

## Formulas of Bucketsort and Radixsort

$$\text{Efficiency}_{BS} = \sum_{i=0}^{n-1} O(n^2)$$

Due to the fact that all ambient values were recorded in a numerical format, a Radixsort algorithm was applied to sort the values in each "Bucket". Its efficiency  $O$  is

$$\text{Efficiency}_{RS} = O(m*n) \mid m=5$$

For the whole sortation, an overall efficiency  $O$  of

$$\text{Efficiency} = \sum_{i=0}^{n-1} O(5n)$$

can be achieved.