



EU Rural Cooperation Fair 23rd and 24th September Edinburgh

- Workshop -
Culture

LEADER Limesregion, Baden-Wuerttemberg,
Germany





LEADER
LIMESREGION
WIR GEBEN IDEEN ZUKUNFT

LEADER Action Area Limesregion

The LAG Limesregion consists of:

- ❖ **4 districts**
 - Heilbronn
 - Hohenlohekreis
 - Rems-Murr-Kreis
 - Schwäbisch Hall
- ❖ **39 Municipalities**
- ❖ **Area size: 1,418 square kilometers (km²)**
- ❖ **Population 174,669 inhabitants (as of 01.01.2007)**
- ❖ **Population density: 123 inhabitants / km²**



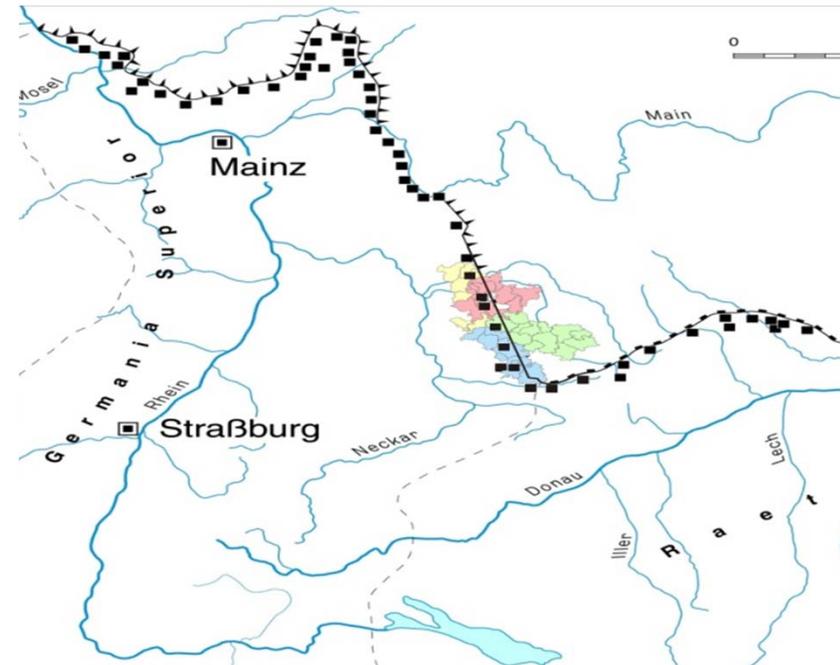
VIRTUELLE LIMESWELTEN



LEADER project:

Virtual Limes Worlds

Historical facts part I



- ❖ In the second and third centuries A.D. the Limes formed the border of the Roman Empire in the Germanic provinces.
- ❖ The Upper German-Raetian Limes is the largest archaeological monument in Germany.
- ❖ With a length of 550 kilometers, it traverses a wide variety of landscapes between the rivers Rhine and Danube in what today is southwest Germany.

Historical facts part II



- ❖ Along the Limes many forts, ranging in size from large to small, guarded the border.
- ❖ These were supplemented by more than 900 watchtowers built of wood and stone.
- ❖ The border fortification was supplemented by 30,000 soldiers and consisted primarily of a system of ramparts and ditches with a great wooden palisade.
- ❖ In some areas the Limes runs straight. In the province of Raetia, now eastern Wuerttemberg and Bavaria, the fortification was later reinforced with a solid stone wall.

Historical facts part III



- ❖ Over time, the wooden towers were gradually replaced by Massive stone towers. In Raetia, the wooden palisade was replaced in the beginning of the third century A.D. with a stone wall about 1 meter wide and probably 3 to 3.5 meters high. The watchtowers were incorporated in the wall.
- ❖ The procedure used to build the wall becomes clear in the laser scan. Quarry pits that were dug alongside the Limes wall provided a cheap and easy way to obtain local Jurassic limestone for the walls construction.

Historical facts part IV



❖ There were also a large number of military facilities near to and behind the Limes. These ranged from small encampments and fortress to cavalry forts up to 6 hectares in size.

This Limes section contains some particularly interesting features. Near Hegelohe, for instance, an encampment or fortress measuring around 20 meters on each side can be identified, although it is hardly visible in the terrain.

❖ In the vicinity of Biebig, a somewhat larger fortress stands out clearly. It was encompassed by a ditch and the interior structures were build against the fort walls to save space.

Limes - UNESCO World Heritage Status

❖ In 2005 the Limes was granted the status of a UNESCO world heritage site and placed under international protection.

❖ The German Limes Commission and national heritage authorities now face the challenge of protecting this archaeological monument while Simultaneously making it accessible to the public.



- ❖ In 2008, 11 out of 39 municipalities concluded the “Virtual Limes Worlds” project.
- ❖ Its aim: combining education with entertaining – a marketing factor
- ❖ New target groups

Beginning of the project “Virtual Limes Worlds”



Project Partner



Alfdorf, Forchtenberg, Großlalach, Jagsthausen, Mainhardt, Murrhardt, Öhringen, Pfedelbach, Welzheim, Widdern, Zweiflingen

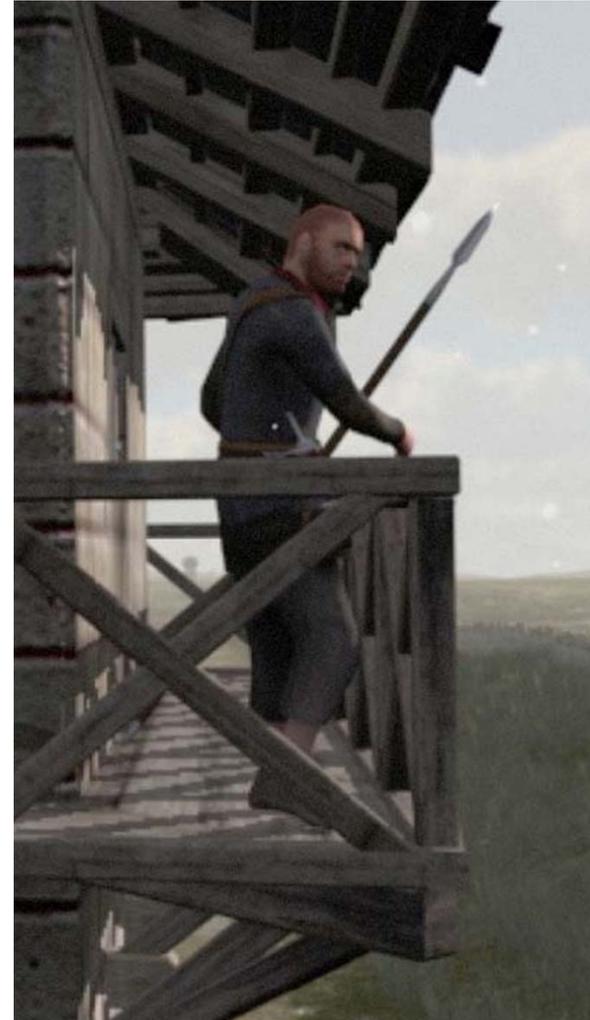




❖ short introduction movie about the Limes and Romans in general

❖ followed by a 3-D movie that allows interactive gaming several people can stand around and look over the player's shoulder

❖ the geographical resources can also be viewed in 2-D



Objectives:

Preservation, experiencing and development of regional cultural heritage, particularly the Limes by extending the day and multi-day tourism by making the lives of our ancestors alongside the Limes lively

the quality of existing infrastructure and the development and marketing of attractive product lines in agriculture, health and cultural tourism



- ❖ **Limes communities welcomed all to the valorization of the Cultural inheritance.**
- ❖ **At first many communities were skeptical that the financing Would be too high .**
- ❖ **The mutual funding from the EU and the State of Baden-Wuerttemberg came to 126,000 €**
- ❖ **Another 74,000 € was raised through communal co-financing from the communities.**
- ❖ **Rems-Murr-Kreis constituted the “manpower“ for the project coordination**

**Interactive information transfer in
state of the Art 3-D technology**

Success of the movie “Avatar”

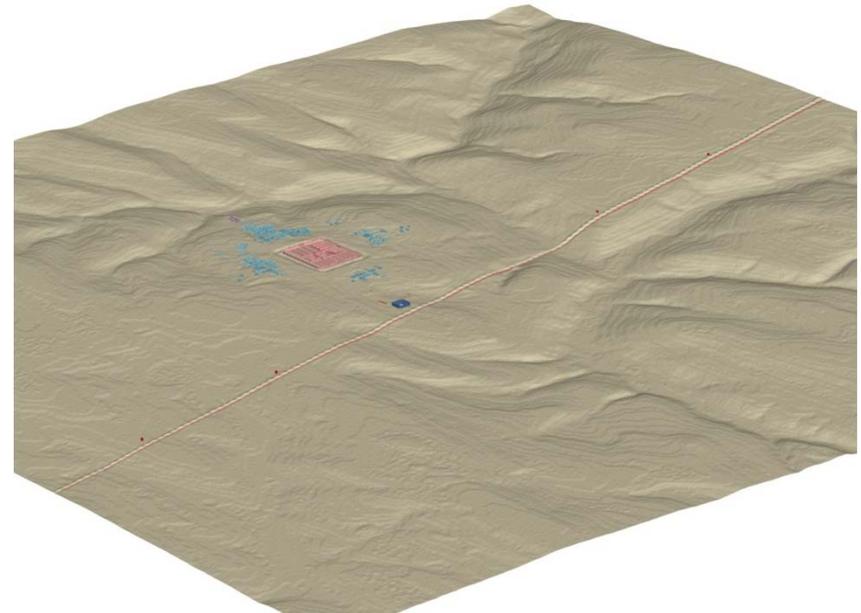
**With the LEADER project “Virtual
Limes Worlds“ (dt. Virtuelle
Limeswelten) a successful step into
a new, future-oriented realistic
dimension of representation has
been accomplished.**

**The press was highly interested
from in the project from the
beginning.**



The helicopter is fitted with technological components of extremely high-quality.

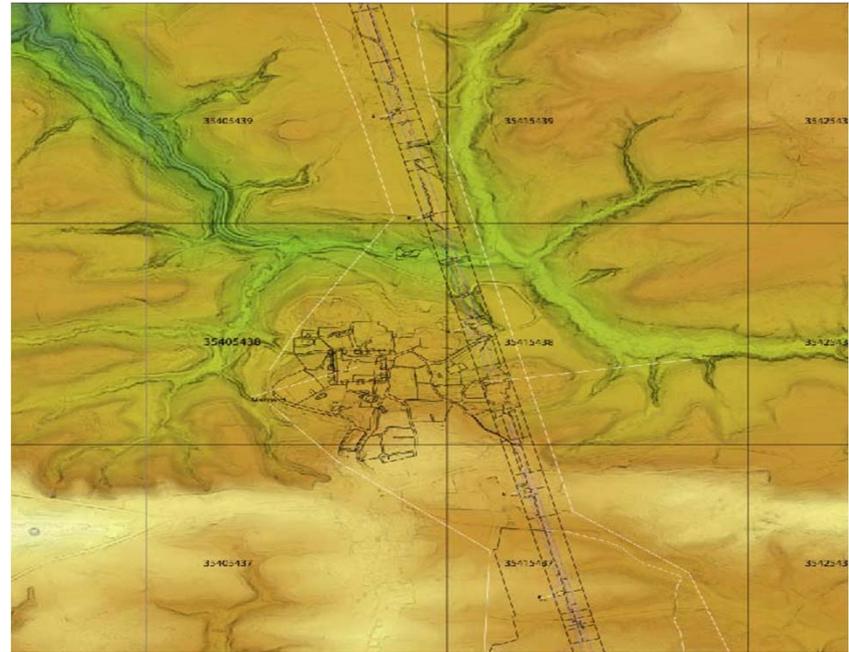
Not only do they continuously determine the exact position of the aircraft in three dimensional space, they can also simultaneously register and administer up to 160,000 3-D Laser measure per second.



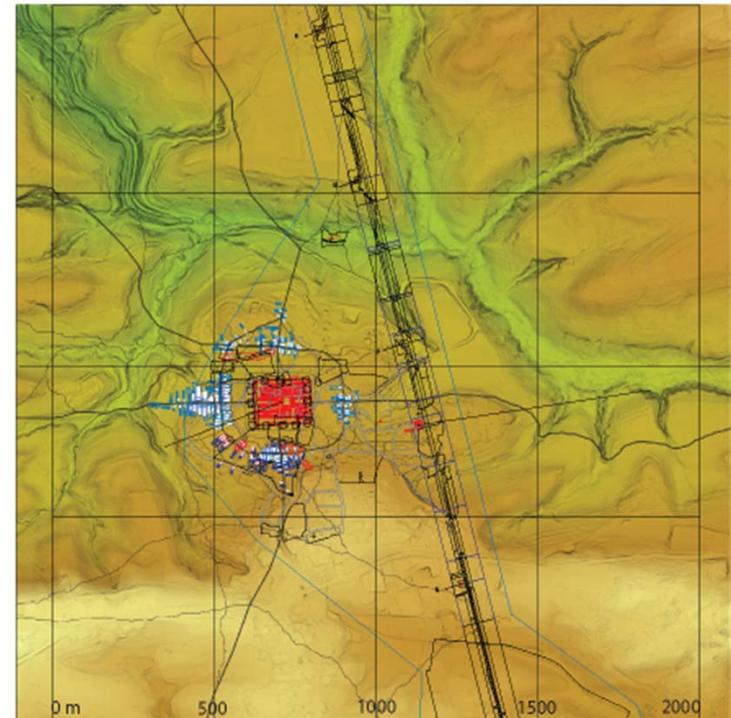
The 3-D laser generates hundreds of millions of points within a very short time.

Measurements are made with „the speed of light“:

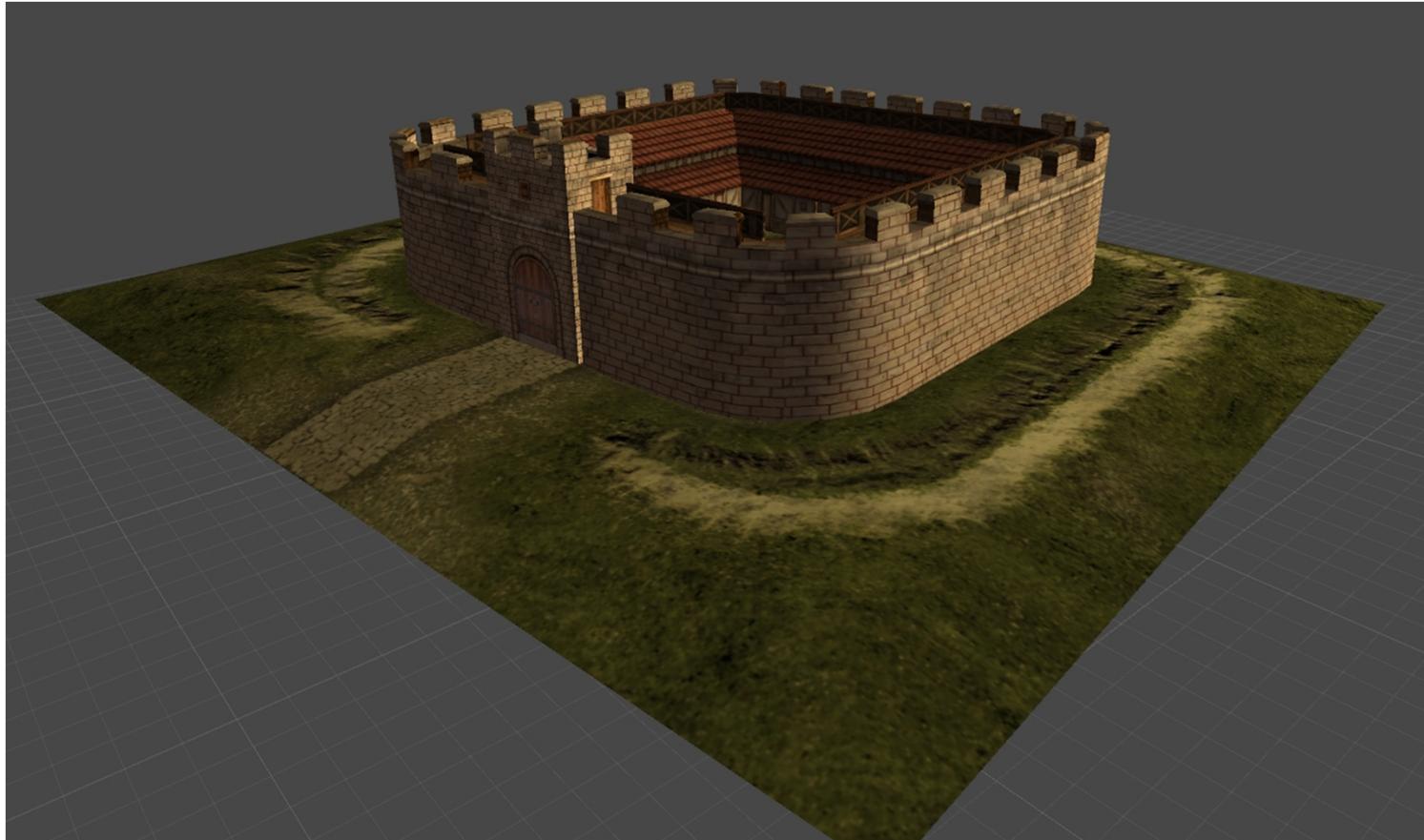
Namely the time difference between send out an receiving the reflected laser beam.



- ❖ The systematic use of this new method of prospecting has revolutionized the way data is retrieved from archaeological sources, especially in wooded areas.
- ❖ The high penetration of laser scanning allows pulsed laser beams to infiltrate forest growth and reach the forest floor.
- ❖ Vegetation, especially trees and undergrowth, can now be filtered out in the computer model to reveal the features hidden below:
for example historical monuments, burial mounds, ancient field terraces and path systems.



Graphic example



Graphic example





KARIKATUR DER WOCHE Das Virtual Dimension Center will den Limes nachbilden: aber wahrscheinlich nicht mit, sondern eher in Computern. Gezeichnet von Egon Kaiser

Fellbacher Zeitung vom 29.3.08

„Virtual Limes Worlds“
in the local newspaper