**Analisis del log, correspondiente a**

**1. Identificación general**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **dataset** | **clase** | **train\_original** | **objetivo\_balance** | **estado** | **motivo\_sin\_sinteticas** |
| **glass** | 1 | 56 | 48 | no se sobremuestrea | sin\_faltante(actual>=objetivo) |
| **glass** | 2 | 61 | 48 | no se sobremuestrea | sin\_faltante(actual>=objetivo) |
| **glass** | 3 | 14 | 48 | sobremuestreada | ok |
| **glass** | 5 | 10 | 48 | sobremuestreada | insuficientes\_filtradas |
| **glass** | 6 | 7 | 48 | sobremuestreada | insuficientes\_filtradas |
| **glass** | 7 | 23 | 48 | sobremuestreada | ok |

**2. Resultados de tamaño y ratios**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **clase** | **muestras\_sinteticas\_generadas** | **total\_original** | **total\_resampled** | **ratio\_original** | **ratio\_resampled** |
| 1 | 0 | 171 | 171 | 0.327485 | 0.327485 |
| 2 | 0 | 171 | 171 | 0.356725 | 0.356725 |
| 3 | 34 | 171 | 205 | 0.081871 | 0.234146 |
| 5 | 0 | 171 | 205 | 0.058480 | 0.048780 |
| 6 | 0 | 171 | 205 | 0.040936 | 0.034146 |
| 7 | 25 | 171 | 230 | 0.134503 | 0.208696 |

**3. Métricas internas de riesgo/densidad**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **clase** | **n\_candidatas** | **n\_filtradas** | **riesgo\_medio** | **riesgo\_std** | **densidad\_media** | **vecinos\_validos\_promedio** |
| 3 | 14 | 8 | 0.9 | 0.10 | 0.7143 | 3.0 |
| 5 | 10 | 2 | 0.2 | 0.00 | 0.0800 | 3.0 |
| 6 | 7 | 3 | 0.4 | 0.1633 | 0.3429 | 3.0 |
| 7 | 23 | 15 | 0.0 | 0.00 | 0.6870 | 3.0 |

**4. Parámetros de configuración**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **clase** | **umbral\_densidad** | **umbral\_entropia** | **percentil\_densidad** | **percentil\_riesgo** | **criterio\_pureza** | **tecnica\_sobremuestreo** | **factor\_equilibrio** | **random\_state** | **modo\_espacial** | **timestamp** |
| 1 | — | — | 75.0 | 50.0 | entropia | PCSMOTE | 0.8 | 42 | 2d | 2025-08-20T00:20:20.726695 |
| 2 | — | — | 75.0 | 50.0 | entropia | PCSMOTE | 0.8 | 42 | 2d | 2025-08-20T00:20:20.726695 |
| 3 | 1.0 | 0.7219 | 75.0 | 50.0 | entropia | PCSMOTE | 0.8 | 42 | 2d | 2025-08-20T00:20:20.763497 |
| 5 | 0.2 | 0.9087 | 75.0 | 50.0 | entropia | PCSMOTE | 0.8 | 42 | 2d | 2025-08-20T00:20:20.763497 |
| 6 | 0.6 | 0.9710 | 75.0 | 50.0 | entropia | PCSMOTE | 0.8 | 42 | 2d | 2025-08-20T00:20:20.779115 |
| 7 | 1.0 | 0.0000 | 75.0 | 50.0 | entropia |  |  |  |  |  |