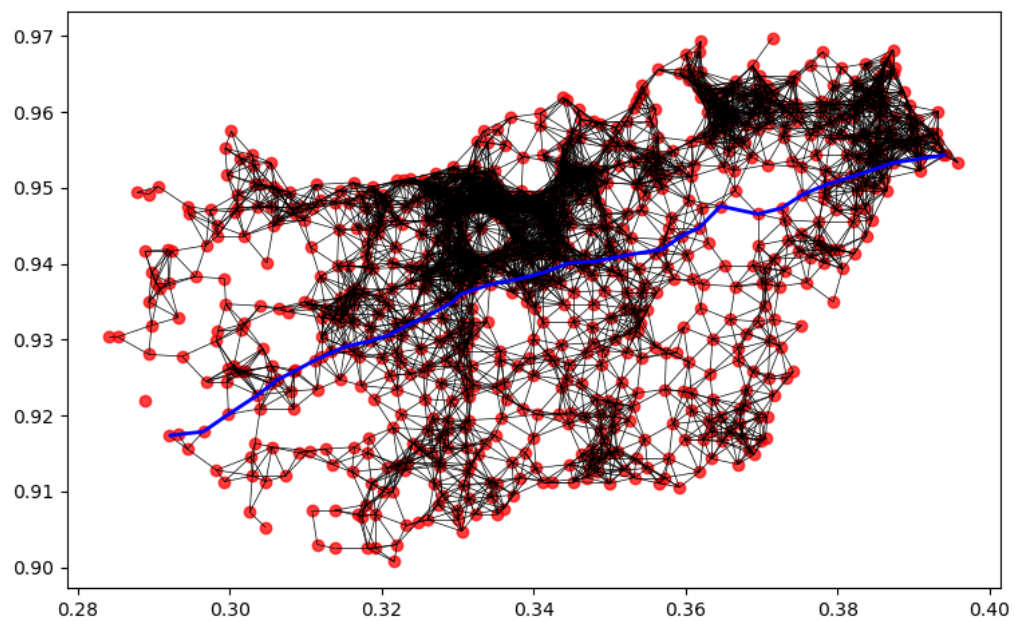
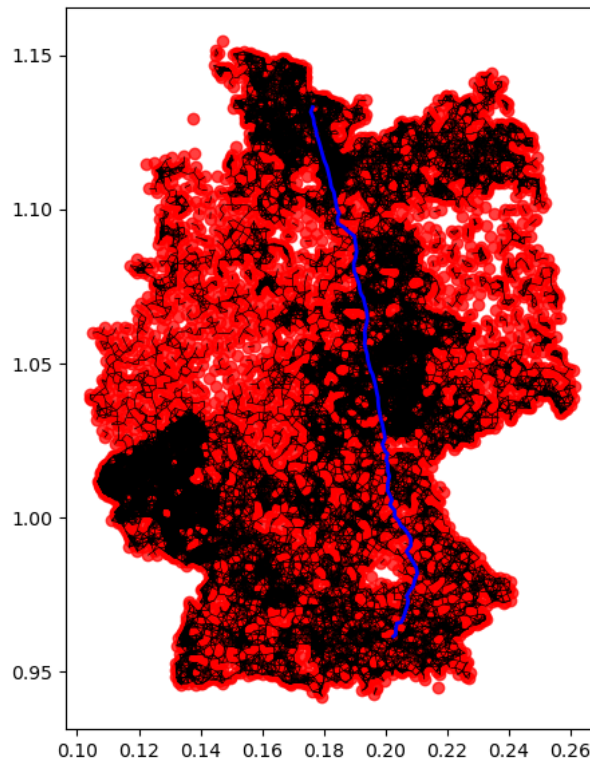


The total distance is: 0.16446989717973534
The shortest path sequence is: [0, 4, 3, 5]



The total distance is: 0.11144861188215292

The shortest path sequence is: [311, 19, 460, 629, 269, 236, 781, 50, 193, 571, 624, 402, 370, 153, 262, 554, 126, 251, 368, 221, 827, 300, 648, 253, 836, 73, 35, 219, 503, 789, 200, 702]



The function "read_coordinate_file" takes: 0.030315399169921875 seconds to execute

The function "construct_fast_graph_connections" takes: 0.29283809661865234 seconds to execute

The function "construct_graph": 0.0029752254486083984 seconds to execute

The function "find_shortest_path" takes: 0.006967782974243164 seconds to execute

The function "plot_points" takes: 4.515625 seconds to execute

The shortest path sequence is: [31, 2091, 11432, 7585, 9484, 3733, 1644, 5675, 7843, 6720, 3817, 6167, 8727, 11559, 5628, 3834, 5366, 7353, 5704, 1759, 8057, 9378, 4324, 6005, 7474, 10298, 8536, 10372, 5899, 5203, 2852, 2928, 9014, 6865, 502, 5250, 8072, 9520, 4651, 6987, 4699, 4887, 8535, 8818, 8748, 10737, 10636, 7482, 8602, 4709, 8966, 9709, 9447, 10702, 132, 11495, 2190, 8408, 7644, 4064, 4075, 4484, 3433, 8734, 5091, 3404, 7831, 3669, 5586, 3294, 2745, 4477, 7130, 1055, 1711, 5389, 5141, 680, 3724, 1528, 4733, 4495, 4860, 5680, 6136, 2177, 1421, 4987, 3704, 6207, 6208, 5690, 5195, 4092, 4030, 1786, 760, 958, 1918, 2]

The total distance is: 0.18729425688325163