Examples of cycles created by chained application of the distance-minimizing mapping function used in <u>A367150</u>, based on the strip bijection described in <u>A307110</u>.

In cases where the orbit length is divisible by 8, the visited points form separate clusters, but within the cluster the points visited after 8 steps after orbiting through the other 7 clusters are again close to each other. If these points visited every eighth step are drawn connected with a line, the impression of a closed figure is created.

The connections of all points in the order in which they are visited can no longer be optically resolved for orbits of larger lengths. That's why it's only shown this way for a few short orbits.

In colored illustrations, the order in which the grid points are visited along the closed orbit is indicated by the colors in the palette next to the image, from black to yellow.









$$L = 56$$



L = 120, complete orbit



L = 120, 1/8 of orbit











L = 154, without connecting lines









L = 120664, complete orbit

Islands on small radius



L = 120664, 1/8 of orbit







L = 120664, 1/8 of orbit







L = 120664, complete orbit

Islands on large radius









L = 7535066, complete orbit

The self-similar structure of the orbit, which continues over several levels, can be seen. In addition, in this example, neighboring points along the path of the orbit are visited at times that are far apart from each other and correspond to half the total length of the orbit.













L = 9966680, 1/8 of orbit



L = 9966680, detail



L = 9966680, detail



L = 9966680, detail



L = 89940184, 1/8 of orbit



L = 89940184, detail



L = 89940184, detail

No further zoom levels are shown.



L = 90240520, complete orbit



L = 90240520, 1/8 of orbit



L = 90240520, 1/8 of orbit











L = 270781672, complete orbit



L = 270781672, 1/8 of orbit



L = 270781672, 1/8 of orbit















L = 918330056, 1/8 of orbit

