

|                |      |                 |            | versus      | Tilted vs. Steady       |                      |                 | Tilted vs. Hybrid       |                      |                 | Hybrid vs. Steady       |                      |                 |
|----------------|------|-----------------|------------|-------------|-------------------------|----------------------|-----------------|-------------------------|----------------------|-----------------|-------------------------|----------------------|-----------------|
|                |      |                 |            |             | Strict Triplet Distance | Lax Triplet Distance | Inner Node Loss | Strict Triplet Distance | Lax Triplet Distance | Inner Node Loss | Strict Triplet Distance | Lax Triplet Distance | Inner Node Loss |
| Scenario       | Unit | Population Size | Downsample | Size (bits) |                         |                      |                 |                         |                      |                 |                         |                      |                 |
| drift          | bit  | 4096            | 500        | 32          | ++++                    | +                    | ++++            |                         | +                    | ++++            | ++++                    | +++                  | ++++            |
|                |      |                 |            | 64          | ++++                    |                      | ++++            | +                       | +                    |                 | ++++                    |                      | ++++            |
|                |      |                 |            | 256         | ++++                    | ++++                 | ++++            | +                       | +                    | ++++            | +++                     | +++                  | ++++            |
|                |      | 65536           | 500        | 32          | ++++                    | ++++                 | ++++            | +++                     | +++                  |                 |                         | +                    | ++++            |
|                |      |                 |            | 64          | +++                     | ++++                 | ++++            | +++                     | +++                  |                 | +                       | +                    | ++++            |
|                |      |                 |            | 256         | +                       | +++                  | ++++            | +                       | +                    |                 |                         | +                    | ++++            |
|                |      |                 | 8000       | 32          | ++++                    | ++++                 | ++++            | +                       | +                    | ++++            | +++                     | ++++                 | ++++            |
|                |      |                 |            | 64          | +++                     | ++++                 | ++++            | ++                      | +                    | ++              | +                       | +                    | ++++            |
|                |      |                 |            | 256         | +                       | +                    | ++++            | +                       | +                    | ++++            |                         |                      | ++++            |
|                | byte | 4096            | 500        | 256         | ++++                    |                      | ++++            | ++                      |                      | ++++            | ++++                    |                      | ++++            |
|                |      | 65536           | 500        | 256         | ++++                    |                      | ++++            | ++++                    |                      | ++++            | +                       |                      | ++++            |
|                |      |                 | 8000       | 256         | ++++                    |                      | ++++            | ++++                    |                      | ++++            | +                       |                      | ++++            |
| mild structure | bit  | 4096            | 500        | 32          | ++++                    | ++++                 | ++++            | +                       | +                    | ++++            | ++++                    | ++++                 | ++++            |
|                |      |                 |            | 64          | ++++                    | ++++                 | ++++            | +++                     | +++                  | ++++            | ++++                    | ++++                 | ++++            |
|                |      |                 |            | 256         | ++++                    | +                    | ++++            | +                       | +                    | ++++            | ++++                    |                      | ++++            |
|                |      | 65536           | 500        | 32          | ++++                    | ++++                 | ++++            | +                       | +                    | ++++            | ++++                    | ++++                 | ++++            |
|                |      |                 |            | 64          | ++++                    | ++++                 | ++++            | +                       | +                    | ++++            | ++++                    | ++++                 | ++++            |
|                |      |                 |            | 256         | ++++                    | ++++                 | ++++            | +++                     | +++                  | +               | ++++                    | +                    | ++++            |
|                |      |                 | 8000       | 32          | ++++                    | ++++                 | ++++            | +                       | +                    | ++++            | ++++                    | ++++                 | ++++            |
|                |      |                 |            | 64          | ++++                    | ++++                 | ++++            | ++++                    | +++                  | ++++            | ++++                    | ++++                 | ++++            |
|                |      |                 |            | 256         | ++++                    | +++                  | ++++            |                         | +                    | ++++            | ++++                    | +                    | ++++            |
|                | byte | 4096            | 500        | 256         | ++++                    |                      | ++++            | +++                     |                      | ++++            | ++++                    |                      | ++++            |
|                |      |                 | 500        | 256         | ++++                    |                      | ++++            | +++                     |                      | ++++            | ++++                    |                      | ++++            |
|                |      | 65536           | 8000       | 256         | ++++                    |                      | ++++            | ++++                    |                      | ++++            | ++++                    |                      | ++++            |
|                |      |                 |            | 256         | ++++                    |                      | ++++            | ++++                    |                      | ++++            | ++++                    |                      | ++++            |
| plain          | bit  | 4096            | 500        | 32          | ++++                    | ++++                 | ++++            | +++                     | +++                  | ++++            | ++++                    | ++++                 | ++++            |
|                |      |                 |            | 64          | ++++                    | ++++                 | ++++            | +++                     | +++                  | ++++            | ++++                    | ++++                 | ++++            |
|                |      |                 |            | 256         | ++++                    | ++++                 | ++++            |                         | +                    | ++++            | ++++                    | ++++                 | ++++            |
|                |      | 65536           | 500        | 32          | ++++                    | ++++                 | ++++            | ++                      | +++                  | ++++            | ++++                    | ++++                 | ++++            |
|                |      |                 |            | 64          | ++++                    | ++++                 | ++++            | +                       | +                    | ++++            | ++++                    | ++++                 | ++++            |
|                |      |                 |            | 256         | ++++                    |                      | ++++            | +                       | +                    | +               | ++++                    | ++                   | ++++            |
|                |      |                 | 8000       | 32          | ++++                    | ++++                 | ++++            | +                       | +                    | ++++            | ++++                    | ++++                 | ++++            |
|                |      |                 |            | 64          | ++++                    | ++++                 | ++++            | +++                     | +++                  | ++++            | ++++                    | ++++                 | ++++            |
|                |      |                 |            | 256         | ++++                    |                      | ++++            | +                       | +++                  | ++++            | ++++                    | +++                  | ++++            |
|                | byte | 4096            | 500        | 256         | ++++                    |                      | ++++            | ++++                    | +                    | ++++            | ++++                    | +                    | ++++            |
|                |      | 65536           | 500        | 256         | ++++                    |                      | ++++            | ++++                    |                      | ++++            | ++++                    |                      | ++++            |
|                |      |                 | 8000       | 256         | ++++                    |                      | ++++            | ++++                    |                      | ++++            | ++++                    |                      | ++++            |
| rich structure | bit  | 4096            | 500        | 32          |                         | +                    | ++++            |                         |                      | ++++            |                         |                      | ++++            |
|                |      |                 |            | 64          | +                       |                      | ++++            | +                       |                      | ++++            |                         | +                    | ++++            |
|                |      |                 |            | 256         | +                       |                      | ++++            | +                       | +                    | ++++            |                         | +                    | ++++            |
|                |      | 65536           | 500        | 32          | +++                     | +                    | ++++            | ++                      | +++                  | ++++            |                         | ++++                 | ++++            |
|                |      |                 |            | 64          | ++++                    | ++                   | ++++            |                         | ++                   |                 | +++                     |                      | ++++            |
|                |      |                 |            | 256         |                         | +                    | ++++            |                         | +                    |                 |                         |                      | ++++            |
|                |      |                 | 8000       | 32          | +                       | +                    | ++++            |                         |                      | ++++            |                         | ++                   | ++++            |
|                |      |                 |            | 64          |                         |                      | ++++            | +                       | +                    | ++++            |                         | +                    | ++++            |
|                |      |                 |            | 256         | +                       | +                    | ++++            |                         |                      |                 | +++                     | +                    | ++++            |
|                | byte | 4096            | 500        | 256         |                         |                      | ++++            | +                       |                      | ++++            | +++                     |                      | ++++            |
|                |      | 65536           | 500        | 256         | +                       |                      | ++++            | +                       |                      | ++++            |                         |                      | ++++            |
|                |      |                 | 8000       | 256         | +                       |                      | ++++            | +                       |                      | ++++            |                         |                      | ++++            |