Chart, line chart

Description automatically generated

Figure - Say something here

Chart

Description automatically generated

Figure r=3.999, x\_n=0.5

Chart

Description automatically generated

Figure r=4.001

Chart

Description automatically generated

Figure Bifucation diagram

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Generation | r=0.6 | r=1.1 | r=1.6 | r=2.1 | r=2.6 | r=3.1 | r=3.5 |
| 1 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 | 0.500 |
| 2 | 0.150 | 0.275 | 0.400 | 0.525 | 0.650 | 0.775 | 0.875 |
| 3 | 0.077 | 0.219 | 0.384 | 0.524 | 0.592 | 0.541 | 0.383 |
| 4 | 0.042 | 0.188 | 0.378 | 0.524 | 0.628 | 0.770 | 0.827 |
| 5 | 0.024 | 0.168 | 0.376 | 0.524 | 0.607 | 0.549 | 0.501 |
| 6 | 0.014 | 0.154 | 0.376 | 0.524 | 0.620 | 0.768 | 0.875 |
| 7 | 0.008 | 0.143 | 0.375 | 0.524 | 0.613 | 0.553 | 0.383 |
| 8 | 0.005 | 0.135 | 0.375 | 0.524 | 0.617 | 0.766 | 0.827 |
| 9 | 0.003 | 0.128 | 0.375 | 0.524 | 0.614 | 0.555 | 0.501 |
| 10 | 0.002 | 0.123 | 0.375 | 0.524 | 0.616 | 0.766 | 0.875 |
| 11 | 0.001 | 0.119 | 0.375 | 0.524 | 0.615 | 0.556 | 0.383 |
| 12 | 0.001 | 0.115 | 0.375 | 0.524 | 0.616 | 0.765 | 0.827 |
| 13 | 0.000 | 0.112 | 0.375 | 0.524 | 0.615 | 0.557 | 0.501 |
| 14 | 0.000 | 0.109 | 0.375 | 0.524 | 0.615 | 0.765 | 0.875 |
| 15 | 0.000 | 0.107 | 0.375 | 0.524 | 0.615 | 0.557 | 0.383 |
| 16 | 0.000 | 0.105 | 0.375 | 0.524 | 0.615 | 0.765 | 0.827 |
| 17 | 0.000 | 0.104 | 0.375 | 0.524 | 0.615 | 0.558 | 0.501 |
| 18 | 0.000 | 0.102 | 0.375 | 0.524 | 0.615 | 0.765 | 0.875 |
| 19 | 0.000 | 0.101 | 0.375 | 0.524 | 0.615 | 0.558 | 0.383 |
| 20 | 0.000 | 0.100 | 0.375 | 0.524 | 0.615 | 0.765 | 0.827 |

Table 20 generations

Chart, line chart

Description automatically generated

Figure Logistics model results

Chart

Description automatically generated

Figure bifurcation 100 gen and remove 200