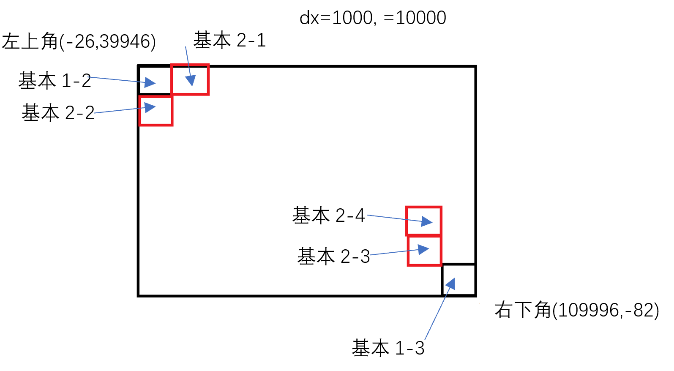
**主要基本功能实现：**

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39行，0列：2093,2094,2140,2141,50248, ==**基本1-2**；

0行，109列：50511, == **基本1-3**；

1行，109列：

2行，109列：50637,

0行，108列：2999,

------------------------------------------------

39行，1列：2095,2096,2142,2143,50005, ==**基本2-1**；

38行，0列：2000,2001,2047,2048,50163, ==**基本2-2**；

38行，1列：2002,2003,2049,2050,

1行，108列：3016,50536, ==**基本2-3**；

2行，108列：50497,50690, ,50476 == **基本2-4**；

19行，109列：2225,

20行，109列：2226,2254,50397,

------------------------------------------------

区域城区2-1测试距离计算：8815点

num:2196,x=93713,y=24550,xh=1.016000,dist=7063,等效强度0.509

num:2293,x=100387,y=21617,xh=0.976000,dist=392,等效强度0.572

num:2321,x=100373,y=22153,xh=0.979000,dist=169,等效强度3.085

测试结束!num=3

区域城区2-2测试距离计算：8815点

num:2196,x=93713,y=24550,xh=1.016000,dist=7362,等效强度0.469

num:2378,x=100947,y=23231,xh=0.959000,dist=274,等效强度1.150 ==**基本3-1**；

num:2406,x=100950,y=23778,xh=0.982000,dist=282,等效强度1.111

测试结束!num=3

区域城区1-1测试距离计算：8815点

num:1011,x=18318,y=26331,xh=0.962000,dist=35,等效强度70.678 == **基本3-2**；

num:50070,x=18007,y=26337,xh=1.000000,dist=284,等效强度1.116

num:50168,x=18114,y=26701,xh=1.000000,dist=389,等效强度0.595

测试结束!num=3

区域高速有测试距离计算：8815点

num:2195,x=84840,y=25287,xh=0.991000,dist=2717,等效强度3.356 ==**基本3-3**；

num:2198,x=88999,y=33693,xh=0.976000,dist=6957,等效强度0.504

测试结束!num=2

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区域城区1-2测试距离计算：8815点

num:1866,x=2979,y=36567,xh=1.007000,dist=333,等效强度0.817 ==**基本4-1**；

num:1912,x=2669,y=37108,xh=1.049000,dist=390,等效强度0.621

num:1913,x=3236,y=37108,xh=0.962000,dist=314,等效强度0.878

num:50225,x=2695,y=36624,xh=1.000000,dist=411,等效强度0.533

测试结束!num=4

区域高速无测试距离计算：8815点

测试结束!num=0 ==**基本4-2**；

区域乡镇2-1测试距离计算：8815点

num:3021,x=87113,y=3630,xh=1.046000,dist=1087,等效强度0.885

num:3022,x=89039,y=3531,xh=1.033000,dist=1166,等效强度0.760

测试结束!num=2

区域乡镇2-2测试距离计算：8815点

num:3062,x=99729,y=7226,xh=1.020000,dist=351,等效强度8.279 ==**基本4-3**；

测试结束!num=1

------------------------------------------------

**基本5**

fdist=15000.0,步长 20.0米, 2.40秒,k=750

dx=20.000000,dy=0.000000

1) 经过57次切换：

0=11:0(4.800),1913=11:0(55.200),0=11:0(62.400),1914=11:1(60.000),0=11:2(14.400),1915=11:2(67.200),0=11:3(19.200),1916=11:3(57.600),50258=11:3(100.800),50016=11:4(84.000),0=11:5(26.400),1918=11:5(81.600),0=11:6(33.600),1919=11:6(84.000),0=11:7(40.800),1920=11:7(88.800),0=11:8(38.400),1921=11:8(91.200),0=11:9(45.600),1922=11:9(103.200),0=11:10(52.800),1923=11:10(105.600),0=11:11(50.400),1924=11:11(105.600),0=11:12(57.600),1925=11:12(110.400),0=11:13(60.000),1926=11:13(115.200),0=11:14(64.800),1927=11:15(57.600),0=11:15(72.000),1928=11:16(72.000),0=11:17(16.800),1929=11:17(57.600),50183=11:17(86.400),1930=11:18(72.000),0=11:19(24.000),1931=11:19(81.600),0=11:20(31.200),1932=11:20(86.400),0=11:21(36.000),1933=11:21(84.000),0=11:22(38.400),1934=11:22(91.200),0=11:23(40.800),1935=11:23(100.800),0=11:24(52.800),1936=11:24(105.600),0=11:25(57.600),1937=11:25(105.600),0=11:26(57.600),1938=11:26(96.000),50067=11:27(74.400),1939=11:28(60.000),0=11:28(69.600),1940=11:29(60.000),0=11:29(62.400),

fdist=15000.0, 步长 20.0米, 2.40秒, k=750

dx=0.000000,dy=-20.000000

2) 经过46次切换：

0=11:29(67.200),1894=11:30(79.200),0=11:31(24.000),1847=11:31(72.000),0=11:32(19.200),1801=11:32(88.800),0=11:33(33.600),1754=11:33(88.800),1708=11:34(98.400),0=11:35(43.200),1661=11:35(95.999),1615=11:36(105.599),0=11:37(50.399),1568=11:37(105.599),1522=11:38(119.999),0=11:39(62.399),1475=11:40(55.199),1429=11:40(122.399),0=11:42(11.999),1382=11:42(62.399),0=11:43(4.799),1336=11:43(67.199),50141=11:44(52.799),1289=11:44(67.199),0=11:45(14.399),1243=11:45(86.399),0=11:46(31.199),1196=11:46(83.999),1150=11:47(93.599),1103=11:48(91.199),1057=11:49(79.199),50168=11:50(47.999),50070=11:50(103.199),964=11:51(112.799),0=11:52(62.399),917=11:53(47.999),0=11:53(52.799),871=11:53(127.199),0=11:55(11.999),824=11:55(57.599),778=11:55(131.999),0=11:57(14.399),731=11:57(69.599),685=11:58(52.799),50192=11:58(95.999),638=11:59(64.799),

fdist=10000.0,步长 20.0米,18.00秒,k=500

dx=-20.000000,dy=0.000000

3) 经过23次切换：

638=11:59(532.799),637=12:7(502.799),0=12:15(40.799),636=12:15(526.799),635=12:23(424.800),50037=12:30(184.800),634=12:33(346.800),50306=12:38(316.800),633=12:43(268.800),632=12:47(514.800),50099=12:55(70.800),631=12:56(496.800),630=13:4(520.800),629=13:12(508.800),628=13:20(514.800),627=13:28(502.801),626=13:36(526.801),625=13:44(514.801),624=13:52(520.801),623=14:0(526.801),622=14:8(550.801),621=14:17(478.801),620=14:24(382.801),

fdist=15000.0,步长 20.0米, 2.40秒,k=750

dx=16.000000,dy=12.000000

4) 经过47次切换：

620=14:24(438.001),0=14:31(20.401),621=14:31(44.401),0=14:31(61.201),668=14:32(70.801),0=14:33(25.201),715=14:33(54.001),0=14:33(56.401),716=14:33(128.401),0=14:35(13.201),763=14:35(61.201),764=14:36(61.201),811=14:37(63.601),812=14:38(54.001),0=14:38(56.401),859=14:38(123.601),860=14:40(46.801),0=14:40(49.201),907=14:40(121.201),908=14:42(30.001),954=14:42(39.601),0=14:42(49.201),955=14:42(121.201),1002=14:44(49.201),1003=14:44(116.401),1050=14:45(106.801),1051=14:46(104.401),0=14:47(49.201),1098=14:47(97.201),50071=14:48(61.201),1099=14:49(37.201),0=14:49(46.801),1146=14:49(114.001),1147=14:50(97.201),1194=14:51(109.201),1195=14:52(70.801),50203=14:53(46.801),1242=14:53(104.401),0=14:54(58.801),1289=14:54(90.001),0=14:55(34.801),1290=14:55(102.001),0=14:56(46.801),1337=14:56(92.401),1338=14:57(97.201),1385=14:58(92.401),1386=14:59(85.201),

fdist=5000.0,步长 20.0米, 2.40秒,k=250

dx=20.000000,dy=0.000000

5) 经过13次切换：

1386=14:59(97.201),0=15:0(39.601),1433=15:0(68.401),1387=15:1(42.001),0=15:1(49.201),1434=15:1(70.801),0=15:2(46.801),1435=15:2(66.001),2190=15:3(27.601),1389=15:3(42.001),2190=15:3(49.201),1436=15:3(75.601),2190=15:4(387.601),

fdist=15000.0,步长 20.0米, 0.80秒,k=750

dx=16.000000,dy=12.000000

6) 经过3次切换：2190=15:4(612.400),2191=15:14(304.400),0=15:19(88.400),

fdist=15000.0,步长 20.0米, 0.80秒,k=750

dx=12.000000,dy=-16.000000

7) 经过3次切换：0=15:19(214.000),2192=15:22(428.400),2188=15:29(89.199),

fdist=49000.0,步长 20.0米, 0.73秒,k=2450

dx=20.000000,dy=0.000000

8) 经过8次切换：

2188=15:29(286.097),0=15:33(98.261),2189=15:34(336.545),0=15:39(760.957),2195=15:51(351.731),0=15:56(84.057),2196=15:57(205.527),2619=16:0(29.936),

fdist=25000.0,步长 20.0米, 2.88秒,k=1250

dx=12.000000,dy=-16.000000

9) 经过57次切换：

2619=16:0(41.456),2196=16:0(58.735),2591=16:0(78.895),2196=16:1(99.535),2564=16:2(85.615),2196=16:3(80.335),2537=16:4(72.175),2196=16:5(40.975),50465=16:5(58.255),2196=16:5(78.415),2510=16:6(61.615),2196=16:7(119.695),2455=16:8(111.535),2196=16:9(103.375),2428=16:10(95.215),50432=16:11(58.255),2196=16:11(92.815),2401=16:12(101.935),2373=16:13(90.895),2374=16:14(82.735),2346=16:15(97.615),0=16:16(63.535),2319=16:17(89.935),0=16:18(32.815),50433=16:18(93.295),2292=16:19(47.695),50366=16:19(82.255),2264=16:20(56.815),50411=16:20(114.415),2237=16:21(123.535),0=16:23(32.335),2210=16:23(104.335),3182=16:24(64.495),50563=16:25(41.935),3182=16:25(151.375),3165=16:27(129.295),50550=16:29(35.215),3165=16:29(98.575),3166=16:30(171.055),0=16:32(56.815),3149=16:32(324.655),0=16:37(105.295),3133=16:38(301.615),50552=16:43(30.415),3133=16:43(33.295),0=16:43(125.455),50691=16:45(37.135),3117=16:45(86.095),【】70004=16:46(49.135),3117=16:46(178.735),3100=16:48(205.615),50534=16:51(80.335),3101=16:52(132.655),50584=16:54(64.495),3084=16:55(203.215),50503=16:58(80.815),0=16:59(92.815),

==**升级2**，伪基站70004，在16:46开始有49.1秒的连接时间；

fdist=25000.0,步长 20.0米, 1.44秒,k=1250

dx=-19.200001,dy=-5.600000

10) 经过28次切换：

0=16:59(124.495),3067=17:1(85.135),50515=17:2(39.535),3067=17:2(68.335),3066=17:3(142.255),50480=17:5(52.495),3065=17:5(118.735),50803=17:6(87.535),0=17:7(56.335),3047=17:7(175.855),3046=17:9(192.655),3045=17:12(130.735),0=17:14(61.135),3027=17:15(88.975),50513=17:16(53.455),3026=17:16(172.975),3025=17:18(186.895),0=17:21(19.855),3024=17:21(110.575),0=17:22(100.975),3006=17:23(161.935),3005=17:25(177.295),3004=17:27(78.895),50695=17:28(43.375),3004=17:28(75.055),50531=17:29(32.335),3004=17:29(61.135),0=17:30(34.255),

fdist=4000.0,步长 20.0米,12.00秒,k=200

dx=0.000000,dy=20.000000

11) 经过6次切换：

0=17:30(82.255),3003=17:31(970.255),0=17:47(142.255),3020=17:49(970.254),0=18:5(178.254),3037=18:7(226.254),

fdist=2500.0,步长 20.0米,24.00秒,k=125

dx=20.000000,dy=0.000000

12) 经过7次切换：3037=18:7(466.254),0=18:14(118.254),3038=18:15(1354.254),【】70005=18:37(58.254),3038=18:37(946.253),0=18:52(142.253),3039=18:54(430.253),

==**升级1**，伪基站70005，,,M在18:37开始有58.3秒的连接时间；

==>合计切换了287次，210个基站，经过77个无信号区域，高速基站17，乡镇基站35，城区基站158，基站(3038)连接最长1354.3秒，(2190)最短 27.6秒，无信号(0)最长761.0秒，(0)最短 4.8秒：

0,1913,0,1914,0,1915,0,1916,50258,50016,0,1918,0,1919,0,1920,0,1921,0,1922,0,1923,0,1924,0,1925,0,1926,0,1927,0,1928,0,1929,50183,1930,0,1931,0,1932,0,1933,0,1934,0,1935,0,1936,0,1937,0,1938,50067,1939,0,1940,0,1894,0,1847,0,1801,0,1754,1708,0,1661,1615,0,1568,1522,0,1475,1429,0,1382,0,1336,50141,1289,0,1243,0,1196,1150,1103,1057,50168,50070,964,0,917,0,871,0,824,778,0,731,685,50192,638,637,0,636,635,50037,634,50306,633,632,50099,631,630,629,628,627,626,625,624,623,622,621,620,0,621,0,668,0,715,0,716,0,763,764,811,812,0,859,860,0,907,908,954,0,955,1002,1003,1050,1051,0,1098,50071,1099,0,1146,1147,1194,1195,50203,1242,0,1289,0,1290,0,1337,1338,1385,1386,0,1433,1387,0,1434,0,1435,高2190,1389,高2190,1436,高2190,高2191,0,高2192,高2188,0,高2189,0,高2195,0,高2196,2619,高2196,2591,高2196,2564,高2196,2537,高2196,50465,高2196,2510,高2196,2455,高2196,2428,50432,高2196,2401,2373,2374,2346,0,2319,0,50433,2292,50366,2264,50411,2237,0,2210,乡3182,50563,乡3182,乡3165,50550,乡3165,乡3166,0,乡3149,0,乡3133,50552,乡3133,0,50691,乡3117,【】70004,乡3117,乡3100,50534,乡3101,50584,乡3084,50503,0,乡3067,50515,乡3067,乡3066,50480,乡3065,50803,0,乡3047,乡3046,乡3045,0,乡3027,50513,乡3026,乡3025,0,乡3024,0,乡3006,乡3005,乡3004,50695,乡3004,50531,乡3004,0,乡3003,0,乡3020,0,乡3037,0,乡3038,【】70005,乡3038,0,乡3039,

在(3000.0,36900.0)与(3400.0,36900.0)之间迭代！需要迭代！

当前(3027.8,36900.0)-(3027.9,36900.0),dt= 3.3398秒，误差 0.1米，进入基站1913

在(3400.0,36900.0)与(6000.0,36900.0)之间迭代！需要迭代！

当前(3444.1,36900.0)-(3444.2,36900.0),dt=53.3035秒，误差 0.1米，离开基站1913

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**扩展功能实现：**

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==**扩展1**：进入首个基站1913，11：0：3.3秒，离开首个基站1913，11：0，53.3秒；

在(18000.0,21900.0)与(17000.0,21900.0)之间迭代！需要迭代！

当前(17481.5,21900.0)-(17481.4,21900.0),dt=466.6447秒，误差 0.1米，离开基站638

在(18000.0,21900.0)与(17000.0,21900.0)之间迭代！需要迭代！

当前(17517.2,21900.0)-(17517.2,21900.0),dt=434.5646秒，误差 0.1米，进入基站637

==**扩展2-1**：基站638切换到637，重叠时间466.6-434.6=32秒；

在(25000.0,30900.0)与(31400.0,35700.0)之间迭代！需要迭代！

当前(30253.7,34840.3)-(30253.8,34840.3),dt=262.6880秒，误差 0.1米，离开基站2190

在(25000.0,30900.0)与(31400.0,35700.0)之间迭代！需要迭代！

当前(28661.7,33646.3)-(28661.8,33646.3),dt=183.0884秒，误差 0.1米，进入基站2191

==**扩展2-2**：基站2190切换到2191，重叠时间262.7-183.1=79.6秒；

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**升级功能实现：**

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==**升级1**，伪基站70005，在18:37开始有27.6秒的连接时间；

==**升级2**，伪基站70004，在16:46开始有22秒的连接时间；

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