**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)