

Multivariate Normality test 30x30 DataFrame(df)

| | t1 | p-value (t1) | t2 | p-value (t2) |
|--------|----------|--------------|----------|--------------|
| mardia | 3869.798 | 1.0 | -8.83595 | 0.0 |
| hz | 120.0 | 0.0 | | |

Univariate Normality test 30x30 DataFrame(df)

| col | jb | p-value (jb) | k2 | p-value (k2) | ks | p-value (ks) | sw | p-value (sw) |
|-----|---------|--------------|---------|--------------|---------|--------------|---------|--------------|
| 1 | 0.2613 | 0.87752 | 0.06443 | 0.9683 | 0.14307 | 0.5342 | 0.96997 | 0.53832 |
| 2 | 0.11668 | 0.94333 | 0.20203 | 0.90392 | 0.12242 | 0.75267 | 0.97569 | 0.70318 |
| 3 | 1.33299 | 0.5135 | 2.45301 | 0.29332 | 0.14859 | 0.48309 | 0.96188 | 0.34566 |
| 4 | 0.83608 | 0.65834 | 1.08658 | 0.58083 | 0.20578 | 0.13653 | 0.96581 | 0.43172 |
| 5 | 0.69493 | 0.70648 | 0.6714 | 0.71484 | 0.08726 | 0.97634 | 0.9767 | 0.73277 |
| 6 | 0.37324 | 0.82976 | 0.58663 | 0.74579 | 0.24502 | 0.04519* | 0.96888 | 0.50897 |
| 7 | 0.66054 | 0.71873 | 0.54946 | 0.75978 | 0.12725 | 0.69791 | 0.97861 | 0.78741 |
| 8 | 1.46626 | 0.4804 | 1.6658 | 0.43479 | 0.10916 | 0.86703 | 0.94913 | 0.16021 |
| 9 | 0.83745 | 0.65789 | 0.89757 | 0.6384 | 0.09289 | 0.95805 | 0.98045 | 0.83729 |
| 10 | 2.44022 | 0.2952 | 3.43041 | 0.17993 | 0.11021 | 0.85939 | 0.94825 | 0.1517 |
| 11 | 0.14936 | 0.92804 | 0.58461 | 0.74654 | 0.20936 | 0.12442 | 0.9834 | 0.90698 |
| 12 | 1.17604 | 0.55543 | 2.30072 | 0.31652 | 0.32244 | 0.00282** | 0.97488 | 0.67923 |
| 13 | 4.18301 | 0.1235 | 5.40694 | 0.06697 | 0.27074 | 0.01965* | 0.92561 | 0.03759* |
| 14 | 0.92967 | 0.62824 | 1.07095 | 0.58539 | 0.0838 | 0.98437 | 0.97282 | 0.61892 |
| 15 | 0.65173 | 0.7219 | 1.73571 | 0.41985 | 0.11515 | 0.82118 | 0.9809 | 0.84897 |
| 16 | 1.59182 | 0.45117 | 2.19273 | 0.33408 | 0.12259 | 0.7508 | 0.95978 | 0.30579 |
| 17 | 2.53193 | 0.28197 | 3.46752 | 0.17662 | 0.17783 | 0.26639 | 0.94692 | 0.1397 |
| 18 | 1.27309 | 0.52912 | 1.49832 | 0.47276 | 0.09401 | 0.95362 | 0.96326 | 0.37422 |
| 19 | 1.32312 | 0.51604 | 1.40371 | 0.49566 | 0.1257 | 0.71525 | 0.95835 | 0.28096 |
| 20 | 0.72955 | 0.69435 | 0.63411 | 0.72829 | 0.12196 | 0.75802 | 0.97871 | 0.79028 |
| 21 | 1.46557 | 0.48057 | 2.17769 | 0.3366 | 0.10935 | 0.86569 | 0.95528 | 0.23354 |
| 22 | 0.72374 | 0.69637 | 0.62638 | 0.73111 | 0.13739 | 0.59009 | 0.98234 | 0.88379 |
| 23 | 1.24766 | 0.53589 | 1.57046 | 0.45601 | 0.11384 | 0.8317 | 0.96146 | 0.33747 |
| 24 | 1.54672 | 0.46146 | 3.6298 | 0.16285 | 0.12211 | 0.75636 | 0.96386 | 0.38719 |
| 25 | 0.66139 | 0.71842 | 1.30456 | 0.52086 | 0.14829 | 0.48573 | 0.9589 | 0.29029 |
| 26 | 0.99965 | 0.60664 | 1.52975 | 0.46539 | 0.19118 | 0.19596 | 0.97674 | 0.73391 |
| 27 | 0.00638 | 0.99681 | 0.29216 | 0.86409 | 0.18494 | 0.22683 | 0.98057 | 0.84058 |
| 28 | 0.66665 | 0.71654 | 0.64943 | 0.72273 | 0.19098 | 0.19691 | 0.96496 | 0.41178 |
| 29 | 0.22405 | 0.89402 | 0.42085 | 0.81024 | 0.09981 | 0.9261 | 0.98717 | 0.96816 |
| 30 | 1.12433 | 0.56997 | 1.20515 | 0.5474 | 0.32411 | 0.00264** | 0.94621 | 0.13373 |