4. What do possible realisations of the uncertain DEM look like? Describe how they differ from the default DEM.

* The plots of the realisations are shown in figure x.
* The mean and of the realisations are more or less similar to the mean of the defualt DEM. However, the difference in sd between realisations is minimal.
* The sd of the realisations is slightly higher than the default
* An important difference between the realisations and the Default DEM is that the realisations contain more noise
* Adding uncertainty to the DEM results also in negative elevations in some cases up to a meter. (histogram of errors?) Either slightly skewed or outliers.
* The realisations have a more spotty or noisy look compared to the defaultdem. This can be clarified by the fact that according to the variogram of the resiudals a limited spatial correlation has been found.

Residuals have been interpolated based on sample\_error. Precise measurments.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| DEM | Mean | Sd | Min | Max |
| DefaultDEM | 352.21 | 366.24 | 0 | 2887.27 |
| Realisation 5 | 351.31 | 371.00 | -8.64 | 2871.81 |
| Realisation 23 | 351.71 | 371.72 | -129.34 | 2837.86 |
| Realisation 56 | 353.76 | 372.68 | -87.11 | 2828.59 |
| Realisation 74 | 352.16 | 372.42 | -52.69 | 2881.02 |
| Realisation 89 | 351.00 | 371.52 | -59.47 | 2859.05 |

