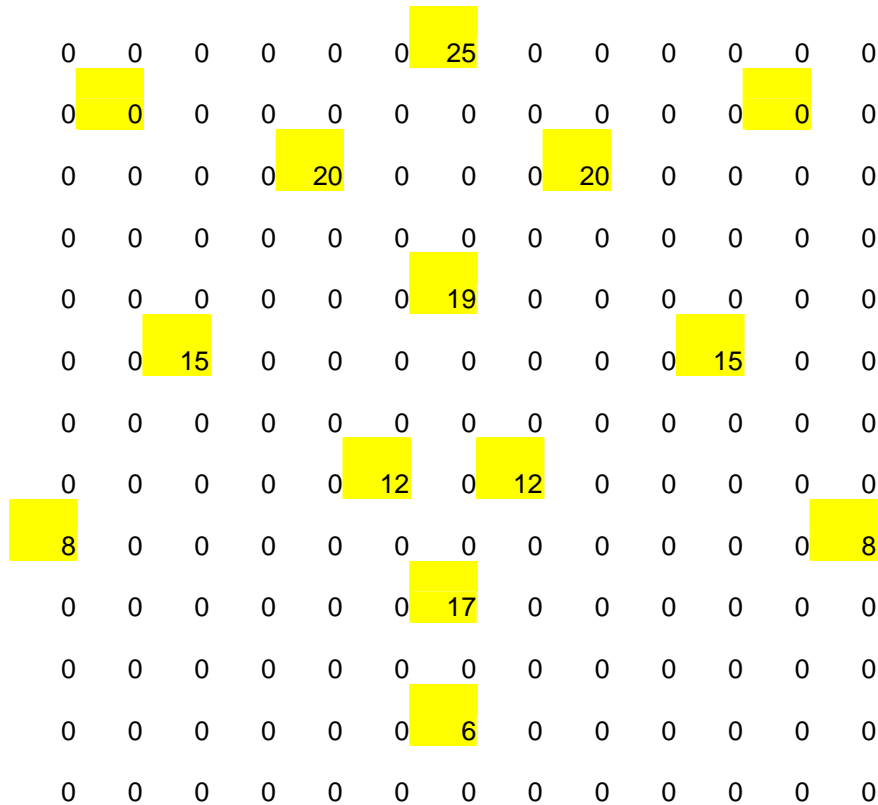# The Riverbed

A box of iron filings is dumped in a river. A few moments later, samples are taken from the riverbed downstream of the dump site, and the concentration of iron filings is determined. This data is shown below. Why might the iron filings be distributed as the results show.   Use the SAA to analyze the data. What does the nearest-neighbor averaging show, and what might account for the iron to be distributed as the averaging shows. Is there anything you might doubt about the results of the averaging? What might account for that?

0	0	0	0	0	0	25	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	20	0	0	0	20	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	19	0	0	0	0	0	0
0	0	15	0	0	0	0	0	0	0	15	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	12	0	12	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	8
0	0	0	0	0	0	17	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	6	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0

Riverbed. Direction of river flow is downward.