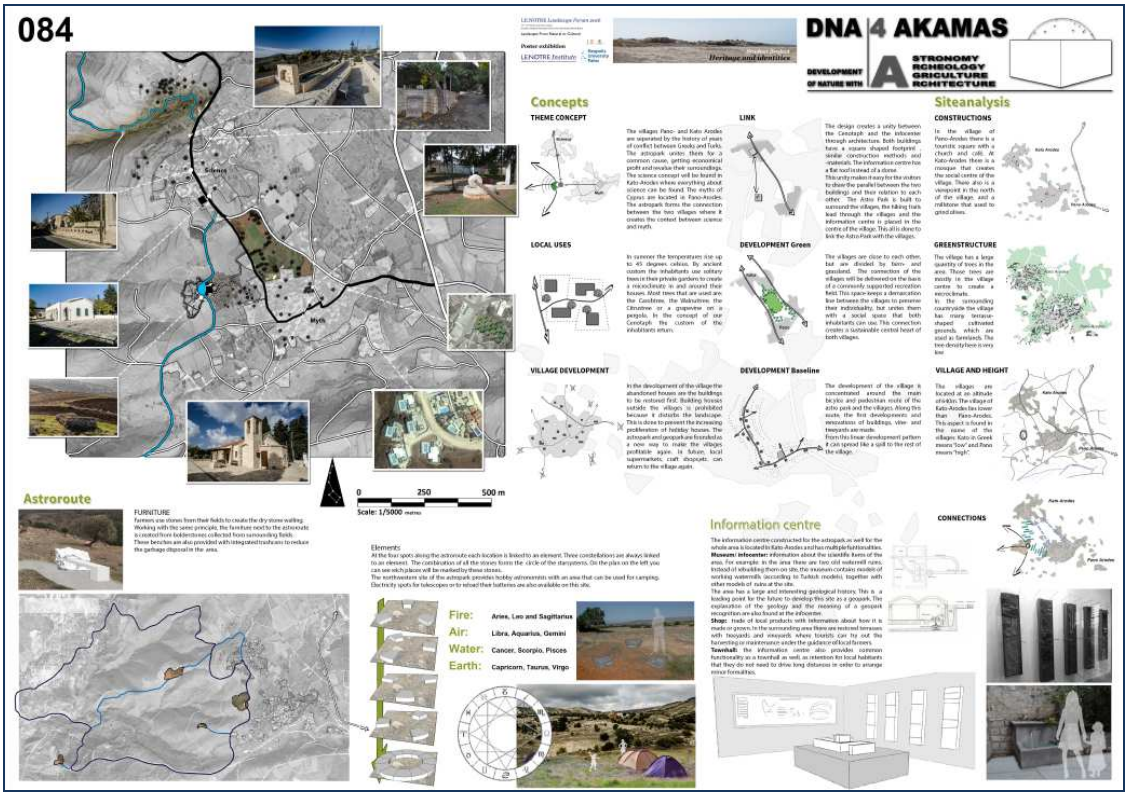
DNA 4 AKAMAS is a method of natural development that combines astronomy, archaeology, agriculture and architecture in the overall concept of a 'Geopark'. The landscape consists of ancient history on geological, architectural and agricultural levels. The vision of the project is to connect these elements with guides routes throughout the landscape. These routs combine the science and the myths of the area.

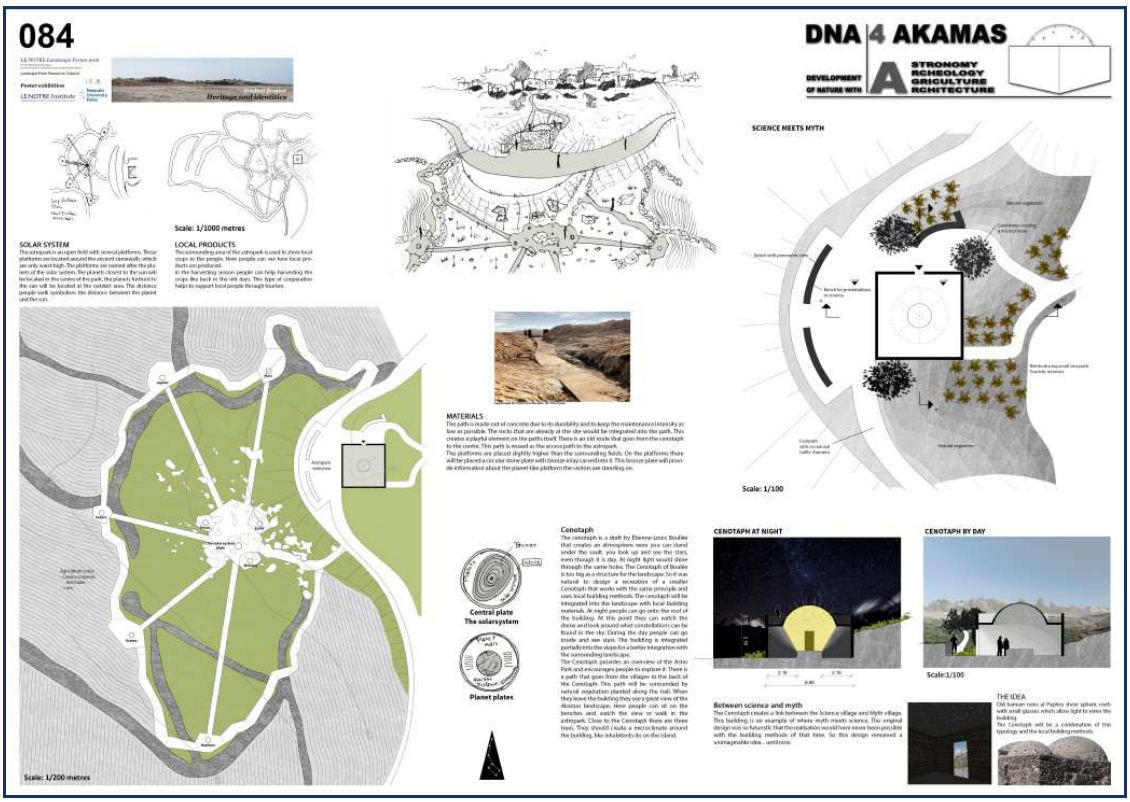
These subjects and the planned developments form an addition to the already existing Akamas 2017 vision. They will give a future value to the area which fits in the line of historic events that made this place as it is today. DNA 4 AKAMAS focuses on the inhabitants in order to support the locals. The main goal is to enhance the touristic activities in the villages and their surroundings. Tourists are seen as guests on the site, not as main users. This vision recognizes the existing qualities. In order to preserve the genius loco 'do more with less' will be reinforced through subtle interventions.

Jury Comment

This is a well-presented and balanced project with a strong conceptual vision. It has a very holistic approach, with the Geopark as a long term target, taking into account sustainable regional development. The project really intends to integrate ecology, culture and preservation issues, dealing with the diversity as presented by Greek and Turkish values. The project shows a very good understanding of the local history, it articulates the three scales very well and uses strong precedents and concepts in building up the design.




084
DNA 4 AKAMAS
DEVELOPMENT OF NATURE WITH A STRONOMY RCHEOLOGY GRICULTURE RCHITECTURE
Concepts
THEME CONCEPT
LINK
LOCAL USES
DEVELOPMENT Green
VILLAGE DEVELOPMENT
DEVELOPMENT Baseline
Siteanalysis
CONSTRUCTIONS
GREENSTRUCTURE
VILLAGE AND HEIGHT
CONNECTIONS
Astroroute
FURNITURE
Elements
Fire: Aries, Leo and Sagittarius
Air: Libra, Aquarius, Gemini
Water: Cancer, Scorpio, Pisces
Earth: Capricorn, Taurus, Virgo
Information centre
0 250 500 m
Scale: 1/5000


084
DNA 4 AKAMAS
DEVELOPMENT OF NATURE WITH A STRONOMY RCHEOLOGY GRICULTURE RCHITECTURE
SOLAR SYSTEM
LOCAL PRODUCTS
Scale: 1/1000 metres
SCIENCE MEETS MYTH
Scale: 1/100
MATERIALS
Central plate
The solarsystem
Planet plates
Cenotaph
CENOTAPH AT NIGHT
CENOTAPH BY DAY
Scale:1/100
Between science and myth
THE IDEA
Scale: 1/200 metres

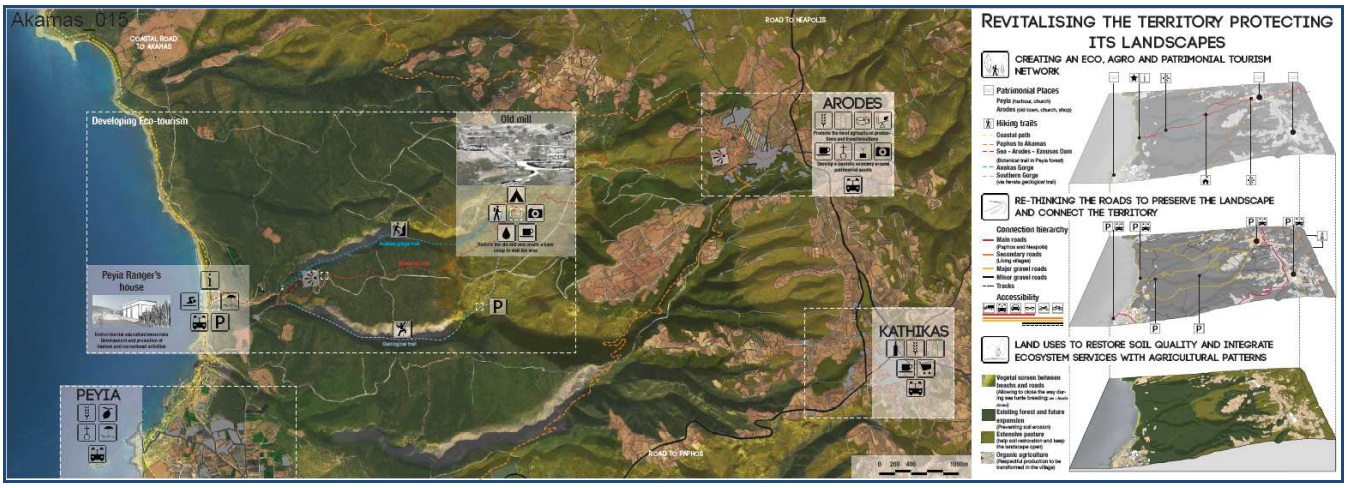
2nd Prize (1): Restructuring with cooperative economy

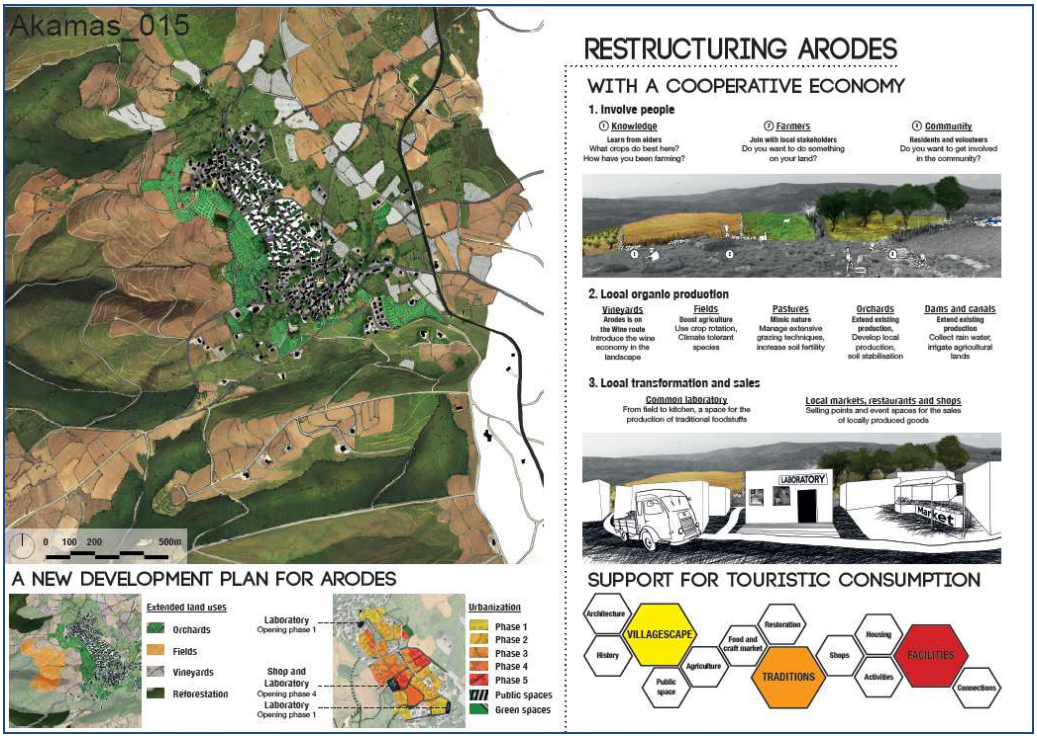
Authors: Philippe Allignet and Sophia Geller
Universities: National School of Higher studies in Nature and Landscape Architecture- Blois, France and Harvard Graduate School of Design, USA

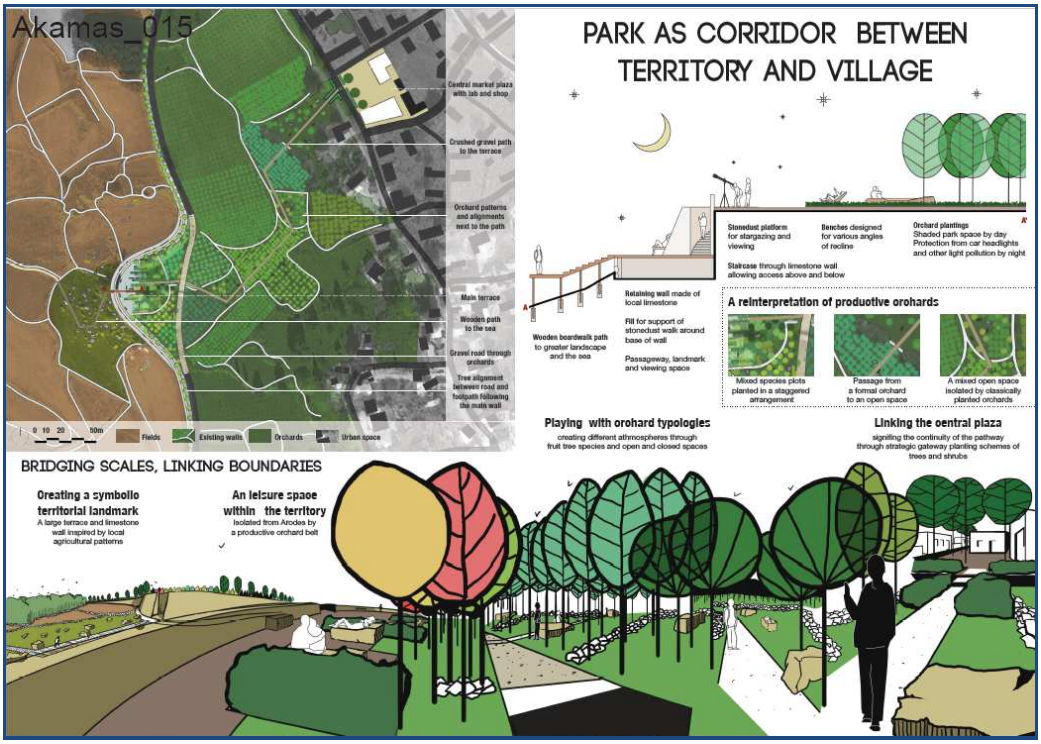
Project description

The territory stretching from Pano and Kato Arodes to the sea spans a vast collection of valuable landscape typologies. But the village itself is shrinking, fields lay abandoned, and deforestation, erosion and desertification abound. Our vision plans to address this decline through a program of revitalization, harnessing the area's rich patrimonial history to foster a strong and unified community that surpasses town divides in order to reaffirm the strength of the rural Cypriot mainstay.

Our primary move involves reforestation and a revised system of cooperative agriculture. Tree root networks along reforested slopes will retain groundwater and stabilize soils. A terraced, organic agricultural system of crop rotation, orchard plantations, and extensive grazing will insure a varied and sensitive use of the land, promoting high nutrient input and restoring soil quality. Coop farms will be established so that farmers with different knowledge sets can pool resources and rotate land use. This stimulated agricultural activity will converge at the center of the community: our urban development scheme employs phased growth towards the center of Pano and Kato Arodes, joining these historically divided Greek and Turkish communities and meeting in the middle at a new public plaza housing a community kitchen, laboratory and marketplace for the production of local goods.




Akamas_015
RESTRUCTURING ARODES
WITH A COOPERATIVE ECONOMY
1. Involve people
Knowledge
Learn from elders
What crops do best here?
How have you been farming?
Farmers
Join with local stakeholders
Do you want to do something on your land?
Community
Residents and volunteers
Do you want to get involved in the community?
2. Local organic production
Vineyards
Arodes is on the Wine route
Introduce the wine economy in the landscape
Fields
Boost agriculture
Use crop rotation, Climate tolerant species
Pastures
Mimic nature
Manage extensive grazing techniques, increase soil fertility
Orchards
Extend existing production, Develop local production, soil stabilisation
Dams and canals
Extend existing production
Collect rain water, irrigate agricultural lands
3. Local transformation and sales
Common laboratory
From field to kitchen, a space for the production of traditional foodstuffs
Local markets, restaurants and shops
Selling points and event spaces for the sales of locally produced goods
LABORATORY
Market
0 100 200 500m
A NEW DEVELOPMENT PLAN FOR ARODES
Extended land uses
Orchards
Fields
Vineyards
Reforestation
Laboratory
Opening phase 1
Shop and Laboratory
Opening phase 4
Laboratory
Opening phase 1
Urbanization
Phase 1
Phase 2
Phase 3
Phase 4
Phase 5
Public spaces
Green spaces
SUPPORT FOR TOURISTIC CONSUMPTION
Architecture
History
VILLAGESCAPE
Public space
Agriculture
Food and craft market
Restoration
TRADITIONS
Shops
Housing
Activities
FACILITIES
Connections


Akamas_015
Central market plaza with lab and shop
Crushed gravel path to the terrace
Orchard patterns and alignments next to the path
Main terrace
Wooden path to the sea
Gravel road through orchards
Tree alignment between road and footpath following the main wall
0 10 20 50m
Fields
Existing walls
Orchards
Urban space
PARK AS CORRIDOR BETWEEN TERRITORY AND VILLAGE
Stonedust platform for stargazing and viewing
Benches designed for various angles of recline
Orchard plantings
Shaded park space by day
Protection from car headlights and other light pollution by night
Staircase through limestone wall allowing access above and below
Retaining wall made of local limestone
Fill for support of stonedust walk around base of wall
Passageway, landmark and viewing space
Wooden boardwalk path to greater landscape and the sea
A reinterpretation of productive orchards
Mixed species plots planted in a staggered arrangement
Passage from a formal orchard to an open space
A mixed open space isolated by classically planted orchards
Playing with orchard typologies
creating different athmospheres through fruit tree species and open and closed spaces
Linking the central plaza
signifing the continuity of the pathway through strategic gateway planting schemes of trees and shrubs
BRIDGING SCALES, LINKING BOUNDARIES
Creating a symbolic territorial landmark
A large terrace and limestone wall inspired by local agricultural patterns
An leisure space within the territory
Isolated from Arodes by a productive orchard belt

2nd Prize (2): Revitalization of the Arodes Region

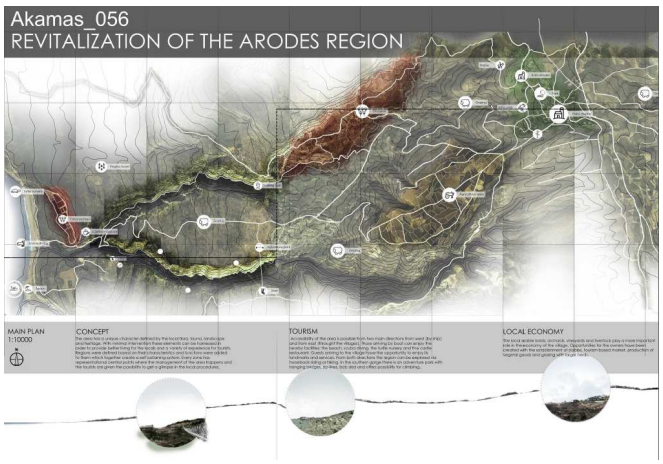
Authors: Patka Zsuzsa-Kincső, Lorant Kovacs, Botond Szabo, Emöke Gereb, Julia Nagy
Universities: Sapienţa Hungarian University of Transsylvania, Romania

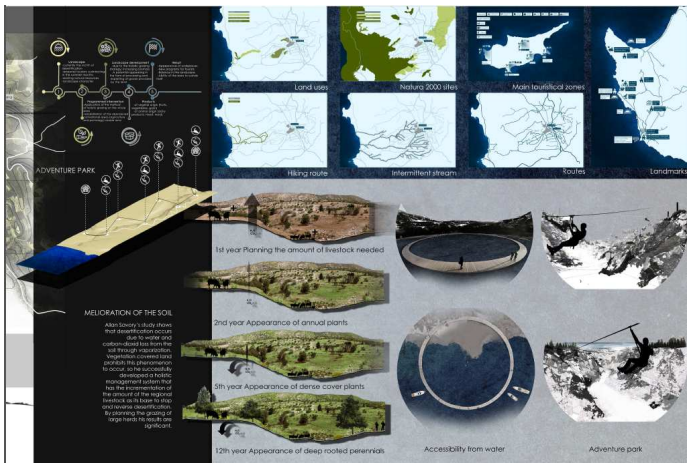
Project description

The planning area's functions have been analyzed, reconsidered and redistributed to create a self-sustaining and tourist friendly region. Four main components have been defined by function: the seaside, the gorges area, the agricultural area and the two villages area. The first two focuses mainly on tourism as they are protected by the Natura 2000 program.

The third area serves the inhabitants in the form of a proposal for reintegration of agriculture into the local people's life. It is an initiative for the locals to consider agriculture as a possibility which can be put to value at the fourth scene, the villages. The villages have been connected by a park, presenting the protected local flora. It also is the site of interactive presentation of traditional arts and crafts offering a possibility for the visitors to take part in the making process, enjoy and buy the products.

The park connects the villages to the Astro park, that models the presently known oldest astronomy device and calculator, the Greek Antikythera mechanism. Ecologically, the region has been treated as one body. By doing so, desertification can be averted and more so even reversed, by implementing a system called holistic management, developed by Allan Savory, requiring minimum intervention. The region can be approached by boat that docks on the southern part and can be crossed by foot, on horse, by bob sled or via zip-lines. Monuments and points of interest around the village can be visited with guided tours, or by following the direction tables.






Akamas_056
Market promenade
Decorative plantation
Place of public events
VILLAGE AREA
1:5000
The conservation of traditional image of Kato and Pano Arodes villages is achieved by defining different zones where the construction of built elements are regulated. The territories nearby the existing villages are strictly kept for the rural aspect and in the surrounding area the newly built villas and houses could develop. The aim of the regulation in the central area is to create a unified image by the utilization of specific outdoor furniture and protection of the facade elements that define the street view.
AROMATIC PLANTS
Euphorbia cyparissias
Odontites cyprius
Phlomis cypria var. accidentalis
Cyclamen cyprium
Senecio glaucus ssp. cyprius
Teucrium divaricatum ssp. canescens
Prunus integrifolia
Crocus veneris
Scutellaria cypria var. asterotricha
ARODES PARK
1:1000
The park connects the two villages which is emphasized by a promenade. It serves as a central point with a range of educational and entertainment facilities. A strong relation between the park and the landscape is realized by the view towards the Mediterranean sea and visual connection with the Astro park.
The centre of the park is suitable for hosting public events and its design is inspired by the antique Greek amphitheatre. Vis-a-vis, the decorative flowerbeds present the variety of the endemic flora.
Furthermore, the local crafts are demonstrated with thematic fields. Each field is equipped with the necessary facilities needed to manufacture, interactively present the craft and even sell the final product.
CUSTOMIZED FURNITURE
A product line with local use of materials is proposed to furnish the streets of the two villages.
The consistent use of furniture unifies the street view, the contemporary design doesn't compete with the archaic, traditional aspect of the village.


Akamas_056
ASTRO PARK
FROM CONCEPT TO FORM
The plan view reveals that the park's concept is based on the presently known oldest astronomy device, the Greek Antikythera mechanism. It is an ancient analog computer designed to predict astronomical positions and eclipses for calendrical and astrological purposes, as well as the Olympiads, the cycles of the ancient Olympic Games. The device is housed in the pinax (front plate) and shows the design of the mechanism. When the predicted eclipses happen, dim lights show the places of the planets, and the moon. In the extension of the planets, thematic pavilions expand the known edges about the universe. These pavilions are targeting astronomical coordinates.
INTEGRATION IN THE LANDSCAPE
Agricultural territories are surrounding the villages, but being on a slopey hill terraces were created to keep the planes horizontal for cultivation. This created a strong image for the villages, so it was adopted as the form of the park. Seen from afar it blends into the scenery of the region. The terrace shape creates horizontal layers and elevation, that allows more visitors to access the view and accentuates the galaxy.
ASTRO PARK PLAN
1:500
ASTRO PARK DETAIL
1:100

3rd Prize: The Blue Thread

Authors: Guillaume Vanden Avenne, Thomas Dreesen, Gus van Hoeck, Robin Vangheluwe
Universities: University College Ghent, Belgium

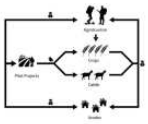
Project description

Water forms the sustainable vision for the agricultural landscape near Arodes. The concept, The Blue Threat, is based on creating a platform for the scarcity of water needed for productive agricultural. Four pilot projects are selected to apply on the cultivated fields to regenerate in economic revival. Each system offers a solution to decrease the water shortage for local and agricultural use.

The central promenade forms the The Blue Threat that connects the coastal area with the two villages of Arodes following the relief of the natural hydro-system. This pathway shapes the landmark that provides passage to a network off scenic routes. They align the agricultural and natural landscape as well as the cultural heritages in the area. Pilot projects forms the foundation to increase the amount of freshwater storage needed for agricultural irrigation. Reducing the water scarcity will regenerate in higher crop yield and freshwater for the cattle. This will create opportunities for the local inhabitants to invest in touristic exploit in the area. Agrotourism provides the right platform for Arodes with initiatives such as creating accommodations for the rural experience of the countryside. In this way there will spontaneously develop a Bottom-up platform for sustainable tourism.

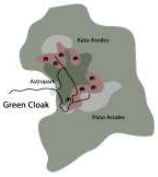
The astropark forms the portal, connecting the two villages with the scenic area following the central the blue thread. The park also aligns Pano and Kato Arodes following the existing pathway. The design of the astropark is incorporated in the natural landscape following the existing terracing relief.

083 THE BLUE THREAD
Connecting The Villages



PILOT PROJECT

IV agroforestry



Katoa and Pano Arodes Scale 1:5 000 A

Agro Forestry - section

Agro Forestry

Common House

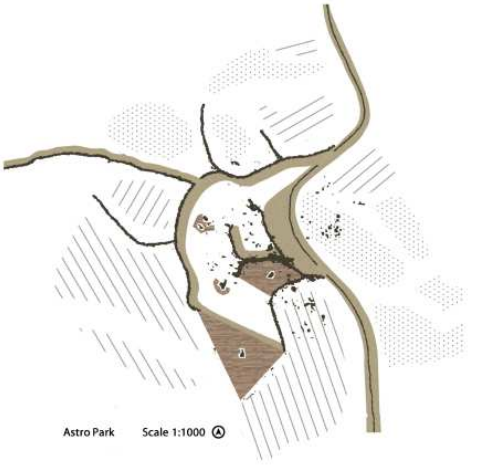
Multifunctional Square

083 THE BLUE THREAD
Portal To The Starry Landscape

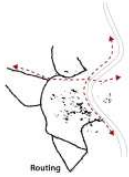
Astro Park - Section

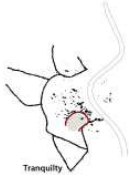
Astro Park

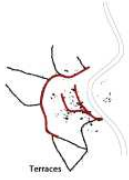
Astro Park - routing



Astro Park Scale 1:1000 A







Honorable Mention: Two Leaves

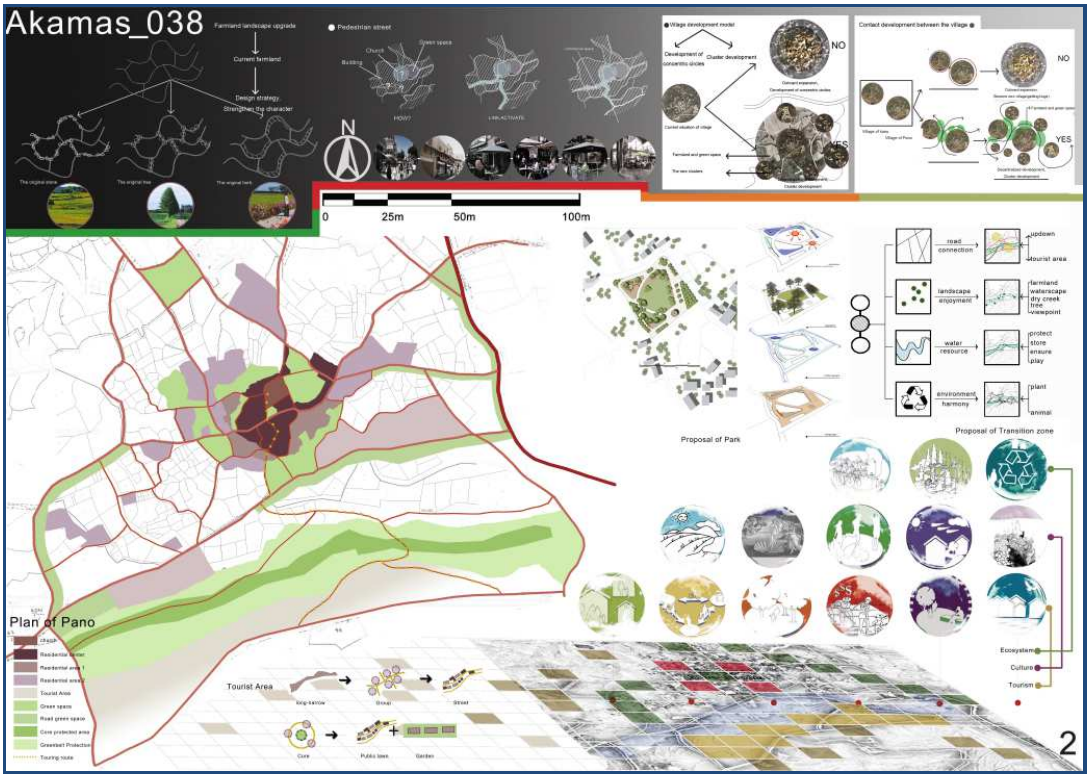
Authors: Luo Huan, Xu Xiaoyu, Wang Lun, Chen Wenshuang, Li Yuan, Guo Yue, Li Jiajia
Universities: Huazhong Agriculture University, China

Project description

“Two leaves” created by nature and human - we think this is a typically phenomenon of harmony. “Two Leaves ” in this strategy builds on a landscape narrative from the sea to the rural hinterland. It aims to enhance and integrate sustainable tourism, landscape scenery and cultural heritage.

Earth is presented as a kind of texture by runoff and contours. Huge space spirit dominates every inch of land from the sea to the village. Mediterranean climate and geological movement created a unique temperament and characteristics of this site, there is no need to change a lot, just respect the process. Agriculture will become a landscape, which can stimulate tourism. Villagers and visitors will have a harmonious relationship, while improving the village industry. In the area, framework like a pearl necklace, connecting every heritage, scenic and economic elements. And, the component of the strategy connects is a sustainable traffic system. The system capable to adjust to the particularities of each functional zone and scenic spot and connect it to its wider landscape. The system contains several means of transportation which can increase landscape experience by modal shift.

When it comes to the village we think the two villages, Kato and Pano Arodes, must become a integral whole, so we design a park between two villages to avoid the disorderly development. A special tourist route is planned to offer more interesting experience in villages. The detail design for an Astro park is inspired by the ocean and stars. In consideration of terrain and environment, we minimize the damage, combine mill, grass and stones, which already exist, to form a new landscape. These will become a landmark by turning space into land art.The park contains a variety of platforms, surrounded by local flowers,which could satisfy different needs of visitors.


Akamas_038
Plan of Pano
Proposal of Park
Proposal of Transition zone
Tourist Area
2


Akamas_038
Analysis graphics
Platform 4
Red landscape road
Platform 3
Art of stones
Platform 2
Platform 1
Pano Arodes
Detail Plan 1:100
Master Plan 1:1000
Astro Park
3

Honorable Mention: Macro-Meso-Micro

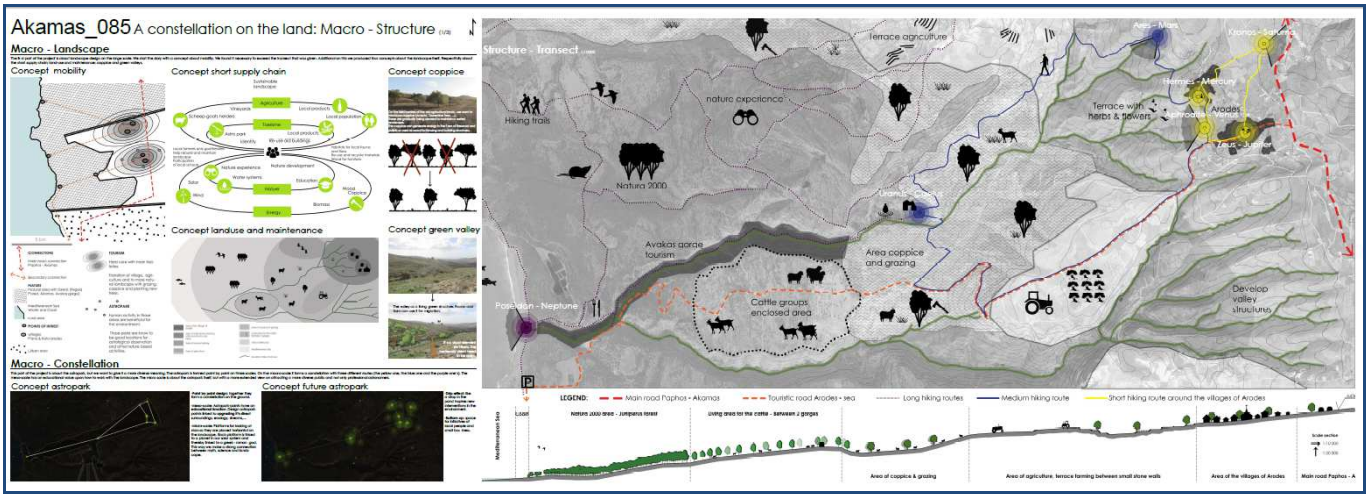
Authors: Fleur Vergote, Nona de Baerdemaecker, Rinus Vanderlinden, Pepijn Verbeeck
Universities: University College Ghent, Belgium

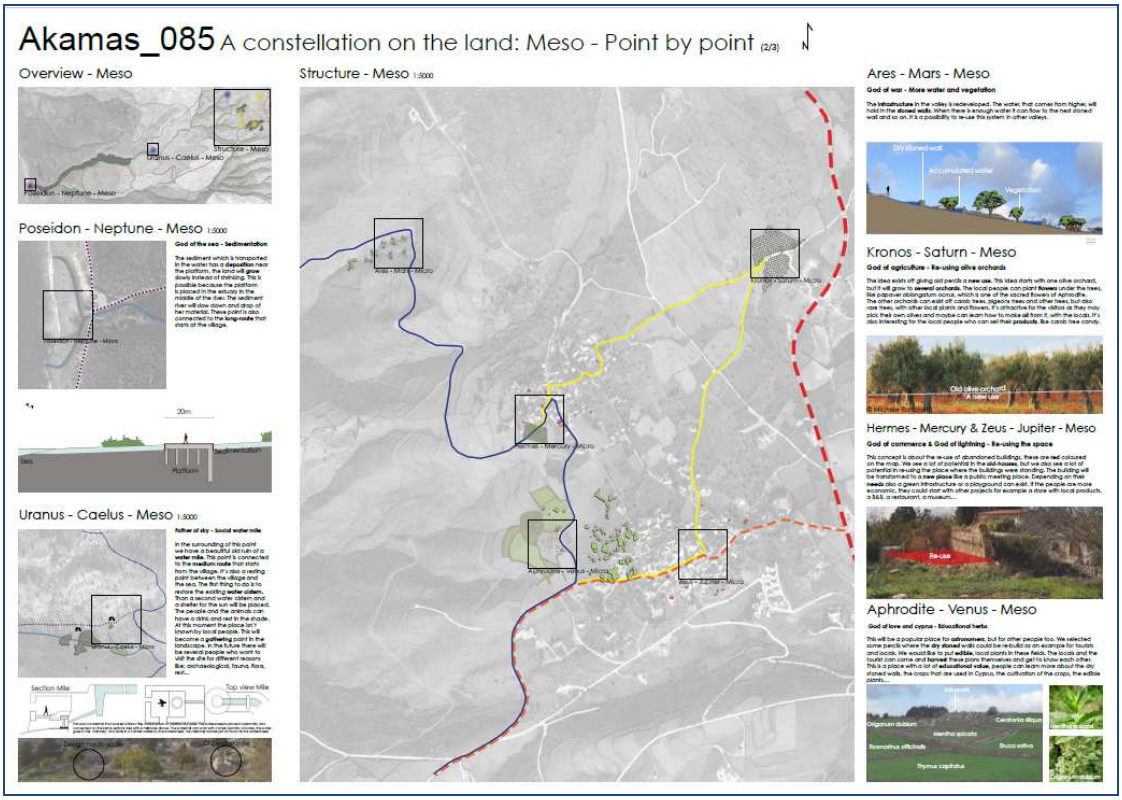
Project description

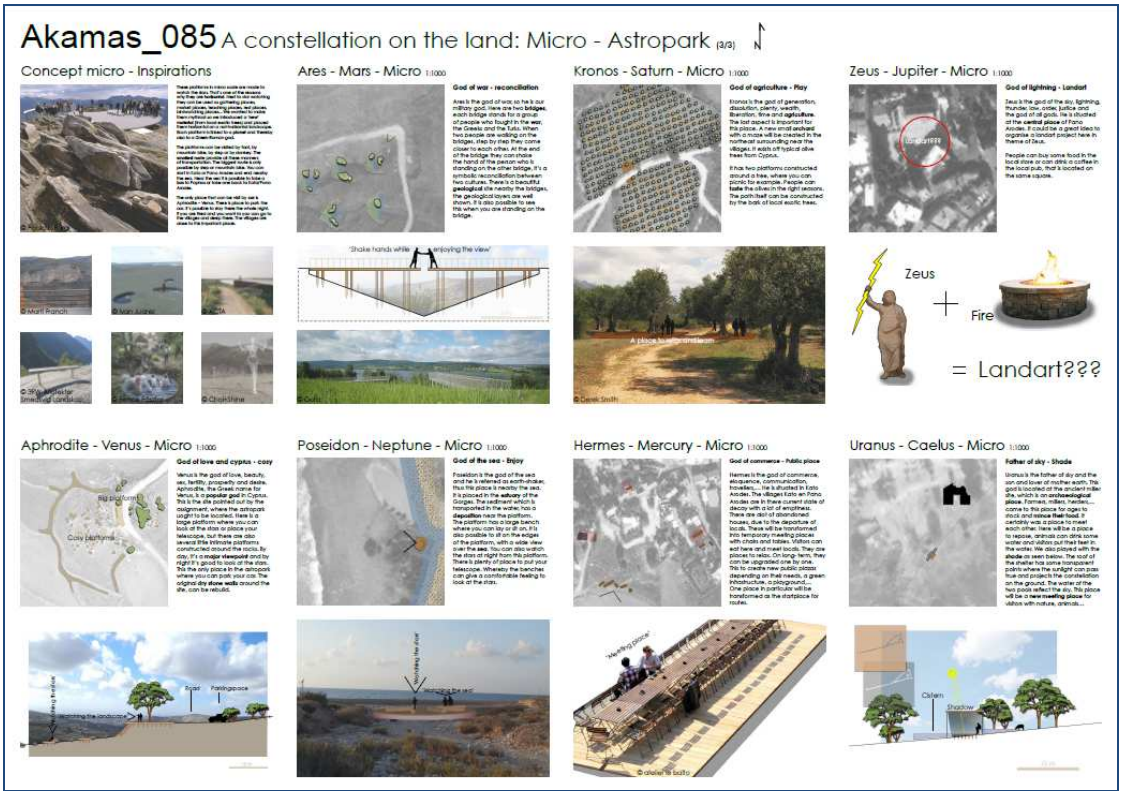
The first part of the project is about landscape design on the large scale. We start the story with a concept about mobility. We found it necessary to exceed the area of the transect that was given. Additional on this we produced four concepts about the landscape itself.

Mobility: The main road has a clear north-south connection. While other connections from sea to main road have an east-west connection. We used this principle for the first concept. To remove the north-south connection by the sea for cars the biggest stream of tourist and recreant use the main road. This way the nature of the Pegeia forest and other Natura 2000 area's experience reduced pressure of entry. Short supply chain: The project has a lot of potential for agriculture, tourism, nature and energy. We want a sustainable land-use, which does not exceed the carrying capacity of the area, and uses local participation. With local people who stand near the tourist, trough short supply chain. Land- use and maintenance: The project is simplified in this concept and divided into categories with a clear east-west structure. With an extra focus on the area of coppice & grazing. Green valleys: The valley is the connecting structure between the various sub- areas. By planting new indigenous trees and bushes along the stream structures, the valley becomes visible in the landscape. Fauna and flora can use it for migration.

Constellation astropark: The astropark itself is not constructed on one place but inspired by "Point by point" design: these individual places form an imaginary constellation on the ground. The astropark is intertwined on three scales. On the macro-scale it forms a constellation with three different routes (one short, one medium and al lot of long routes). The meso-scale has an educational value upon how to work with the landscape. The micro scale is about the astropark itself, but with a more extended view on attracting a more diverse public and not only professional astronomers.




Akamas_085 A constellation on the land: Meso - Point by point (2/3)
Overview - Meso
Structure - Meso 1:5000
Ares - Mars - Meso
Poseidon - Neptune - Meso 1:5000
Kronos - Saturn - Meso
Hermes - Mercury & Zeus - Jupiter - Meso
Uranus - Caelus - Meso 1:5000
Aphrodite - Venus - Meso


Akamas_085 A constellation on the land: Micro - Astropark (3/3)
Concept micro - Inspirations
Ares - Mars - Micro 1:1000
Kronos - Saturn - Micro 1:1000
Zeus - Jupiter - Micro 1:1000
Zeus
Fire
= Landart???
Aphrodite - Venus - Micro 1:1000
Poseidon - Neptune - Micro 1:1000
Hermes - Mercury - Micro 1:1000
Uranus - Caelus - Micro 1:1000