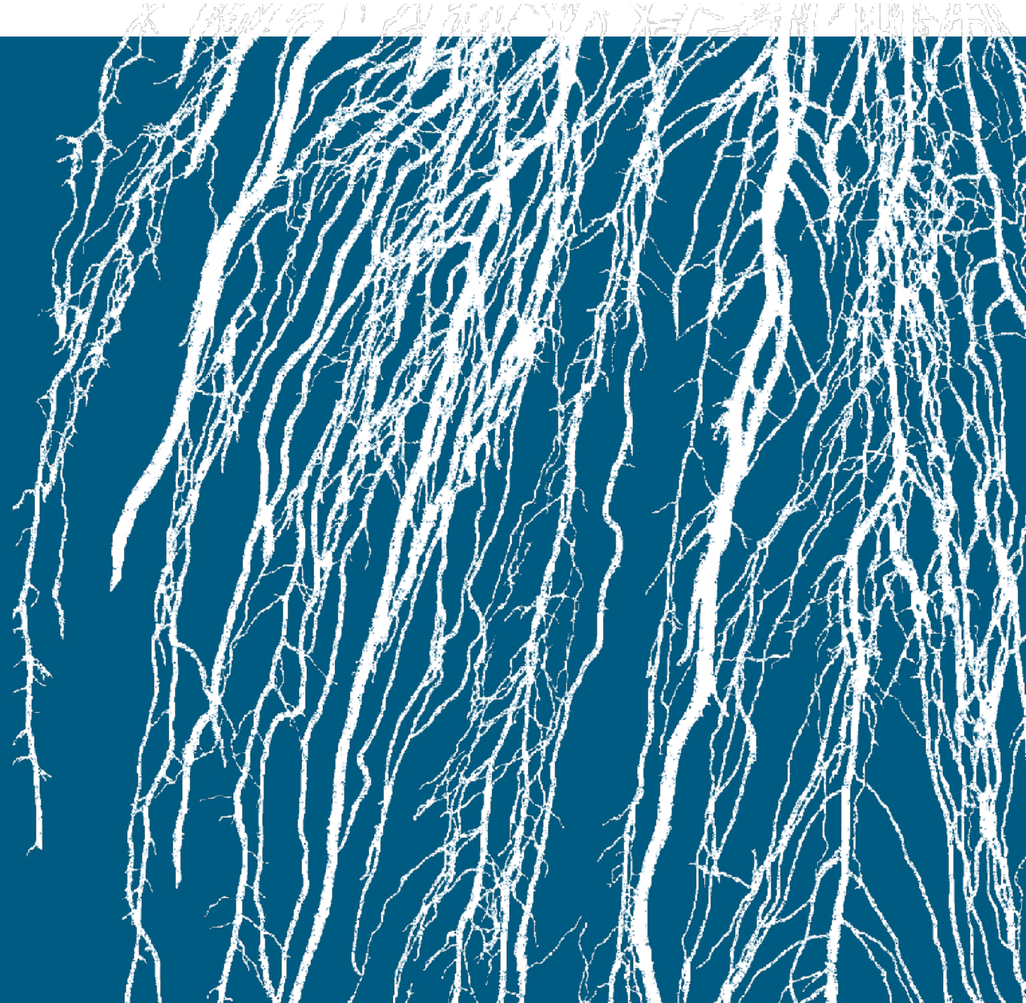
JÜLICH
FORSCHUNGSZENTRUM

USING STRUCTURAL **MODEL** TO **VALIDATE** AND **IMPROVE** ROOT **IMAGE ANALYSIS** PIPELINES

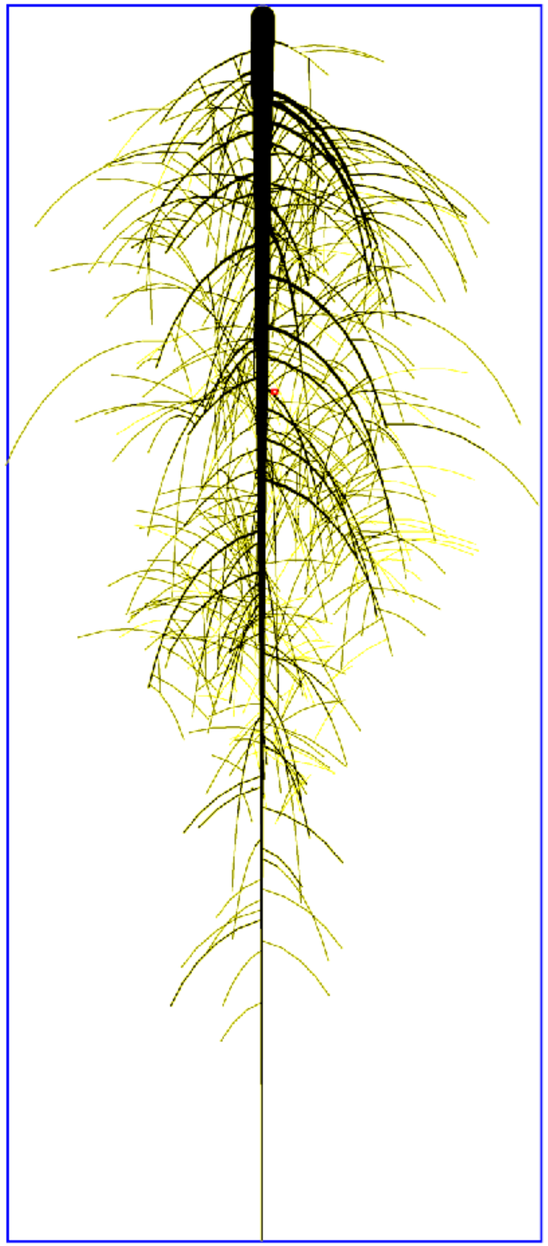


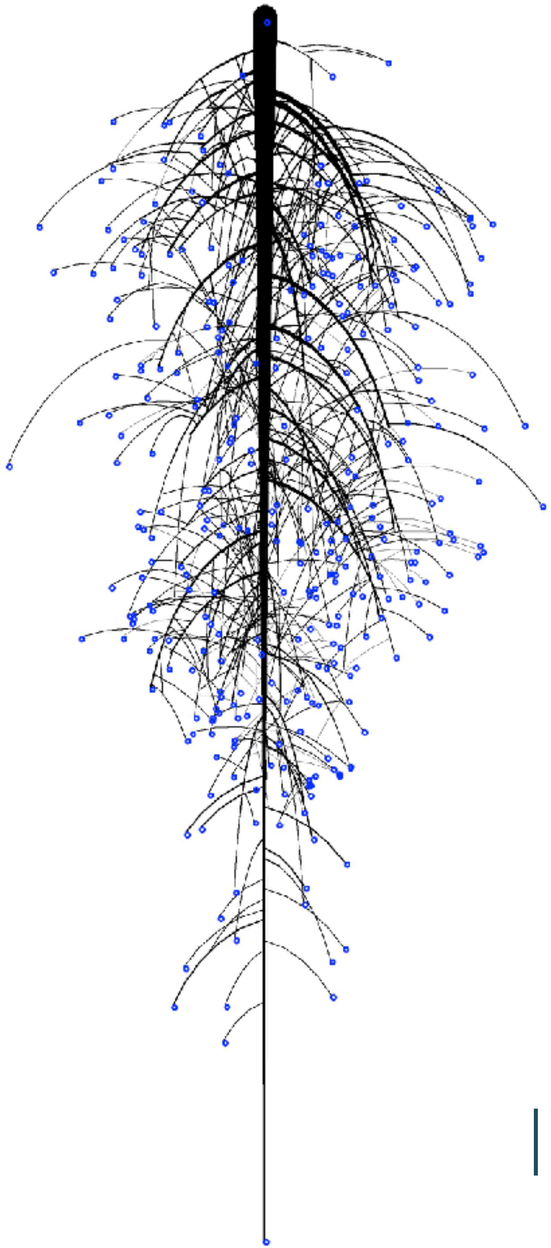
Guillaume Lobet, Iko Koevoets, Manu Noll, Loïc Pagès,
Pierre Tocquin and Claire Périlleux

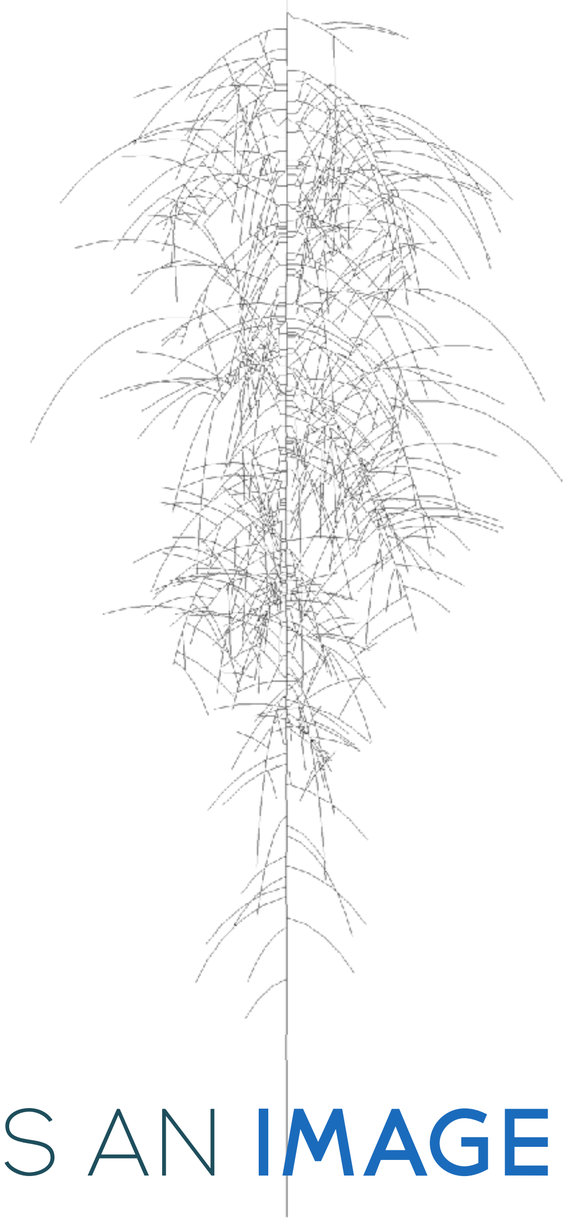
g.lobet@fz-juelich.de
@guillaumelobet

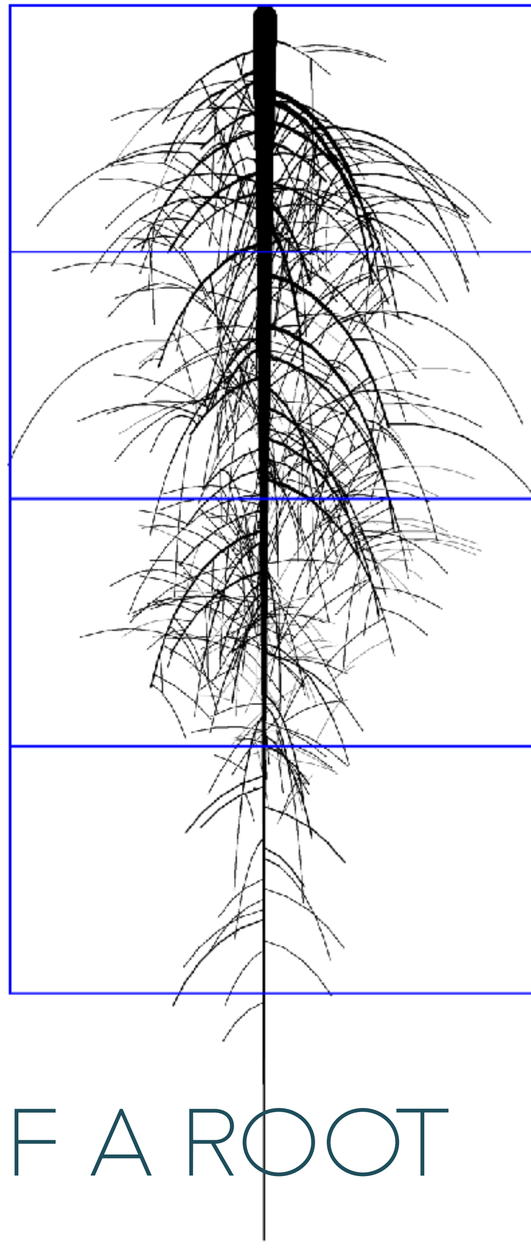
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THIS IS **NOT A ROOT**





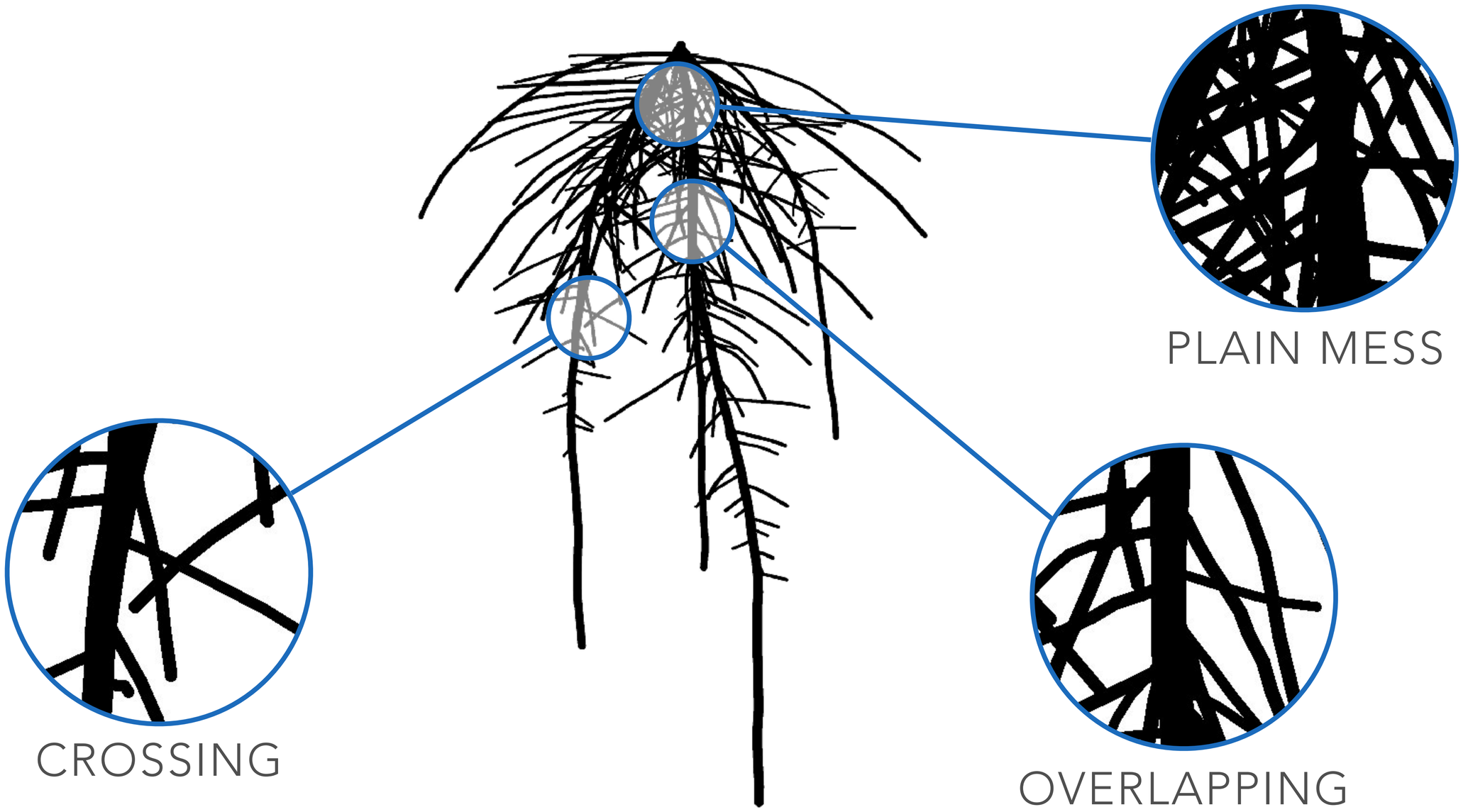




IT IS AN **IMAGE** OF A ROOT

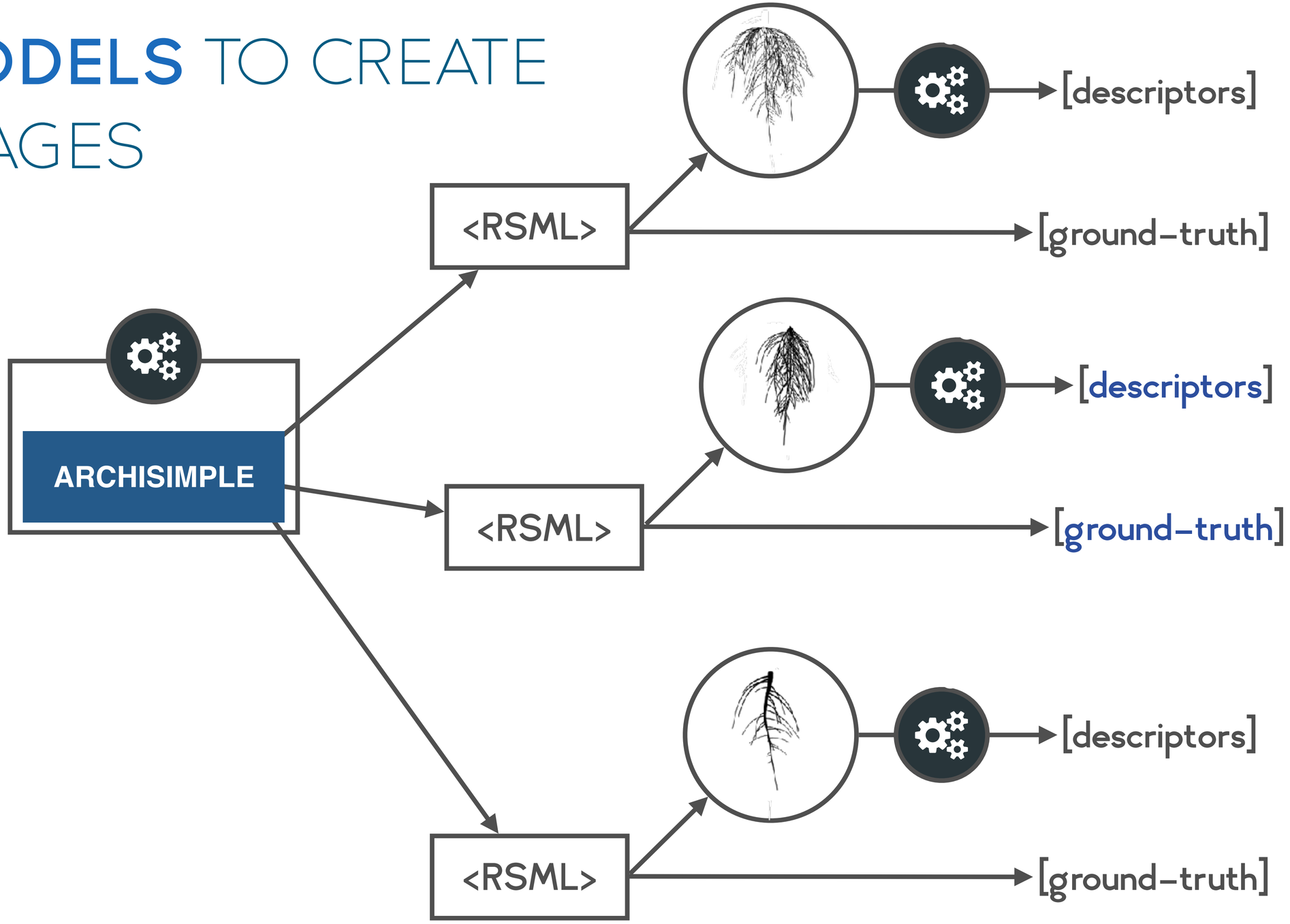
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THE **PROBLEM** WITH ROOT SYSTEMS



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MODELS TO CREATE IMAGES



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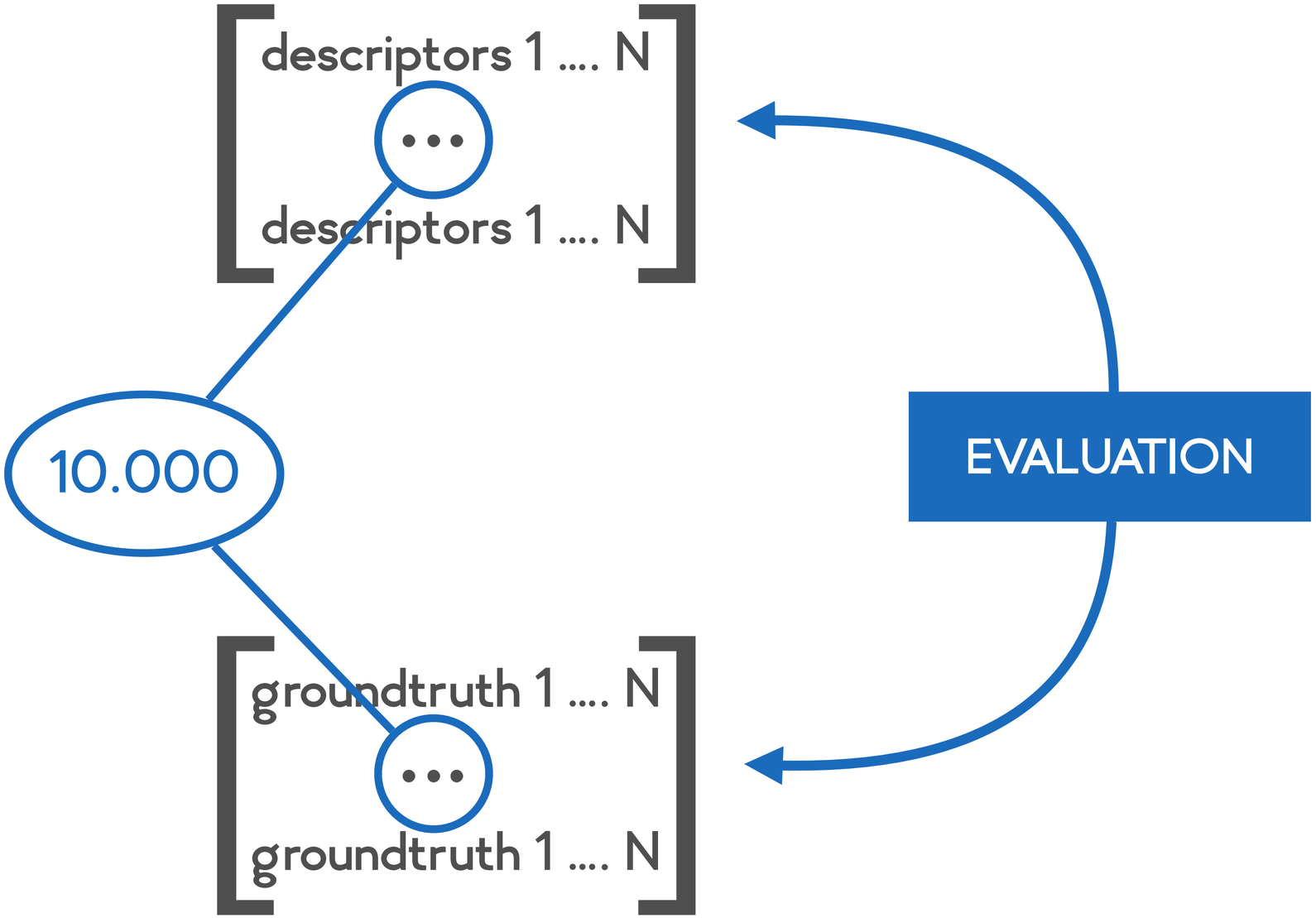
LARGE **LIBRARY** OF ROOT SYSTEMS



http://bit.ly/root-library

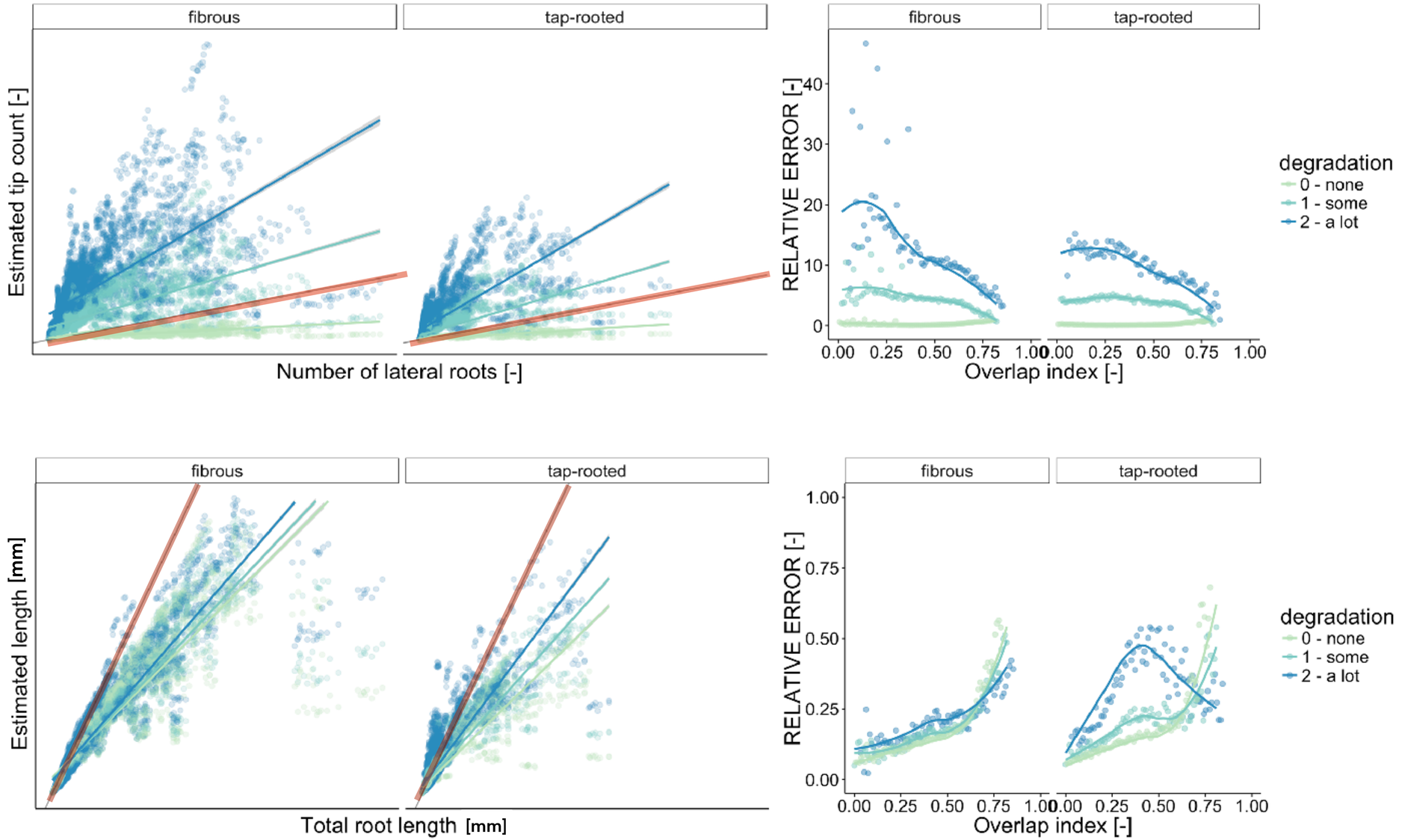


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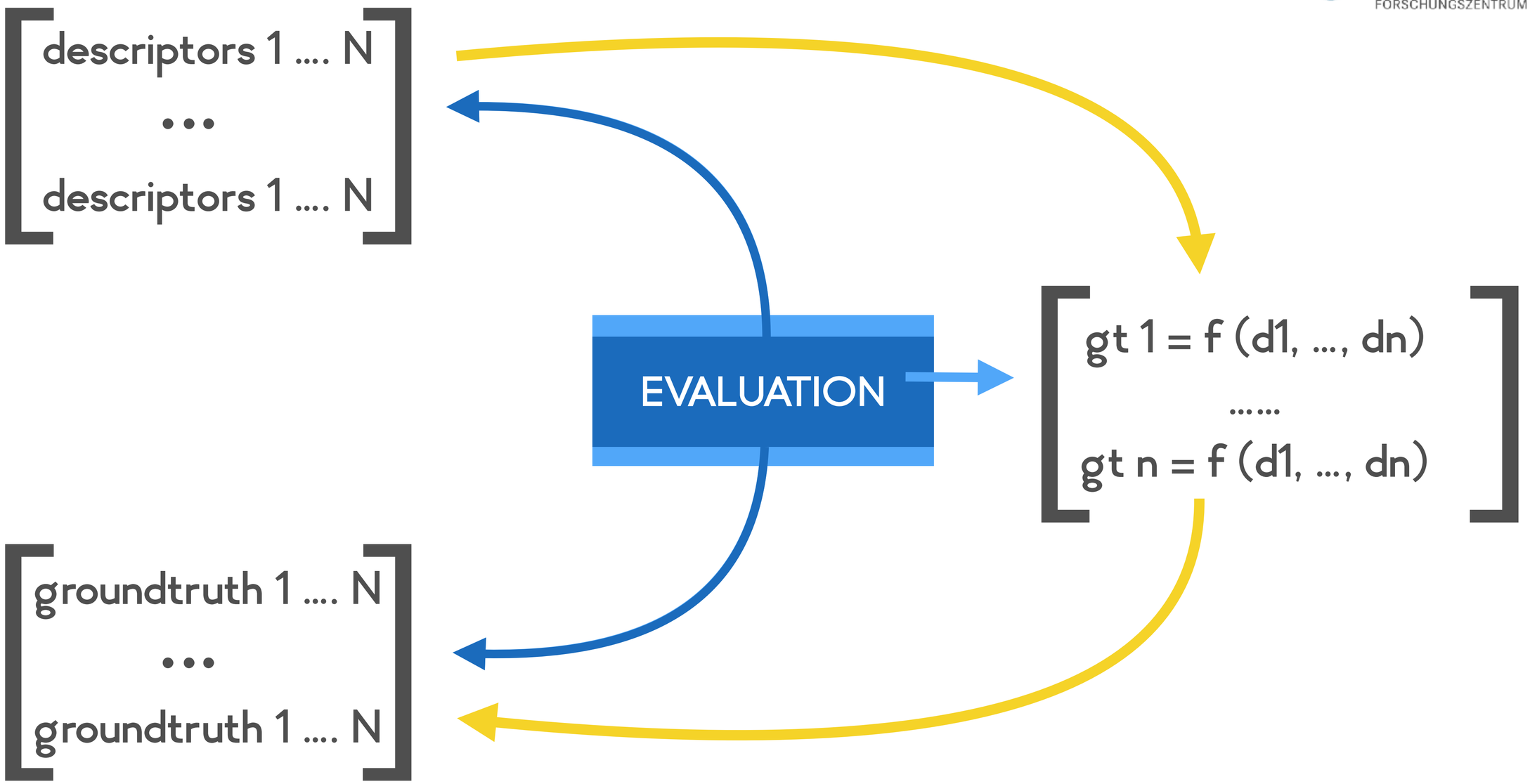


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ACCURACY IS **NOT** CONSTANT

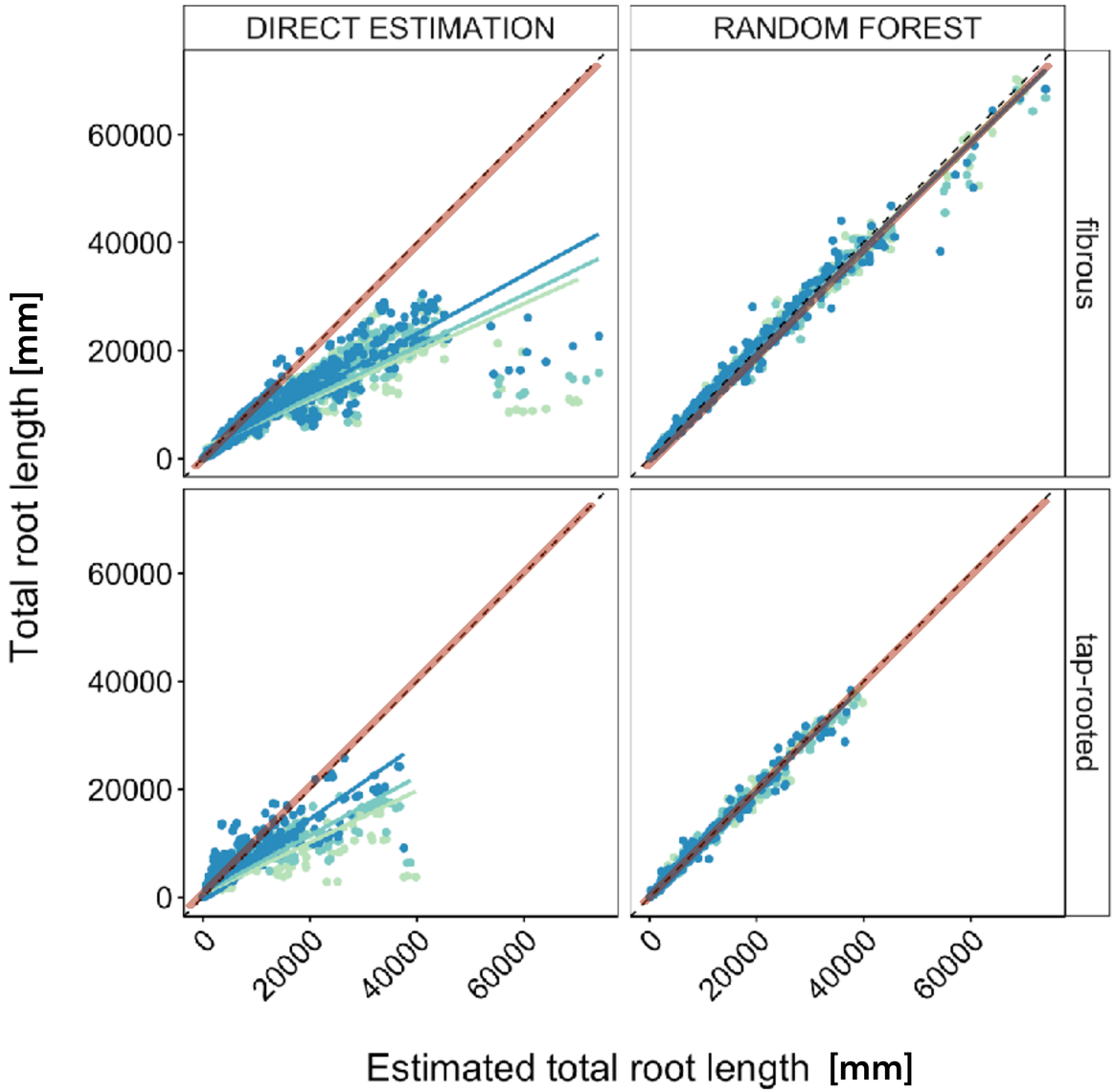


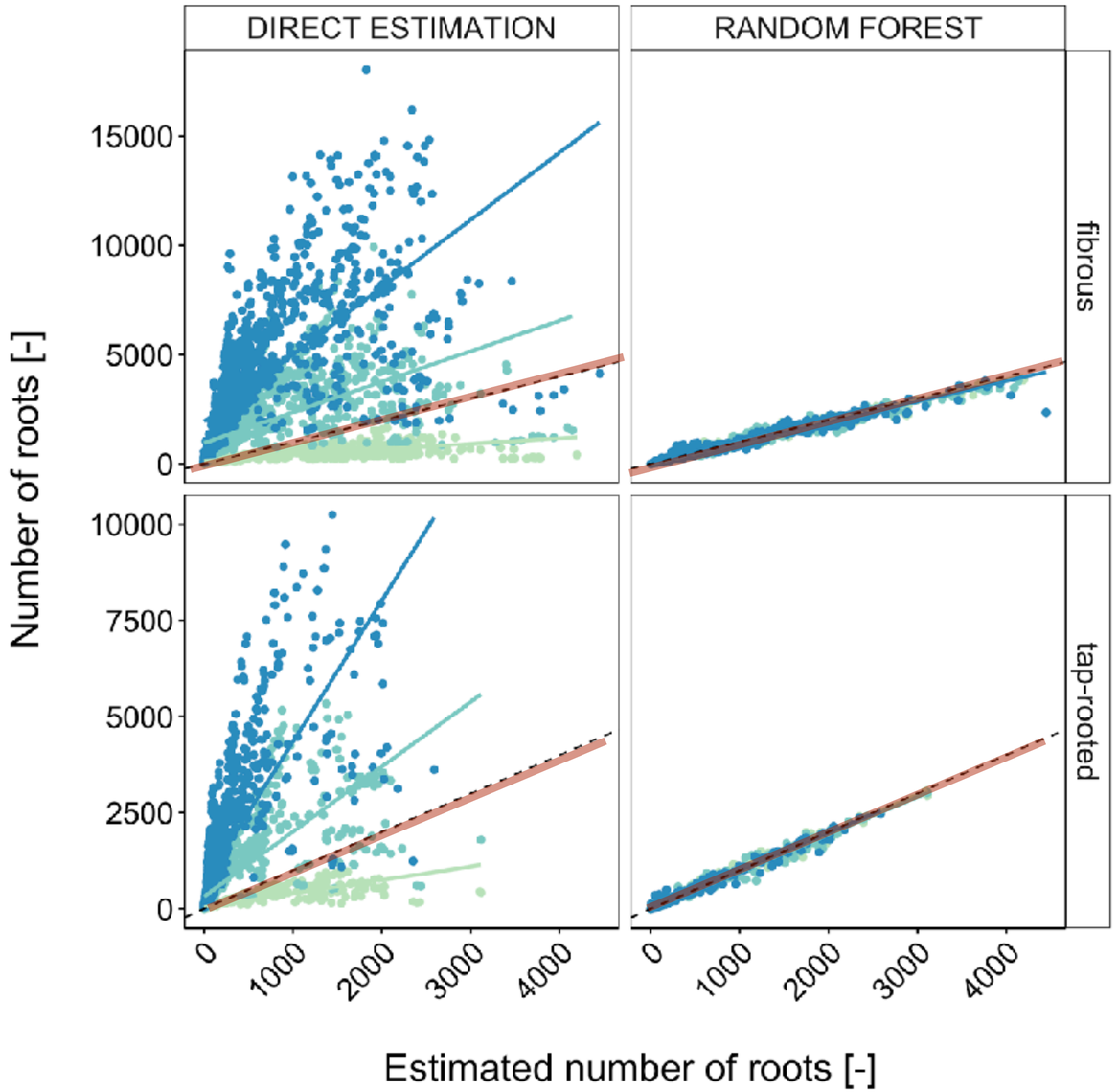
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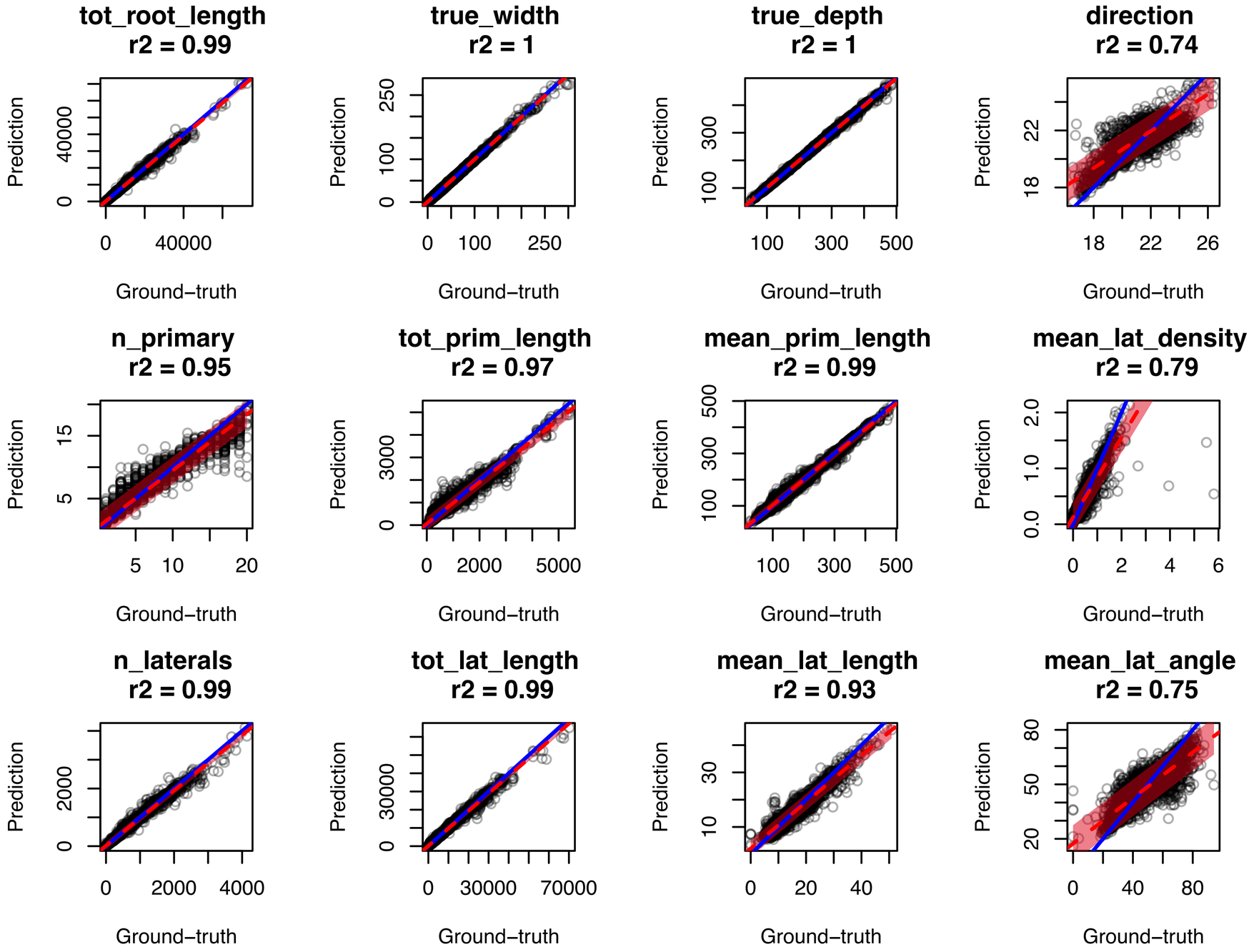
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MACHINE LEARNING = **IMPROVEMENT**





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Average r-squared

0.92

Average analysis time

3 sec

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THANK YOU
ANY QUESTIONS ?

Presentation available on **figshare**

bit.ly/lobet-ipps-2016