**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 | 11569,7 | 0,012 | 2493 | 2208,4 | 0,885 | 0,165 | 0,985 | 3,428 |
| SURF128 | 12154 | 0,013 | 1197 | 936,8 | 0,782 | 0,065 | 1,293 | 3,771 |
| SURF64 | 12154 | 0,013 | 1765,4 | 1394,8 | 0,789 | 0,097 | 1,323 | 3,835 |
| ORB | 49411,1 | 0,052 | 5921,6 | 4486,8 | 0,757 | 0,07 | 1,198 | 4,203 |
| ORB1000 | 1000 | 0,001 | 156 | 124,6 | 0,799 | 0,132 | 0,885 | 2,469 |
| BRISK | 18966,1 | 0,02 | 2321 | 1831,4 | 0,789 | 0,069 | 1,109 | 3,756 |
| KAZE | 3102,6 | 0,003 | 765,6 | 564,4 | 0,737 | 0,142 | 1,138 | 3,685 |
| AKAZE | 3648,7 | 0,004 | 598,2 | 482,2 | 0,805 | 0,098 | 1,058 | 3,19 |

**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 | 13974 | 9165,4 | 0,396775 | 0,356086 | 0,37643 | 1,874931 | 0,003369 | 0,033622 | 0,751234 | 0,001525 | 2,63116 |
| SURF128 | 14804 | 9504 | 0,700564 | 0,551208 | 0,625886 | 2,056103 | 0,00171 | 0,05266 | 1,716853 | 0,001825 | 3,309585 |
| SURF64 | 14804 | 9504 | 0,665567 | 0,563104 | 0,614335 | 1,091524 | 0,002055 | 0,052104 | 0,617308 | 0,001473 | 2,322249 |
| ORB | 64986 | 33836,2 | 0,149849 | 0,083792 | 0,116821 | 7,892045 | 0,009718 | 0,002391 | 1,332306 | 0,002166 | 8,135405 |
| ORB1000 | 1000 | 1000 | 0,040125 | 0,031555 | 0,03584 | 0,003897 | 0,000722 | 0,03584 | 0,024983 | 0,005798 | 0,076299 |
| BRISK | 27221 | 10711,2 | 0,45115 | 0,164871 | 0,30801 | 0,997114 | 0,002056 | 0,015983 | 0,429383 | 0,001123 | 1,61519 |
| KAZE | 4180 | 2025,2 | 0,721167 | 0,596809 | 0,658988 | 0,113985 | 0,001284 | 0,23361 | 0,148766 | 0,002276 | 1,433245 |
| AKAZE | 5089 | 2208,4 | 0,129084 | 0,127613 | 0,128348 | 0,063884 | 0,001308 | 0,041575 | 0,10665 | 0,002713 | 0,321888 |