>> matlabpool open local1 12

Starting matlabpool using the 'local1' configuration ... connected to 12 labs.

Best Mean Stall

Generation f-count f(x) f(x) Generations

1 200 4000 4895 0

2 300 4000 4937 1

3 400 4000 4858 0

4 500 4000 4980 0

5 600 4000 4926 0

6 700 4000 4813 0

7 800 4000 4886 0

8 900 4000 4869 0

9 1000 4000 4913 0

10 1100 4000 4946 1

11 1200 4000 4851 2

12 1300 3999 4863 0

13 1400 3999 4760 0

14 1500 3999 4661 0

15 1600 3999 4810 0

16 1700 3999 4789 1

17 1800 3999 4915 0

18 1900 3999 4829 1

19 2000 3998 4652 0

20 2100 3998 4661 0

21 2200 3998 4530 0

22 2300 3997 4515 0

23 2400 3996 4486 0

24 2500 3996 4485 1

25 2600 3996 4498 0

26 2700 3996 4559 0

27 2800 3996 4549 0

28 2900 3996 4623 0

29 3000 3996 4547 0

30 3100 3996 4603 0

31 3200 3996 4579 1

32 3300 3995 4633 0

33 3400 3995 4667 0

34 3500 3995 4661 0

35 3600 3995 4719 1

36 3700 3995 4694 2

37 3800 3995 4799 0

38 3900 3995 4567 1

39 4000 3995 4518 0

40 4100 3994 4467 0

41 4200 3994 4559 0

42 4300 3994 4499 1

43 4400 3994 4390 0

44 4500 3994 4440 1

45 4600 3994 4447 2

46 4700 3994 4415 3

47 4800 3994 4342 0

48 4900 3993 4427 0

49 5000 3992 4468 0

50 5100 3992 4436 1

51 5200 3992 4304 2

52 5300 3992 4385 0

53 5400 3992 4334 0

54 5500 3992 4349 0

55 5600 3992 4382 0

56 5700 3992 4335 1

57 5800 3992 4354 0

58 5900 3992 4384 1

59 6000 3992 4362 0

60 6100 3992 4328 0

61 6200 3991 4297 0

62 6300 3991 4290 0

63 6400 3991 4287 1

64 6500 3991 4217 0

65 6600 3991 4209 0

66 6700 3991 4157 0

67 6800 3991 4197 0

68 6900 3990 4210 0

69 7000 3990 4253 0

70 7100 3990 4210 0

71 7200 3990 4222 1

72 7300 3990 4165 2

73 7400 3990 4207 3

74 7500 3990 4143 4

75 7600 3990 4120 5

76 7700 3990 4128 0

77 7800 3990 4135 1

78 7900 3990 4167 0

79 8000 3990 4157 0

80 8100 3990 4166 0

81 8200 3989 4115 0

82 8300 3989 4155 0

83 8400 3989 4149 0

84 8500 3989 4112 0

85 8600 3989 4111 1

86 8700 3989 4115 2

87 8800 3989 4086 0

88 8900 3989 4098 0

89 9000 3989 4096 0

90 9100 3989 4069 1

91 9200 3989 4058 0

92 9300 3989 4053 0

93 9400 3988 4049 0

94 9500 3988 4041 1

95 9600 3988 4025 0

96 9700 3988 4013 0

97 9800 3988 4011 0

98 9900 3988 4006 0

99 10000 3988 4000 0

100 10100 3988 3993 0

Optimization terminated: maximum number of generations exceeded.

Switching to the hybrid optimization algorithm (FMINSEARCH).

Iteration Func-count min f(x) Procedure

0 1 3988.09

1 7 3986.87 initial simplex

2 8 3986.87 reflect

3 9 3986.87 reflect

4 10 3986.87 reflect

5 12 3986.87 contract inside

6 14 3986.87 contract inside

7 16 3986.87 contract inside

8 18 3986.87 contract inside

9 19 3986.87 reflect

10 20 3986.87 reflect

11 22 3986.17 expand

12 23 3986.17 reflect

13 24 3986.17 reflect

14 26 3985.66 reflect

15 28 3984.34 expand

16 29 3984.34 reflect

17 31 3982.97 expand

18 32 3982.97 reflect

19 34 3981.16 expand

20 36 3978.34 expand

21 37 3978.34 reflect

22 38 3978.34 reflect

23 40 3973.55 expand

24 41 3973.55 reflect

25 43 3965.6 expand

26 44 3965.6 reflect

27 45 3965.6 reflect

28 47 3954.81 expand

29 48 3954.81 reflect

30 50 3945.43 expand

31 52 3930.93 expand

32 53 3930.93 reflect

33 54 3930.93 reflect

34 56 3928.84 reflect

35 58 3893.79 expand

36 59 3893.79 reflect

37 60 3893.79 reflect

38 61 3893.79 reflect

39 62 3893.79 reflect

40 64 3893.79 contract inside

41 66 3848.94 expand

42 67 3848.94 reflect

43 68 3848.94 reflect

44 70 3811.61 expand

45 71 3811.61 reflect

46 73 3806.09 reflect

47 75 3806.09 contract inside

48 77 3749.58 expand

49 78 3749.58 reflect

50 79 3749.58 reflect

51 80 3749.58 reflect

52 82 3608.73 expand

53 83 3608.73 reflect

54 84 3608.73 reflect

55 86 3547.52 expand

56 88 1712.44 expand

57 89 1712.44 reflect

58 91 1557.94 reflect

59 92 1557.94 reflect

60 93 1557.94 reflect

61 94 1557.94 reflect

62 95 1557.94 reflect

63 97 1557.94 contract outside

64 99 1557.94 contract inside

65 100 1557.94 reflect

66 101 1557.94 reflect

67 103 1442.83 reflect

68 105 1442.83 contract inside

69 107 1315.11 reflect

70 109 1315.11 contract inside

71 111 1140.96 expand

72 112 1140.96 reflect

73 113 1140.96 reflect

74 114 1140.96 reflect

75 116 1140.96 contract inside

76 117 1140.96 reflect

77 118 1140.96 reflect

78 119 1140.96 reflect

79 121 1140.96 contract inside

80 123 1018.12 expand

81 124 1018.12 reflect

82 125 1018.12 reflect

83 126 1018.12 reflect

84 128 913.285 expand

85 130 913.285 contract inside

86 131 913.285 reflect

87 133 780.651 expand

88 134 780.651 reflect

89 135 780.651 reflect

90 136 780.651 reflect

91 138 780.651 contract inside

92 139 780.651 reflect

93 140 780.651 reflect

94 142 721.177 contract inside

95 143 721.177 reflect

96 145 721.177 contract inside

97 147 721.177 contract inside

98 149 721.177 contract outside

99 151 694.577 reflect

100 153 694.577 contract inside

101 155 694.577 contract inside

102 157 694.577 contract inside

103 159 694.577 contract inside

104 161 694.577 contract inside

105 163 694.577 contract outside

106 165 694.577 contract inside

107 167 694.577 contract inside

108 169 694.577 contract inside

109 171 694.577 contract inside

110 173 694.577 contract outside

111 175 686.725 reflect

112 177 686.725 contract outside

113 179 686.725 contract inside

114 181 681.464 expand

115 183 681.464 contract inside

116 185 674.068 expand

117 186 674.068 reflect

118 188 667.715 expand

119 190 665.374 reflect

120 191 665.374 reflect

121 192 665.374 reflect

122 193 665.374 reflect

123 195 665.374 contract inside

124 197 665.374 contract inside

125 199 660.476 expand

126 201 660.476 contract inside

127 203 660.476 contract inside

128 204 660.476 reflect

129 205 660.476 reflect

130 207 657.234 reflect

131 209 655.069 reflect

132 211 641.907 expand

133 213 641.907 contract outside

134 215 641.907 contract inside

135 216 641.907 reflect

136 218 641.907 contract inside

137 219 641.907 reflect

138 220 641.907 reflect

139 222 641.862 reflect

140 224 634.592 expand

141 226 634.592 contract inside

142 227 634.592 reflect

143 229 624.041 expand

144 230 624.041 reflect

145 232 611.129 expand

146 233 611.129 reflect

147 234 611.129 reflect

148 235 611.129 reflect

149 236 611.129 reflect

150 238 583.815 expand

151 239 583.815 reflect

152 240 583.815 reflect

153 241 583.815 reflect

154 243 572.42 expand

155 244 572.42 reflect

156 246 572.42 contract inside

157 248 572.42 contract inside

158 250 561.869 reflect

159 252 561.869 contract inside

160 254 557.486 expand

161 255 557.486 reflect

162 257 551.744 reflect

163 259 551.744 contract outside

164 261 541.395 expand

165 262 541.395 reflect

166 263 541.395 reflect

167 264 541.395 reflect

168 266 541.395 contract inside

169 268 541.395 contract inside

170 270 533.438 expand

171 271 533.438 reflect

172 272 533.438 reflect

173 273 533.438 reflect

174 274 533.438 reflect

175 275 533.438 reflect

176 276 533.438 reflect

177 278 517.54 expand

178 279 517.54 reflect

179 280 517.54 reflect

180 281 517.54 reflect

181 282 517.54 reflect

182 283 517.54 reflect

183 285 517.54 contract inside

184 286 517.54 reflect

185 288 517.54 contract inside

186 290 517.54 contract inside

187 292 511.006 reflect

188 294 511.006 contract inside

189 296 511.006 contract outside

190 297 511.006 reflect

191 299 511.006 contract inside

192 300 511.006 reflect

193 302 506.08 reflect

194 304 506.08 contract inside

195 305 506.08 reflect

196 306 506.08 reflect

197 308 503.371 reflect

198 309 503.371 reflect

199 310 503.371 reflect

200 312 502.052 reflect

201 313 502.052 reflect

202 315 502.052 contract inside

203 317 502.052 contract inside

204 318 502.052 reflect

205 319 502.052 reflect

206 321 502.052 contract inside

207 323 502.052 contract inside

208 325 500.556 contract inside

209 327 500.556 contract outside

210 329 500.556 contract inside

211 331 498.021 reflect

212 333 498.021 contract inside

213 334 498.021 reflect

214 336 498.021 contract inside

215 337 498.021 reflect

216 338 498.021 reflect

217 340 497.427 expand

218 342 497.366 reflect

219 344 497.366 contract inside

220 345 497.366 reflect

221 347 497.366 contract inside

222 348 497.366 reflect

223 349 497.366 reflect

224 350 497.366 reflect

225 352 495.132 expand

226 353 495.132 reflect

227 354 495.132 reflect

228 355 495.132 reflect

229 356 495.132 reflect

230 357 495.132 reflect

231 359 494.514 reflect

232 361 493.336 reflect

233 362 493.336 reflect

234 364 493.336 contract outside

235 366 493.336 contract inside

236 367 493.336 reflect

237 368 493.336 reflect

238 370 490.326 expand

239 372 490.326 contract inside

240 374 490.326 contract inside

241 375 490.326 reflect

242 376 490.326 reflect

243 377 490.326 reflect

244 378 490.326 reflect

245 379 490.326 reflect

246 380 490.326 reflect

247 382 487.772 expand

248 383 487.772 reflect

249 384 487.772 reflect

250 385 487.772 reflect

251 386 487.772 reflect

252 387 487.772 reflect

253 389 481.691 expand

254 390 481.691 reflect

255 391 481.691 reflect

256 392 481.691 reflect

257 394 478.312 expand

258 395 478.312 reflect

259 397 470.244 expand

260 398 470.244 reflect

261 399 470.244 reflect

262 401 463.852 expand

263 403 454.332 expand

264 404 454.332 reflect

265 406 438.904 expand

266 407 438.904 reflect

267 408 438.904 reflect

268 410 414.673 expand

269 411 414.673 reflect

270 413 389.773 expand

271 414 389.773 reflect

272 415 389.773 reflect

273 417 352.766 expand

274 418 352.766 reflect

275 420 323.264 expand

276 421 323.264 reflect

277 423 296.067 expand

278 425 266.517 expand

279 426 266.517 reflect

280 427 266.517 reflect

281 428 266.517 reflect

282 430 266.517 contract inside

283 432 266.517 contract inside

284 434 266.517 contract inside

285 435 266.517 reflect

286 436 266.517 reflect

287 438 266.517 contract inside

288 440 260.447 contract inside

289 442 260.447 contract inside

290 444 260.447 contract outside

291 445 260.447 reflect

292 446 260.447 reflect

293 448 260.447 contract inside

294 450 259.699 reflect

295 452 256.082 expand

296 453 256.082 reflect

297 455 256.082 contract inside

298 457 254.49 reflect

299 459 254.49 contract inside

300 461 254.49 contract inside

301 462 254.49 reflect

302 463 254.49 reflect

303 465 251.088 reflect

304 467 245.748 expand

305 468 245.748 reflect

306 469 245.748 reflect

307 470 245.748 reflect

308 472 242.886 expand

309 474 231.8 expand

310 475 231.8 reflect

311 476 231.8 reflect

312 477 231.8 reflect

313 479 229.519 expand

314 481 217.495 expand

315 482 217.495 reflect

316 484 217.44 reflect

317 485 217.44 reflect

318 486 217.44 reflect

319 488 217.44 contract outside

320 490 215.165 reflect

321 491 215.165 reflect

322 492 215.165 reflect

323 494 215.165 contract inside

324 495 215.165 reflect

325 497 215.165 contract outside

326 499 207.983 expand

327 501 206.553 expand

328 502 206.553 reflect

329 503 206.553 reflect

330 505 196.451 expand

331 506 196.451 reflect

332 508 188.518 expand

333 509 188.518 reflect

334 510 188.518 reflect

335 511 188.518 reflect

336 512 188.518 reflect

337 513 188.518 reflect

338 515 181.776 reflect

339 517 181.776 contract inside

340 518 181.776 reflect

341 520 178.296 expand

342 521 178.296 reflect

343 522 178.296 reflect

344 524 175.863 reflect

345 526 174.078 reflect

346 527 174.078 reflect

347 528 174.078 reflect

348 530 171.766 expand

349 531 171.766 reflect

350 533 166.828 reflect

351 535 157.53 expand

352 536 157.53 reflect

353 537 157.53 reflect

354 539 157.396 reflect

355 540 157.396 reflect

356 542 146.907 expand

357 543 146.907 reflect

358 544 146.907 reflect

359 546 131.772 expand

360 547 131.772 reflect

361 548 131.772 reflect

362 550 124.107 expand

363 551 124.107 reflect

364 552 124.107 reflect

365 553 124.107 reflect

366 554 124.107 reflect

367 556 120.346 reflect

368 558 119.716 reflect

369 560 116.127 expand

370 562 116.127 contract inside

371 563 116.127 reflect

372 565 101.75 expand

373 566 101.75 reflect

374 567 101.75 reflect

375 569 92.5461 expand

376 570 92.5461 reflect

377 571 92.5461 reflect

378 573 89.9252 reflect

379 574 89.9252 reflect

380 575 89.9252 reflect

381 577 89.9252 contract inside

382 579 89.9252 contract inside

383 580 89.9252 reflect

384 581 89.9252 reflect

385 582 89.9252 reflect

386 584 82.0265 expand

387 586 82.0265 contract inside

388 587 82.0265 reflect

389 589 82.0265 contract inside

390 591 79.0937 expand

391 593 61.3975 expand

392 594 61.3975 reflect

393 595 61.3975 reflect

394 596 61.3975 reflect

395 597 61.3975 reflect

396 598 61.3975 reflect

397 600 61.3975 contract inside

398 602 56.5447 reflect

399 604 56.5447 contract outside

400 606 52.6787 reflect

401 607 52.6787 reflect

402 609 52.6787 contract inside

403 610 52.6787 reflect

404 612 45.5936 reflect

405 614 45.5936 contract inside

406 615 45.5936 reflect

407 616 45.5936 reflect

408 618 41.4065 reflect

409 619 41.4065 reflect

410 621 41.4065 contract inside

411 623 41.4065 contract inside

412 625 41.4065 contract outside

413 627 39.9905 reflect

414 629 38.6691 contract inside

415 631 36.2387 reflect

416 633 36.2387 contract inside

417 634 36.2387 reflect

418 636 34.7561 expand

419 638 32.2211 reflect

420 639 32.2211 reflect

421 640 32.2211 reflect

422 642 32.2211 contract inside

423 644 32.2211 contract inside

424 645 32.2211 reflect

425 646 32.2211 reflect

426 648 31.7655 contract inside

427 649 31.7655 reflect

428 651 31.7655 contract inside

429 652 31.7655 reflect

430 654 31.7655 contract inside

431 655 31.7655 reflect

432 657 31.7655 contract inside

433 659 31.7655 contract inside

434 661 31.7655 contract inside

435 663 31.7655 contract inside

436 665 31.7655 contract inside

437 666 31.7655 reflect

438 667 31.7655 reflect

439 669 31.7655 contract inside

440 671 31.7655 contract inside

441 673 31.7655 contract inside

442 674 31.7655 reflect

443 676 30.7456 expand

444 678 30.7456 contract inside

445 679 30.7456 reflect

446 680 30.7456 reflect

447 681 30.7456 reflect

448 683 30.7166 reflect

449 684 30.7166 reflect

450 686 29.4861 expand

451 688 29.4861 contract outside

452 689 29.4861 reflect

453 690 29.4861 reflect

454 691 29.4861 reflect

455 692 29.4861 reflect

456 694 29.1743 expand

457 696 28.238 expand

458 697 28.238 reflect

459 698 28.238 reflect

460 699 28.238 reflect

461 701 28.238 contract outside

462 703 28.238 contract outside

463 704 28.238 reflect

464 705 28.238 reflect

465 707 27.3278 expand

466 708 27.3278 reflect

467 710 27.1317 reflect

468 712 27.1317 contract inside

469 713 27.1317 reflect

470 715 26.7642 reflect

471 717 25.7313 expand

472 718 25.7313 reflect

473 719 25.7313 reflect

474 720 25.7313 reflect

475 721 25.7313 reflect

476 722 25.7313 reflect

477 724 24.5678 expand

478 725 24.5678 reflect

479 727 24.2393 expand

480 729 24.1569 reflect

481 730 24.1569 reflect

482 731 24.1569 reflect

483 733 24.1569 contract inside

484 735 24.1569 contract outside

485 737 24.099 reflect

486 739 24.099 contract outside

487 741 24.099 contract inside

488 743 24.099 contract outside

489 745 24.0024 contract inside

490 747 24.0024 contract inside

491 749 23.9287 reflect

492 751 23.9287 contract inside

493 752 23.9287 reflect

494 753 23.9287 reflect

495 755 23.9287 contract outside

496 757 23.9287 contract inside

497 759 23.9287 contract inside

498 761 23.9287 contract inside

499 763 23.9287 contract inside

500 764 23.9287 reflect

501 766 23.9287 contract inside

502 768 23.9287 contract outside

503 770 23.9287 contract inside

504 772 23.9287 contract inside

505 773 23.9287 reflect

506 774 23.9287 reflect

507 776 23.9027 reflect

508 777 23.9027 reflect

509 778 23.9027 reflect

510 780 23.8436 expand

511 781 23.8436 reflect

512 783 23.8414 reflect

513 785 23.8414 contract inside

514 786 23.8414 reflect

515 788 23.7381 expand

516 789 23.7381 reflect

517 790 23.7381 reflect

518 792 23.7381 contract inside

519 793 23.7381 reflect

520 795 23.7381 contract inside

521 797 23.6613 expand

522 798 23.6613 reflect

523 800 23.5589 expand

524 801 23.5589 reflect

525 802 23.5589 reflect

526 803 23.5589 reflect

527 805 23.5003 expand

528 807 23.4441 expand

529 809 23.3768 expand

530 811 23.3162 expand

531 812 23.3162 reflect

532 813 23.3162 reflect

533 815 23.3162 contract inside

534 817 23.2244 expand

535 818 23.2244 reflect

536 820 23.1451 expand

537 821 23.1451 reflect

538 823 23.1324 reflect

539 825 22.9975 expand

540 826 22.9975 reflect

541 827 22.9975 reflect

542 829 22.9975 contract inside

543 831 22.8092 reflect

544 832 22.8092 reflect

545 834 22.7365 expand

546 836 22.7055 reflect

547 837 22.7055 reflect

548 839 22.5036 expand

549 841 22.5036 contract inside

550 842 22.5036 reflect

551 843 22.5036 reflect

552 844 22.5036 reflect

553 845 22.5036 reflect

554 847 22.2488 reflect

555 849 22.2488 contract inside

556 850 22.2488 reflect

557 852 22.2488 contract inside

558 854 22.2488 contract outside

559 856 22.2488 contract inside

560 857 22.2488 reflect

561 859 22.1333 expand

562 861 22.1333 contract outside

563 863 22.1333 contract inside

564 864 22.1333 reflect

565 866 22.1018 reflect

566 868 22.0372 expand

567 870 22.0264 reflect

568 871 22.0264 reflect

569 872 22.0264 reflect

570 874 21.924 reflect

571 875 21.924 reflect

572 876 21.924 reflect

573 878 21.924 contract inside

574 880 21.924 contract inside

575 881 21.924 reflect

576 883 21.924 contract inside

577 885 21.7403 expand

578 886 21.7403 reflect

579 887 21.7403 reflect

580 889 21.6887 expand

581 891 21.5345 expand

582 892 21.5345 reflect

583 894 21.5345 contract inside

584 896 21.5345 contract outside

585 897 21.5345 reflect

586 898 21.5345 reflect

587 899 21.5345 reflect

588 900 21.5345 reflect

589 901 21.5345 reflect

590 903 21.375 expand

591 905 21.2587 expand

592 907 21.2247 reflect

593 909 21.2247 contract inside

594 911 21.2247 contract inside

595 913 21.1858 reflect

596 914 21.1858 reflect

597 916 21.136 reflect

598 917 21.136 reflect

599 918 21.136 reflect

600 920 21.136 contract inside

601 922 21.0956 reflect

602 924 21.0956 contract inside

603 925 21.0956 reflect

604 927 21.0804 contract inside

605 929 20.9757 expand

606 930 20.9757 reflect

607 932 20.9306 expand

608 933 20.9306 reflect

609 935 20.9306 contract outside

610 937 20.8632 expand

611 938 20.8632 reflect

612 939 20.8632 reflect

613 941 20.7495 expand

614 942 20.7495 reflect

615 943 20.7495 reflect

616 944 20.7495 reflect

617 946 20.6979 reflect

618 948 20.6979 contract inside

619 950 20.6979 contract inside

620 952 20.6564 reflect

621 953 20.6564 reflect

622 955 20.6564 contract inside

623 956 20.6564 reflect

624 958 20.6287 contract inside

625 959 20.6287 reflect

626 960 20.6287 reflect

627 962 20.6287 contract inside

628 964 20.6287 contract inside

629 966 20.5866 expand

630 968 20.5287 expand

631 970 20.5287 contract outside

632 971 20.5287 reflect

633 973 20.5287 contract inside

634 975 20.5287 contract inside

635 976 20.5287 reflect

636 977 20.5287 reflect

637 978 20.5287 reflect

638 979 20.5287 reflect

639 980 20.5287 reflect

640 981 20.5287 reflect

641 983 20.4869 reflect

642 985 20.4869 contract inside

643 987 20.4869 contract inside

644 989 20.4818 contract inside

645 990 20.4818 reflect

646 992 20.4622 expand

647 993 20.4622 reflect

648 995 20.4622 contract inside

649 997 20.431 reflect

650 999 20.431 contract inside

651 1000 20.431 reflect

652 1002 20.4207 expand

653 1003 20.4207 reflect

654 1004 20.4207 reflect

655 1006 20.4131 reflect

656 1008 20.4131 contract inside

657 1010 20.4131 contract inside

658 1011 20.4131 reflect

659 1013 20.4131 contract inside

660 1015 20.3961 reflect

661 1016 20.3961 reflect

662 1018 20.3871 reflect

663 1020 20.3871 contract inside

664 1022 20.3871 contract inside

665 1023 20.3871 reflect

666 1024 20.3871 reflect

667 1026 20.3773 reflect

668 1028 20.3773 contract inside

669 1030 20.3642 expand

670 1032 20.3642 contract outside

671 1033 20.3642 reflect

672 1035 20.3584 reflect

673 1037 20.3584 contract inside

674 1039 20.3544 reflect

675 1040 20.3544 reflect

676 1042 20.338 expand

677 1044 20.338 contract outside

678 1046 20.338 contract inside

679 1048 20.3245 expand

680 1049 20.3245 reflect

681 1050 20.3245 reflect

682 1051 20.3245 reflect

683 1053 20.3036 expand

684 1054 20.3036 reflect

685 1055 20.3036 reflect

686 1056 20.3036 reflect

687 1057 20.3036 reflect

688 1059 20.2899 reflect

689 1060 20.2899 reflect

690 1061 20.2899 reflect

691 1063 20.2899 contract inside

692 1065 20.2834 reflect

693 1067 20.2485 expand

694 1068 20.2485 reflect

695 1069 20.2485 reflect

696 1071 20.2485 contract outside

697 1073 20.2485 contract inside

698 1074 20.2485 reflect

699 1076 20.237 expand

700 1077 20.237 reflect

701 1079 20.2282 expand

702 1080 20.2282 reflect

703 1082 20.2282 contract inside

704 1084 20.2234 reflect

705 1086 20.2234 contract inside

706 1088 20.2174 reflect

707 1090 20.2166 contract outside

708 1092 20.2135 reflect

709 1094 20.1791 expand

710 1095 20.1791 reflect

711 1097 20.1791 contract inside

712 1098 20.1791 reflect

713 1099 20.1791 reflect

714 1100 20.1791 reflect

715 1102 20.1296 expand

716 1104 20.1296 contract outside

717 1106 20.1296 contract inside

718 1107 20.1296 reflect

719 1108 20.1296 reflect

720 1109 20.1296 reflect

721 1111 20.1296 contract inside

722 1112 20.1296 reflect

723 1113 20.1296 reflect

724 1114 20.1296 reflect

725 1116 20.1103 expand

726 1117 20.1103 reflect

727 1118 20.1103 reflect

728 1119 20.1103 reflect

729 1120 20.1103 reflect

730 1122 20.1046 reflect

731 1124 20.1046 contract inside

732 1126 20.0943 reflect

733 1128 20.0943 contract inside

734 1130 20.0936 contract inside

735 1131 20.0936 reflect

736 1133 20.0882 reflect

737 1135 20.0864 reflect

738 1137 20.0864 contract inside

739 1139 20.0864 contract outside

740 1140 20.0864 reflect

741 1142 20.0833 reflect

742 1143 20.0833 reflect

743 1144 20.0833 reflect

744 1146 20.0636 expand

745 1147 20.0636 reflect

746 1149 20.0636 contract inside

747 1150 20.0636 reflect

748 1151 20.0636 reflect

749 1152 20.0636 reflect

750 1154 20.0625 reflect

751 1156 20.0505 reflect

752 1157 20.0505 reflect

753 1158 20.0505 reflect

754 1159 20.0505 reflect

755 1160 20.0505 reflect

756 1162 20.0505 contract inside

757 1163 20.0505 reflect

758 1164 20.0505 reflect

759 1166 20.0478 reflect

760 1168 20.0478 contract inside

761 1169 20.0478 reflect

762 1171 20.0388 contract inside

763 1172 20.0388 reflect

764 1174 20.038 reflect

765 1175 20.038 reflect

766 1176 20.038 reflect

767 1177 20.038 reflect

768 1179 20.0352 reflect

769 1180 20.0352 reflect

770 1181 20.0352 reflect

771 1183 20.0352 contract inside

772 1185 20.034 contract inside

773 1187 20.0328 contract inside

774 1189 20.0328 contract inside

775 1191 20.0328 contract inside

776 1193 20.0304 reflect

777 1194 20.0304 reflect

778 1196 20.0216 expand

779 1197 20.0216 reflect

780 1198 20.0216 reflect

781 1199 20.0216 reflect

782 1200 20.0216 reflect

783 1202 20.0177 reflect

784 1204 20.0177 contract inside

785 1206 20.0076 expand

786 1208 20.0076 contract inside

787 1210 20.0076 contract outside

788 1211 20.0076 reflect

789 1213 20.0076 contract inside

790 1214 20.0076 reflect

791 1216 20.0037 expand

792 1217 20.0037 reflect

793 1219 20.0028 reflect

794 1221 20.0001 reflect

795 1223 19.9994 reflect

796 1224 19.9994 reflect

797 1225 19.9994 reflect

798 1227 19.9994 contract inside

799 1228 19.9994 reflect

800 1229 19.9994 reflect

801 1230 19.9994 reflect

802 1232 19.9992 contract inside

803 1233 19.9992 reflect

804 1235 19.9942 expand

805 1236 19.9942 reflect

806 1238 19.9937 reflect

807 1240 19.991 expand

808 1241 19.991 reflect

809 1243 19.988 reflect

810 1244 19.988 reflect

811 1245 19.988 reflect

812 1247 19.9856 reflect

813 1248 19.9856 reflect

814 1250 19.9856 contract inside

815 1252 19.9786 expand

816 1253 19.9786 reflect

817 1254 19.9786 reflect

818 1255 19.9786 reflect

819 1257 19.9761 expand

820 1258 19.9761 reflect

821 1259 19.9761 reflect

822 1260 19.9761 reflect

823 1261 19.9761 reflect

824 1262 19.9761 reflect

825 1264 19.9708 reflect

826 1265 19.9708 reflect

827 1267 19.9706 contract inside

828 1268 19.9706 reflect

829 1270 19.9706 contract inside

830 1272 19.9684 expand

831 1274 19.9651 reflect

832 1276 19.9651 contract inside

833 1277 19.9651 reflect

834 1279 19.9591 expand

835 1281 19.9591 contract inside

836 1282 19.9591 reflect

837 1283 19.9591 reflect

838 1284 19.9591 reflect

839 1286 19.9591 contract inside

840 1287 19.9591 reflect

841 1288 19.9591 reflect

842 1289 19.9591 reflect

843 1291 19.9568 expand

844 1293 19.9568 contract inside

845 1295 19.9515 expand

846 1296 19.9515 reflect

847 1297 19.9515 reflect

848 1299 19.9439 expand

849 1301 19.9439 contract inside

850 1302 19.9439 reflect

851 1303 19.9439 reflect

852 1304 19.9439 reflect

853 1305 19.9439 reflect

854 1306 19.9439 reflect

855 1308 19.9439 contract inside

856 1310 19.9376 expand

857 1311 19.9376 reflect

858 1313 19.9376 contract outside

859 1315 19.9323 expand

860 1316 19.9323 reflect

861 1318 19.9257 expand

862 1319 19.9257 reflect

863 1320 19.9257 reflect

864 1322 19.9165 expand

865 1324 19.9165 contract inside

866 1325 19.9165 reflect

867 1327 19.9093 expand

868 1328 19.9093 reflect

869 1330 19.8981 expand

870 1331 19.8981 reflect

871 1332 19.8981 reflect

872 1333 19.8981 reflect

873 1334 19.8981 reflect

874 1336 19.8895 reflect

875 1337 19.8895 reflect

876 1339 19.8895 contract inside

877 1341 19.8895 contract outside

878 1343 19.8876 reflect

879 1344 19.8876 reflect

880 1346 19.8873 reflect

881 1348 19.8856 contract inside

882 1350 19.8856 contract inside

883 1352 19.8856 contract inside

884 1354 19.8856 contract inside

885 1356 19.8855 contract inside

886 1358 19.8819 contract inside

887 1359 19.8819 reflect

888 1361 19.8799 contract inside

889 1362 19.8799 reflect

890 1364 19.8785 reflect

891 1366 19.8785 contract inside

892 1367 19.8785 reflect

893 1369 19.8785 contract inside

894 1371 19.8785 contract inside

895 1373 19.8785 contract inside

896 1374 19.8785 reflect

897 1375 19.8785 reflect

898 1377 19.8766 reflect

899 1378 19.8766 reflect

900 1379 19.8766 reflect

901 1381 19.8766 contract inside

902 1383 19.8766 contract outside

903 1385 19.8766 contract inside

904 1387 19.8766 contract inside

905 1389 19.8766 contract inside

906 1391 19.8766 contract inside

907 1392 19.8766 reflect

908 1394 19.8761 contract inside

909 1396 19.8761 contract inside

910 1398 19.8761 contract inside

911 1399 19.8761 reflect

912 1401 19.8761 contract inside

913 1403 19.8761 contract inside

914 1405 19.8761 contract inside

915 1407 19.8756 contract inside

916 1408 19.8756 reflect

917 1409 19.8756 reflect

918 1411 19.8756 contract inside

919 1413 19.8755 reflect

920 1415 19.8753 contract inside

921 1416 19.8753 reflect

922 1418 19.8753 contract inside

923 1420 19.8753 contract inside

924 1422 19.8753 contract inside

925 1424 19.8753 contract inside

926 1425 19.8753 reflect

927 1427 19.8753 contract inside

928 1429 19.8753 contract outside

929 1431 19.8753 contract inside

930 1433 19.8753 contract outside

931 1435 19.8752 contract inside

932 1437 19.8752 contract inside

933 1439 19.8752 contract inside

934 1441 19.8752 contract inside

935 1442 19.8752 reflect

936 1444 19.8752 reflect

937 1446 19.8752 contract inside

938 1448 19.8752 contract inside

939 1449 19.8752 reflect

940 1450 19.8752 reflect

941 1452 19.8752 contract inside

942 1454 19.8751 reflect

943 1455 19.8751 reflect

944 1456 19.8751 reflect

945 1458 19.8751 contract inside

946 1459 19.8751 reflect

947 1461 19.8751 contract inside

948 1462 19.8751 reflect

949 1464 19.8751 contract inside

950 1466 19.8751 contract inside

951 1468 19.8751 contract inside

952 1470 19.8751 reflect

953 1472 19.8751 contract inside

954 1473 19.8751 reflect

955 1475 19.8751 contract inside

956 1477 19.8751 contract inside

957 1478 19.8751 reflect

958 1480 19.8751 contract inside

959 1482 19.8751 reflect

960 1484 19.8751 contract inside

961 1486 19.8751 contract inside

962 1487 19.8751 reflect

963 1489 19.8751 contract inside

964 1491 19.8751 contract inside

965 1493 19.8751 contract inside

966 1495 19.8751 contract inside

967 1497 19.8751 contract inside

968 1498 19.8751 reflect

969 1500 19.8751 contract inside

970 1502 19.8751 reflect

971 1504 19.8751 contract inside

972 1506 19.8751 contract inside

973 1508 19.8751 contract inside

974 1510 19.8751 contract outside

975 1512 19.8751 contract inside

976 1514 19.8751 contract inside

977 1516 19.8751 expand

978 1517 19.8751 reflect

979 1519 19.8751 contract inside

980 1521 19.8751 expand

981 1523 19.8751 contract inside

982 1524 19.8751 reflect

983 1526 19.8751 contract inside

984 1528 19.8751 expand

985 1529 19.8751 reflect

986 1530 19.8751 reflect

987 1531 19.8751 reflect

988 1533 19.8751 expand

989 1534 19.8751 reflect

990 1536 19.8751 expand

991 1538 19.875 expand

992 1539 19.875 reflect

993 1540 19.875 reflect

994 1541 19.875 reflect

995 1543 19.875 expand

996 1544 19.875 reflect

997 1546 19.875 expand

998 1548 19.875 expand

999 1549 19.875 reflect

1000 1550 19.875 reflect

1001 1552 19.8749 expand

1002 1553 19.8749 reflect

1003 1555 19.8749 expand

1004 1556 19.8749 reflect

1005 1558 19.8748 expand

1006 1559 19.8748 reflect

1007 1561 19.8747 expand

1008 1562 19.8747 reflect

1009 1563 19.8747 reflect

1010 1565 19.8746 expand

1011 1566 19.8746 reflect

1012 1568 19.8744 expand

1013 1569 19.8744 reflect

1014 1571 19.8742 expand

1015 1572 19.8742 reflect

1016 1574 19.8739 expand

1017 1575 19.8739 reflect

1018 1577 19.8735 expand

1019 1578 19.8735 reflect

1020 1580 19.8729 expand

1021 1581 19.8729 reflect

1022 1583 19.8721 expand

1023 1584 19.8721 reflect

1024 1586 19.8713 expand

1025 1587 19.8713 reflect

1026 1589 19.87 expand

1027 1590 19.87 reflect

1028 1592 19.8685 expand

1029 1593 19.8685 reflect

1030 1595 19.867 expand

1031 1596 19.867 reflect

1032 1598 19.8657 expand

1033 1599 19.8657 reflect

1034 1601 19.8656 reflect

1035 1603 19.8654 reflect

1036 1604 19.8654 reflect

1037 1605 19.8654 reflect

1038 1607 19.8654 contract outside

1039 1609 19.8654 contract outside

1040 1611 19.8654 contract inside

1041 1612 19.8654 reflect

1042 1614 19.8654 contract inside

1043 1616 19.8654 contract inside

1044 1618 19.8654 contract inside

1045 1620 19.8654 contract inside

1046 1622 19.8654 contract inside

1047 1623 19.8654 reflect

1048 1625 19.8654 contract inside

1049 1627 19.8654 contract inside

1050 1628 19.8654 reflect

1051 1630 19.8654 contract inside

1052 1632 19.8654 contract inside

1053 1634 19.8654 contract inside

1054 1636 19.8654 contract inside

1055 1638 19.8654 contract outside

1056 1640 19.8654 expand

1057 1641 19.8654 reflect

1058 1642 19.8654 reflect

1059 1644 19.8654 contract inside

1060 1646 19.8654 expand

1061 1647 19.8654 reflect

1062 1648 19.8654 reflect

1063 1650 19.8654 contract inside

1064 1652 19.8654 expand

1065 1653 19.8654 reflect

1066 1655 19.8654 contract inside

1067 1657 19.8654 expand

1068 1658 19.8654 reflect

1069 1659 19.8654 reflect

1070 1660 19.8654 reflect

1071 1662 19.8653 expand

1072 1664 19.8653 expand

1073 1665 19.8653 reflect

1074 1666 19.8653 reflect

1075 1668 19.8653 expand

1076 1670 19.8653 expand

1077 1671 19.8653 reflect

1078 1673 19.8652 expand

1079 1674 19.8652 reflect

1080 1676 19.8651 expand

1081 1677 19.8651 reflect

1082 1679 19.8651 expand

1083 1680 19.8651 reflect

1084 1682 19.8649 expand

1085 1684 19.8648 expand

1086 1685 19.8648 reflect

1087 1687 19.8646 expand

1088 1689 19.8643 expand

1089 1690 19.8643 reflect

1090 1692 19.864 expand

1091 1693 19.864 reflect

1092 1695 19.8634 expand

1093 1696 19.8634 reflect

1094 1698 19.8626 expand

1095 1699 19.8626 reflect

1096 1701 19.8616 expand

1097 1702 19.8616 reflect

1098 1703 19.8616 reflect

1099 1705 19.8613 expand

1100 1707 19.8612 expand

1101 1709 19.8609 expand

1102 1710 19.8609 reflect

1103 1712 19.8601 expand

1104 1714 19.8601 contract inside

1105 1715 19.8601 reflect

1106 1716 19.8601 reflect

1107 1718 19.8594 expand

1108 1720 19.8594 contract inside

1109 1721 19.8594 reflect

1110 1722 19.8594 reflect

1111 1724 19.8584 expand

1112 1725 19.8584 reflect

1113 1727 19.8578 expand

1114 1729 19.8575 reflect

1115 1731 19.857 reflect

1116 1732 19.857 reflect

1117 1734 19.857 contract inside

1118 1736 19.857 contract inside

1119 1738 19.8569 reflect

1120 1740 19.8569 contract inside

1121 1741 19.8569 reflect

1122 1742 19.8569 reflect

1123 1744 19.8569 contract inside

1124 1746 19.8569 contract inside

1125 1748 19.8569 contract inside

1126 1749 19.8569 reflect

1127 1750 19.8569 reflect

1128 1752 19.8569 contract inside

1129 1754 19.8568 contract inside

1130 1756 19.8568 contract inside

1131 1758 19.8568 contract inside

1132 1760 19.8566 contract inside

1133 1762 19.8566 reflect

1134 1764 19.8566 contract inside

1135 1766 19.8566 contract inside

1136 1768 19.8566 contract inside

1137 1769 19.8566 reflect

1138 1771 19.8566 contract inside

1139 1773 19.8566 contract inside

1140 1775 19.8566 reflect

1141 1777 19.8566 contract inside

1142 1779 19.8566 contract inside

1143 1781 19.8566 contract inside

1144 1783 19.8566 contract outside

1145 1784 19.8566 reflect

1146 1786 19.8566 contract inside

1147 1788 19.8566 contract inside

1148 1790 19.8566 contract inside

1149 1792 19.8566 contract inside

1150 1793 19.8566 reflect

1151 1795 19.8566 contract inside

1152 1797 19.8566 contract inside

1153 1799 19.8566 contract inside

1154 1801 19.8566 contract inside

1155 1803 19.8566 contract inside

1156 1804 19.8566 reflect

1157 1806 19.8566 contract inside

1158 1807 19.8566 reflect

1159 1808 19.8566 reflect

1160 1810 19.8566 reflect

1161 1812 19.8566 contract inside

1162 1814 19.8566 contract inside

1163 1815 19.8566 reflect

1164 1816 19.8566 reflect

1165 1818 19.8566 contract inside

1166 1820 19.8566 contract inside

1167 1821 19.8566 reflect

1168 1823 19.8566 contract outside

1169 1825 19.8566 contract inside

1170 1826 19.8566 reflect

1171 1828 19.8566 contract inside

1172 1830 19.8566 contract inside

1173 1832 19.8566 contract inside

1174 1834 19.8566 contract inside

1175 1836 19.8566 contract inside

1176 1838 19.8566 contract inside

1177 1840 19.8566 contract inside

1178 1842 19.8566 reflect

1179 1844 19.8566 contract inside

1180 1845 19.8566 reflect

1181 1846 19.8566 reflect

1182 1848 19.8566 contract inside

1183 1850 19.8566 contract inside

1184 1852 19.8566 contract inside

1185 1854 19.8566 contract outside

1186 1855 19.8566 reflect

1187 1857 19.8566 contract inside

1188 1859 19.8566 contract inside

1189 1861 19.8566 contract inside

1190 1862 19.8566 reflect

1191 1864 19.8566 contract inside

1192 1865 19.8566 reflect

1193 1867 19.8566 contract inside

1194 1869 19.8566 contract inside

1195 1871 19.8566 reflect

1196 1873 19.8566 contract inside

1197 1875 19.8566 contract inside

1198 1876 19.8566 reflect

1199 1878 19.8566 contract inside

1200 1880 19.8566 contract inside

1201 1882 19.8566 contract inside

1202 1884 19.8566 contract inside

1203 1885 19.8566 reflect

1204 1887 19.8566 expand

1205 1888 19.8566 reflect

1206 1889 19.8566 reflect

1207 1891 19.8566 contract inside

1208 1892 19.8566 reflect

1209 1894 19.8566 expand

1210 1895 19.8566 reflect

1211 1897 19.8566 expand

1212 1899 19.8566 expand

1213 1900 19.8566 reflect

1214 1901 19.8566 reflect

1215 1903 19.8566 expand

1216 1904 19.8566 reflect

1217 1905 19.8566 reflect

1218 1906 19.8566 reflect

1219 1908 19.8566 expand

1220 1909 19.8566 reflect

1221 1911 19.8566 expand

1222 1912 19.8566 reflect

1223 1914 19.8566 expand

1224 1916 19.8566 expand

1225 1918 19.8566 expand

1226 1919 19.8566 reflect

1227 1921 19.8566 expand

1228 1922 19.8566 reflect

1229 1924 19.8566 expand

1230 1926 19.8566 expand

1231 1927 19.8566 reflect

1232 1928 19.8566 reflect

1233 1929 19.8566 reflect

1234 1931 19.8566 expand

1235 1932 19.8566 reflect

1236 1934 19.8565 expand

1237 1935 19.8565 reflect

1238 1936 19.8565 reflect

1239 1938 19.8565 expand

1240 1939 19.8565 reflect

1241 1940 19.8565 reflect

1242 1942 19.8565 expand

1243 1944 19.8565 expand

1244 1945 19.8565 reflect

1245 1947 19.8565 expand

1246 1948 19.8565 reflect

1247 1950 19.8565 expand

1248 1951 19.8565 reflect

1249 1952 19.8565 reflect

1250 1954 19.8564 expand

1251 1955 19.8564 reflect

1252 1956 19.8564 reflect

1253 1958 19.8564 expand

1254 1959 19.8564 reflect

1255 1960 19.8564 reflect

1256 1962 19.8563 expand

1257 1963 19.8563 reflect

1258 1964 19.8563 reflect

1259 1966 19.8562 expand

1260 1967 19.8562 reflect

1261 1968 19.8562 reflect

1262 1970 19.8561 expand

1263 1971 19.8561 reflect

1264 1972 19.8561 reflect

1265 1974 19.856 expand

1266 1976 19.8558 expand

1267 1977 19.8558 reflect

1268 1978 19.8558 reflect

1269 1979 19.8558 reflect

1270 1981 19.8556 expand

1271 1982 19.8556 reflect

1272 1984 19.8554 expand

1273 1985 19.8554 reflect

1274 1987 19.8552 expand

1275 1988 19.8552 reflect

1276 1989 19.8552 reflect

1277 1991 19.8548 expand

1278 1992 19.8548 reflect

1279 1993 19.8548 reflect

1280 1995 19.8546 expand

1281 1997 19.8541 expand

1282 1998 19.8541 reflect

1283 1999 19.8541 reflect

1284 2001 19.8531 expand

1285 2002 19.8531 reflect

1286 2004 19.8518 expand

1287 2005 19.8518 reflect

1288 2006 19.8518 reflect

1289 2008 19.8504 expand

1290 2010 19.8485 expand

1291 2011 19.8485 reflect

1292 2012 19.8485 reflect

1293 2014 19.8479 expand

1294 2016 19.8452 expand

1295 2018 19.8412 expand

1296 2019 19.8412 reflect

1297 2020 19.8412 reflect

1298 2021 19.8412 reflect

1299 2023 19.838 expand

1300 2025 19.829 expand

1301 2026 19.829 reflect

1302 2027 19.829 reflect

1303 2028 19.829 reflect

1304 2030 19.8211 expand

1305 2032 19.8211 contract outside

1306 2033 19.8211 reflect

1307 2035 19.8117 expand

1308 2036 19.8117 reflect

1309 2037 19.8117 reflect

1310 2039 19.7965 expand

1311 2040 19.7965 reflect

1312 2041 19.7965 reflect

1313 2043 19.776 expand

1314 2044 19.776 reflect

1315 2046 19.7615 expand

1316 2048 19.7406 expand

1317 2049 19.7406 reflect

1318 2050 19.7406 reflect

1319 2052 19.7132 expand

1320 2053 19.7132 reflect

1321 2054 19.7132 reflect

1322 2055 19.7132 reflect

1323 2057 19.7071 reflect

1324 2059 19.7051 reflect

1325 2060 19.7051 reflect

1326 2061 19.7051 reflect

1327 2062 19.7051 reflect

1328 2063 19.7051 reflect

1329 2064 19.7051 reflect

1330 2066 19.7051 contract inside

1331 2068 19.7051 contract outside

1332 2070 19.7051 contract inside

1333 2072 19.7051 contract inside

1334 2073 19.7051 reflect

1335 2075 19.705 contract inside

1336 2077 19.705 contract inside

1337 2078 19.705 reflect

1338 2080 19.705 contract inside

1339 2082 19.7049 contract inside

1340 2084 19.7049 contract outside

1341 2086 19.7047 contract inside

1342 2088 19.7047 contract inside

1343 2090 19.7047 contract inside

1344 2092 19.7047 contract inside

1345 2094 19.7047 contract inside

1346 2095 19.7047 reflect

1347 2097 19.7047 contract inside

1348 2099 19.7047 contract inside

1349 2101 19.7047 contract inside

1350 2103 19.7047 contract inside

1351 2105 19.7047 contract inside

1352 2107 19.7047 contract inside

1353 2109 19.7047 contract inside

1354 2111 19.7047 contract inside

1355 2113 19.7047 contract inside

1356 2115 19.7047 contract inside

1357 2117 19.7047 contract inside

1358 2119 19.7047 contract inside

1359 2121 19.7047 contract inside

1360 2123 19.7047 contract inside

1361 2125 19.7047 contract inside

1362 2127 19.7047 contract inside

1363 2129 19.7047 contract inside

1364 2131 19.7047 contract inside

1365 2133 19.7046 contract inside

1366 2135 19.7046 contract inside

1367 2137 19.7046 contract inside

1368 2139 19.7046 contract inside

1369 2141 19.7046 contract inside

1370 2143 19.7046 contract inside

1371 2145 19.7046 contract inside

1372 2147 19.7046 contract inside

1373 2149 19.7046 contract inside

1374 2151 19.7046 contract inside

1375 2153 19.7046 contract inside

1376 2155 19.7046 contract inside

1377 2157 19.7046 contract outside

1378 2159 19.7046 contract inside

1379 2161 19.7046 contract inside

1380 2163 19.7046 contract inside

1381 2165 19.7046 contract inside

1382 2167 19.7046 contract inside

1383 2168 19.7046 reflect

1384 2170 19.7046 contract inside

1385 2172 19.7046 contract inside

1386 2174 19.7046 contract inside

1387 2176 19.7046 contract inside

1388 2178 19.7046 contract inside

1389 2179 19.7046 reflect

1390 2180 19.7046 reflect

1391 2181 19.7046 reflect

1392 2183 19.7046 contract inside

1393 2185 19.7046 contract inside

1394 2187 19.7046 contract inside

1395 2189 19.7046 contract inside

1396 2190 19.7046 reflect

1397 2192 19.7046 contract inside

1398 2194 19.7046 contract outside

1399 2195 19.7046 reflect

1400 2197 19.7046 contract inside

1401 2199 19.7046 reflect

1402 2201 19.7046 expand

1403 2203 19.7046 contract inside

1404 2204 19.7046 reflect

1405 2205 19.7046 reflect

1406 2207 19.7046 contract inside

1407 2209 19.7046 expand

1408 2210 19.7046 reflect

1409 2211 19.7046 reflect

1410 2212 19.7046 reflect

1411 2214 19.7046 expand

1412 2215 19.7046 reflect

1413 2217 19.7046 expand

1414 2218 19.7046 reflect

1415 2219 19.7046 reflect

1416 2221 19.7046 expand

1417 2222 19.7046 reflect

1418 2223 19.7046 reflect

1419 2225 19.7046 expand

1420 2226 19.7046 reflect

1421 2228 19.7046 expand

1422 2230 19.7046 expand

1423 2231 19.7046 reflect

1424 2233 19.7046 expand

1425 2234 19.7046 reflect

1426 2235 19.7046 reflect

1427 2237 19.7046 expand

1428 2238 19.7046 reflect

1429 2239 19.7046 reflect

1430 2241 19.7046 expand

1431 2242 19.7046 reflect

1432 2244 19.7046 expand

1433 2245 19.7046 reflect

1434 2246 19.7046 reflect

1435 2248 19.7046 expand

1436 2249 19.7046 reflect

1437 2250 19.7046 reflect

1438 2252 19.7046 expand

1439 2253 19.7046 reflect

1440 2254 19.7046 reflect

1441 2256 19.7046 expand

1442 2257 19.7046 reflect

1443 2259 19.7046 expand

1444 2260 19.7046 reflect

1445 2262 19.7046 expand

1446 2263 19.7046 reflect

1447 2265 19.7046 reflect

1448 2266 19.7046 reflect

1449 2268 19.7046 expand

1450 2269 19.7046 reflect

1451 2271 19.7046 expand

1452 2272 19.7046 reflect

1453 2273 19.7046 reflect

1454 2275 19.7046 reflect

1455 2277 19.7046 expand

1456 2279 19.7046 expand

1457 2280 19.7046 reflect

1458 2282 19.7046 expand

1459 2283 19.7046 reflect

1460 2284 19.7046 reflect

1461 2286 19.7046 expand

1462 2287 19.7046 reflect

1463 2288 19.7046 reflect

1464 2290 19.7046 expand

1465 2291 19.7046 reflect

1466 2293 19.7046 expand

1467 2294 19.7046 reflect

1468 2296 19.7046 expand

1469 2297 19.7046 reflect

1470 2298 19.7046 reflect

1471 2300 19.7046 expand

1472 2301 19.7046 reflect

1473 2303 19.7046 expand

1474 2305 19.7046 expand

1475 2306 19.7046 reflect

1476 2307 19.7046 reflect

1477 2309 19.7046 expand

1478 2310 19.7046 reflect

1479 2311 19.7046 reflect

1480 2313 19.7046 expand

1481 2314 19.7046 reflect

1482 2316 19.7046 expand

1483 2318 19.7046 expand

1484 2319 19.7046 reflect

1485 2320 19.7046 reflect

1486 2322 19.7046 expand

1487 2324 19.7046 expand

1488 2325 19.7046 reflect

1489 2327 19.7046 expand

1490 2328 19.7046 reflect

1491 2329 19.7046 reflect

1492 2330 19.7046 reflect

1493 2332 19.7046 reflect

1494 2333 19.7046 reflect

1495 2335 19.7046 contract inside

1496 2336 19.7046 reflect

1497 2337 19.7046 reflect

1498 2339 19.7045 expand

1499 2340 19.7045 reflect

1500 2341 19.7045 reflect

1501 2343 19.7045 reflect

1502 2345 19.7045 expand

1503 2346 19.7045 reflect

1504 2348 19.7045 expand

1505 2350 19.7045 expand

1506 2351 19.7045 reflect

1507 2352 19.7045 reflect

1508 2354 19.7045 expand

1509 2355 19.7045 reflect

1510 2357 19.7044 expand

1511 2358 19.7044 reflect

1512 2359 19.7044 reflect

1513 2361 19.7044 expand

1514 2363 19.7044 expand

1515 2364 19.7044 reflect

1516 2366 19.7043 expand

1517 2367 19.7043 reflect

1518 2368 19.7043 reflect

1519 2369 19.7043 reflect

1520 2371 19.7041 expand

1521 2372 19.7041 reflect

1522 2373 19.7041 reflect

1523 2375 19.704 expand

1524 2376 19.704 reflect

1525 2378 19.7038 expand

1526 2379 19.7038 reflect

1527 2381 19.7035 expand

1528 2382 19.7035 reflect

1529 2384 19.7031 expand

1530 2385 19.7031 reflect

1531 2387 19.7027 expand

1532 2388 19.7027 reflect

1533 2390 19.702 expand

1534 2391 19.702 reflect

1535 2392 19.702 reflect

1536 2394 19.7007 expand

1537 2395 19.7007 reflect

1538 2397 19.6997 expand

1539 2399 19.6982 expand

1540 2400 19.6982 reflect

Exiting: Maximum number of function evaluations has been exceeded

- increase MaxFunEvals option.

Current function value: 19.698243

FMINSEARCH terminated.

**x =[155.9396,1.2986,0.0000,1.1087,0.4152,-1.4416];**

**fval =19.6982;**

exitflag =0;

output =

problemtype: 'unconstrained'

rngstate: [1x1 struct]

generations: 100

funccount: 12500

message: [1x228 char]

population =

11.1432 1.3049 0.1403 0.8803 4.9505 -1.5500

11.0309 1.3049 0.0135 0.8356 4.9969 -1.5650

10.9745 1.2956 0.0135 0.8356 4.9969 -1.5524

10.9838 1.3049 0.0135 0.8356 4.9969 -1.5650

10.9838 1.3049 0.0135 0.8463 4.9969 -1.5650

11.0309 1.2630 0.0135 0.8356 5.0155 -1.5226

10.9886 1.3049 0.0135 0.8310 4.9969 -1.5650

10.9838 1.2996 0.0135 0.8356 4.9969 -1.5650

10.9838 1.3049 0.0135 0.8356 4.9409 -1.2527

10.9838 1.3049 0.0135 0.8356 4.9969 -1.5650

10.9595 1.3049 0.0135 0.8356 4.9969 -1.5650

10.9838 1.3049 0.1451 0.8435 4.9718 -1.5650

11.0309 1.3049 0.0135 0.8121 4.9969 -1.5650

11.0113 1.3049 0.0457 0.9670 4.9776 -1.5650

10.7622 1.3296 0.0334 0.8393 4.9969 -1.5650

11.0134 1.2117 0.1403 0.8261 5.0025 -1.5500

10.7334 1.3049 0.0135 0.8356 4.9395 -1.5650

10.9640 1.3049 0.0135 0.8315 4.9969 -1.5278

10.9686 1.3049 0.1734 0.8356 4.9969 -1.5650

10.6592 1.3015 0.0520 0.8356 4.9489 -1.5650

11.0113 1.3049 0.0135 0.8298 4.9969 -1.5650

10.9838 1.3049 0.0135 0.8356 4.9969 -1.5533

11.0309 1.3049 0.0135 0.8356 4.9969 -1.5650

11.0309 1.3049 0.0135 0.8356 4.9969 -1.5650

11.0113 1.3049 0.0135 0.8356 4.9969 -1.5650

11.0309 1.3049 0.0135 0.8356 4.9969 -1.5650

11.0113 1.3049 0.0135 0.8261 5.0025 -1.5650

10.9896 1.3049 0.0135 0.8904 4.9969 -1.5637

10.9838 1.3956 0.0135 0.8556 4.9855 -1.5787

10.9819 1.3049 0.0078 0.8257 4.9969 -1.5659

10.9838 1.3049 0.0135 0.8356 5.0049 -1.5856

11.0113 1.3049 0.0429 0.8356 4.9392 -1.5650

11.0309 1.3049 0.0135 0.8803 4.9505 -1.5650

11.0309 1.3049 0.0135 0.8356 4.9969 -1.5650

11.1432 1.3049 0.0429 0.8435 4.9505 -1.5500

10.9213 1.3610 0.0848 0.8231 4.9740 -1.5608

10.9825 1.3049 0.0682 0.8121 4.9969 -1.5650

11.0113 1.3049 0.0135 0.8356 4.9969 -1.5650

10.9838 1.3049 0.0135 0.8387 4.9969 -1.5533

10.9855 1.3049 0.0135 0.8356 4.9969 -1.5650

11.0210 1.3025 0.0135 0.8121 4.9969 -1.5898

10.9595 1.3049 0.0135 0.8617 4.9969 -1.5650

11.0309 1.2692 0.0135 0.8356 4.9969 -1.5650

10.9838 1.3049 0.0135 0.8356 4.9969 -1.5650

11.1432 1.3049 0.1403 0.8803 4.9969 -1.5500

10.9838 1.3049 0.0135 0.8356 4.9392 -1.5650

11.0210 1.3049 0.0135 0.8356 4.9969 -1.5650

11.0309 1.3049 0.0135 0.8356 4.9969 -1.5650

10.9838 1.2345 0.0225 0.8461 5.0155 -1.5650

11.0352 1.3128 0.0281 0.8344 4.9718 -1.5650

11.0309 1.3049 0.0135 0.8310 4.9969 -1.5650

11.0309 1.3049 0.0310 0.8356 4.9969 -1.5650

11.0294 1.3049 0.0197 0.8235 4.9969 -1.5537

11.0113 1.3049 0.1403 0.8803 4.9969 -1.5650

11.0113 1.3049 0.0135 0.8356 4.9969 -1.5650

10.9838 1.3049 0.0135 0.8740 4.9969 -1.5650

10.6302 1.3049 0.0135 0.8121 4.9969 -1.5650

10.9838 1.2981 0.0135 0.8067 4.9969 -1.5518

10.9830 1.3049 0.0666 0.8722 4.9817 -1.5650

11.0113 1.3049 0.0310 0.8617 4.9969 -1.5650

10.9838 1.3049 0.0135 0.8435 4.9969 -1.5650

10.9762 1.3049 0.1047 0.8356 5.0078 -1.5416

10.9838 1.2980 0.0818 0.8356 4.9969 -1.5650

11.0113 1.3049 0.0509 0.9026 4.9969 -1.5650

10.9838 1.3049 0.1027 0.8356 4.9969 -1.5533

11.0309 1.3172 0.0429 0.8435 4.9718 -1.5650

11.0309 1.3049 0.0187 0.8356 5.0173 -1.5649

11.0309 1.3049 0.0310 0.8284 4.9969 -1.5650

10.9838 1.3049 0.1403 0.8740 4.9505 -1.5650

11.0210 1.3049 0.0135 0.8356 4.9969 -1.5650

11.0309 1.3049 0.0135 0.8356 4.9969 -1.5650

11.0210 1.3049 0.0940 0.8310 4.9969 -1.5650

11.0219 1.3150 0.0135 0.8356 4.9792 -1.5533

10.8150 1.2857 0.0161 0.8493 4.9801 -1.5735

11.1432 1.3049 0.0509 0.8803 4.9969 -1.5650

11.0164 1.3152 0.0275 0.8375 5.0025 -1.5650

11.0309 1.3049 0.0135 0.8356 4.9969 -1.5650

10.9838 1.3049 0.0940 0.8356 4.9395 -1.5650

11.0254 1.3025 0.0037 0.8358 4.9229 -1.5630

11.1432 1.3049 0.0135 0.8356 4.9969 -1.5650

10.9838 1.3049 0.1027 0.8356 4.9969 -1.5533

11.0210 1.3049 0.0940 0.8310 4.9969 -1.5650

11.0113 1.3049 0.1451 0.8310 4.9969 -1.5650

10.9838 1.3049 0.1451 0.8310 4.9969 -1.5650

10.7622 1.3049 0.0940 0.8356 4.9969 -1.5533

10.9949 1.3037 0.0334 0.8393 4.7880 -1.5536

11.1432 1.3049 0.1403 0.8803 4.9505 -1.5500

10.9887 1.3099 0.0446 0.9098 5.0029 -1.5532

11.0433 1.3105 0.0118 0.8366 4.9423 -1.5715

10.9686 1.2659 0.1734 0.8435 5.0174 -1.5650

11.0309 1.3049 0.1451 0.8435 4.9718 -1.5650

11.0210 1.3049 0.0135 0.8356 4.9969 -1.5533

11.0113 1.3049 0.0259 0.8617 4.9728 -1.5650

11.0075 1.3049 0.0135 0.8356 4.9969 -1.5650

10.9838 1.3049 0.0135 0.8356 4.9969 -1.5533

10.9815 1.3035 0.0206 0.8389 4.9976 -1.5715

10.9972 1.3276 0.0558 0.8509 4.9904 -1.5638

10.9838 1.3049 0.1027 0.8356 4.9409 -1.2527

10.6615 1.3049 0.0135 0.8356 4.9969 -1.5650

10.9838 1.3049 0.0135 0.8310 4.9969 -1.5650

scores =

1.0e+003 \*

3.9881

3.9883

3.9886

3.9884

3.9884

3.9953

3.9884

3.9885

3.9891

3.9884

3.9885

3.9885

3.9884

3.9887

4.0199

3.9909

3.9890

3.9885

3.9885

3.9892

3.9884

3.9884

3.9883

3.9883

3.9884

3.9883

3.9894

3.9884

4.1292

3.9884

4.0092

3.9884

3.9884

3.9883

3.9881

4.0670

3.9885

3.9884

3.9884

3.9884

4.0126

3.9885

3.9889

3.9884

3.9881

3.9884

3.9884

3.9883

3.9958

3.9941

3.9883

3.9883

3.9884

3.9884

3.9884

3.9884

3.9892

3.9886

3.9884

3.9884

3.9884

3.9916

3.9886

3.9884

3.9885

4.0007

3.9953

3.9883

3.9885

3.9884

3.9883

3.9884

3.9973

3.9925

3.9881

3.9987

3.9883

3.9884

3.9884

3.9881

3.9885

3.9884

3.9884

3.9885

3.9889

3.9885

3.9881

3.9909

3.9915

3.9961

3.9884

3.9884

3.9884

3.9884

3.9884

3.9894

4.0165

3.9891

3.9891

3.9884

Sending a stop signal to all the labs ... stopped.

**Caculation finished and the elapsedTime= 76.8183hours**

**x =[155.9396,1.2986,0.0000,1.1087,0.4152,-1.4416]; % fval =19.6982;**

**x =[1.5593956e+2,1.2985792,4.2205976e-5,1.1087494,4.1524983e-1, -1.4416383];**

**P\_asterisk =19.4938; L =1.0000; delta =-4.4396e-005; AR =3.7643; Re =161.5046;**

**penaltyfun1 =0.0888; penaltyfun2 =0.1156; penaltyfun5 =0; obj\_function =19.6982;**

**由如下初始值代入计算而得：% 继续遗传1000代+2400代局部搜索**

**x\_start =[5.8381,0.001,1.171,0.4201,0.47,-0.4892]; %六个变量的翅膀运动学参数作为初始值**