

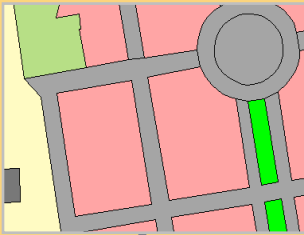
**Building- and Vegetation Heights**

- Berlin area and surroundings



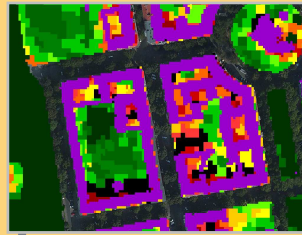
**ISUS: Land Use- and Block Information**

- Surroundings: ALKIS of land surveying office



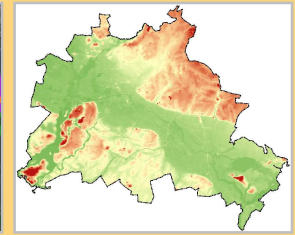
**Sealing of Soil Surface data**

- Berlin area only



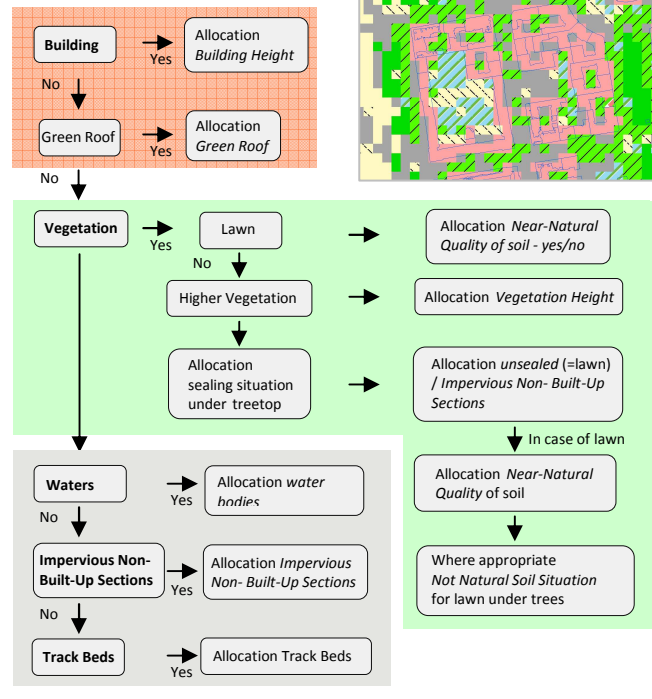
**Terrain Elevation**

- Berlin area and surroundings



**Query schema for model grid**

Combination of basic data



**Climate Modell FITNAH**

(Flow over Irregular Terrain with Natural and Anthropogenic Heat Sources)

Spatial resolution:  
Horizontal 10 m x 10 m

**Synoptic Framework Conditions**

Summery high-pressure weather situation with unhindered radiation conditions

- Simulation of a „typical“ midsummery day and night respectively in Berlin for an autochthonous situation
- Characteristic summery weather situation with good air exchange

**Validation of the Model Results**

- Analysis of long-term measuring data of the Berlin area
- Surface Temperature for morning- and evening situation

**Model Results FITNAH**

**Analysis of the climate-ecological situation in Berlin**

Evaluation for the time 02.00 p.m. und 04.00 a.m.

Heights: 2 m und 22 m above ground

**Cold-Air-Balance**

- Wind Speed
- Wind Direction
- Cold-Air-Volume Flow

**Temperature and Bioclimate**

- Air Temperature
- PMV-value, PET, UTCI
- Radiation Temperature

**Meteorological Threshold Days**

- Summer Days
- Heat Days
- Tropical Nights