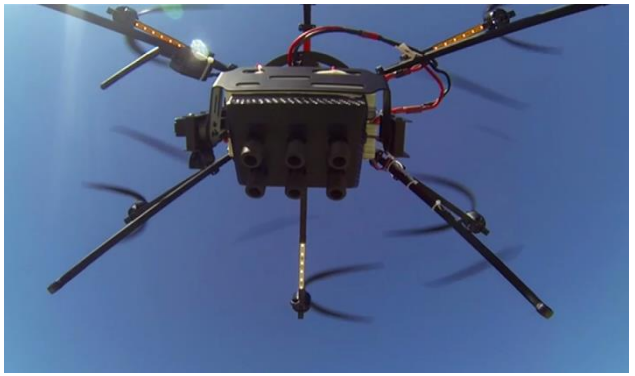
Phenome MCP1

Imaging Plant Architecture



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Jérôme Chopard, Nicolas Brichet, Llorenç Cabrera-Bosquet,
Xavier Sirault, Sarah Cohen-Boulakia, Christophe Pradal

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M3P

Mistea
Mathématiques, Informatique et STatistique pour l'Environnement et l'Agronomie

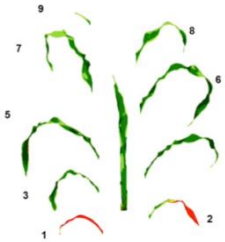
Zenith

CDD Phenomes

2013 2014 2015 2016 2017 2018

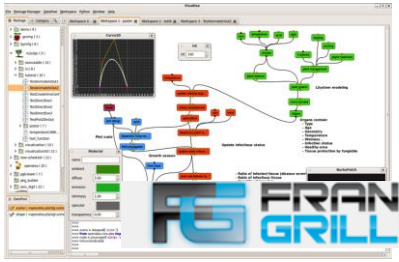
oct sept Juin Nov.

Images 2D PhenoArch

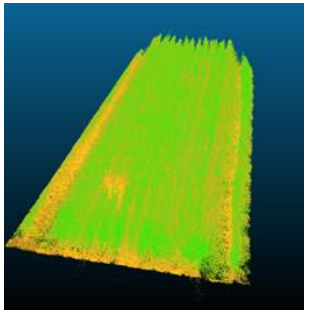


3D + PipeLines Analyse

Infrastructure



Pipeline Phenomobile

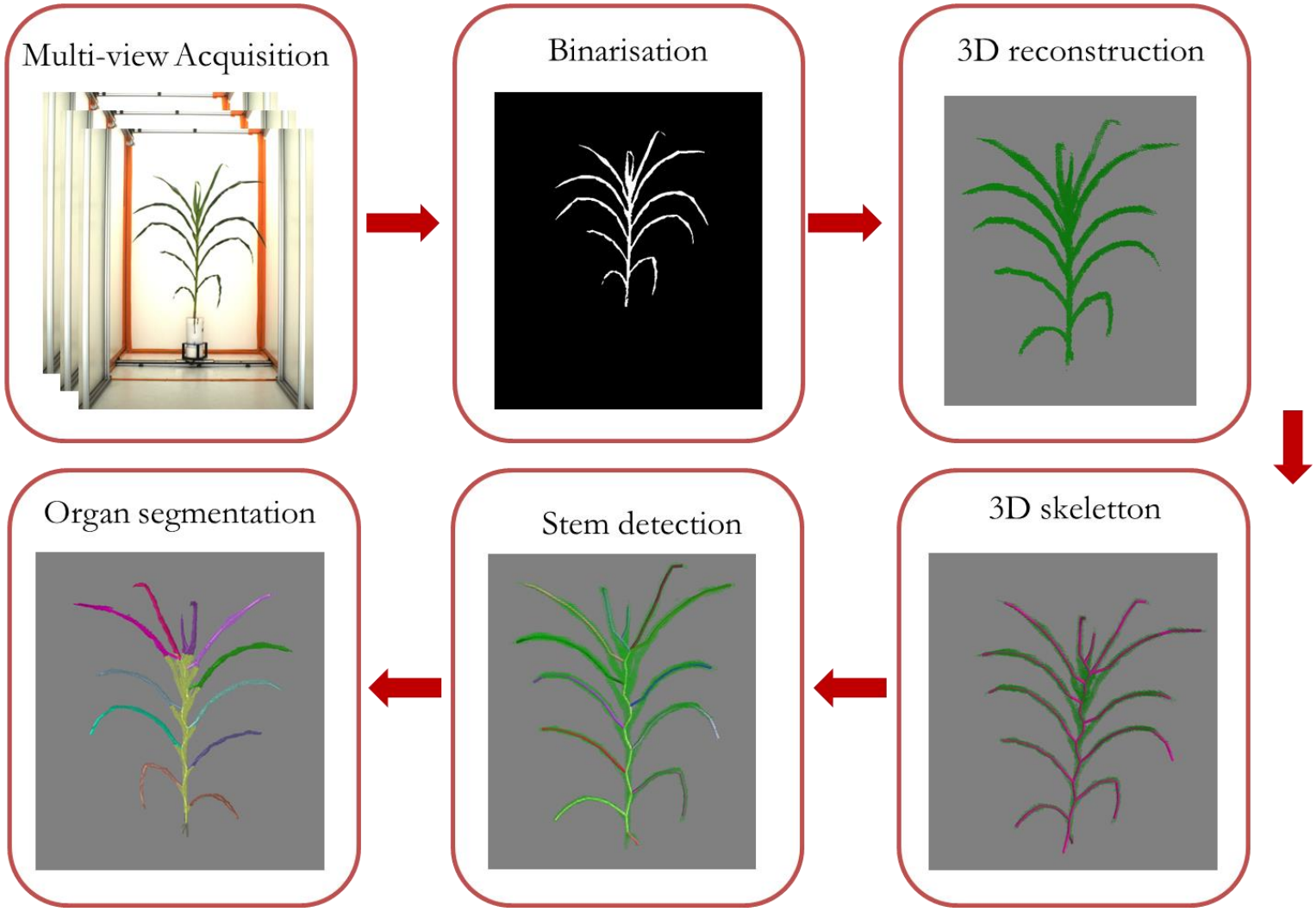


Michael

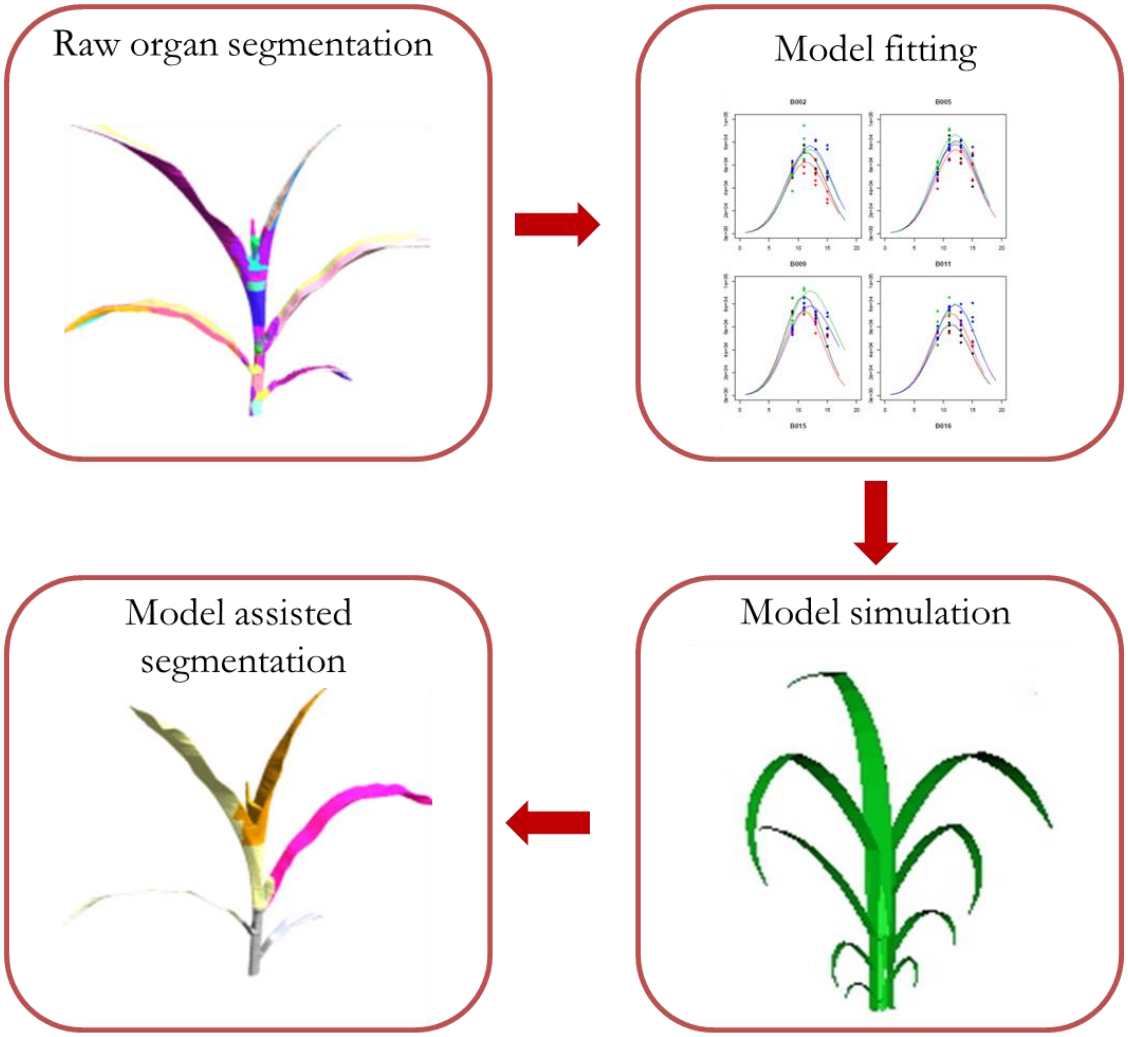
Simon

Jerome

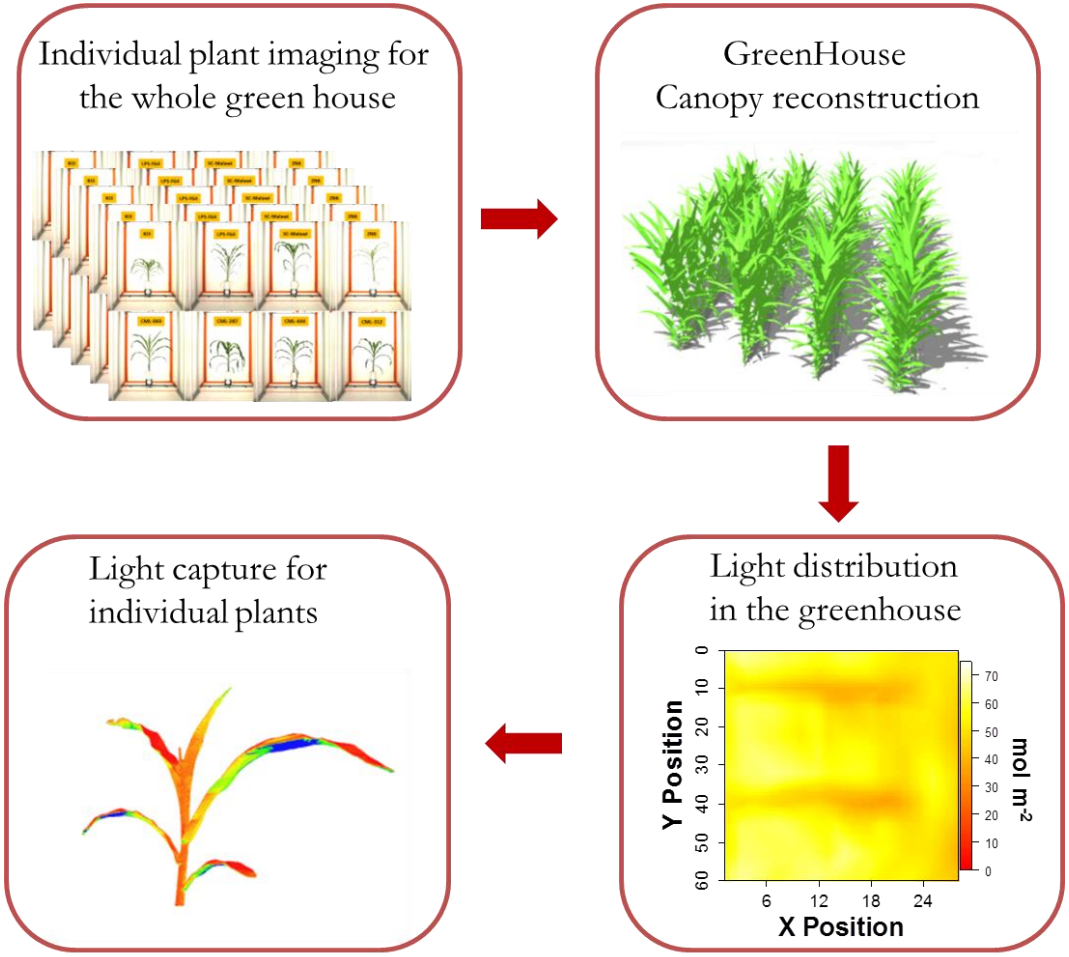
Pipeline 3D + ‘Organ detection’



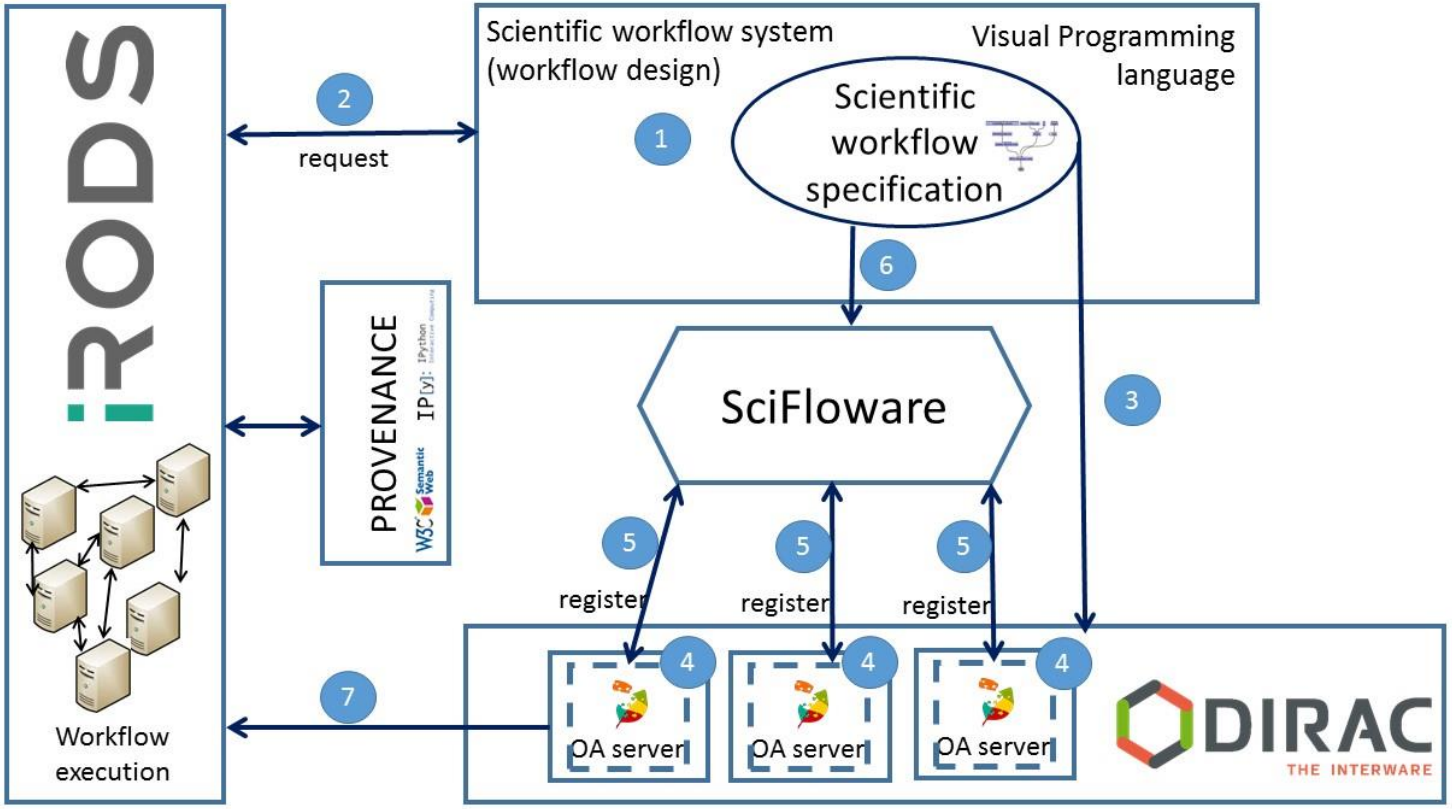
Model assisted segmentation



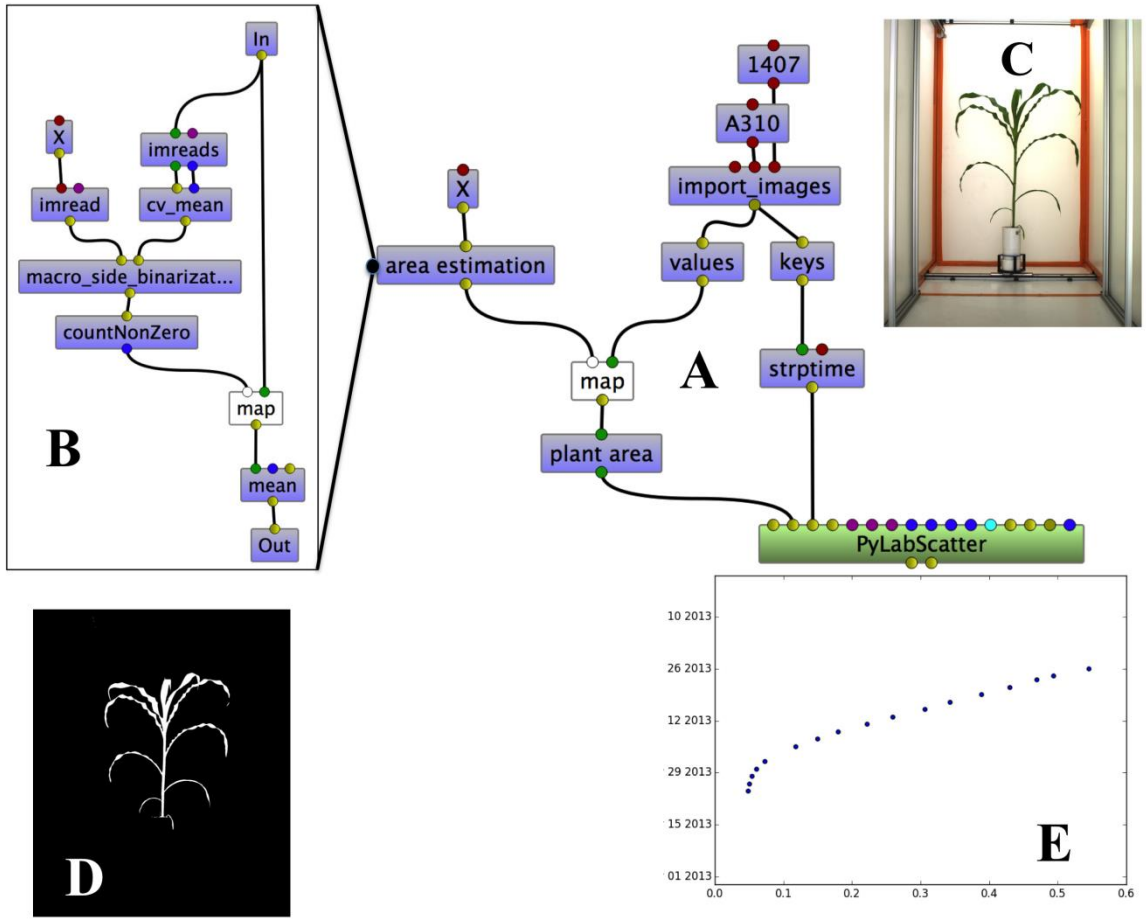
Pipeline 3D + ‘Light Interception’



Grid Computing



Analysis as Workflows



OpenAlea

Provenance

My Projects – Overleaf | http://nbview...taflow.ipynb | IPy Home | IPy Provenance Phenomics

localhost:8888/notebooks/Provenance Phenomics.ipynb#

SON overlay network

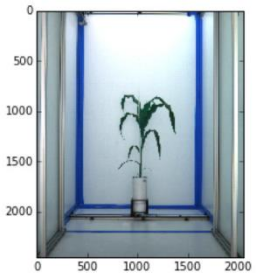
IP[y]: Notebook — Provenance Phenomics Last Checkpoint: Jul 21 23:51 (autosaved)

File Edit View Insert Cell Kernel Help

Code | Cell Toolbar: None

```
edge3 = imread(img)
imshow(edge3)
```

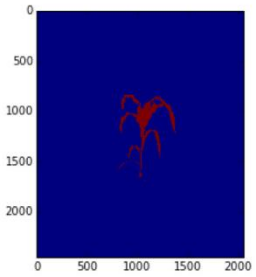
Out[17]: <matplotlib.image.AxesImage at 0x127069190>



In [18]:
```
edge4, edge5, edge6, edge7 = sidebinarisation_configuration(edge2)
```

In [19]:
```
edge8, = side_binarisation(edge3, edge4, edge5, edge6, edge7)
imshow(edge8)
```

Out[19]: <matplotlib.image.AxesImage at 0x12b04d890>



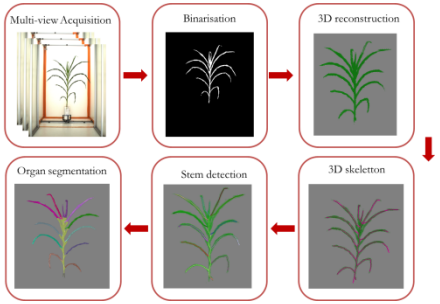
In [20]:
```
edge9 = countNonZero(edge8)
print edge9
```

```
87499
```

Etapes

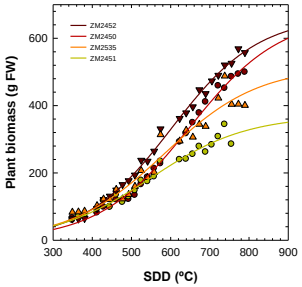
Prototypage

- Fonctionnalités
- Création des paquets



Beta test

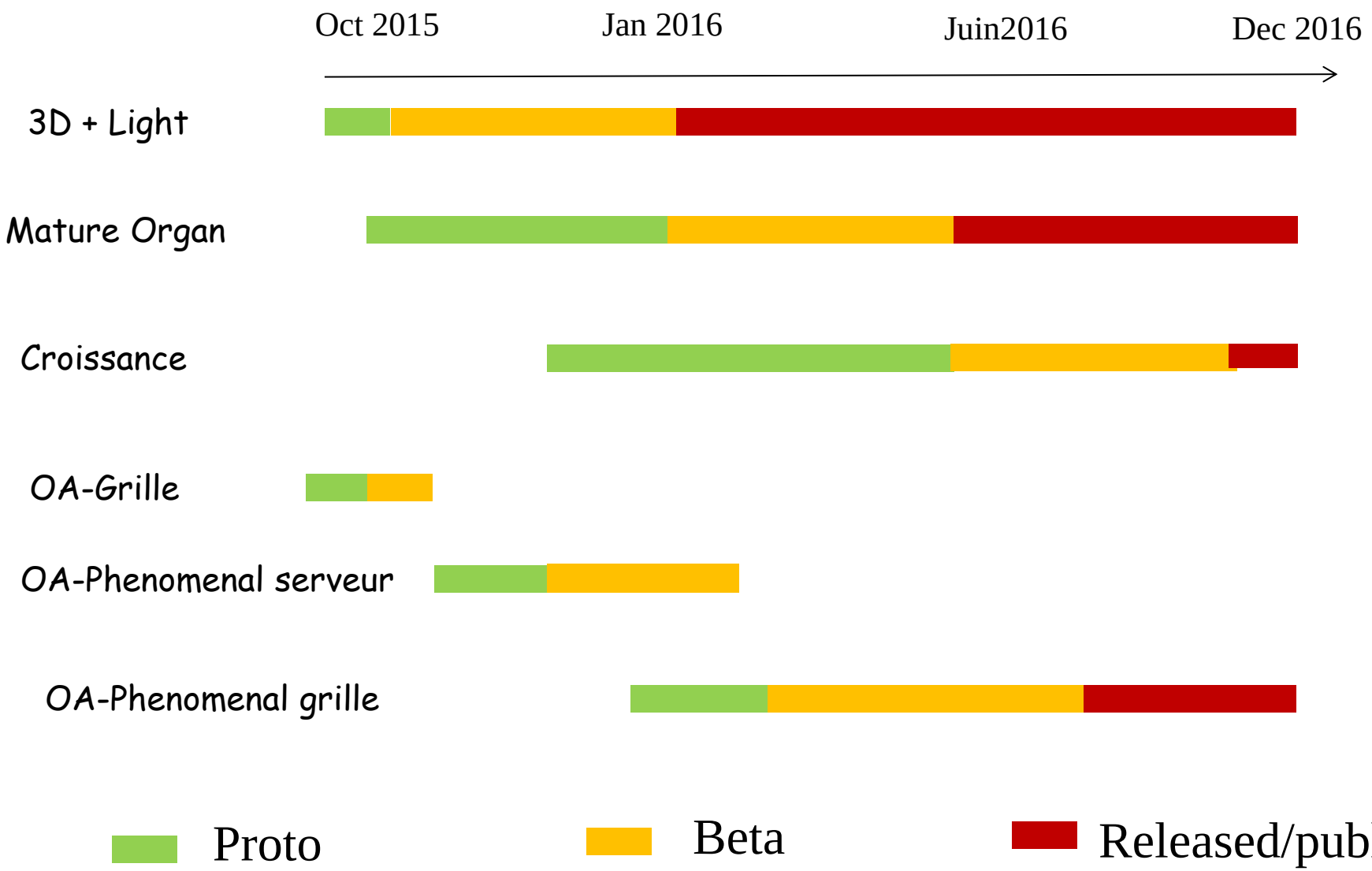
- Run tests : 1-3manips, serveur local
- Premières Analyses
- Robustesse – Fiabilité- validations



Finalisation

- Interfaces (Utilisateur, Phis,…)
- Mise en production Grille + all data
- Papiers méthodes

Sorties étagées



Roles

Développeurs – Relecteurs

Simon (Phenomenal), Christian (model assisted),
Nicolas (Ear tracking), Jerome (InfraphenoGrid),
Christophe (InfraphenoGrid)

Beta test

Tsu Wei, Nicolas, Christian, Llorenç

Coordination

Christophe, Christian

Suites

Maïs -> Blé

3D field data

Liens Modeles –fits –analyses -simulations

4D4Phen