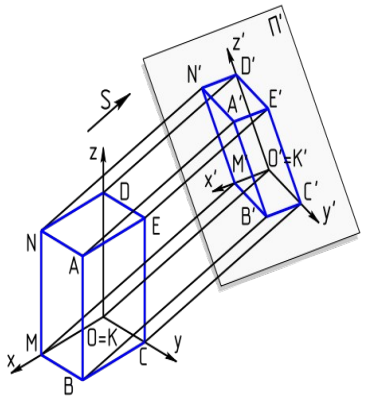
Reconstructing 3D plant from binary images

I. Calibration of the camera :

- Compute camera parameters (focal, rotation and translation matrix) for each angle of view with a chessboard image dataset.
- Associate a projection functions (3D -> 2D) obtained trough camera parameters to each binary images.



II. Reconstruction 3D :

- Defines a voxel of the size of the scene.
- And iteratively until the size of voxels desired is attain :
  1) Subdivide each voxel in eight
  2) Project each voxel on the binary images and remove it if he include no plant pixel.