

READ ME

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http://lisabiblio.univ-angers.fr/PHENOTIC/Shape_descriptors.zip
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Here is a downloadable file containing:

1. Results of extended applications on 9 plants of shape descriptors proposed in manuscript called "Shape descriptors to characterize the shoots of entire plants from multiple side views of a motorized depth sensor" by Yann CHÉNÉ *et al.*

This includes panel results in .png format:

- RGB views of these 9 plants,
- Depth views of these 9 plants,
- Effective volume, hole ratios, 3D symmetry, multiscale analysis panels of these 9 plants.

2. Dataset of 11 files including RGB and depth views (in 72 positions):

- PLANT_A and PLANT_B are data used along the study,
- PLANT_1 to PLANT_9 are data used and usable for extended applications.

Each file contains (readable as .txt file):

- a file with 72 RGB views computable using Matlab,
- a file with 72 corresponding depth views computable using Matlab.

The matlab script for opening depth files is the following :

```
function M=LoadDepthRaw(FileName)
    fd=fopen (FileName,'r');
    width=fread(fd,1,'uint32');
    height=fread(fd,1,'uint32');
    Img=fread(fd,[height,width],'float32=>double');
    M= Img';
    fclose (fd);
end
```