

Tree survey and comparison with current cadaster of Berlin

Challenge

Comprehensive aerial data of the entire urban area is available for the city of Berlin. The requirement was to detect all important objects within the aerial data, including the vegetation and particularly the tree population.



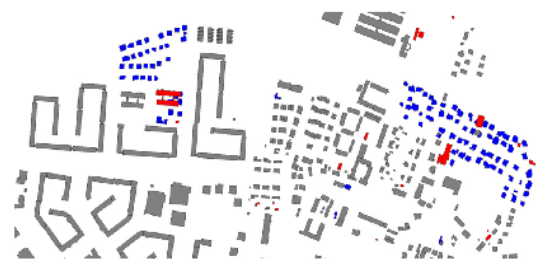
Solution

With the help of our point cloud technology, the large amounts of data resulting from the aerial survey were automatically analyzed using machine learning. Single trees were detected which also meant that all trees were automatically counted. The detected trees were matched with the tree population in the official tree cadaster of the city.



Result

The comparison with the official tree cadaster showed that the actual number of trees significantly exceeds the number in the cadaster. The official cadaster contains approximately 430,000 trees, while Point Cloud Technology's automated tree detection system identified over 10 million trees in Berlin.



- **Documentation**
- **Fully automated classification**
- **Change detection**