

# Designing Virtual Tours of 3D-Adaptative Greenhouses

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A.M. Espínola<sup>1</sup>, G.F. Parra<sup>1</sup>, L. Iribarne<sup>1</sup> and J.A. Torres<sup>2</sup>

<sup>1</sup> Unit of Engineering in Graphical Computation, University of Almería, Spain

<sup>2</sup> Group of Computer Science and Environment, University of Almería, Spain



# 1. INTRODUCTION

## Greenhouses design

- ❑ Greenhouses design
  - ❑ Plane
  - ❑ Grids
  
- ❑ 3D Virtual visit
  - ❑ Adapted form
  - ❑ All perspectives

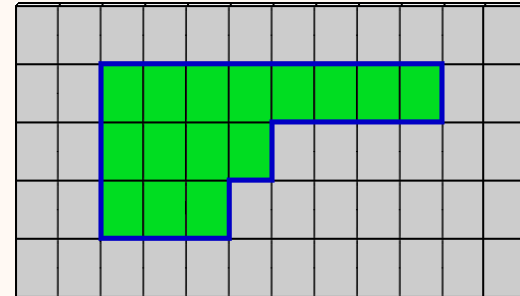


Image 1. Plane divided in grids



Image 2. Virtual visit example

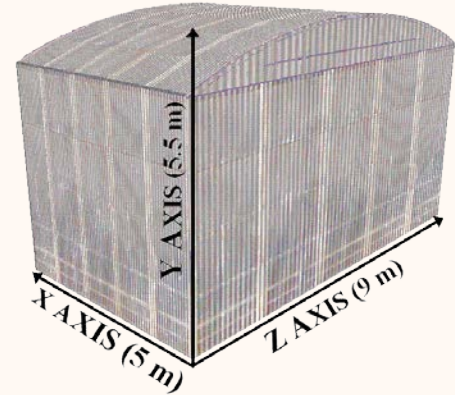
## 2. REGULAR GREENHOUSES

### 3D Basic Modules

- Designing 3D-adaptative greenhouses

  - Basic modules

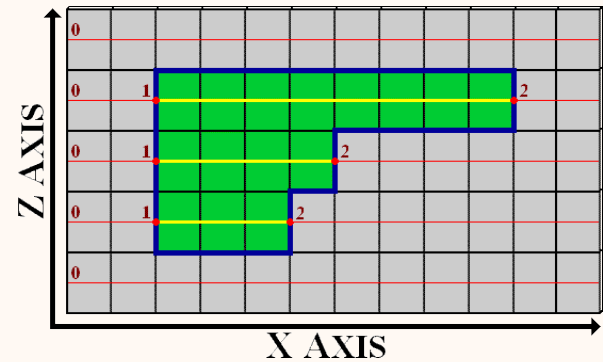
  - Measures



- Regular greenhouses

  - Detection method

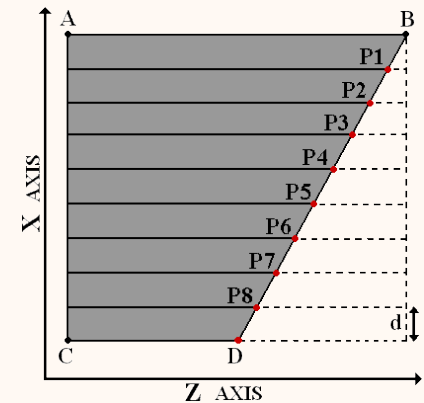
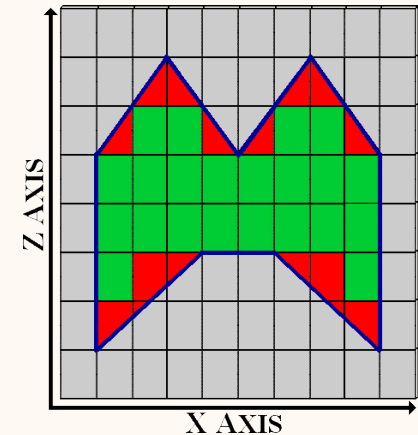
  - Greenhouse creation



### 3. IRREGULAR GREENHOUSES

## Adaptation process

- ❑ Irregular problems
  - ❑ Incomplete modules
  - ❑ Adaptation
- ❑ Adaptation example
  - ❑ Ceiling
  - ❑ Z axis modification



## 4. VIRTUAL VISIT

### Engine 3D

- ❑ Our Engine 3D
  - ❑ Camera movement and rotation
  - ❑ Collision detection
  - ❑ Text console
  - ❑ OpenGL, VC++

