VisualDefo: a web-based tool for cross-calibration of visual assessment of tree crown condition

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Background

The assessment of tree crown condition is central to the ICP Forests monitoring activities.

As crown condition is visually assessed, cross-calibration is essential for quality assurance.

Photo based quality assurance methods have been used for cross-calibration purposes within ICP Forests.

A web-based tool reduces costs and makes cross-calibration easier.

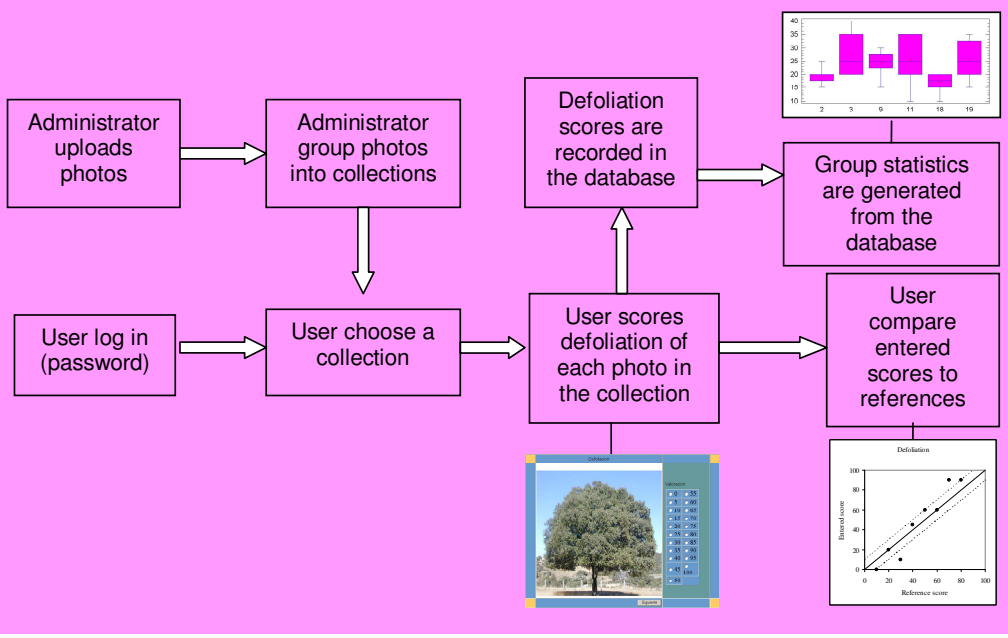
Are photo based assessments comparable to field assessments?

No significant differences were found when comparing field and photo assessments.

P-values for tests of differences among field and photo assessments. Null hypothesis (no difference among assessments) must be accepted for p > 0.05

Expert Code	Sign test	Wilcoxon signed rank test	n (pairs)	Expert Code	Sign test	Wilcoxon signed rank test	n (pairs)
All	0.1708	0.9999	431	8	0.9999	0.9648	18
1	0.1374	0.3404	38	9	1.0000	1.0000	18
2	0.6891	0.8430	38	10	0.9999	0.9999	32
3	0.5224	0.9275	33	11	0.5023	0.7459	32
4	0.8597	0.2656	38	12	0.7518	0.9999	24
5	0.8311	0.8057	32	13	0.3588	0.6699	32
6	0.9999	0.9999	32	14	0.5023	0.9546	32
7	0.4795	0.9999	32				

VisualDefo working flow



Technical info

Developed using Java Technology and MySQL.

http://abies.forestales.upm.es:8080/visualdefo/Jsp/Acceso.jsp

Demo collection of photos (user: demo, password: demo).