

Map marking information for Ludwigshafen-Dannstadt, Rheinland-Pfalz, Germany

Courtesy of Bernd Schwehm

Latitude range: 47 47.6 to 51 56.7
Longitude range: 6 14.0 to 12 29.1

File created Wednesday, 08 May 2024 at 16:00 GMT

UNOFFICIAL, USE AT YOUR OWN RISK

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User assumes all risk of use.

| | Way Point | Latitude | | | Longitude | | | ID | Distance | Bearing | Description |
|-----|------------|----------|------|---|-----------|------|---|-------------|----------|---------|-------------|
| 436 | 180km 183o | 47 | 47,6 | N | 8 | 14,6 | E | 436_180_183 | 180 | 183 | |
| 454 | 200km 153o | 47 | 48,5 | N | 9 | 34,9 | E | 454_200_153 | 200 | 153 | |
| 437 | 180km 189o | 47 | 48,6 | N | 7 | 59,5 | E | 437_180_189 | 180 | 188 | |
| 435 | 180km 159o | 47 | 54,1 | N | 9 | 13,8 | E | 435_180_159 | 180 | 159 | |
| 434 | 180km 153o | 47 | 58,2 | N | 9 | 27,7 | E | 434_180_153 | 180 | 153 | |
| 410 | 160km 180o | 47 | 58,4 | N | 8 | 22,0 | E | 410_160_180 | 160 | 180 | |
| 411 | 160km 188o | 47 | 59,1 | N | 8 | 4,1 | E | 411_160_188 | 160 | 187 | |
| 409 | 160km 172o | 47 | 59,3 | N | 8 | 39,9 | E | 409_160_172 | 160 | 172 | |
| 412 | 160km 196o | 48 | 1,4 | N | 7 | 46,5 | E | 412_160_196 | 160 | 195 | |
| 408 | 160km 164o | 48 | 1,8 | N | 8 | 57,5 | E | 408_160_164 | 160 | 164 | |
| 433 | 180km 147o | 48 | 3,2 | N | 9 | 40,9 | E | 433_180_147 | 180 | 147 | |
| 407 | 160km 156o | 48 | 5,9 | N | 9 | 14,3 | E | 407_160_156 | 160 | 156 | |
| 432 | 180km 141o | 48 | 9,1 | N | 9 | 53,2 | E | 432_180_141 | 180 | 141 | |
| 384 | 140km 184o | 48 | 9,3 | N | 8 | 14,0 | E | 384_140_184 | 140 | 184 | |
| 469 | 220km 129o | 48 | 9,3 | N | 10 | 39,8 | E | 469_220_129 | 220 | 129 | |
| 383 | 140km 176o | 48 | 9,4 | N | 8 | 29,8 | E | 383_140_176 | 140 | 176 | |
| 385 | 140km 192o | 48 | 10,6 | N | 7 | 58,4 | E | 385_140_192 | 140 | 191 | |
| 406 | 160km 148o | 48 | 11,5 | N | 9 | 30,3 | E | 406_160_148 | 160 | 148 | |
| 382 | 140km 160o | 48 | 13,8 | N | 9 | 0,5 | E | 382_140_160 | 140 | 160 | |
| 353 | 130km 180o | 48 | 14,5 | N | 8 | 21,8 | E | 353_130_180 | 130 | 180 | |

| | Way Point | Latitude | | | Longitude | | | ID | Distance | Bearing | Description |
|-----|------------|----------|------|---|-----------|------|---|-------------|----------|---------|-------------|
| 354 | 130km 188o | 48 | 15,1 | N | 8 | 7,2 | E | 354_130_188 | 130 | 187 | |
| 352 | 130km 172o | 48 | 15,3 | N | 8 | 36,4 | E | 352_130_172 | 130 | 172 | |
| 431 | 180km 135o | 48 | 15,8 | N | 10 | 4,7 | E | 431_180_135 | 180 | 135 | |
| 453 | 200km 129o | 48 | 16,3 | N | 10 | 27,4 | E | 453_200_129 | 200 | 129 | |
| 351 | 130km 164o | 48 | 17,4 | N | 8 | 50,8 | E | 351_130_164 | 130 | 164 | |
| 381 | 140km 152o | 48 | 18,1 | N | 9 | 14,9 | E | 381_140_152 | 140 | 152 | |
| 405 | 160km 140o | 48 | 18,5 | N | 9 | 45,0 | E | 405_160_140 | 160 | 140 | |
| 318 | 120km 184o | 48 | 20,1 | N | 8 | 14,9 | E | 318_120_184 | 120 | 184 | |
| 317 | 120km 176o | 48 | 20,1 | N | 8 | 28,5 | E | 317_120_176 | 120 | 176 | |
| 350 | 130km 156o | 48 | 20,7 | N | 9 | 4,5 | E | 350_130_156 | 130 | 156 | |
| 319 | 120km 192o | 48 | 21,2 | N | 8 | 1,5 | E | 319_120_192 | 120 | 191 | |
| 316 | 120km 168o | 48 | 21,4 | N | 8 | 41,9 | E | 316_120_168 | 120 | 168 | |
| 430 | 180km 129o | 48 | 23,3 | N | 10 | 15,1 | E | 430_180_129 | 180 | 129 | |
| 380 | 140km 144o | 48 | 23,6 | N | 9 | 28,4 | E | 380_140_144 | 140 | 144 | |
| 315 | 120km 160o | 48 | 23,9 | N | 8 | 55,0 | E | 315_120_160 | 120 | 160 | |
| 349 | 130km 148o | 48 | 25,3 | N | 9 | 17,5 | E | 349_130_148 | 130 | 148 | |
| 452 | 200km 123o | 48 | 25,3 | N | 10 | 37,7 | E | 452_200_123 | 200 | 123 | |
| 290 | 110km 186o | 48 | 25,6 | N | 8 | 12,3 | E | 290_110_186 | 110 | 185 | |
| 289 | 110km 174o | 48 | 25,7 | N | 8 | 31,0 | E | 289_110_174 | 110 | 174 | |
| 404 | 160km 132o | 48 | 26,8 | N | 9 | 58,1 | E | 404_160_132 | 160 | 132 | |
| 348 | 130km 144o | 48 | 28,0 | N | 9 | 23,6 | E | 348_130_144 | 130 | 144 | |
| 288 | 110km 162o | 48 | 28,3 | N | 8 | 49,2 | E | 288_110_162 | 110 | 162 | |
| 379 | 140km 136o | 48 | 30,3 | N | 9 | 40,6 | E | 379_140_136 | 140 | 136 | |
| 268 | 100km 180o | 48 | 30,7 | N | 8 | 21,6 | E | 268_100_180 | 100 | 180 | |
| 269 | 100km 186o | 48 | 31,0 | N | 8 | 13,1 | E | 269_100_186 | 100 | 185 | |
| 267 | 100km 174o | 48 | 31,1 | N | 8 | 30,1 | E | 267_100_174 | 100 | 174 | |
| 429 | 180km 123o | 48 | 31,4 | N | 10 | 24,2 | E | 429_180_123 | 180 | 123 | |
| 270 | 100km 192o | 48 | 31,8 | N | 8 | 4,7 | E | 270_100_192 | 100 | 191 | |
| 266 | 100km 168o | 48 | 32,0 | N | 8 | 38,5 | E | 266_100_168 | 100 | 168 | |
| 265 | 100km 162o | 48 | 33,5 | N | 8 | 46,7 | E | 265_100_162 | 100 | 162 | |
| 271 | 100km 204o | 48 | 35,1 | N | 7 | 48,5 | E | 271_100_204 | 100 | 203 | |
| 251 | 090km 180o | 48 | 36,1 | N | 8 | 21,5 | E | 251_090_180 | 90 | 180 | |
| 403 | 160km 124o | 48 | 36,2 | N | 10 | 9,5 | E | 403_160_124 | 160 | 124 | |
| 252 | 090km 186o | 48 | 36,4 | N | 8 | 13,9 | E | 252_090_186 | 90 | 185 | |
| 250 | 090km 174o | 48 | 36,4 | N | 8 | 29,2 | E | 250_090_174 | 90 | 174 | |
| 249 | 090km 168o | 48 | 37,2 | N | 8 | 36,8 | E | 249_090_168 | 90 | 168 | |
| 378 | 140km 128o | 48 | 38,1 | N | 9 | 51,4 | E | 378_140_128 | 140 | 128 | |
| 248 | 090km 162o | 48 | 38,6 | N | 8 | 44,1 | E | 248_090_162 | 90 | 162 | |
| 451 | 200km 114o | 48 | 40,0 | N | 10 | 50,4 | E | 451_200_114 | 200 | 114 | |
| 428 | 180km 117o | 48 | 40,1 | N | 10 | 32,2 | E | 428_180_117 | 180 | 117 | |
| 230 | 080km 184o | 48 | 41,6 | N | 8 | 16,9 | E | 230_080_184 | 80 | 183 | |

| | Way Point | Latitude | | | Longitude | | | ID | Distance | Bearing | Description |
|-----|------------|----------|------|---|-----------|------|---|-------------|----------|---------|-------------|
| 229 | 080km 176o | 48 | 41,6 | N | 8 | 26,0 | E | 229_080_176 | 80 | 176 | |
| 231 | 080km 192o | 48 | 42,4 | N | 8 | 7,9 | E | 231_080_192 | 80 | 191 | |
| 228 | 080km 168o | 48 | 42,5 | N | 8 | 35,0 | E | 228_080_168 | 80 | 168 | |
| 227 | 080km 160o | 48 | 44,2 | N | 8 | 43,8 | E | 227_080_160 | 80 | 160 | |
| 347 | 130km 124o | 48 | 45,4 | N | 9 | 49,4 | E | 347_130_124 | 130 | 124 | |
| 402 | 160km 116o | 48 | 46,5 | N | 10 | 18,8 | E | 402_160_116 | 160 | 116 | |
| 377 | 140km 120o | 48 | 46,8 | N | 10 | 0,4 | E | 377_140_120 | 140 | 120 | |
| 209 | 070km 184o | 48 | 47,0 | N | 8 | 17,4 | E | 209_070_184 | 70 | 183 | |
| 208 | 070km 176o | 48 | 47,0 | N | 8 | 25,4 | E | 208_070_176 | 70 | 176 | |
| 207 | 070km 168o | 48 | 47,8 | N | 8 | 33,3 | E | 207_070_168 | 70 | 168 | |
| 427 | 180km 111o | 48 | 49,3 | N | 10 | 38,7 | E | 427_180_111 | 180 | 111 | |
| 206 | 070km 160o | 48 | 49,3 | N | 8 | 40,9 | E | 206_070_160 | 70 | 160 | |
| 346 | 130km 120o | 48 | 49,5 | N | 9 | 53,4 | E | 346_130_120 | 130 | 120 | |
| 205 | 070km 152o | 48 | 51,5 | N | 8 | 48,2 | E | 205_070_152 | 70 | 152 | |
| 314 | 120km 120o | 48 | 52,3 | N | 9 | 46,4 | E | 314_120_120 | 120 | 120 | |
| 468 | 220km 105o | 48 | 52,8 | N | 11 | 15,2 | E | 468_220_105 | 219 | 105 | |
| 188 | 060km 168o | 48 | 53,1 | N | 8 | 31,5 | E | 188_060_168 | 60 | 168 | |
| 345 | 130km 116o | 48 | 53,8 | N | 9 | 57,0 | E | 345_130_116 | 130 | 116 | |
| 204 | 070km 144o | 48 | 54,2 | N | 8 | 55,0 | E | 204_070_144 | 70 | 144 | |
| 187 | 060km 160o | 48 | 54,4 | N | 8 | 38,1 | E | 187_060_160 | 60 | 160 | |
| 287 | 110km 120o | 48 | 55,0 | N | 9 | 39,3 | E | 287_110_120 | 110 | 120 | |
| 170 | 055km 168o | 48 | 55,7 | N | 8 | 30,6 | E | 170_055_168 | 55 | 168 | |
| 450 | 200km 105o | 48 | 55,8 | N | 10 | 59,5 | E | 450_200_105 | 200 | 105 | |
| 376 | 140km 112o | 48 | 56,2 | N | 10 | 7,6 | E | 376_140_112 | 140 | 112 | |
| 186 | 060km 152o | 48 | 56,2 | N | 8 | 44,4 | E | 186_060_152 | 60 | 152 | |
| 313 | 120km 116o | 48 | 56,2 | N | 9 | 49,6 | E | 313_120_116 | 120 | 116 | |
| 401 | 160km 108o | 48 | 57,6 | N | 10 | 26,0 | E | 401_160_108 | 160 | 108 | |
| 203 | 070km 136o | 48 | 57,6 | N | 9 | 1,1 | E | 203_070_136 | 70 | 136 | |
| 169 | 055km 156o | 48 | 57,7 | N | 8 | 39,6 | E | 169_055_156 | 55 | 156 | |
| 226 | 080km 128o | 48 | 58,2 | N | 9 | 12,9 | E | 226_080_128 | 80 | 128 | |
| 344 | 130km 112o | 48 | 58,3 | N | 10 | 0,1 | E | 344_130_112 | 130 | 112 | |
| 488 | 260km 100o | 48 | 58,3 | N | 11 | 51,2 | E | 488_260_100 | 259 | 100 | |
| 185 | 060km 144o | 48 | 58,6 | N | 8 | 50,1 | E | 185_060_144 | 60 | 144 | |
| 426 | 180km 105o | 48 | 58,9 | N | 10 | 43,8 | E | 426_180_105 | 180 | 105 | |
| 312 | 120km 112o | 49 | 0,3 | N | 9 | 52,5 | E | 312_120_112 | 120 | 112 | |
| 247 | 090km 120o | 49 | 0,5 | N | 9 | 25,2 | E | 247_090_120 | 90 | 120 | |
| 286 | 110km 114o | 49 | 0,5 | N | 9 | 43,7 | E | 286_110_114 | 110 | 114 | |
| 168 | 055km 144o | 49 | 0,8 | N | 8 | 47,7 | E | 168_055_144 | 55 | 144 | |
| 140 | 045km 168o | 49 | 1,0 | N | 8 | 28,9 | E | 140_045_168 | 45 | 168 | |
| 155 | 050km 150o | 49 | 1,4 | N | 8 | 41,7 | E | 155_050_150 | 50 | 150 | |
| 184 | 060km 136o | 49 | 1,5 | N | 8 | 55,4 | E | 184_060_136 | 60 | 136 | |

| | Way Point | Latitude | | | Longitude | | | ID | Distance | Bearing | Description |
|-----|------------|----------|------|---|-----------|------|---|-------------|----------|---------|-------------|
| 141 | 045km 198o | 49 | 1,5 | N | 8 | 9,8 | E | 141_045_198 | 45 | 197 | |
| 202 | 070km 128o | 49 | 1,6 | N | 9 | 6,5 | E | 202_070_128 | 70 | 128 | |
| 139 | 045km 156o | 49 | 2,6 | N | 8 | 36,2 | E | 139_045_156 | 45 | 156 | |
| 264 | 100km 114o | 49 | 2,8 | N | 9 | 36,2 | E | 264_100_114 | 100 | 114 | |
| 225 | 080km 120o | 49 | 3,2 | N | 9 | 18,1 | E | 225_080_120 | 80 | 120 | |
| 125 | 040km 192o | 49 | 3,5 | N | 8 | 14,3 | E | 125_040_192 | 40 | 191 | |
| 189 | 060km 232o | 49 | 4,4 | N | 7 | 42,3 | E | 189_060_232 | 60 | 231 | |
| 124 | 040km 160o | 49 | 4,5 | N | 8 | 32,4 | E | 124_040_160 | 40 | 160 | |
| 311 | 120km 108o | 49 | 4,6 | N | 9 | 54,9 | E | 311_120_108 | 120 | 108 | |
| 154 | 050km 138o | 49 | 4,8 | N | 8 | 48,6 | E | 154_050_138 | 50 | 138 | |
| 497 | 300km 096o | 49 | 4,8 | N | 12 | 26,3 | E | 497_300_096 | 299 | 96 | |
| 467 | 220km 099o | 49 | 4,8 | N | 11 | 19,7 | E | 467_220_099 | 219 | 99 | |
| 183 | 060km 128o | 49 | 4,9 | N | 9 | 0,0 | E | 183_060_128 | 60 | 128 | |
| 167 | 055km 132o | 49 | 5,0 | N | 8 | 54,8 | E | 167_055_132 | 55 | 132 | |
| 246 | 090km 114o | 49 | 5,0 | N | 9 | 28,7 | E | 246_090_114 | 90 | 114 | |
| 138 | 045km 144o | 49 | 5,1 | N | 8 | 42,9 | E | 138_045_144 | 45 | 144 | |
| 107 | 035km 184o | 49 | 5,8 | N | 8 | 19,1 | E | 107_035_184 | 35 | 184 | |
| 201 | 070km 120o | 49 | 5,9 | N | 9 | 11,0 | E | 201_070_120 | 70 | 120 | |
| 375 | 140km 104o | 49 | 6,2 | N | 10 | 12,8 | E | 375_140_104 | 140 | 104 | |
| 156 | 050km 228o | 49 | 6,4 | N | 7 | 50,6 | E | 156_050_228 | 50 | 227 | |
| 108 | 035km 200o | 49 | 6,9 | N | 8 | 11,3 | E | 108_035_200 | 35 | 199 | |
| 171 | 055km 234o | 49 | 7,0 | N | 7 | 44,5 | E | 171_055_234 | 55 | 233 | |
| 343 | 130km 104o | 49 | 7,5 | N | 10 | 4,9 | E | 343_130_104 | 130 | 104 | |
| 487 | 260km 096o | 49 | 8,0 | N | 11 | 53,8 | E | 487_260_096 | 259 | 96 | |
| 263 | 100km 108o | 49 | 8,0 | N | 9 | 39,4 | E | 263_100_108 | 100 | 108 | |
| 106 | 035km 152o | 49 | 8,1 | N | 8 | 34,6 | E | 106_035_152 | 35 | 152 | |
| 190 | 060km 240o | 49 | 8,1 | N | 7 | 38,4 | E | 190_060_240 | 60 | 239 | |
| 137 | 045km 132o | 49 | 8,6 | N | 8 | 48,6 | E | 137_045_132 | 45 | 132 | |
| 224 | 080km 112o | 49 | 8,6 | N | 9 | 22,1 | E | 224_080_112 | 80 | 112 | |
| 182 | 060km 120o | 49 | 8,6 | N | 9 | 3,9 | E | 182_060_120 | 60 | 120 | |
| 89 | 030km 190o | 49 | 8,7 | N | 8 | 16,8 | E | 089_030_190 | 30 | 189 | |
| 88 | 030km 170o | 49 | 8,8 | N | 8 | 25,4 | E | 088_030_170 | 30 | 170 | |
| 310 | 120km 104o | 49 | 8,9 | N | 9 | 56,9 | E | 310_120_104 | 120 | 104 | |
| 153 | 050km 126o | 49 | 8,9 | N | 8 | 54,4 | E | 153_050_126 | 50 | 126 | |
| 400 | 160km 100o | 49 | 9,2 | N | 10 | 30,8 | E | 400_160_100 | 160 | 100 | |
| 109 | 035km 216o | 49 | 9,3 | N | 8 | 4,2 | E | 109_035_216 | 35 | 215 | |
| 87 | 030km 160o | 49 | 9,5 | N | 8 | 29,6 | E | 087_030_160 | 30 | 160 | |
| 245 | 090km 108o | 49 | 9,7 | N | 9 | 31,5 | E | 245_090_108 | 90 | 108 | |
| 166 | 055km 120o | 49 | 10,0 | N | 9 | 0,3 | E | 166_055_120 | 55 | 120 | |
| 142 | 045km 234o | 49 | 10,2 | N | 7 | 51,1 | E | 142_045_234 | 45 | 233 | |
| 90 | 030km 210o | 49 | 10,6 | N | 8 | 8,7 | E | 090_030_210 | 30 | 209 | |

| | Way Point | Latitude | | | Longitude | | | ID | Distance | Bearing | Description |
|-----|------------|----------|------|---|-----------|------|---|-------------|----------|---------|-------------|
| 200 | 070km 112o | 49 | 10,7 | N | 9 | 14,5 | E | 200_070_112 | 70 | 112 | |
| 86 | 030km 150o | 49 | 10,7 | N | 8 | 33,4 | E | 086_030_150 | 30 | 150 | |
| 157 | 050km 240o | 49 | 10,9 | N | 7 | 45,4 | E | 157_050_240 | 50 | 239 | |
| 105 | 035km 136o | 49 | 11,2 | N | 8 | 41,1 | E | 105_035_136 | 35 | 136 | |
| 126 | 040km 232o | 49 | 11,2 | N | 7 | 55,1 | E | 126_040_232 | 40 | 231 | |
| 72 | 025km 190o | 49 | 11,4 | N | 8 | 17,5 | E | 072_025_190 | 25 | 189 | |
| 71 | 025km 170o | 49 | 11,4 | N | 8 | 24,6 | E | 071_025_170 | 25 | 170 | |
| 123 | 040km 128o | 49 | 11,5 | N | 8 | 47,0 | E | 123_040_128 | 40 | 128 | |
| 191 | 060km 248o | 49 | 12,2 | N | 7 | 35,2 | E | 191_060_248 | 60 | 247 | |
| 285 | 110km 102o | 49 | 12,3 | N | 9 | 49,7 | E | 285_110_102 | 110 | 102 | |
| 85 | 030km 140o | 49 | 12,4 | N | 8 | 37,0 | E | 085_030_140 | 30 | 140 | |
| 449 | 200km 096o | 49 | 12,4 | N | 11 | 4,9 | E | 449_200_096 | 199 | 96 | |
| 136 | 045km 120o | 49 | 12,7 | N | 8 | 53,2 | E | 136_045_120 | 45 | 120 | |
| 181 | 060km 112o | 49 | 12,7 | N | 9 | 6,9 | E | 181_060_112 | 60 | 112 | |
| 73 | 025km 210o | 49 | 12,9 | N | 8 | 10,8 | E | 073_025_210 | 25 | 209 | |
| 70 | 025km 150o | 49 | 13,1 | N | 8 | 31,4 | E | 070_025_150 | 25 | 150 | |
| 104 | 035km 128o | 49 | 13,2 | N | 8 | 43,8 | E | 104_035_128 | 35 | 128 | |
| 309 | 120km 100o | 49 | 13,3 | N | 9 | 58,4 | E | 309_120_100 | 120 | 100 | |
| 262 | 100km 102o | 49 | 13,5 | N | 9 | 41,6 | E | 262_100_102 | 100 | 102 | |
| 425 | 180km 096o | 49 | 13,8 | N | 10 | 48,6 | E | 425_180_096 | 180 | 96 | |
| 152 | 050km 114o | 49 | 13,8 | N | 8 | 58,7 | E | 152_050_114 | 50 | 114 | |
| 51 | 020km 180o | 49 | 13,9 | N | 8 | 21,1 | E | 051_020_180 | 20 | 179 | |
| 91 | 030km 230o | 49 | 14,2 | N | 8 | 2,1 | E | 091_030_230 | 30 | 229 | |
| 52 | 020km 195o | 49 | 14,2 | N | 8 | 16,8 | E | 052_020_195 | 20 | 194 | |
| 50 | 020km 165o | 49 | 14,3 | N | 8 | 25,3 | E | 050_020_165 | 20 | 165 | |
| 223 | 080km 104o | 49 | 14,3 | N | 9 | 25,0 | E | 223_080_104 | 80 | 104 | |
| 84 | 030km 130o | 49 | 14,4 | N | 8 | 40,0 | E | 084_030_130 | 30 | 130 | |
| 143 | 045km 246o | 49 | 14,6 | N | 7 | 47,1 | E | 143_045_246 | 45 | 245 | |
| 244 | 090km 102o | 49 | 14,6 | N | 9 | 33,6 | E | 244_090_102 | 90 | 102 | |
| 210 | 070km 256o | 49 | 15,0 | N | 7 | 25,0 | E | 210_070_256 | 70 | 255 | |
| 110 | 035km 240o | 49 | 15,1 | N | 7 | 56,0 | E | 110_035_240 | 35 | 239 | |
| 53 | 020km 210o | 49 | 15,3 | N | 8 | 12,8 | E | 053_020_210 | 20 | 209 | |
| 103 | 035km 120o | 49 | 15,3 | N | 8 | 46,0 | E | 103_035_120 | 35 | 120 | |
| 49 | 020km 150o | 49 | 15,4 | N | 8 | 29,3 | E | 049_020_150 | 20 | 150 | |
| 165 | 055km 108o | 49 | 15,6 | N | 9 | 4,2 | E | 165_055_108 | 55 | 108 | |
| 199 | 070km 104o | 49 | 15,7 | N | 9 | 17,0 | E | 199_070_104 | 70 | 104 | |
| 74 | 025km 230o | 49 | 15,9 | N | 8 | 5,2 | E | 074_025_230 | 25 | 229 | |
| 158 | 050km 252o | 49 | 16,0 | N | 7 | 41,8 | E | 158_050_252 | 50 | 251 | |
| 69 | 025km 130o | 49 | 16,1 | N | 8 | 36,8 | E | 069_025_130 | 25 | 130 | |
| 127 | 040km 248o | 49 | 16,4 | N | 7 | 50,4 | E | 127_040_248 | 40 | 247 | |
| 192 | 060km 256o | 49 | 16,4 | N | 7 | 33,0 | E | 192_060_256 | 60 | 255 | |

| | Way Point | Latitude | | | Longitude | | | ID | Distance | Bearing | Description |
|-----|------------|----------|------|---|-----------|------|---|-------------|----------|---------|-------------|
| 374 | 140km 096o | 49 | 16,5 | N | 10 | 15,8 | E | 374_140_096 | 140 | 96 | |
| 32 | 015km 180o | 49 | 16,6 | N | 8 | 21,0 | E | 032_015_180 | 15 | 180 | |
| 320 | 120km 264o | 49 | 16,7 | N | 6 | 42,5 | E | 320_120_264 | 120 | 263 | |
| 122 | 040km 112o | 49 | 16,7 | N | 8 | 51,6 | E | 122_040_112 | 40 | 112 | |
| 180 | 060km 104o | 49 | 17,0 | N | 9 | 9,0 | E | 180_060_104 | 60 | 104 | |
| 54 | 020km 225o | 49 | 17,0 | N | 8 | 9,3 | E | 054_020_225 | 20 | 224 | |
| 33 | 015km 200o | 49 | 17,1 | N | 8 | 16,8 | E | 033_015_200 | 15 | 199 | |
| 31 | 015km 160o | 49 | 17,1 | N | 8 | 25,2 | E | 031_015_160 | 15 | 160 | |
| 48 | 020km 135o | 49 | 17,1 | N | 8 | 32,7 | E | 048_020_135 | 20 | 135 | |
| 342 | 130km 096o | 49 | 17,1 | N | 10 | 7,7 | E | 342_130_096 | 130 | 96 | |
| 135 | 045km 108o | 49 | 17,3 | N | 8 | 56,3 | E | 135_045_108 | 45 | 108 | |
| 272 | 100km 264o | 49 | 18,1 | N | 6 | 58,9 | E | 272_100_264 | 100 | 263 | |
| 34 | 015km 220o | 49 | 18,4 | N | 8 | 13,0 | E | 034_015_220 | 15 | 219 | |
| 92 | 030km 250o | 49 | 19,0 | N | 7 | 57,7 | E | 092_030_250 | 30 | 249 | |
| 261 | 100km 096o | 49 | 19,0 | N | 9 | 43,1 | E | 261_100_096 | 100 | 96 | |
| 55 | 020km 240o | 49 | 19,2 | N | 8 | 6,7 | E | 055_020_240 | 20 | 239 | |
| 151 | 050km 102o | 49 | 19,2 | N | 9 | 1,4 | E | 151_050_102 | 50 | 102 | |
| 83 | 030km 110o | 49 | 19,2 | N | 8 | 44,2 | E | 083_030_110 | 30 | 110 | |
| 21 | 010km 180o | 49 | 19,3 | N | 8 | 21,0 | E | 021_010_180 | 10 | 180 | |
| 144 | 045km 258o | 49 | 19,4 | N | 7 | 44,6 | E | 144_045_258 | 45 | 257 | |
| 47 | 020km 120o | 49 | 19,4 | N | 8 | 35,3 | E | 047_020_120 | 20 | 120 | |
| 232 | 080km 264o | 49 | 19,5 | N | 7 | 15,3 | E | 232_080_264 | 80 | 263 | |
| 22 | 010km 200o | 49 | 19,6 | N | 8 | 18,1 | E | 022_010_200 | 10,0 | 199 | |
| 20 | 010km 160o | 49 | 19,6 | N | 8 | 23,8 | E | 020_010_160 | 10,0 | 160 | |
| 111 | 035km 256o | 49 | 19,9 | N | 7 | 52,9 | E | 111_035_256 | 35 | 255 | |
| 75 | 025km 250o | 49 | 19,9 | N | 8 | 1,6 | E | 075_025_250 | 25 | 249 | |
| 68 | 025km 110o | 49 | 20,2 | N | 8 | 40,4 | E | 068_025_110 | 25 | 110 | |
| 211 | 070km 264o | 49 | 20,2 | N | 7 | 23,5 | E | 211_070_264 | 70 | 263 | |
| 102 | 035km 104o | 49 | 20,2 | N | 8 | 49,0 | E | 102_035_104 | 35 | 104 | |
| 222 | 080km 096o | 49 | 20,2 | N | 9 | 26,7 | E | 222_080_096 | 80 | 96 | |
| 23 | 010km 220o | 49 | 20,5 | N | 8 | 15,7 | E | 023_010_220 | 10,0 | 219 | |
| 35 | 015km 240o | 49 | 20,6 | N | 8 | 10,2 | E | 035_015_240 | 15 | 239 | |
| 193 | 060km 264o | 49 | 20,9 | N | 7 | 31,6 | E | 193_060_264 | 60 | 263 | |
| 321 | 120km 268o | 49 | 21,2 | N | 6 | 41,9 | E | 321_120_268 | 120 | 267 | |
| 179 | 060km 096o | 49 | 21,4 | N | 9 | 10,2 | E | 179_060_096 | 60 | 96 | |
| 159 | 050km 264o | 49 | 21,5 | N | 7 | 39,9 | E | 159_050_264 | 50 | 264 | |
| 56 | 020km 255o | 49 | 21,8 | N | 8 | 5,0 | E | 056_020_255 | 20 | 254 | |
| 46 | 020km 105o | 49 | 22,0 | N | 8 | 36,9 | E | 046_020_105 | 20 | 105 | |
| 14 | 005km 200o | 49 | 22,1 | N | 8 | 19,5 | E | 014_005_200 | 5,0 | 199 | |
| 13 | 005km 160o | 49 | 22,2 | N | 8 | 22,4 | E | 013_005_160 | 5,0 | 160 | |
| 128 | 040km 264o | 49 | 22,2 | N | 7 | 48,0 | E | 128_040_264 | 40 | 263 | |

| | Way Point | Latitude | | | Longitude | | | ID | Distance | Bearing | Description |
|-----|------------------------|----------|------|---|-----------|------|---|-------------|----------|---------|-------------|
| 308 | 120km 092o | 49 | 22,3 | N | 10 | 0,1 | E | 308_120_092 | 120 | 92 | |
| 121 | 040km 096o | 49 | 22,6 | N | 8 | 53,8 | E | 121_040_096 | 40 | 96 | |
| 24 | 010km 250o | 49 | 22,8 | N | 8 | 13,2 | E | 024_010_250 | 10,0 | 249 | |
| 5 | 003km 180o | 49 | 23,1 | N | 8 | 20,9 | E | 005_003_180 | 3,0 | 180 | |
| 36 | 015km 260o | 49 | 23,2 | N | 8 | 8,7 | E | 036_015_260 | 15 | 259 | |
| 6 | 003km 210o | 49 | 23,3 | N | 8 | 19,7 | E | 006_003_210 | 3,0 | 209 | |
| 4 | 003km 150o | 49 | 23,3 | N | 8 | 22,2 | E | 004_003_150 | 3,0 | 150 | |
| 15 | 005km 240o | 49 | 23,3 | N | 8 | 17,3 | E | 015_005_240 | 5,0 | 240 | |
| 30 | 015km 100o | 49 | 23,4 | N | 8 | 33,1 | E | 030_015_100 | 15 | 100 | |
| 12 | 005km 120o | 49 | 23,4 | N | 8 | 24,5 | E | 012_005_120 | 5,0 | 120 | |
| 291 | 110km 270o | 49 | 23,6 | N | 6 | 50,0 | E | 291_110_270 | 110 | 269 | |
| 19 | 010km 100o | 49 | 23,8 | N | 8 | 29,1 | E | 019_010_100 | 10,0 | 100 | |
| 253 | 090km 270o | 49 | 23,9 | N | 7 | 6,5 | E | 253_090_270 | 90 | 270 | |
| 7 | 003km 240o | 49 | 23,9 | N | 8 | 18,8 | E | 007_003_240 | 3,0 | 240 | |
| 3 | 003km 120o | 49 | 23,9 | N | 8 | 23,1 | E | 003_003_120 | 3,0 | 120 | |
| 93 | 030km 270o | 49 | 24,5 | N | 7 | 56,1 | E | 093_030_270 | 30 | 270 | |
| 57 | 020km 270o | 49 | 24,6 | N | 8 | 4,4 | E | 057_020_270 | 20 | 269 | |
| 25 | 010km 270o | 49 | 24,6 | N | 8 | 12,6 | E | 025_010_270 | 10,0 | 270 | |
| 8 | 003km 270o | 49 | 24,7 | N | 8 | 18,4 | E | 008_003_270 | 3,0 | 269 | |
| 0 | Ludwigshafen-Dannstadt | 49 | 24,7 | N | 8 | 20,9 | E | 000_LUDW | | | |
| 2 | 003km 090o | 49 | 24,7 | N | 8 | 23,4 | E | 002_003_090 | 3,0 | 89 | |
| 243 | 090km 090o | 49 | 24,7 | N | 9 | 35,4 | E | 243_090_090 | 90 | 90 | |
| 45 | 020km 090o | 49 | 24,8 | N | 8 | 37,5 | E | 045_020_090 | 20 | 90 | |
| 67 | 025km 090o | 49 | 24,8 | N | 8 | 41,6 | E | 067_025_090 | 25 | 90 | |
| 82 | 030km 090o | 49 | 24,8 | N | 8 | 45,7 | E | 082_030_090 | 30 | 89 | |
| 150 | 050km 090o | 49 | 24,8 | N | 9 | 2,2 | E | 150_050_090 | 50 | 89 | |
| 112 | 035km 272o | 49 | 25,1 | N | 7 | 52,0 | E | 112_035_272 | 35 | 272 | |
| 16 | 005km 280o | 49 | 25,1 | N | 8 | 16,8 | E | 016_005_280 | 5,0 | 280 | |
| 212 | 070km 272o | 49 | 25,4 | N | 7 | 23,0 | E | 212_070_272 | 70 | 272 | |
| 101 | 035km 088o | 49 | 25,5 | N | 8 | 49,8 | E | 101_035_088 | 35 | 87 | |
| 9 | 003km 300o | 49 | 25,5 | N | 8 | 18,7 | E | 009_003_300 | 3,0 | 300 | |
| 233 | 080km 272o | 49 | 25,5 | N | 7 | 14,7 | E | 233_080_272 | 80 | 272 | |
| 355 | 130km 272o | 49 | 25,7 | N | 6 | 33,4 | E | 355_130_272 | 130 | 272 | |
| 178 | 060km 088o | 49 | 25,9 | N | 9 | 10,5 | E | 178_060_088 | 60 | 87 | |
| 37 | 015km 280o | 49 | 26,0 | N | 8 | 8,7 | E | 037_015_280 | 15 | 280 | |
| 10 | 003km 330o | 49 | 26,1 | N | 8 | 19,6 | E | 010_003_330 | 3,0 | 330 | |
| 1 | 003km 000o | 49 | 26,3 | N | 8 | 20,9 | E | 001_003_000 | 3,0 | 360 | |
| 26 | 010km 290o | 49 | 26,5 | N | 8 | 13,1 | E | 026_010_290 | 10,0 | 290 | |
| 17 | 005km 320o | 49 | 26,8 | N | 8 | 18,2 | E | 017_005_320 | 5,0 | 320 | |
| 341 | 130km 088o | 49 | 26,9 | N | 10 | 8,4 | E | 341_130_088 | 130 | 88 | |
| 373 | 140km 088o | 49 | 27,0 | N | 10 | 16,7 | E | 373_140_088 | 140 | 88 | |

| | Way Point | Latitude | | | Longitude | | | ID | Distance | Bearing | Description |
|-----|------------|----------|------|---|-----------|------|---|-------------|----------|---------|-------------|
| 496 | 300km 088o | 49 | 27,3 | N | 12 | 29,1 | E | 496_300_088 | 299 | 88 | |
| 134 | 045km 084o | 49 | 27,4 | N | 8 | 57,9 | E | 134_045_084 | 45 | 83 | |
| 58 | 020km 285o | 49 | 27,4 | N | 8 | 4,9 | E | 058_020_285 | 20 | 285 | |
| 11 | 005km 000o | 49 | 27,4 | N | 8 | 20,9 | E | 011_005_000 | 5,0 | 360 | |
| 113 | 035km 280o | 49 | 27,8 | N | 7 | 52,3 | E | 113_035_280 | 35 | 280 | |
| 164 | 055km 084o | 49 | 27,9 | N | 9 | 6,2 | E | 164_055_084 | 55 | 83 | |
| 120 | 040km 080o | 49 | 28,6 | N | 8 | 53,5 | E | 120_040_080 | 40 | 79 | |
| 38 | 015km 300o | 49 | 28,7 | N | 8 | 10,1 | E | 038_015_300 | 15 | 300 | |
| 27 | 010km 320o | 49 | 28,8 | N | 8 | 15,5 | E | 027_010_320 | 10,0 | 320 | |
| 76 | 025km 290o | 49 | 29,2 | N | 8 | 1,4 | E | 076_025_290 | 25 | 290 | |
| 273 | 100km 276o | 49 | 29,4 | N | 6 | 58,4 | E | 273_100_276 | 100 | 276 | |
| 66 | 025km 070o | 49 | 29,4 | N | 8 | 40,3 | E | 066_025_070 | 25 | 69 | |
| 28 | 010km 340o | 49 | 29,8 | N | 8 | 18,0 | E | 028_010_340 | 10,0 | 340 | |
| 242 | 090km 084o | 49 | 29,8 | N | 9 | 35,0 | E | 242_090_084 | 90 | 83 | |
| 59 | 020km 300o | 49 | 30,0 | N | 8 | 6,5 | E | 059_020_300 | 20 | 300 | |
| 18 | 010km 000o | 49 | 30,1 | N | 8 | 20,8 | E | 018_010_000 | 10 | 360 | |
| 322 | 120km 276o | 49 | 30,2 | N | 6 | 41,9 | E | 322_120_276 | 120 | 276 | |
| 114 | 035km 288o | 49 | 30,3 | N | 7 | 53,2 | E | 114_035_288 | 35 | 288 | |
| 81 | 030km 070o | 49 | 30,3 | N | 8 | 44,2 | E | 081_030_070 | 30 | 69 | |
| 149 | 050km 078o | 49 | 30,4 | N | 9 | 1,4 | E | 149_050_078 | 50 | 77 | |
| 177 | 060km 080o | 49 | 30,4 | N | 9 | 9,8 | E | 177_060_080 | 60 | 79 | |
| 100 | 035km 072o | 49 | 30,6 | N | 8 | 48,4 | E | 100_035_072 | 35 | 71 | |
| 213 | 070km 280o | 49 | 30,7 | N | 7 | 23,7 | E | 213_070_280 | 70 | 280 | |
| 284 | 110km 084o | 49 | 30,8 | N | 9 | 51,5 | E | 284_110_084 | 110 | 83 | |
| 39 | 015km 320o | 49 | 30,9 | N | 8 | 12,8 | E | 039_015_320 | 15 | 320 | |
| 307 | 120km 084o | 49 | 31,3 | N | 9 | 59,8 | E | 307_120_084 | 120 | 83 | |
| 198 | 070km 080o | 49 | 31,4 | N | 9 | 18,0 | E | 198_070_080 | 70 | 79 | |
| 234 | 080km 280o | 49 | 31,5 | N | 7 | 15,5 | E | 234_080_280 | 80 | 280 | |
| 145 | 045km 288o | 49 | 31,9 | N | 7 | 45,3 | E | 145_045_288 | 45 | 288 | |
| 479 | 240km 086o | 49 | 32,0 | N | 11 | 39,3 | E | 479_240_086 | 239 | 85 | |
| 194 | 060km 284o | 49 | 32,1 | N | 7 | 32,5 | E | 194_060_284 | 60 | 284 | |
| 60 | 020km 315o | 49 | 32,2 | N | 8 | 9,1 | E | 060_020_315 | 20 | 315 | |
| 221 | 080km 080o | 49 | 32,2 | N | 9 | 26,1 | E | 221_080_080 | 80 | 79 | |
| 40 | 015km 340o | 49 | 32,3 | N | 8 | 16,6 | E | 040_015_340 | 15 | 340 | |
| 133 | 045km 072o | 49 | 32,3 | N | 8 | 56,3 | E | 133_045_072 | 45 | 71 | |
| 29 | 015km 020o | 49 | 32,3 | N | 8 | 25,1 | E | 029_015_020 | 15 | 19 | |
| 486 | 260km 086o | 49 | 32,4 | N | 11 | 55,9 | E | 486_260_086 | 259 | 85 | |
| 44 | 020km 045o | 49 | 32,4 | N | 8 | 32,5 | E | 044_020_045 | 20 | 44 | |
| 99 | 035km 064o | 49 | 33,1 | N | 8 | 46,9 | E | 099_035_064 | 35 | 63 | |
| 77 | 025km 310o | 49 | 33,3 | N | 8 | 4,9 | E | 077_025_310 | 25 | 310 | |
| 65 | 025km 050o | 49 | 33,5 | N | 8 | 36,7 | E | 065_025_050 | 25 | 49 | |

| | Way Point | Latitude | | | Longitude | | | ID | Distance | Bearing | Description |
|-----|------------|----------|------|---|-----------|------|---|-------------|----------|---------|-------------|
| 172 | 055km 288o | 49 | 33,5 | N | 7 | 37,4 | E | 172_055_288 | 55 | 288 | |
| 163 | 055km 072o | 49 | 34,0 | N | 9 | 4,2 | E | 163_055_072 | 55 | 71 | |
| 254 | 090km 282o | 49 | 34,0 | N | 7 | 7,7 | E | 254_090_282 | 90 | 282 | |
| 61 | 020km 330o | 49 | 34,0 | N | 8 | 12,5 | E | 061_020_330 | 20 | 330 | |
| 43 | 020km 030o | 49 | 34,1 | N | 8 | 29,1 | E | 043_020_030 | 20 | 29 | |
| 119 | 040km 064o | 49 | 34,3 | N | 8 | 50,6 | E | 119_040_064 | 40 | 63 | |
| 176 | 060km 072o | 49 | 34,8 | N | 9 | 8,1 | E | 176_060_072 | 60 | 71 | |
| 115 | 035km 304o | 49 | 35,1 | N | 7 | 56,7 | E | 115_035_304 | 35 | 304 | |
| 62 | 020km 345o | 49 | 35,1 | N | 8 | 16,5 | E | 062_020_345 | 20 | 345 | |
| 42 | 020km 015o | 49 | 35,1 | N | 8 | 25,1 | E | 042_020_015 | 20 | 14 | |
| 80 | 030km 050o | 49 | 35,2 | N | 8 | 39,8 | E | 080_030_050 | 30 | 49 | |
| 98 | 035km 056o | 49 | 35,4 | N | 8 | 44,9 | E | 098_035_056 | 35 | 55 | |
| 41 | 020km 000o | 49 | 35,5 | N | 8 | 20,8 | E | 041_020_000 | 20 | 359 | |
| 148 | 050km 066o | 49 | 35,8 | N | 8 | 58,7 | E | 148_050_066 | 50 | 65 | |
| 214 | 070km 288o | 49 | 35,8 | N | 7 | 25,5 | E | 214_070_288 | 70 | 288 | |
| 260 | 100km 078o | 49 | 35,9 | N | 9 | 42,0 | E | 260_100_078 | 100 | 77 | |
| 292 | 110km 282o | 49 | 36,0 | N | 6 | 51,4 | E | 292_110_282 | 110 | 282 | |
| 78 | 025km 330o | 49 | 36,3 | N | 8 | 10,4 | E | 078_025_330 | 25 | 330 | |
| 195 | 060km 292o | 49 | 36,4 | N | 7 | 34,5 | E | 195_060_292 | 60 | 292 | |
| 64 | 025km 030o | 49 | 36,4 | N | 8 | 31,1 | E | 064_025_030 | 25 | 29 | |
| 129 | 040km 304o | 49 | 36,6 | N | 7 | 53,2 | E | 129_040_304 | 40 | 304 | |
| 340 | 130km 080o | 49 | 36,7 | N | 10 | 7,1 | E | 340_130_080 | 130 | 79 | |
| 235 | 080km 288o | 49 | 37,4 | N | 7 | 17,5 | E | 235_080_288 | 80 | 288 | |
| 97 | 035km 048o | 49 | 37,4 | N | 8 | 42,3 | E | 097_035_048 | 35 | 47 | |
| 372 | 140km 080o | 49 | 37,5 | N | 10 | 15,3 | E | 372_140_080 | 140 | 79 | |
| 160 | 050km 300o | 49 | 37,9 | N | 7 | 44,8 | E | 160_050_300 | 50 | 300 | |
| 63 | 025km 010o | 49 | 38,0 | N | 8 | 24,3 | E | 063_025_010 | 25 | 9 | |
| 220 | 080km 072o | 49 | 38,1 | N | 9 | 23,9 | E | 220_080_072 | 80 | 71 | |
| 94 | 030km 330o | 49 | 38,6 | N | 8 | 8,2 | E | 094_030_330 | 30 | 330 | |
| 79 | 030km 030o | 49 | 38,8 | N | 8 | 33,2 | E | 079_030_030 | 30 | 29 | |
| 255 | 090km 288o | 49 | 39,0 | N | 7 | 9,6 | E | 255_090_288 | 90 | 288 | |
| 175 | 060km 064o | 49 | 39,0 | N | 9 | 5,5 | E | 175_060_064 | 60 | 63 | |
| 116 | 035km 320o | 49 | 39,0 | N | 8 | 2,0 | E | 116_035_320 | 35 | 320 | |
| 132 | 045km 054o | 49 | 39,1 | N | 8 | 51,0 | E | 132_045_054 | 45 | 53 | |
| 323 | 120km 284o | 49 | 39,1 | N | 6 | 43,9 | E | 323_120_284 | 120 | 284 | |
| 118 | 040km 048o | 49 | 39,2 | N | 8 | 45,4 | E | 118_040_048 | 40 | 47 | |
| 96 | 035km 040o | 49 | 39,2 | N | 8 | 39,4 | E | 096_035_040 | 35 | 39 | |
| 162 | 055km 060o | 49 | 39,6 | N | 9 | 0,3 | E | 162_055_060 | 55 | 59 | |
| 241 | 090km 072o | 49 | 39,8 | N | 9 | 31,9 | E | 241_090_072 | 90 | 71 | |
| 306 | 120km 076o | 49 | 40,2 | N | 9 | 57,5 | E | 306_120_076 | 120 | 75 | |
| 356 | 130km 284o | 49 | 40,3 | N | 6 | 35,8 | E | 356_130_284 | 130 | 284 | |

| | Way Point | Latitude | | | Longitude | | | ID | Distance | Bearing | Description |
|-----|------------|----------|------|---|-----------|------|---|-------------|----------|---------|-------------|
| 196 | 060km 300o | 49 | 40,5 | N | 7 | 37,5 | E | 196_060_300 | 60 | 300 | |
| 147 | 050km 054o | 49 | 40,7 | N | 8 | 54,3 | E | 147_050_054 | 50 | 53 | |
| 146 | 045km 312o | 49 | 40,7 | N | 7 | 52,9 | E | 146_045_312 | 45 | 312 | |
| 215 | 070km 296o | 49 | 40,8 | N | 7 | 28,4 | E | 215_070_296 | 70 | 296 | |
| 95 | 035km 032o | 49 | 40,8 | N | 8 | 36,1 | E | 095_035_032 | 35 | 31 | |
| 130 | 040km 320o | 49 | 41,1 | N | 7 | 59,3 | E | 130_040_320 | 40 | 320 | |
| 197 | 070km 064o | 49 | 41,4 | N | 9 | 13,0 | E | 197_070_064 | 70 | 63 | |
| 293 | 110km 288o | 49 | 42,0 | N | 6 | 53,6 | E | 293_110_288 | 110 | 288 | |
| 131 | 045km 042o | 49 | 42,9 | N | 8 | 45,7 | E | 131_045_042 | 45 | 41 | |
| 174 | 060km 056o | 49 | 42,9 | N | 9 | 2,0 | E | 174_060_056 | 60 | 55 | |
| 283 | 110km 072o | 49 | 43,0 | N | 9 | 47,7 | E | 283_110_072 | 110 | 71 | |
| 236 | 080km 296o | 49 | 43,0 | N | 7 | 20,8 | E | 236_080_296 | 80 | 296 | |
| 117 | 040km 032o | 49 | 43,1 | N | 8 | 38,3 | E | 117_040_032 | 40 | 31 | |
| 219 | 080km 064o | 49 | 43,7 | N | 9 | 20,5 | E | 219_080_064 | 80 | 63 | |
| 173 | 055km 312o | 49 | 44,3 | N | 7 | 46,6 | E | 173_055_312 | 55 | 312 | |
| 161 | 050km 318o | 49 | 44,5 | N | 7 | 52,8 | E | 161_050_318 | 50 | 318 | |
| 216 | 070km 304o | 49 | 45,4 | N | 7 | 32,3 | E | 216_070_304 | 70 | 304 | |
| 339 | 130km 072o | 49 | 46,2 | N | 10 | 3,6 | E | 339_130_072 | 130 | 71 | |
| 259 | 100km 066o | 49 | 46,7 | N | 9 | 36,7 | E | 259_100_066 | 100 | 65 | |
| 371 | 140km 072o | 49 | 47,8 | N | 10 | 11,6 | E | 371_140_072 | 140 | 71 | |
| 324 | 120km 292o | 49 | 47,8 | N | 6 | 47,8 | E | 324_120_292 | 120 | 292 | |
| 294 | 110km 294o | 49 | 47,9 | N | 6 | 56,8 | E | 294_110_294 | 110 | 294 | |
| 237 | 080km 304o | 49 | 48,3 | N | 7 | 25,3 | E | 237_080_304 | 80 | 304 | |
| 305 | 120km 068o | 49 | 48,9 | N | 9 | 53,4 | E | 305_120_068 | 120 | 67 | |
| 218 | 080km 056o | 49 | 48,9 | N | 9 | 15,9 | E | 218_080_056 | 80 | 55 | |
| 240 | 090km 060o | 49 | 49,0 | N | 9 | 25,6 | E | 240_090_060 | 90 | 59 | |
| 217 | 070km 312o | 49 | 49,6 | N | 7 | 37,2 | E | 217_070_312 | 70 | 312 | |
| 357 | 130km 292o | 49 | 49,7 | N | 6 | 40,0 | E | 357_130_292 | 130 | 292 | |
| 495 | 300km 080o | 49 | 49,8 | N | 12 | 27,1 | E | 495_300_080 | 299 | 79 | |
| 478 | 240km 078o | 49 | 50,0 | N | 11 | 36,4 | E | 478_240_078 | 239 | 77 | |
| 399 | 160km 072o | 49 | 51,0 | N | 10 | 27,6 | E | 399_160_072 | 160 | 71 | |
| 448 | 200km 075o | 49 | 51,7 | N | 11 | 1,8 | E | 448_200_075 | 199 | 74 | |
| 485 | 260km 078o | 49 | 51,8 | N | 11 | 52,9 | E | 485_260_078 | 259 | 77 | |
| 325 | 120km 296o | 49 | 52,0 | N | 6 | 50,5 | E | 325_120_296 | 120 | 296 | |
| 238 | 080km 312o | 49 | 53,1 | N | 7 | 30,9 | E | 238_080_312 | 80 | 312 | |
| 424 | 180km 072o | 49 | 54,0 | N | 10 | 43,5 | E | 424_180_072 | 180 | 71 | |
| 466 | 220km 075o | 49 | 54,2 | N | 11 | 18,1 | E | 466_220_075 | 219 | 74 | |
| 282 | 110km 060o | 49 | 54,4 | N | 9 | 40,1 | E | 282_110_060 | 110 | 59 | |
| 338 | 130km 064o | 49 | 55,3 | N | 9 | 58,1 | E | 338_130_064 | 130 | 63 | |
| 386 | 140km 296o | 49 | 56,4 | N | 6 | 35,2 | E | 386_140_296 | 140 | 296 | |
| 258 | 100km 054o | 49 | 56,5 | N | 9 | 28,1 | E | 258_100_054 | 100 | 53 | |

| | Way Point | Latitude | | | Longitude | | | ID | Distance | Bearing | Description |
|-----|------------|----------|------|---|-----------|------|---|-------------|----------|---------|-------------|
| 304 | 120km 060o | 49 | 57,0 | N | 9 | 47,4 | E | 304_120_060 | 120 | 59 | |
| 239 | 080km 320o | 49 | 57,4 | N | 7 | 37,5 | E | 239_080_320 | 80 | 320 | |
| 370 | 140km 064o | 49 | 57,6 | N | 10 | 5,7 | E | 370_140_064 | 140 | 63 | |
| 281 | 110km 054o | 49 | 59,6 | N | 9 | 34,9 | E | 281_110_054 | 110 | 53 | |
| 326 | 120km 304o | 49 | 59,9 | N | 6 | 57,1 | E | 326_120_304 | 120 | 304 | |
| 398 | 160km 064o | 50 | 2,2 | N | 10 | 20,9 | E | 398_160_064 | 160 | 63 | |
| 358 | 130km 304o | 50 | 2,8 | N | 6 | 50,1 | E | 358_130_304 | 130 | 304 | |
| 477 | 240km 072o | 50 | 3,2 | N | 11 | 31,7 | E | 477_240_072 | 239 | 71 | |
| 256 | 090km 324o | 50 | 3,6 | N | 7 | 36,0 | E | 256_090_324 | 90 | 324 | |
| 423 | 180km 066o | 50 | 3,6 | N | 10 | 38,2 | E | 423_180_066 | 180 | 65 | |
| 280 | 110km 048o | 50 | 4,5 | N | 9 | 28,9 | E | 280_110_048 | 110 | 47 | |
| 303 | 120km 052o | 50 | 4,6 | N | 9 | 39,6 | E | 303_120_052 | 120 | 51 | |
| 387 | 140km 304o | 50 | 5,7 | N | 6 | 43,0 | E | 387_140_304 | 140 | 304 | |
| 413 | 160km 300o | 50 | 6,2 | N | 6 | 24,1 | E | 413_160_300 | 160 | 300 | |
| 369 | 140km 056o | 50 | 6,8 | N | 9 | 57,7 | E | 369_140_056 | 140 | 55 | |
| 359 | 130km 308o | 50 | 6,9 | N | 6 | 54,4 | E | 359_130_308 | 130 | 308 | |
| 447 | 200km 066o | 50 | 7,8 | N | 10 | 53,7 | E | 447_200_066 | 200 | 65 | |
| 337 | 130km 052o | 50 | 7,8 | N | 9 | 46,3 | E | 337_130_052 | 130 | 51 | |
| 279 | 110km 042o | 50 | 8,9 | N | 9 | 22,1 | E | 279_110_042 | 110 | 41 | |
| 484 | 260km 070o | 50 | 10,8 | N | 11 | 45,6 | E | 484_260_070 | 259 | 69 | |
| 274 | 100km 330o | 50 | 11,1 | N | 7 | 38,2 | E | 274_100_330 | 100 | 330 | |
| 302 | 120km 044o | 50 | 11,3 | N | 9 | 30,3 | E | 302_120_044 | 120 | 43 | |
| 336 | 130km 048o | 50 | 11,6 | N | 9 | 41,5 | E | 336_130_048 | 130 | 47 | |
| 465 | 220km 066o | 50 | 11,9 | N | 11 | 9,2 | E | 465_220_066 | 219 | 65 | |
| 397 | 160km 056o | 50 | 12,7 | N | 10 | 11,8 | E | 397_160_056 | 160 | 55 | |
| 422 | 180km 060o | 50 | 12,8 | N | 10 | 31,3 | E | 422_180_060 | 180 | 59 | |
| 335 | 130km 044o | 50 | 15,2 | N | 9 | 36,2 | E | 335_130_044 | 130 | 43 | |
| 368 | 140km 048o | 50 | 15,2 | N | 9 | 47,8 | E | 368_140_048 | 140 | 47 | |
| 275 | 100km 342o | 50 | 15,8 | N | 7 | 54,2 | E | 275_100_342 | 100 | 342 | |
| 476 | 240km 066o | 50 | 16,0 | N | 11 | 24,8 | E | 476_240_066 | 239 | 65 | |
| 301 | 120km 036o | 50 | 17,2 | N | 9 | 19,6 | E | 301_120_036 | 120 | 35 | |
| 388 | 140km 316o | 50 | 18,1 | N | 6 | 58,2 | E | 388_140_316 | 140 | 316 | |
| 276 | 100km 354o | 50 | 18,3 | N | 8 | 11,4 | E | 276_100_354 | 100 | 354 | |
| 257 | 100km 006o | 50 | 18,4 | N | 8 | 29,0 | E | 257_100_006 | 100 | 5 | |
| 334 | 130km 040o | 50 | 18,5 | N | 9 | 30,6 | E | 334_130_040 | 130 | 39 | |
| 295 | 110km 336o | 50 | 18,6 | N | 7 | 42,5 | E | 295_110_336 | 110 | 336 | |
| 360 | 130km 324o | 50 | 20,8 | N | 7 | 15,7 | E | 360_130_324 | 130 | 324 | |
| 414 | 160km 312o | 50 | 21,2 | N | 6 | 39,9 | E | 414_160_312 | 160 | 312 | |
| 421 | 180km 054o | 50 | 21,4 | N | 10 | 23,0 | E | 421_180_054 | 180 | 53 | |
| 327 | 120km 332o | 50 | 21,4 | N | 7 | 32,6 | E | 327_120_332 | 120 | 332 | |
| 333 | 130km 036o | 50 | 21,5 | N | 9 | 24,6 | E | 333_130_036 | 130 | 35 | |

| | Way Point | Latitude | | | Longitude | | | ID | Distance | Bearing | Description |
|-----|------------|----------|------|---|-----------|------|---|-------------|----------|---------|-------------|
| 300 | 120km 028o | 50 | 22,0 | N | 9 | 7,7 | E | 300_120_028 | 120 | 27 | |
| 396 | 160km 048o | 50 | 22,3 | N | 10 | 0,4 | E | 396_160_048 | 160 | 47 | |
| 367 | 140km 040o | 50 | 22,6 | N | 9 | 36,0 | E | 367_140_040 | 140 | 39 | |
| 296 | 110km 348o | 50 | 22,6 | N | 8 | 0,8 | E | 296_110_348 | 110 | 348 | |
| 494 | 300km 068o | 50 | 22,7 | N | 12 | 14,8 | E | 494_300_068 | 299 | 67 | |
| 446 | 200km 057o | 50 | 22,9 | N | 10 | 41,7 | E | 446_200_057 | 200 | 56 | |
| 278 | 110km 012o | 50 | 22,9 | N | 8 | 39,4 | E | 278_110_012 | 110 | 11 | |
| 277 | 110km 000o | 50 | 24,1 | N | 8 | 20,1 | E | 277_110_000 | 110 | 360 | |
| 299 | 120km 020o | 50 | 25,7 | N | 8 | 54,7 | E | 299_120_020 | 120 | 19 | |
| 332 | 130km 028o | 50 | 26,8 | N | 9 | 11,6 | E | 332_130_028 | 130 | 27 | |
| 328 | 120km 348o | 50 | 27,9 | N | 7 | 59,0 | E | 328_120_348 | 120 | 348 | |
| 389 | 140km 328o | 50 | 28,1 | N | 7 | 17,3 | E | 389_140_328 | 140 | 328 | |
| 298 | 120km 012o | 50 | 28,1 | N | 8 | 41,1 | E | 298_120_012 | 120 | 11 | |
| 475 | 240km 060o | 50 | 28,2 | N | 11 | 15,8 | E | 475_240_060 | 239 | 59 | |
| 464 | 220km 057o | 50 | 28,5 | N | 10 | 56,0 | E | 464_220_057 | 220 | 56 | |
| 366 | 140km 032o | 50 | 28,9 | N | 9 | 22,8 | E | 366_140_032 | 140 | 31 | |
| 483 | 260km 062o | 50 | 29,0 | N | 11 | 34,2 | E | 483_260_062 | 259 | 61 | |
| 329 | 120km 356o | 50 | 29,2 | N | 8 | 12,9 | E | 329_120_356 | 120 | 356 | |
| 297 | 120km 004o | 50 | 29,3 | N | 8 | 27,1 | E | 297_120_004 | 120 | 3 | |
| 420 | 180km 048o | 50 | 29,4 | N | 10 | 13,2 | E | 420_180_048 | 180 | 47 | |
| 361 | 130km 340o | 50 | 30,3 | N | 7 | 42,4 | E | 361_130_340 | 130 | 340 | |
| 331 | 130km 020o | 50 | 30,7 | N | 8 | 57,6 | E | 331_130_020 | 130 | 19 | |
| 395 | 160km 040o | 50 | 30,8 | N | 9 | 47,0 | E | 395_160_040 | 160 | 39 | |
| 445 | 200km 051o | 50 | 32,1 | N | 10 | 31,6 | E | 445_200_051 | 200 | 50 | |
| 330 | 130km 012o | 50 | 33,4 | N | 8 | 42,9 | E | 330_130_012 | 130 | 11 | |
| 365 | 140km 024o | 50 | 33,8 | N | 9 | 8,2 | E | 365_140_024 | 140 | 23 | |
| 362 | 130km 356o | 50 | 34,6 | N | 8 | 12,3 | E | 362_130_356 | 130 | 356 | |
| 455 | 200km 312o | 50 | 35,0 | N | 6 | 14,0 | E | 455_200_312 | 200 | 312 | |
| 438 | 180km 318o | 50 | 35,5 | N | 6 | 37,8 | E | 438_180_318 | 180 | 318 | |
| 419 | 180km 042o | 50 | 36,7 | N | 10 | 2,0 | E | 419_180_042 | 180 | 41 | |
| 364 | 140km 016o | 50 | 37,4 | N | 8 | 52,6 | E | 364_140_016 | 140 | 15 | |
| 394 | 160km 032o | 50 | 38,0 | N | 9 | 31,8 | E | 394_160_032 | 160 | 31 | |
| 390 | 140km 352o | 50 | 39,4 | N | 8 | 3,3 | E | 390_140_352 | 140 | 352 | |
| 363 | 140km 008o | 50 | 39,6 | N | 8 | 36,4 | E | 363_140_008 | 140 | 7 | |
| 474 | 240km 054o | 50 | 39,8 | N | 11 | 4,7 | E | 474_240_054 | 240 | 53 | |
| 444 | 200km 045o | 50 | 40,7 | N | 10 | 19,9 | E | 444_200_045 | 200 | 44 | |
| 418 | 180km 036o | 50 | 43,2 | N | 9 | 49,8 | E | 418_180_036 | 180 | 35 | |
| 493 | 300km 060o | 50 | 43,4 | N | 12 | 0,7 | E | 493_300_060 | 299 | 59 | |
| 463 | 220km 048o | 50 | 43,5 | N | 10 | 38,8 | E | 463_220_048 | 220 | 47 | |
| 393 | 160km 024o | 50 | 43,7 | N | 9 | 15,1 | E | 393_160_024 | 160 | 23 | |
| 482 | 260km 054o | 50 | 45,9 | N | 11 | 18,8 | E | 482_260_054 | 260 | 53 | |

| | Way Point | Latitude | | | Longitude | | | ID | Distance | Bearing | Description |
|-----|------------------|-----------------|------|---|------------------|------|---|-------------|-----------------|----------------|--------------------|
| 392 | 160km 016o | 50 | 47,8 | N | 8 | 57,3 | E | 392_160_016 | 160 | 15 | |
| 417 | 180km 030o | 50 | 48,8 | N | 9 | 36,4 | E | 417_180_030 | 180 | 29 | |
| 473 | 240km 048o | 50 | 50,6 | N | 10 | 51,7 | E | 473_240_048 | 240 | 47 | |
| 391 | 160km 000o | 50 | 51,0 | N | 8 | 19,7 | E | 391_160_000 | 160 | 360 | |
| 443 | 200km 036o | 50 | 51,9 | N | 9 | 59,9 | E | 443_200_036 | 200 | 35 | |
| 472 | 240km 046o | 50 | 54,0 | N | 10 | 47,0 | E | 472_240_046 | 240 | 45 | |
| 462 | 220km 039o | 50 | 56,6 | N | 10 | 17,9 | E | 462_220_039 | 220 | 38 | |
| 416 | 180km 018o | 50 | 57,2 | N | 9 | 7,1 | E | 416_180_018 | 180 | 17 | |
| 456 | 200km 333o | 51 | 0,0 | N | 7 | 1,9 | E | 456_200_333 | 200 | 333 | |
| 442 | 200km 027o | 51 | 0,9 | N | 9 | 37,2 | E | 442_200_027 | 200 | 26 | |
| 439 | 180km 354o | 51 | 1,2 | N | 8 | 3,5 | E | 439_180_354 | 180 | 354 | |
| 415 | 180km 006o | 51 | 1,4 | N | 8 | 35,6 | E | 415_180_006 | 180 | 5 | |
| 492 | 300km 052o | 51 | 2,6 | N | 11 | 41,9 | E | 492_300_052 | 299 | 51 | |
| 461 | 220km 030o | 51 | 7,4 | N | 9 | 53,8 | E | 461_220_030 | 220 | 29 | |
| 441 | 200km 012o | 51 | 10,4 | N | 8 | 55,1 | E | 441_200_012 | 200 | 11 | |
| 471 | 240km 034o | 51 | 11,8 | N | 10 | 14,7 | E | 471_240_034 | 240 | 33 | |
| 457 | 200km 354o | 51 | 11,9 | N | 8 | 1,4 | E | 457_200_354 | 200 | 354 | |
| 440 | 200km 003o | 51 | 12,5 | N | 8 | 28,4 | E | 440_200_003 | 200 | 2 | |
| 460 | 220km 021o | 51 | 15,6 | N | 9 | 27,1 | E | 460_220_021 | 220 | 20 | |
| 459 | 220km 012o | 51 | 20,9 | N | 8 | 58,7 | E | 459_220_012 | 220 | 11 | |
| 458 | 220km 003o | 51 | 23,3 | N | 8 | 29,2 | E | 458_220_003 | 220 | 2 | |
| 470 | 240km 022o | 51 | 24,8 | N | 9 | 36,8 | E | 470_240_022 | 240 | 21 | |
| 481 | 260km 030o | 51 | 25,9 | N | 10 | 11,4 | E | 481_260_030 | 260 | 29 | |
| 491 | 300km 036o | 51 | 34,9 | N | 10 | 51,8 | E | 491_300_036 | 300 | 35 | |
| 480 | 260km 014o | 51 | 40,9 | N | 9 | 13,6 | E | 480_260_014 | 260 | 13 | |
| 490 | 300km 028o | 51 | 47,3 | N | 10 | 21,4 | E | 490_300_028 | 300 | 27 | |
| 489 | 300km 020o | 51 | 56,8 | N | 9 | 48,3 | E | 489_300_020 | 300 | 19 | |