

Creating a GIS based learning tool for the Faculty of Forest & Environment at the HNE Eberswalde

Part 1: „Geographic tasks“

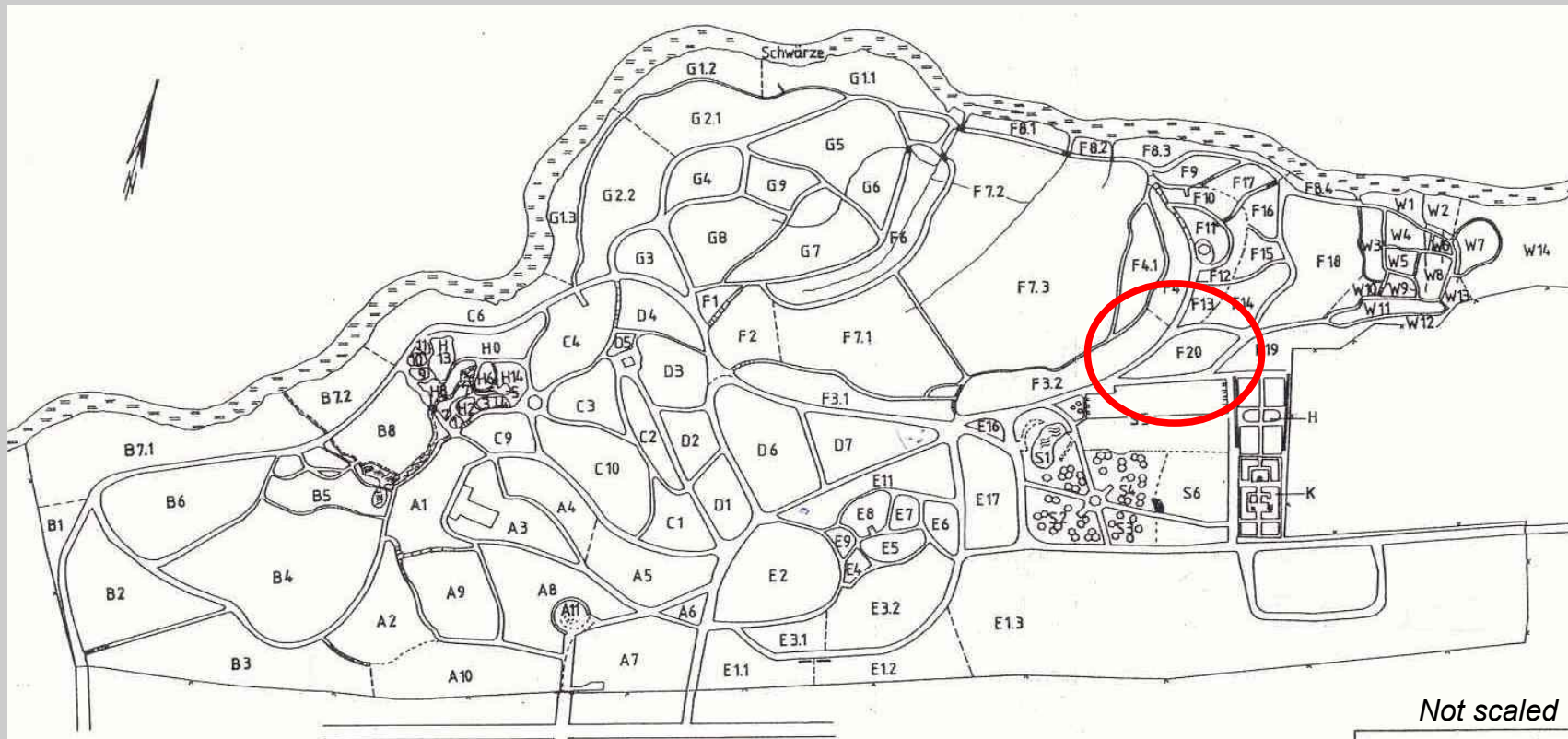
By Henrik Plesse & Georg Singelstein,
Eberswalde, 11.04.2011

Introduction

Current situation

- 3 steps for identification needed

NUMMER	QUARTIER	GAT	ART
8040	F20	Spiraea	mongolica
8053	F4	Pseudotsuga	menziesii



Benefits of the project

- Saves time for students and personal
- Eases object finding
- Independent provision of information
- Eases information collecting for the student

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Not scaled

Targets to solve the task

- Identify all relevant data
- Creating a database
- Prepare a tool to provide the data

Methods

- Data collection:
 - Interviews
 - Data sampling
- Database
 - Creating a spatial database to store the collected data
- Data presentation
 - Preparing a tool to display the data to the user

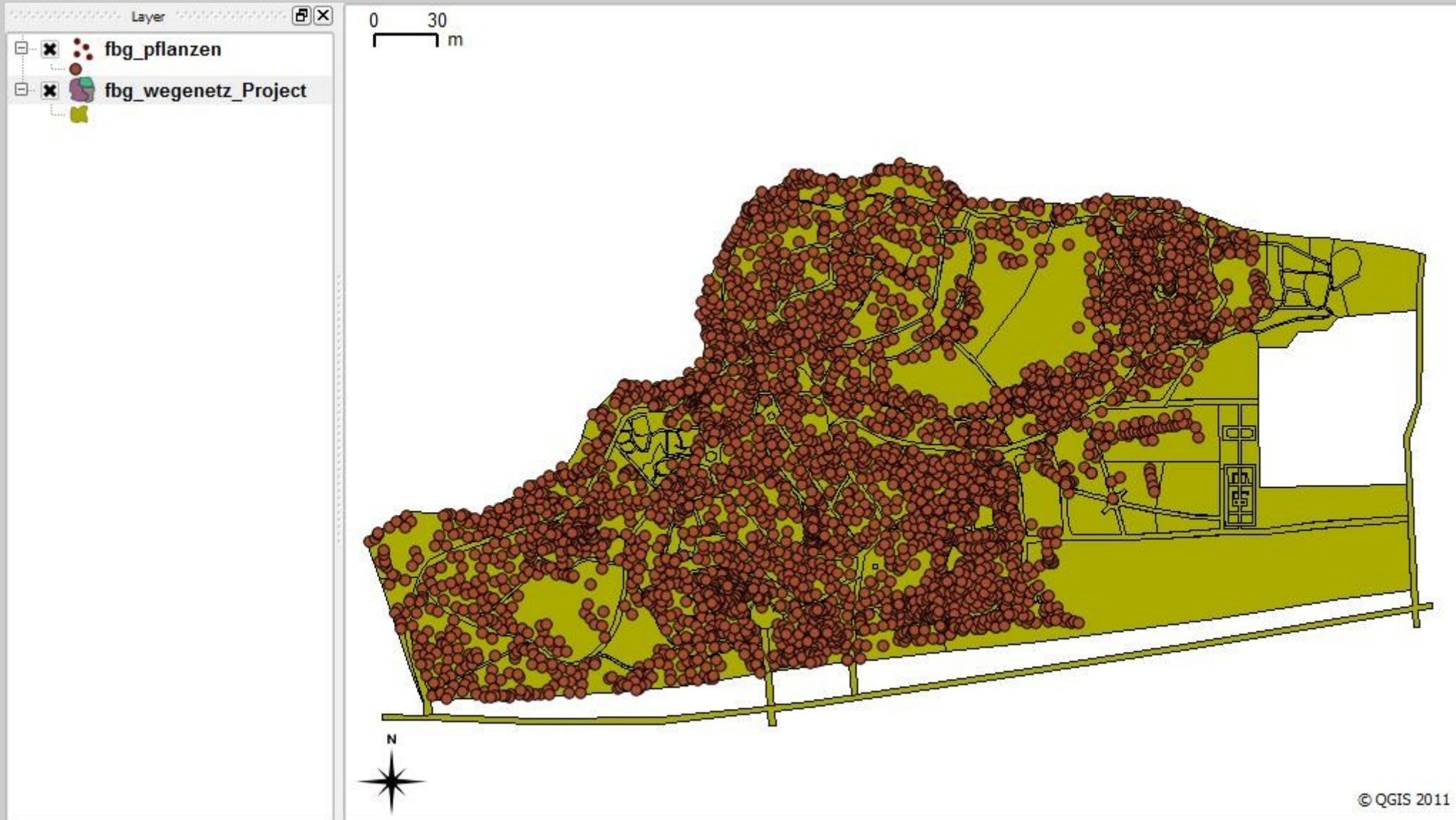
GIS related tasks of the project

Collecting all available geographic datasets

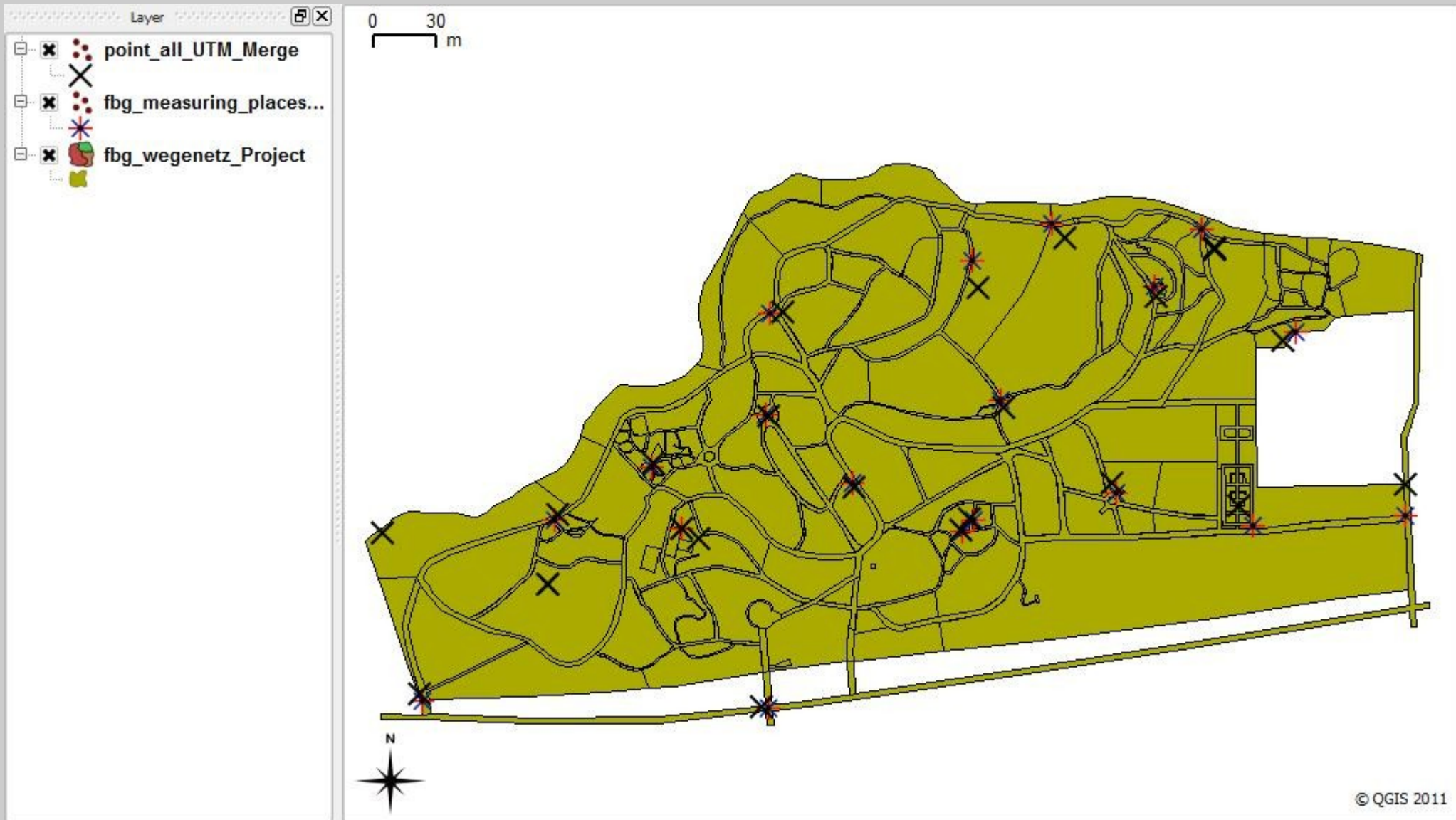
Checking the applicability of the data sets

Adjusting the schapefiles

All basic Layers in correct geographic projection



Evaluation of the map



Results

The map has internal errors

Options

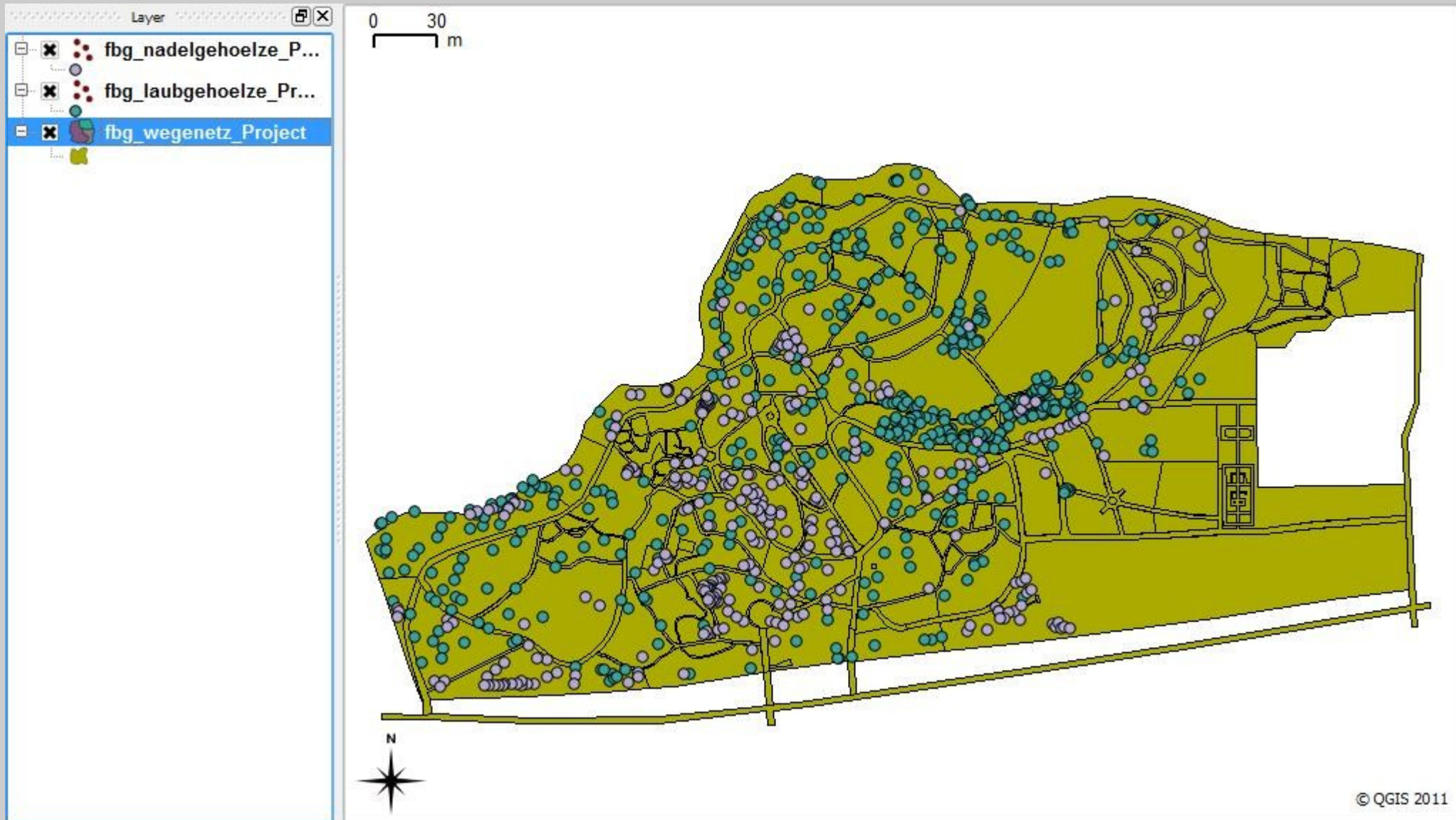
Completely new measurements

Adjustment of the actual map

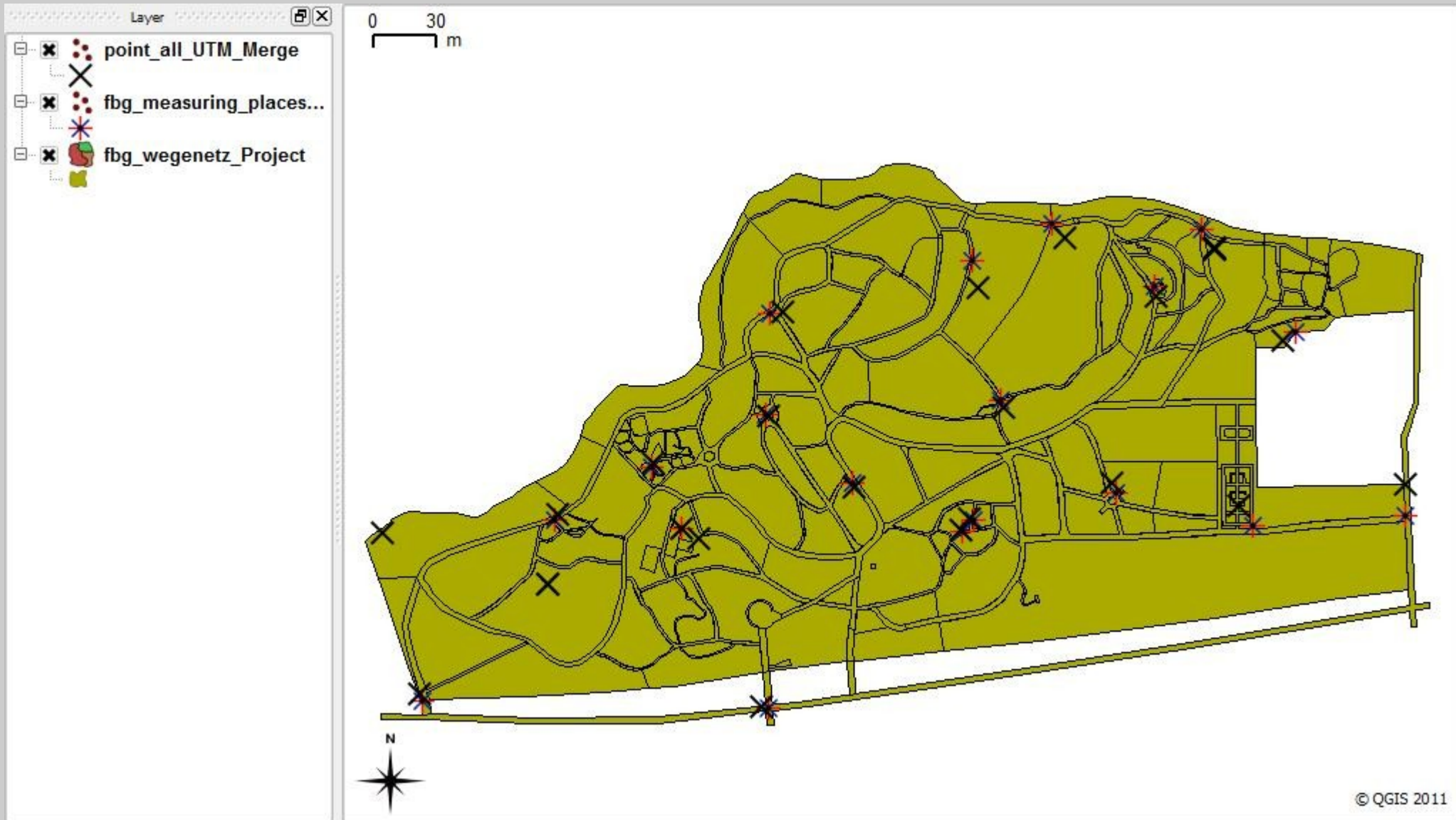
Table 1: Calculated error of the map

point number	Location	calculated error in meters
1	Sonnenuhr	1,70
2	Denkmal	1,86
3	Rosa saturata bak	2,11
4	Hochmoor	2,20
5	Eingang	3,60
6	Pavillon	4,57
7	Kräutergarten	5,83
8	Brücke	5,91
9	Salicetum	7,49
10	Ecke Schwärze	11,59

Selection of tree objects



Spatial Adjustment procedure



Result



Thank you for your attention