

Cities are warmer than rural areas

- Especially during nighttime
- More heat in summer, less frost in winter
- Cities are extra vulnerable for the effects of global warming

- The UHI is not well quantified in The Netherlands
 - And there are almost no 'official' observations in cities

However:

- Many amateurs observe in urban area using semi-professional equipment
- We have gathered a full year of observations



Challenges

- No control over measurements; metadata is very important
- Data validation is needed in order to filter out errors

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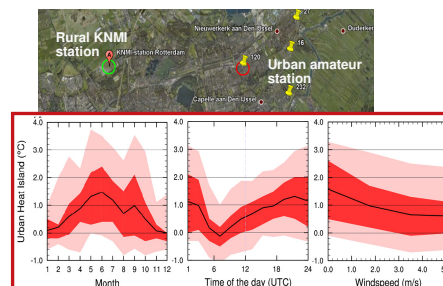
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Preliminary results

UHI in Dutch residential areas

- Around 1°C on average in summer; over 4°C under favorable conditions
- Strongest in summer nights, possibly absent in mornings and in winter
- Calm, stable weather is strongly favorable



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