**Developing a multi-Kinect-system for monitoring in dairy cows: object recognition and surface analysis using wavelets –**

**Supplementary Table S1**

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***Supplementary Table S1*** *Descriptive statistics for the absolute values of horizontal, vertical, diagonal, and summed details for every image averaged within image fore- and background[[1]](#footnote-1).* *Details were calculated from transformations with the haar and the bior1.5 wavelet at second decomposition level.*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | Horizontal details | | | Vertical details | | | Diagonal details | | | Sum of details | |
|  | | foregr. | | backgr. | foregr. | | backgr. | foregr. | | backgr. | foregr. | | backgr. | |
| haar | sequences of sideview camera, N = 208 | | | | | | | | | | | | |
| min | | 1.24 | | 26.11 | 2.95 | | 25.79 | 0.93 | | 14.10 | 3.24 | | 39.85 |
| max | | 145.16 | | 136.11 | 142.40 | | 152.24 | 76.88 | | 77.82 | 197.35 | | 225.95 |
| mean | | 18.19 | | 76.22 | 22.22 | | 81.17 | 10.77 | | 41.03 | 31.37 | | 122.51 |
| std | | 30.53 | | 23.98 | 30.52 | | 24.80 | 16.90 | | 13.15 | 46.40 | | 37.85 |
| η2 | | | 0.54 | | | 0.54 | | | 0.52 | | | 0.54 | |
| CI | | | [-63.3,-52.7] | | | [-64.3,-53.6] | | | [-33.2,-27.3] | | | [-99.3,-83.0] | |
| bior1.5 | sequences of sideview camera, N = 208 | | | | | | | | | | | | |
| Min | | 1.83 | | 38.02 | 4.19 | | 38.19 | 1.55 | | 22.79 | 4.53 | | 54.95 |
| max | | 206.60 | | 195.30 | 193.07 | | 219.30 | 119.40 | | 121.34 | 267.73 | | 306.04 |
| mean | | 26.68 | | 109.90 | 33.11 | | 118.34 | 17.52 | | 64.93 | 44.09 | | 168.48 |
| std | | 43.42 | | 34.35 | 44.68 | | 35.79 | 26.42 | | 20.35 | 63.42 | | 51.39 |
| η2 | | | 0.54 | | | 0.54 | | | 0.55 | | | 0.55 | |
| CI | | | [-90.8,-75.7] | | | [-93.0,-77.4] | | | [-52.0,-42.9] | | | [-135.5,-113.3] | |
| haar | sequences of topview camera, N = 276 | | | | | | | | | | | | |
| min | | 6.74 | | 86.80 | 5.74 | | 86.31 | 2.92 | | 43.99 | 9.97 | | 136.28 |
| max | | 33.47 | | 235.62 | 39.73 | | 238.27 | 19.55 | | 1276.63 | 55.94 | | 364.69 |
| mean | | 13.27 | | 170.95 | 13.06 | | 169.68 | 6.94 | | 91.39 | 20.14 | | 264.60 |
| std | | 4.36 | | 25.39 | 5.47 | | 25.12 | 2.76 | | 13.87 | 7.45 | | 38.95 |
| η2 | | | 0.95 | | | 0.95 | | | 0.95 | | | 0.95 | |
| CI | | | [-160.7,-154.6] | | | [-159.7,-153.6] | | | [-86.1,-82.8] | | | [-249.2,-239.8] | |
| bior1.5 | sequences of topview camera, N = 276 | | | | | | | | | | | | |
| min | | 10.03 | | 124.42 | 8.63 | | 125.83 | 5.12 | | 70.06 | 13.96 | | 187.98 |
| max | | 47.90 | | 339.52 | 59.40 | | 339.32 | 34.60 | | 195.52 | 78.08 | | 491.43 |
| mean | | 19.84 | | 244.51 | 19.41 | | 243.44 | 11.54 | | 141.19 | 28.64 | | 358.3 |
| std | | 6.46 | | 35.76 | 8.19 | | 35.47 | 4.51 | | 20.74 | 10.49 | | 51.89 |
| η2 | | | 0.95 | | | 0.95 | | | 0.95 | | | 0.95 | |
| CI | | | [-229.0,-220.4] | | | [-228.3,-219.7] | | | [-132.2,-127.1] | | | [-335.9,-323.4] | |

1. The differences in means in image fore- and background were analyzed by performing a t-test. The significance levels were <0.001. Columns 2 and 3, 4 and 5, 6 and 7, and 8 and 9 belong to the horizontal, vertical, diagonal, and summed details, whereas within each type of details the first column presents the descriptive statistics for the fore- and the second column presents the descriptive statistics for the background pixel.η² and CI denote effect sizes and boundaries of 95% confidence intervals, respectively. The table’s cells for η² and CI span across the two columns holding the values of the groups in comparison. [↑](#footnote-ref-1)