**Table 1 - Quantitative evaluation of descriptors, precision and recall estimation (with found overlap)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Name | NP | DP | NMO | NI | Precision | RecallO1 | avg ErrIM (pixel) | max ErrIM |
| SIFT | 3228,5 | 0,004 | 537,833 | 398,333 | 0,718 | 0,134 | 0,739 | 2,962 |
| SURF128 | 6925,833 | 0,008 | 606,833 | 381,167 | 0,61 | 0,058 | 0,789 | 2,481 |
| SURF64 | 6925,833 | 0,008 | 636,333 | 424,833 | 0,65 | 0,063 | 0,809 | 2,45 |
| ORB | 16994,583 | 0,02 | 1249,5 | 956,5 | 0,761 | 0,051 | 0,759 | 2,556 |
| ORB1000 | 1000 | 0,001 | 103,333 | 87,333 | 0,84 | 0,098 | 0,681 | 1,848 |
| BRISK | 5934,5 | 0,007 | 552,833 | 407,833 | 0,733 | 0,068 | 0,869 | 2,959 |
| KAZE | 3177,75 | 0,004 | 375,167 | 280,5 | 0,741 | 0,076 | 0,976 | 2,951 |
| AKAZE | 2982,167 | 0,003 | 334,333 | 261,5 | 0,778 | 0,069 | 0,671 | 2,366 |

**Table 2 - Estimation of time costs**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Name | NP1 | NP2 | DesT1, sec | DesT2, sec | DesT, sec | MatchT, sec | InlierT, sec | AvgDesT, ms | AvgMatchT, ms | AvgInlierT, ms | TotalNormT, sec |
| SIFT | 3361 | 3096 | 0,258249 | 0,190529 | 0,224389 | 0,154133 | 0,016829 | 0,069189 | 0,277884 | 0,042249 | 0,61974 |
| SURF128 | 7603 | 6248,667 | 0,567371 | 0,381779 | 0,474575 | 0,733819 | 0,018965 | 0,067861 | 1,174737 | 0,049754 | 1,701934 |
| SURF64 | 7603 | 6248,667 | 0,567574 | 0,397743 | 0,482658 | 0,377276 | 0,021493 | 0,069152 | 0,577169 | 0,050591 | 1,364085 |
| ORB | 19105 | 14884,167 | 0,101973 | 0,076602 | 0,089287 | 1,150001 | 0,025223 | 0,005242 | 0,915241 | 0,02637 | 1,353799 |
| ORB1000 | 1000 | 1000 | 0,034064 | 0,031316 | 0,03269 | 0,015622 | 0,001102 | 0,03269 | 0,15021 | 0,012616 | 0,082104 |
| BRISK | 6549 | 5320 | 0,177926 | 0,13391 | 0,155918 | 0,186615 | 0,003105 | 0,02617 | 0,335236 | 0,007615 | 0,501555 |
| KAZE | 4081 | 2274,5 | 0,969637 | 0,668224 | 0,818931 | 0,147776 | 0,001806 | 0,265694 | 0,390425 | 0,00644 | 1,787444 |
| AKAZE | 3884 | 2080,333 | 0,185634 | 0,133273 | 0,159453 | 0,056799 | 0,02771 | 0,055929 | 0,169045 | 0,105967 | 0,403416 |