## Algorithms for the Minmax Regret Path Problem with Interval Data: BKS

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Table 1: Best Known Solutions for karazan instances. (H) solutions found by heuristic approach

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|-------------|------|-------|---|---|------------|-------|-----|------|--------|---|-----------|
| n           | c    | p     | i | w | BKS        | n     | c   | p    | i      | w | BKS       |
| 1 000       | 200  | 0.15  | 0 | 2 | 7 603      | 2 000 | 200 | 0.15 | 0      | 2 | 15 718    |
| 1 000       | 200  | 0.15  | 1 | 2 | 8 116      | 2 000 | 200 | 0.15 | 1      | 2 | 15 865    |
| 1 000       | 200  | 0.15  | 2 | 2 | 7 896      | 2 000 | 200 | 0.15 | $^{2}$ | 2 | 16 025(H) |
| 1 000       | 200  | 0.15  | 3 | 2 | 7 982      | 2 000 | 200 | 0.15 | 3      | 2 | 15 001(H) |
| 1 000       | 200  | 0.15  | 4 | 2 | 7 893      | 2 000 | 200 | 0.15 | 4      | 2 | 15 231    |
| 1 000       | 200  | 0.15  | 5 | 2 | 8 173      | 2 000 | 200 | 0.15 | 5      | 2 | 15 885    |
| 1 000       | 200  | 0.15  | 6 | 2 | 7 616      | 2 000 | 200 | 0.15 | 6      | 2 | 15 569(H) |
| 1 000       | 200  | 0.15  | 7 | 2 | 7 388      | 2 000 | 200 | 0.15 | 7      | 2 | 15 358(H) |
| 1 000       | 200  | 0.15  | 8 | 2 | 7 545      | 2 000 | 200 | 0.15 | 8      | 2 | 15 081(H) |
| 1 000       | 200  | 0.15  | 9 | 2 | 7 681 (H)  | 2 000 | 200 | 0.15 | 9      | 2 | 1 6079    |
| 1 000       | 200  | 0.5   | 0 | 2 | 25 941     | 2 000 | 200 | 0.5  | 0      | 2 | 53 591(H) |
| 1 000       | 200  | 0.5   | 1 | 2 | 27 678     | 2 000 | 200 | 0.5  | 1      | 2 | 54 118    |
| 1 000       | 200  | 0.5   | 2 | 2 | 26 943     | 2 000 | 200 | 0.5  | 2      | 2 | 54 707(H) |
| 1 000       | 200  | 0.5   | 3 | 2 | 27 247     | 2 000 | 200 | 0.5  | 3      | 2 | 51 223(H) |
| 1 000       | 200  | 0.5   | 4 | 2 | 26 944(H)  | 2 000 | 200 | 0.5  | 4      | 2 | 52 016    |
| 1 000       | 200  | 0.5   | 5 | 2 | 27 902     | 2 000 | 200 | 0.5  | 5      | 2 | 54 231    |
| 1 000       | 200  | 0.5   | 6 | 2 | 26 004     | 2 000 | 200 | 0.5  | 6      | 2 | 53 256(H) |
| 1 000       | 200  | 0.5   | 7 | 2 | 25 229     | 2 000 | 200 | 0.5  | 7      | 2 | 52 460(H) |
| 1 000       | 200  | 0.5   | 8 | 2 | $25 \ 802$ | 2 000 | 200 | 0.5  | 8      | 2 | 51 432(H) |
| 1 000       | 200  | 0.5   | 9 | 2 | 26 210     | 2 000 | 200 | 0.5  | 9      | 2 | 54 911(H) |
| 1 000       | 200  | 0.85  | 0 | 2 | 44 111     | 2 000 | 200 | 0.85 | 0      | 2 | 91 152(H) |
| 1 000       | 200  | 0.85  | 1 | 2 | 47 084     | 2 000 | 200 | 0.85 | 1      | 2 | 92 070    |
| 1 000       | 200  | 0.85  | 2 | 2 | 45 845     | 2 000 | 200 | 0.85 | 2      | 2 | 93 061    |
| 1 000       | 200  | 0.85  | 3 | 2 | 46 353     | 2 000 | 200 | 0.85 | 3      | 2 | 87 163(H) |
| 1 000       | 200  | 0.85  | 4 | 2 | 45 833     | 2 000 | 200 | 0.85 | 4      | 2 | 88 571    |
| 1 000       | 200  | 0.85  | 5 | 2 | $47\ 465$  | 2 000 | 200 | 0.85 | 5      | 2 | 92 242(H) |
| 1 000       | 200  | 0.85  | 6 | 2 | 44 238     | 2 000 | 200 | 0.85 | 6      | 2 | 90 569(H) |
| 1 000       | 200  | 0.85  | 7 | 2 | 42 943     | 2 000 | 200 | 0.85 | 7      | 2 | 89 279    |
| 1 000       | 200  | 0.85  | 8 | 2 | 43 871     | 2 000 | 200 | 0.85 | 8      | 2 | 87 500(H) |
| 1 000       | 200  | 0.85  | 9 | 2 | 44 590     | 2 000 | 200 | 0.85 | 9      | 2 | 93 398(H) |
|             |      |       |   |   |            |       |     |      |        |   |           |

Table 2: Best Known Solutions for grid instances. (H) solutions found by heuristic approach

| n | m   | i | BKS      | n  | m   | i | BKS      |
|---|-----|---|----------|----|-----|---|----------|
| 2 | 320 | 0 | 7 666    | 32 | 320 | 0 | 9 217    |
| 2 | 320 | 1 | 8 599    | 32 | 320 | 1 | 8 605    |
| 2 | 320 | 2 | 8 413    | 32 | 320 | 2 | 8 929    |
| 2 | 320 | 3 | 7 356    | 32 | 320 | 3 | 8 913    |
| 2 | 320 | 4 | 7 769(H) | 32 | 320 | 4 | 8 779(H) |
| 2 | 320 | 5 | 7 649    | 32 | 320 | 5 | 8 916    |
| 2 | 320 | 6 | 8 485    | 32 | 320 | 6 | $9\ 055$ |
| 2 | 320 | 7 | 8 457    | 32 | 320 | 7 | 9 061    |
| 2 | 320 | 8 | 8 264    | 32 | 320 | 8 | 9.625    |
| 2 | 320 | 9 | 7 639    | 32 | 320 | 9 | 9 059(H) |