# PROST: September 6, 2014 7:55

### Rewards: elevators

|                            | 1                  | 2                  | 3                  | 4                  | 5                  | 6                  | 7                    | 8                    | 9                    | 10                   |
|----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------|----------------------|----------------------|----------------------|
| min                        | $-66.57(\pm 2.69)$ | $-57.7(\pm 6.23)$  | $-71.7(\pm 1.75)$  | $-105.0(\pm 7.98)$ | $-111.8(\pm 7.89)$ | $-124.37(\pm 4.7)$ | $-134.53(\pm 11.84)$ | $-152.4(\pm 10.31)$  | $-163.03(\pm 8.01)$  | $-126.93(\pm 12.11)$ |
| rev72 [DP-UCT -i [IDS]]    | $-44.23(\pm 2.55)$ | $-18.59(\pm 1.62)$ | $-54.58(\pm 1.88)$ | $-58.11(\pm 3.92)$ | $-54.23(\pm 3.42)$ | $-68.04(\pm 3.35)$ | $-82.94(\pm 4.75)$   | $-77.2(\pm 4.09)$    | $-91.69(\pm 4.77)$   | $-67.61(\pm 5.11)$   |
| rev72 [IPPC2011]           | $-44.33(\pm 2.5)$  | $-16.32(\pm 1.46)$ | $-55.84(\pm 1.97)$ | $-56.31(\pm 3.87)$ | $-50.5(\pm 3.12)$  | $-66.61(\pm 2.65)$ | $-86.5(\pm 5.42)$    | $-73.3(\pm 3.87)$    | $-94.77(\pm 4.56)$   | $-67.16(\pm 5.17)$   |
| rev72 [MC-UCT -i [IDS]]    | $-44.15(\pm 2.71)$ | $-18.41(\pm 1.69)$ | $-56.83(\pm 2.04)$ | $-59.34(\pm 4.11)$ | $-54.69(\pm 3.02)$ | $-74.69(\pm 3.15)$ | $-83.13(\pm 4.91)$   | $-80.61(\pm 3.73)$   | $-96.09(\pm 3.84)$   | $-68.95(\pm 5.45)$   |
| rev72 [MaxMC-UCT -i [IDS]] | $-45.93(\pm 2.49)$ | $-17.8(\pm 1.42)$  | $-57.2(\pm 1.91)$  | $-58.02(\pm 3.81)$ | $-55.59(\pm 3.49)$ | $-69.58(\pm 3.24)$ | $-83.34(\pm 4.61)$   | $-77.53(\pm 4.19)$   | $-95.58(\pm 4.44)$   | $-70.24(\pm 5.93)$   |
| rev72 [UCTStar -i [IDS]]   | $-43.88(\pm 2.52)$ | $-18.23(\pm 1.54)$ | $-55.7(\pm 2.01)$  | $-58.49(\pm 3.83)$ | $-51.36(\pm 3.23)$ | $-68.21(\pm 3.54)$ | $-79.67(\pm 5.03)$   | $-72.93(\pm 4.35)$   | $-90.66(\pm 4.02)$   | $-67.49(\pm 5.7)$    |
| rev99 CDP-UCT              | $-55.23(\pm 4.37)$ | $-21.35(\pm 3.2)$  | $-56.17(\pm 4.47)$ | $-70.23(\pm 7.77)$ | $-62.39(\pm 7.62)$ | $-87.97(\pm 8.63)$ | $-91.72(\pm 10.38)$  | $-102.87(\pm 11.64)$ | $-133.28(\pm 12.13)$ | $-77.36(\pm 13.26)$  |

### IPPC Scores: elevators

|                            | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
|----------------------------|------|------|------|------|------|------|------|------|------|------|
| min                        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| rev72 [DP-UCT -i [IDS]]    | 0.98 | 0.95 | 1.0  | 0.96 | 0.94 | 0.98 | 0.94 | 0.95 | 0.99 | 0.99 |
| rev72 [IPPC2011]           | 0.98 | 1.0  | 0.93 | 1.0  | 1.0  | 1.0  | 0.88 | 1.0  | 0.94 | 1.0  |
| rev72 [MC-UCT -i [IDS]]    | 0.99 | 0.95 | 0.87 | 0.94 | 0.93 | 0.86 | 0.94 | 0.9  | 0.92 | 0.97 |
| rev72 [MaxMC-UCT -i [IDS]] | 0.91 | 0.96 | 0.85 | 0.96 | 0.92 | 0.95 | 0.93 | 0.94 | 0.93 | 0.95 |
| rev72 [UCTStar -i [IDS]]   | 1.0  | 0.95 | 0.93 | 0.96 | 0.99 | 0.97 | 1.0  | 1.0  | 1.0  | 0.99 |
| rev99 CDP-UCT              | 0.5  | 0.88 | 0.91 | 0.71 | 0.81 | 0.63 | 0.78 | 0.62 | 0.41 | 0.83 |

## Rewards: sysadmin

|                            | 1                   | 2                  | 3                    | 4                   | 5                   | 6                    | 7                    | 8                    | 9                    | 10                      |
|----------------------------|---------------------|--------------------|----------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|-------------------------|
| min                        | $210.18(\pm 10.77)$ | $166.68(\pm 9.63)$ | $345.4(\pm 15.84)$   | $311.79(\pm 19.75)$ | $443.05(\pm 15.19)$ | $407.16(\pm 17.92)$  | $513.74(\pm 23.37)$  | $426.46(\pm 18.46)$  | $612.06(\pm 28.27)$  | $471.1(\pm 21.62)$      |
| rev72 [DP-UCT -i [IDS]]    | $335.8(\pm 4.0)$    | $300.88(\pm 7.67)$ | $480.62(\pm 12.83)$  | $430.04(\pm 13.75)$ | $503.32(\pm 10.66)$ | $456.47(\pm 12.43)$  | $573.08(\pm 13.55)$  | $470.94(\pm 11.86)$  | $693.74(\pm 15.23)$  | $513.43(\pm 11.17)$     |
| rev72 [IPPC2011]           | $339.52(\pm 4.47)$  | $308.95(\pm 7.97)$ | $561.05 (\pm 15.08)$ | $476.83(\pm 16.68)$ | $555.34(\pm 13.96)$ | $499.81(\pm 13.69)$  | $600.0(\pm 14.0)$    | $481.77(\pm 12.45)$  | $719.3(\pm 13.57)$   | $522.84(\pm 10.06)$     |
| rev72 [MC-UCT -i [IDS]]    | $337.34(\pm 3.85)$  | $305.46(\pm 7.79)$ | $518.66(\pm 14.37)$  | $462.01(\pm 17.49)$ | $513.71(\pm 11.69)$ | $465.53(\pm 12.58)$  | $564.56(\pm 12.08)$  | $453.04(\pm 11.18)$  | $687.1(\pm 12.69)$   | $501.79(\pm 10.33)$     |
| rev72 [MaxMC-UCT -i [IDS]] | $333.15(\pm 4.62)$  | $301.56(\pm 8.34)$ | $502.52(\pm 12.42)$  | $435.21(\pm 13.41)$ | $515.4(\pm 11.96)$  | $473.01(\pm 11.56)$  | $583.43(\pm 12.21)$  | $478.6(\pm 10.41)$   | $711.3(\pm 13.28)$   | $527.19(\pm 11.73)$     |
| rev72 [UCTStar -i [IDS]]   | $336.94(\pm 3.81)$  | $308.84(\pm 7.45)$ | $554.88(\pm 15.45)$  | $492.28(\pm 16.35)$ | $581.93(\pm 16.76)$ | $517.37(\pm 17.0)$   | $609.03 (\pm 16.46)$ | $500.92 (\pm 13.87)$ | $720.02 (\pm 14.97)$ | $\bf 551.1 (\pm 13.94)$ |
| rev99 CDP-UCT              | $337.17(\pm 4.93)$  | $313.98(\pm 8.85)$ | $561.07 (\pm 26.99)$ | $494.79 (\pm 27.0)$ | $560.02(\pm 18.06)$ | $520.56 (\pm 24.41)$ | $596.87(\pm 26.71)$  | $498.91(\pm 26.43)$  | $717.08(\pm 26.02)$  | $534.04(\pm 16.76)$     |

# IPPC Scores: sysadmin

|                            | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
|----------------------------|------|------|------|------|------|------|------|------|------|------|
| min                        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| rev72 [DP-UCT -i [IDS]]    | 0.97 | 0.91 | 0.63 | 0.65 | 0.43 | 0.43 | 0.62 | 0.6  | 0.76 | 0.53 |
| rev72 [IPPC2011]           | 1.0  | 0.97 | 1.0  | 0.9  | 0.81 | 0.82 | 0.91 | 0.74 | 0.99 | 0.65 |
| rev72 [MC-UCT -i [IDS]]    | 0.98 | 0.94 | 0.8  | 0.82 | 0.51 | 0.51 | 0.53 | 0.36 | 0.7  | 0.38 |
| rev72 [MaxMC-UCT -i [IDS]] | 0.95 | 0.92 | 0.73 | 0.67 | 0.52 | 0.58 | 0.73 | 0.7  | 0.92 | 0.7  |
| rev72 [UCTStar -i [IDS]]   | 0.98 | 0.97 | 0.97 | 0.99 | 1.0  | 0.97 | 1.0  | 1.0  | 1.0  | 1.0  |
| rev99 CDP-UCT              | 0.98 | 1.0  | 1.0  | 1.0  | 0.84 | 1.0  | 0.87 | 0.97 | 0.97 | 0.79 |

### Rewards: recon

|                            | 1                | 2                | 3                 | 4                | 5                 | 6                 | 7                | 8                 | 9                | 10               |
|----------------------------|------------------|------------------|-------------------|------------------|-------------------|-------------------|------------------|-------------------|------------------|------------------|
| min                        | $0.0(\pm 0.0)$   | $0.0(\pm 0.0)$   | $0.0(\pm 0.0)$    | $0.0(\pm 0.0)$   | $0.0(\pm 0.0)$    | $0.0(\pm 0.0)$    | $0.0(\pm 0.0)$   | $0.0(\pm 0.0)$    | $0.0(\pm 0.0)$   | $0.0(\pm 0.0)$   |
| rev72 [DP-UCT -i [IDS]]    | $3.46(\pm 0.17)$ | $3.16(\pm 0.09)$ | $14.1(\pm 0.13)$  | $2.54(\pm 0.13)$ | $14.63(\pm0.18)$  | $8.58(\pm0.2)$    | $4.22(\pm0.1)$   | $10.31(\pm 0.1)$  | $7.54(\pm 0.22)$ | $4.67(\pm0.09)$  |
| rev72 [IPPC2011]           | $3.43(\pm 0.14)$ | $3.16(\pm 0.09)$ | $14.09(\pm 0.13)$ | $2.71(\pm 0.09)$ | $14.65(\pm 0.22)$ | $10.17(\pm 0.08)$ | $5.22(\pm 0.07)$ | $10.31(\pm 0.12)$ | $9.59(\pm 0.09)$ | $5.97(\pm 0.08)$ |
| rev72 [MC-UCT -i [IDS]]    | $3.49(\pm0.22)$  | $3.14(\pm 0.13)$ | $14.12(\pm 0.11)$ | $2.68(\pm 0.11)$ | $14.59(\pm 0.32)$ | $10.23(\pm 0.14)$ | $5.25(\pm 0.06)$ | $10.33(\pm 0.09)$ | $9.55(\pm 0.1)$  | $6.01(\pm 0.07)$ |
| rev72 [MaxMC-UCT -i [IDS]] | $3.37(\pm 0.12)$ | $3.12(\pm 0.14)$ | $14.12(\pm 0.11)$ | $2.54(\pm 0.15)$ | $14.65(\pm 0.19)$ | $8.45(\pm 0.21)$  | $3.89(\pm0.1)$   | $10.32(\pm 0.1)$  | $7.42(\pm 0.21)$ | $4.32(\pm0.1)$   |
| rev72 [UCTStar -i [IDS]]   | $3.28(\pm0.1)$   | $3.12(\pm 0.13)$ | $13.83(\pm 0.17)$ | $2.65(\pm 0.09)$ | $14.64(\pm 0.2)$  | $10.33(\pm0.17)$  | $5.17(\pm 0.07)$ | $10.1(\pm 0.1)$   | $8.87(\pm 0.25)$ | $5.61(\pm 0.12)$ |
| rev99 CDP-UCT              | $3.17(\pm 0.15)$ | $2.87(\pm0.23)$  | $14.23(\pm 0.17)$ | $2.54(\pm0.21)$  | $14.19(\pm 0.19)$ | $10.38(\pm0.22)$  | $5.34(\pm0.08)$  | $10.37(\pm0.14)$  | $10.05(\pm0.18)$ | $5.75(\pm0.15)$  |

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### IPPC Scores: recon

|                            | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
|----------------------------|------|------|------|------|------|------|------|------|------|------|
| min                        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| rev72 [DP-UCT -i [IDS]]    | 0.99 | 1.0  | 0.99 | 0.94 | 1.0  | 0.83 | 0.79 | 0.99 | 0.75 | 0.78 |
| rev72 [IPPC2011]           | 0.98 | 1.0  | 0.99 | 1.0  | 1.0  | 0.98 | 0.98 | 0.99 | 0.95 | 0.99 |
| rev72 [MC-UCT -i [IDS]]    | 1.0  | 0.99 | 0.99 | 0.99 | 1.0  | 0.99 | 0.98 | 1.0  | 0.95 | 1.0  |
| rev72 [MaxMC-UCT -i [IDS]] | 0.97 | 0.99 | 0.99 | 0.94 | 1.0  | 0.81 | 0.73 | 1.0  | 0.74 | 0.72 |
| rev72 [UCTStar -i [IDS]]   | 0.94 | 0.99 | 0.97 | 0.98 | 1.0  | 1.0  | 0.97 | 0.97 | 0.88 | 0.93 |
| rev99 CDP-UCT              | 0.91 | 0.91 | 1.0  | 0.94 | 0.97 | 1.0  | 1.0  | 1.0  | 1.0  | 0.96 |

### Rewards: game

|                            | 1                       | 2                   | 3                   | 4                   | 5                   | 6                   | 7                   | 8                   | 9                   | 10                   |
|----------------------------|-------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|
| min                        | $70.53(\pm 14.78)$      | $73.27(\pm 9.76)$   | $107.17(\pm 8.53)$  | $167.23(\pm 27.73)$ | $203.07(\pm 14.44)$ | $224.17(\pm 9.16)$  | $264.97(\pm 37.19)$ | $295.23(\pm 22.8)$  | $311.47(\pm 16.69)$ | $176.73(\pm 32.03)$  |
| rev72 [DP-UCT -i [IDS]]    | $204.52 (\pm 6.05)$     | $129.34(\pm 8.55)$  | $145.47(\pm 4.8)$   | $342.8(\pm 7.5)$    | $297.77(\pm 5.86)$  | $278.65(\pm 4.25)$  | $471.26(\pm 5.12)$  | $435.02(\pm 6.16)$  | $408.65(\pm 6.56)$  | $558.32(\pm 8.72)$   |
| rev72 [IPPC2011]           | $\bf 204.21 (\pm 6.29)$ | $130.96(\pm 8.36)$  | $148.91 (\pm 4.75)$ | $349.52(\pm 3.66)$  | $310.07(\pm 5.16)$  | $284.31(\pm 3.56)$  | $468.83(\pm 5.82)$  | $434.79(\pm 6.6)$   | $410.23(\pm 5.78)$  | $562.03(\pm 8.52)$   |
| rev72 [MC-UCT -i [IDS]]    | $200.9(\pm 6.66)$       | $128.85(\pm 8.54)$  | $147.26(\pm 4.85)$  | $345.03(\pm 5.13)$  | $299.89(\pm 6.3)$   | $276.29(\pm 3.51)$  | $469.54(\pm 5.91)$  | $433.09(\pm 7.14)$  | $418.72(\pm 5.28)$  | $553.3(\pm 6.95)$    |
| rev72 [MaxMC-UCT -i [IDS]] | $200.87(\pm 5.41)$      | $128.51(\pm 8.33)$  | $148.27(\pm 4.39)$  | $346.82(\pm 6.21)$  | $299.66(\pm 5.37)$  | $278.5(\pm 3.8)$    | $468.56(\pm 6.23)$  | $435.66(\pm 6.78)$  | $419.43(\pm 6.29)$  | $559.73(\pm 7.52)$   |
| rev72 [UCTStar -i [IDS]]   | $202.16(\pm 7.97)$      | $134.15(\pm 8.06)$  | $149.07 (\pm 5.14)$ | $365.37(\pm 4.96)$  | $316.24(\pm 5.02)$  | $287.54(\pm 3.5)$   | $505.96(\pm 5.37)$  | $449.76(\pm 5.72)$  | $422.58(\pm 5.26)$  | $591.3(\pm 8.92)$    |
| rev99 CDP-UCT              | $202.67(\pm 12.23)$     | $122.33(\pm 16.77)$ | $146.43(\pm 9.84)$  | $366.43(\pm 7.41)$  | $321.93(\pm 8.04)$  | $294.23 (\pm 5.84)$ | $524.93(\pm 8.36)$  | $471.33 (\pm 9.89)$ | $431.03(\pm 14.46)$ | $612.77 (\pm 11.51)$ |

## IPPC Scores: game

|                            | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
|----------------------------|------|------|------|------|------|------|------|------|------|------|
| min                        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| rev72 [DP-UCT -i [IDS]]    | 1.0  | 0.92 | 0.91 | 0.88 | 0.8  | 0.78 | 0.79 | 0.79 | 0.81 | 0.88 |
| rev72 [IPPC2011]           | 1.0  | 0.95 | 1.0  | 0.92 | 0.9  | 0.86 | 0.78 | 0.79 | 0.83 | 0.88 |
| rev72 [MC-UCT -i [IDS]]    | 0.97 | 0.91 | 0.96 | 0.89 | 0.81 | 0.74 | 0.79 | 0.78 | 0.9  | 0.86 |
| rev72 [MaxMC-UCT -i [IDS]] | 0.97 | 0.91 | 0.98 | 0.9  | 0.81 | 0.78 | 0.78 | 0.8  | 0.9  | 0.88 |
| rev72 [UCTStar -i [IDS]]   | 0.98 | 1.0  | 1.0  | 0.99 | 0.95 | 0.9  | 0.93 | 0.88 | 0.93 | 0.95 |
| rev99 CDP-UCT              | 0.99 | 0.81 | 0.94 | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  |

### Rewards: traffic

|                            | 1                 | 2                  | 3                   | 4                   | 5                   | 6                    | 7                    | 8                    | 9                    | 10                   |
|----------------------------|-------------------|--------------------|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| min                        | $-21.6(\pm 4.66)$ | $-49.2(\pm 5.57)$  | $-63.93(\pm 10.13)$ | $-119.33(\pm 3.54)$ | $-123.03(\pm 8.76)$ | $-158.27(\pm 12.57)$ | $-146.97(\pm 14.87)$ | $-154.37(\pm 15.51)$ | $-108.03(\pm 16.02)$ | $-255.83(\pm 17.04)$ |
| rev72 [DP-UCT -i [IDS]]    | $-7.77(\pm0.82)$  | $-17.69(\pm 1.21)$ | $-26.2(\pm 2.61)$   | $-59.45(\pm 3.29)$  | $-53.64(\pm 3.55)$  | $-83.05(\pm 4.99)$   | $-50.82(\pm 3.06)$   | $-70.56(\pm 6.73)$   | $-26.75(\pm 4.14)$   | $-131.58(\pm 7.73)$  |
| rev72 [IPPC2011]           | $-5.05(\pm0.8)$   | $-13.9(\pm 1.09)$  | $-22.96(\pm 2.14)$  | $-62.05(\pm 2.69)$  | $-52.74(\pm 3.69)$  | $-80.6(\pm 4.99)$    | $-50.97(\pm 3.59)$   | $-63.86(\pm 5.38)$   | $-24.04(\pm 3.16)$   | $-112.98(\pm 5.82)$  |
| rev72 [MC-UCT -i [IDS]]    | $-5.97(\pm0.8)$   | $-16.56(\pm 1.11)$ | $-27.06(\pm 2.27)$  | $-69.6(\pm 3.17)$   | $-53.87(\pm 3.47)$  | $-85.42(\pm 5.49)$   | $-51.67(\pm 3.37)$   | $-75.93(\pm 6.19)$   | $-27.59(\pm 3.7)$    | $-125.44(\pm 6.67)$  |
| rev72 [MaxMC-UCT -i [IDS]] | $-7.94(\pm0.93)$  | $-18.83(\pm 1.1)$  | $-23.52(\pm 2.2)$   | $-62.18(\pm 2.99)$  | $-52.07(\pm 4.01)$  | $-82.05(\pm 5.37)$   | $-53.87(\pm 3.29)$   | $-66.33(\pm 6.66)$   | $-25.23(\pm 3.65)$   | $-126.6(\pm 6.14)$   |
| rev72 [UCTStar -i [IDS]]   | $-5.06(\pm0.69)$  | $-14.34(\pm 1.03)$ | $-15.69(\pm 2.17)$  | $-48.11(\pm 2.96)$  | $-46.42(\pm 3.44)$  | $-73.5 (\pm 4.77)$   | $-44.6(\pm 2.76)$    | $-58.36(\pm 6.16)$   | $-23.12(\pm 3.22)$   | $-131.1(\pm 6.95)$   |
| rev99 CDP-UCT              | $-3.17(\pm 1.07)$ | $-10.37(\pm 1.35)$ | $-12.87(\pm 3.46)$  | $-49.37(\pm 5.28)$  | $-45.83(\pm 5.87)$  | $-74.43(\pm 9.15)$   | $-45.1(\pm 4.69)$    | $-62.2(\pm 12.49)$   | $-21.63(\pm 5.24)$   | $-125.13(\pm 11.57)$ |

### IPPC Scores: traffic

|                            | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
|----------------------------|------|------|------|------|------|------|------|------|------|------|
| min                        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| rev72 [DP-UCT -i [IDS]]    | 0.75 | 0.81 | 0.74 | 0.84 | 0.9  | 0.89 | 0.94 | 0.87 | 0.94 | 0.87 |
| rev72 [IPPC2011]           | 0.9  | 0.91 | 0.8  | 0.8  | 0.91 | 0.92 | 0.94 | 0.94 | 0.97 | 1.0  |
| rev72 [MC-UCT -i [IDS]]    | 0.85 | 0.84 | 0.72 | 0.7  | 0.9  | 0.86 | 0.93 | 0.82 | 0.93 | 0.91 |
| rev72 [MaxMC-UCT -i [IDS]] | 0.74 | 0.78 | 0.79 | 0.8  | 0.92 | 0.9  | 0.91 | 0.92 | 0.96 | 0.9  |
| rev72 [UCTStar -i [IDS]]   | 0.9  | 0.9  | 0.94 | 1.0  | 0.99 | 1.0  | 1.0  | 1.0  | 0.98 | 0.87 |
| rev99 CDP-UCT              | 1.0  | 1.0  | 1.0  | 0.98 | 1.0  | 0.99 | 1.0  | 0.96 | 1.0  | 0.91 |

## Rewards: crossing

|                            | 1                  | 2                  | 3                  | 4                  | 5                  | 6                  | 7                  | 8                  | 9                         | 10                 |
|----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------------|--------------------|
| min                        | $-34.83(\pm 4.38)$ | $-38.67(\pm 1.82)$ | $-39.03(\pm 1.89)$ | $-40.0(\pm0.0)$    | $-38.97(\pm 2.03)$ | $-40.0(\pm0.0)$    | $-39.47(\pm 1.05)$ | $-40.0(\pm0.0)$    | $-40.0(\pm0.0)$           | $-40.0(\pm0.0)$    |
| rev72 [DP-UCT -i [IDS]]    | $-4.37(\pm0.14)$   | $-5.39(\pm0.32)$   | $-6.15(\pm0.35)$   | $-10.73(\pm 0.95)$ | $-7.53(\pm0.7)$    | $-10.74(\pm0.61)$  | $-11.43(\pm 0.62)$ | $-18.38(\pm 1.38)$ | $-11.8(\pm 0.79)$         | $-18.91(\pm 1.68)$ |
| rev72 [IPPC2011]           | $-4.37(\pm0.14)$   | $-5.37 (\pm 0.32)$ | $-7.06(\pm0.44)$   | $-11.85(\pm0.94)$  | $-8.6(\pm 0.72)$   | $-12.05(\pm0.9)$   | $-14.3(\pm 1.73)$  | $-28.4(\pm 2.51)$  | $-15.41(\pm 1.74)$        | $-29.57(\pm 2.39)$ |
| rev72 [MC-UCT -i [IDS]]    | $-4.74(\pm0.23)$   | $-5.39 (\pm 0.32)$ | $-6.84(\pm0.44)$   | $-11.97(\pm0.98)$  | $-8.17(\pm0.42)$   | $-11.6(\pm 1.07)$  | $-16.57(\pm 2.62)$ | $-27.97(\pm 2.78)$ | $-16.94(\pm 2.91)$        | $-29.02(\pm 2.8)$  |
| rev72 [MaxMC-UCT -i [IDS]] | $-4.37(\pm0.14)$   | $-5.37 (\pm 0.32)$ | $-6.29 (\pm 0.38)$ | $-10.51(\pm 0.93)$ | $-7.6(\pm 0.7)$    | $-10.85(\pm0.63)$  | $-11.43(\pm0.83)$  | $-17.67(\pm 1.13)$ | $-11.83(\pm 1.09)$        | $-18.48(\pm 1.47)$ |
| rev72 [UCTStar -i [IDS]]   | $-4.37(\pm0.14)$   | $-5.37 (\pm 0.32)$ | $-6.18 (\pm 0.36)$ | $-10.05(\pm0.92)$  | $-7.11(\pm 0.69)$  | $-9.74(\pm 1.04)$  | $-10.11(\pm 1.08)$ | $-22.4(\pm 2.24)$  | $\textbf{-9.5} (\pm 0.8)$ | $-23.3(\pm 2.0)$   |
| rev99 CDP-UCT              | $-4.57(\pm0.35)$   | $-5.33(\pm0.46)$   | $-6.23(\pm0.69)$   | $-13.83(\pm 2.38)$ | $-22.53(\pm 3.52)$ | $-35.43(\pm 3.43)$ | $-26.93(\pm 3.98)$ | $-39.0(\pm 1.19)$  | $-10.83(\pm0.93)$         | $-19.0(\pm 2.86)$  |

## IPPC Scores: crossing

|                            | 1    | 2   | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
|----------------------------|------|-----|------|------|------|------|------|------|------|------|
| min                        | 0.0  | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| rev72 [DP-UCT -i [IDS]]    | 1.0  | 1.0 | 1.0  | 0.98 | 0.99 | 0.97 | 0.96 | 0.97 | 0.92 | 0.98 |
| rev72 [IPPC2011]           | 1.0  | 1.0 | 0.97 | 0.94 | 0.95 | 0.92 | 0.86 | 0.52 | 0.81 | 0.48 |
| rev72 [MC-UCT -i [IDS]]    | 0.99 | 1.0 | 0.98 | 0.94 | 0.97 | 0.94 | 0.78 | 0.54 | 0.76 | 0.51 |
| rev72 [MaxMC-UCT -i [IDS]] | 1.0  | 1.0 | 1.0  | 0.98 | 0.98 | 0.96 | 0.96 | 1.0  | 0.92 | 1.0  |
| rev72 [UCTStar -i [IDS]]   | 1.0  | 1.0 | 1.0  | 1.0  | 1.0  | 1.0  | 1.0  | 0.79 | 1.0  | 0.78 |
| rev99 CDP-UCT              | 0.99 | 1.0 | 1.0  | 0.87 | 0.52 | 0.15 | 0.43 | 0.04 | 0.96 | 0.98 |

### Rewards: skill

|                            | 1                 | 2                  | 3                  | 4                    | 5                    | 6                    | 7                    | 8                    | 9                    | 10                   |
|----------------------------|-------------------|--------------------|--------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| min                        | $39.34(\pm 7.38)$ | $33.75(\pm 10.34)$ | $-83.23(\pm 31.2)$ | $-108.73(\pm 27.53)$ | $-285.95(\pm 32.72)$ | $-302.99(\pm 45.35)$ | $-382.86(\pm 47.52)$ | $-541.01(\pm 46.26)$ | $-543.09(\pm 38.88)$ | $-632.0(\pm 48.13)$  |
| rev72 [DP-UCT -i [IDS]]    | $66.95(\pm 1.62)$ | $78.8(\pm 1.88)$   | $98.2(\pm 10.18)$  | $102.62(\pm 10.05)$  | $16.57(\pm 15.51)$   | $37.11(\pm 24.54)$   | $-74.5(\pm 31.01)$   | $-168.36(\pm 38.53)$ | $-169.1(\pm 33.84)$  | $-214.21(\pm 41.05)$ |
| rev72 [IPPC2011]           | $65.8(\pm 1.59)$  | $79.11(\pm 1.81)$  | $87.91(\pm 11.27)$ | $100.23(\pm 12.54)$  | $14.5(\pm 19.83)$    | $4.84(\pm 26.73)$    | $-35.18(\pm 25.56)$  | $-152.7(\pm 42.35)$  | $-156.19(\pm 30.51)$ | $-220.43(\pm 40.58)$ |
| rev72 [MC-UCT -i [IDS]]    | $66.91(\pm 1.62)$ | $78.78(\pm 1.88)$  | $75.28(\pm 13.78)$ | $101.16(\pm 10.22)$  | $4.94(\pm 19.3)$     | $3.69(\pm 26.0)$     | $-67.21(\pm 27.27)$  | $-148.11(\pm 38.29)$ | $-175.95(\pm 34.16)$ | $-199.58(\pm 43.96)$ |
| rev72 [MaxMC-UCT -i [IDS]] | $67.03(\pm 1.62)$ | $78.78(\pm 1.89)$  | $80.77(\pm 11.48)$ | $103.31(\pm 11.44)$  | $-11.43(\pm 19.13)$  | $-9.21(\pm 28.09)$   | $-68.54(\pm 25.35)$  | $-200.49(\pm 38.79)$ | $-156.12(\pm 29.13)$ | $-204.92(\pm 36.11)$ |
| rev72 [UCTStar -i [IDS]]   | $66.43(\pm 1.57)$ | $78.51(\pm 2.05)$  | $96.43(\pm 10.79)$ | $100.25(\pm 10.62)$  | $-19.01(\pm 19.1)$   | $0.52(\pm 25.18)$    | $-55.9(\pm 25.13)$   | $-169.06(\pm 31.39)$ | $-155.45(\pm 29.91)$ | $-190.09(\pm41.7)$   |
| rev99 CDP-UCT              | $67.17(\pm 2.92)$ | $79.34(\pm 3.05)$  | $84.65(\pm 21.91)$ | $115.97(\pm 16.23)$  | $36.04(\pm 25.25)$   | $14.93(\pm 57.17)$   | $-33.55(\pm 36.09)$  | $-176.15(\pm 53.13)$ | $-146.18(\pm 51.34)$ | $-195.13(\pm 64.43)$ |

## IPPC Scores: skill

|                            | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
|----------------------------|------|------|------|------|------|------|------|------|------|------|
| min                        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| rev72 [DP-UCT -i [IDS]]    | 0.99 | 0.99 | 1.0  | 0.94 | 0.94 | 1.0  | 0.88 | 0.95 | 0.94 | 0.95 |
| rev72 [IPPC2011]           | 0.95 | 0.99 | 0.94 | 0.93 | 0.93 | 0.91 | 1.0  | 0.99 | 0.97 | 0.93 |
| rev72 [MC-UCT -i [IDS]]    | 0.99 | 0.99 | 0.87 | 0.93 | 0.9  | 0.9  | 0.9  | 1.0  | 0.92 | 0.98 |
| rev72 [MaxMC-UCT -i [IDS]] | 0.99 | 0.99 | 0.9  | 0.94 | 0.85 | 0.86 | 0.9  | 0.87 | 0.97 | 0.97 |
| rev72 [UCTStar -i [IDS]]   | 0.97 | 0.98 | 0.99 | 0.93 | 0.83 | 0.89 | 0.94 | 0.95 | 0.98 | 1.0  |
| rev99 CDP-UCT              | 1.0  | 1.0  | 0.93 | 1.0  | 1.0  | 0.93 | 1.0  | 0.93 | 1.0  | 0.99 |

## Rewards: navigation

|                            | 1                  | 2                  | 3                  | 4                  | 5                  | 6                  | 7                  | 8                  | 9                  | 10                |
|----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|
| min                        | $-37.27(\pm 3.01)$ | $-40.0(\pm0.0)$    | $-40.0(\pm0.0)$    | $-39.83(\pm0.33)$  | $-40.0(\pm0.0)$    | $-40.0(\pm0.0)$    | $-40.0(\pm0.0)$    | $-38.73(\pm 2.48)$ | $-40.0(\pm0.0)$    | $-40.0(\pm0.0)$   |
| rev72 [DP-UCT -i [IDS]]    | $-9.28(\pm 1.24)$  | $-10.3(\pm 0.59)$  | $-12.16(\pm 1.12)$ | $-14.89(\pm 1.36)$ | $-20.8(\pm 0.77)$  | $-21.97(\pm0.76)$  | $-23.92(\pm 1.06)$ | $-31.9(\pm 2.03)$  | $-35.93(\pm 1.03)$ | $-37.96(\pm0.68)$ |
| rev72 [IPPC2011]           | $-9.29(\pm 1.24)$  | $-10.33(\pm0.59)$  | $-12.26(\pm 1.12)$ | $-15.97(\pm 1.5)$  | $-22.11(\pm 2.21)$ | $-36.58(\pm 1.44)$ | $-38.99(\pm0.48)$  | $-33.45(\pm 2.58)$ | $-39.27(\pm0.65)$  | $-40.0(\pm0.0)$   |
| rev72 [MC-UCT -i [IDS]]    | $-11.07(\pm 1.58)$ | $-11.51(\pm 1.0)$  | $-13.85(\pm 1.43)$ | $-16.48(\pm 1.56)$ | $-21.19(\pm 1.35)$ | $-22.9(\pm0.87)$   | $-25.12(\pm 1.06)$ | $-30.79(\pm 2.46)$ | $-37.97(\pm 1.07)$ | $-38.71(\pm0.63)$ |
| rev72 [MaxMC-UCT -i [IDS]] | $-9.28(\pm 1.24)$  | $-10.35(\pm0.59)$  | $-13.98(\pm 1.62)$ | $-16.67(\pm 1.47)$ | $-25.43(\pm 1.38)$ | $-35.46(\pm 1.32)$ | $-35.83(\pm 1.33)$ | $-39.88(\pm0.13)$  | $-40.0(\pm0.0)$    | $-40.0(\pm0.0)$   |
| rev72 [UCTStar -i [IDS]]   | $-9.28(\pm 1.24)$  | $-10.3(\pm 0.59)$  | $-12.16(\pm 1.12)$ | $-14.4(\pm 1.16)$  | $-20.51(\pm0.57)$  | $-23.4(\pm 1.14)$  | $-25.22(\pm 1.29)$ | $-29.1(\pm 2.14)$  | $-36.34(\pm 1.0)$  | $-38.25(\pm0.65)$ |
| rev99 CDP-UCT              | $-9.07(\pm 2.09)$  | $-18.67(\pm 5.49)$ | $-12.93(\pm 2.63)$ | $-18.2(\pm 3.53)$  | $-22.6(\pm 2.22)$  | $-31.13(\pm 3.74)$ | $-32.97(\pm 3.33)$ | $-32.77(\pm 4.09)$ | $-39.2(\pm0.85)$   | $-40.0(\pm0.0)$   |

## IPPC Scores: navigation

|                            | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
|----------------------------|------|------|------|------|------|------|------|------|------|------|
| min                        | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
| rev72 [DP-UCT -i [IDS]]    | 0.99 | 1.0  | 1.0  | 0.98 | 0.99 | 1.0  | 1.0  | 0.71 | 1.0  | 1.0  |
| rev72 [IPPC2011]           | 0.99 | 1.0  | 1.0  | 0.94 | 0.92 | 0.19 | 0.06 | 0.55 | 0.18 | 0.0  |
| rev72 [MC-UCT -i [IDS]]    | 0.93 | 0.96 | 0.94 | 0.92 | 0.97 | 0.95 | 0.93 | 0.82 | 0.5  | 0.63 |
| rev72 [MaxMC-UCT -i [IDS]] | 0.99 | 1.0  | 0.93 | 0.91 | 0.75 | 0.25 | 0.26 | 0.0  | 0.0  | 0.0  |
| rev72 [UCTStar -i [IDS]]   | 0.99 | 1.0  | 1.0  | 1.0  | 1.0  | 0.92 | 0.92 | 1.0  | 0.9  | 0.86 |
| rev99 CDP-UCT              | 1.0  | 0.72 | 0.97 | 0.85 | 0.89 | 0.49 | 0.44 | 0.62 | 0.2  | 0.0  |

## Total Time (in minutes)

|                            | elevators | sysadmin | recon  | game   | traffic | crossing | skill  | navigation | Total   |
|----------------------------|-----------|----------|--------|--------|---------|----------|--------|------------|---------|
| min                        | n/a       | n/a      | n/a    | n/a    | n/a     | n/a      | n/a    | n/a        | n/a     |
| rev72 [DP-UCT -i [IDS]]    | 612.39    | 775.43   | 581.78 | 726.49 | 643.03  | 195.18   | 200.15 | 63.75      | 3798.2  |
| rev72 [IPPC2011]           | 824.65    | 803.55   | 749.75 | 794.71 | 665.61  | 173.42   | 332.07 | 303.65     | 4647.41 |
| rev72 [MC-UCT -i [IDS]]    | 843.3     | 799.32   | 793.4  | 804.54 | 672.21  | 148.84   | 362.42 | 275.11     | 4699.14 |
| rev72 [MaxMC-UCT -i [IDS]] | 841.19    | 777.97   | 734.7  | 767.17 | 677.22  | 194.86   | 357.19 | 426.79     | 4777.09 |
| rev72 [UCTStar -i [IDS]]   | 535.14    | 755.81   | 565.22 | 688.58 | 629.79  | 197.17   | 182.63 | 76.35      | 3630.68 |
| rev99 CDP-UCT              | 157.02    | 179.81   | 174.81 | 179.08 | 180.02  | 131.2    | 72.48  | 54.86      | 1129.29 |

# IPPC Scores: Total

|                            | elevators | sysadmin | recon | game | traffic | crossing | skill | navigation | Total |
|----------------------------|-----------|----------|-------|------|---------|----------|-------|------------|-------|
| min                        | 0.0       | 0.0      | 0.0   | 0.0  | 0.0     | 0.0      | 0.0   | 0.0        | 0.0   |
| rev72 [DP-UCT -i [IDS]]    | 0.97      | 0.65     | 0.91  | 0.86 | 0.85    | 0.98     | 0.96  | 0.97       | 0.89  |
| rev72 [IPPC2011]           | 0.97      | 0.88     | 0.99  | 0.89 | 0.91    | 0.85     | 0.95  | 0.58       | 0.88  |
| rev72 [MC-UCT -i [IDS]]    | 0.93      | 0.65     | 0.99  | 0.86 | 0.85    | 0.84     | 0.94  | 0.86       | 0.86  |
| rev72 [MaxMC-UCT -i [IDS]] | 0.93      | 0.74     | 0.89  | 0.87 | 0.86    | 0.98     | 0.92  | 0.51       | 0.84  |
| rev72 [UCTStar -i [IDS]]   | 0.98      | 0.99     | 0.96  | 0.95 | 0.96    | 0.96     | 0.95  | 0.96       | 0.96  |
| rev99 CDP-UCT              | 0.71      | 0.94     | 0.97  | 0.97 | 0.98    | 0.69     | 0.98  | 0.62       | 0.86  |

