

run_reliability_analisis

February 24, 2025

[43]: !pip install duckdb seaborn

```
Requirement already satisfied: duckdb in
/home/matheus/.local/lib/python3.8/site-packages (1.0.0)
Requirement already satisfied: seaborn in
/home/matheus/.local/lib/python3.8/site-packages (0.12.1)
Requirement already satisfied: numpy>=1.17 in
/home/matheus/.local/lib/python3.8/site-packages (from seaborn) (1.24.4)
Requirement already satisfied: matplotlib!=3.6.1,>=3.1 in
/home/matheus/.local/lib/python3.8/site-packages (from seaborn) (3.5.2)
Requirement already satisfied: pandas>=0.25 in
/home/matheus/.local/lib/python3.8/site-packages (from seaborn) (1.4.2)
Requirement already satisfied: cycler>=0.10 in
/home/matheus/.local/lib/python3.8/site-packages (from
matplotlib!=3.6.1,>=3.1->seaborn) (0.11.0)
Requirement already satisfied: packaging>=20.0 in
/home/matheus/.local/lib/python3.8/site-packages (from
matplotlib!=3.6.1,>=3.1->seaborn) (21.3)
Requirement already satisfied: pillow>=6.2.0 in
/home/matheus/.local/lib/python3.8/site-packages (from
matplotlib!=3.6.1,>=3.1->seaborn) (9.1.1)
Requirement already satisfied: pyparsing>=2.2.1 in
/home/matheus/.local/lib/python3.8/site-packages (from
matplotlib!=3.6.1,>=3.1->seaborn) (3.0.9)
Requirement already satisfied: fonttools>=4.22.0 in
/home/matheus/.local/lib/python3.8/site-packages (from
matplotlib!=3.6.1,>=3.1->seaborn) (4.33.3)
Requirement already satisfied: python-dateutil>=2.7 in
/home/matheus/.local/lib/python3.8/site-packages (from
matplotlib!=3.6.1,>=3.1->seaborn) (2.8.2)
Requirement already satisfied: kiwisolver>=1.0.1 in
/home/matheus/.local/lib/python3.8/site-packages (from
matplotlib!=3.6.1,>=3.1->seaborn) (1.4.3)
Requirement already satisfied: pytz>=2020.1 in
/home/matheus/.local/lib/python3.8/site-packages (from pandas>=0.25->seaborn)
(2022.1)
Requirement already satisfied: six>=1.5 in /usr/lib/python3/dist-packages (from
python-dateutil>=2.7->matplotlib!=3.6.1,>=3.1->seaborn) (1.14.0)
```

```
[44]: import duckdb
import scipy.stats as stats
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
from scipy import special
import numpy as np
import plotly.express as px
```

```
[45]: def process(task_id: str):

    print(f"== {task_id} ==")

    df_reliability = duckdb.query(f"""
        with dates as (
            select date--, message
            , row_number() OVER (ORDER BY date) as row_num
            from "commits/{task_id}-commits.csv"
            where change_type in ('__label__corrective')
        )
        select date_diff('days', d1.date, d2.date) TBF from dates d1
        left join dates d2 on d2.row_num = d1.row_num + 1
    """).to_df()

    # Carregar os dados de TBF (substitua pelo seu DataFrame real)
    TBF_data = df_reliability['TBF'].dropna()
    TBF_data = TBF_data[TBF_data > 0] # Remover valores zero
    TBF_values = TBF_data.values

    # Visualizar distribuição inicial
    fig = plt.figure(figsize=(12, 5))
    sns.histplot(TBF_values, bins=50, kde=True)
    plt.title(f"The histogram of Time Between Failures (TBF) {task_id}")
    fig.savefig(f"reliability/{task_id}-TBF.png")
    plt.show()

    sns.set(style="whitegrid")
    x = np.arange(1, len(df_reliability['TBF']) + 1)
    fig = plt.figure(figsize=(12, 5))
    plt.plot(x, df_reliability['TBF'], 'bo-', markersize=4, linewidth=1)
    plt.xlabel("Failures")
    plt.ylabel("Time Interval")
    plt.yscale("linear")
    fig.savefig(f"reliability/{task_id}-FTI.png")
    plt.show()
```

```

sns.set(style="whitegrid")
x = np.arange(1, len(df_reliability['TBF']) + 1)
y_cumulative = np.cumsum(df_reliability['TBF'])
fig = plt.figure(figsize=(12, 5))
plt.plot(x, y_cumulative, 'bo-', markersize=4, linewidth=1)
plt.xlabel("Failures")
plt.ylabel("Cumulative Time Interval")
plt.yscale("linear")
fig.savefig(f"reliability/{task_id}-CFTI.png")
plt.show()

sns.set(style="whitegrid")
MTBF = df_reliability['TBF'].mean()
lambda_failure = 1 / MTBF
t_values = np.linspace(0, df_reliability['TBF'].max(), 100)
R_values = np.exp(-lambda_failure * t_values)
fig = plt.figure(figsize=(12, 5))
plt.plot(t_values, R_values, 'b-', linewidth=2, label="Confiabilidade R(t)")
plt.xlabel("Time Since Last Failure (fix commit)")
plt.ylabel("Probability of No Fix (R(t))")
plt.title("Repository Reliability Curve")
plt.legend()
fig.savefig(f"reliability/{task_id}-Rt.png")
plt.show()

MTBF = df_reliability['TBF'].mean()
lambda_failure = 1 / MTBF
def reliability(t):
    return np.exp(-lambda_failure * t)
t_values = [1, 5, 10, 50, 100]
reliability_values = [reliability(t) for t in t_values]
for t, R_t in zip(t_values, reliability_values):
    print(f"Confiabilidade R({t}) = {R_t:.4f}")

df_reliability.to_csv(f"reliability/{task_id}_reliability.csv")

t_days = 1

df_reliability_file = duckdb.query(f"""
    WITH dates AS (
        SELECT date, filepath,
            ROW_NUMBER() OVER (PARTITION BY filepath ORDER BY date) AS ↵
    ↵row_num
        FROM "commits/{task_id}-files.csv" f
        LEFT JOIN "commits/{task_id}-commits.csv" c ON f.commit_id = c.
    ↵commit_id
""")

```

```

        WHERE change_type IN ('__label__corrective')
    )
SELECT d1.filepath,
       MAX(d1.row_num) AS n_commits,
       AVG(DATE_DIFF('days', d1.date, d2.date)) AS MTBF,
       1.0 / NULLIF(AVG(DATE_DIFF('days', d1.date, d2.date)), 0) AS
→lambda_failure, -- Evita divisão por zero
       EXP(- (1.0 / NULLIF(AVG(DATE_DIFF('days', d1.date, d2.date)), 0)) *_
→{t_days}) AS R_t -- Confiabilidade para t dias
FROM dates d1
LEFT JOIN dates d2
    ON d2.filepath = d1.filepath
    AND d2.row_num = d1.row_num + 1
GROUP BY d1.filepath
HAVING d1.filepath LIKE '%.java' AND MTBF > 0
ORDER BY R_t, n_commits
""").to_df()

with pd.option_context('display.max_rows', 20, 'display.max_columns',_u
→None, 'display.max_colwidth', -1):
    display(df_reliability_file)

df_reliability_file.to_csv(f"reliability/{task_id}_reliability_file.csv")

df_all_files = pd.read_csv(f"maps/{task_id}_all_files2.csv")

df_all_files_reliability = duckdb.query(f"""
    select *, 1-R_t as U_t from df_all_files a
    left join df_reliability_file r on r.filepath = a.filename
""").to_df()

fig = px.treemap(
    names = df_all_files_reliability['filename'],
    parents = df_all_files_reliability['path'],
    color=df_all_files_reliability['R_t'],
    hover_data=[df_all_files_reliability['filename'],_u
→df_all_files_reliability['R_t']],
    color_continuous_scale='RdBu'
)

fig.update_layout(
    uniformtext=dict(minsize=10, mode='hide'),
    margin = dict(t=50, l=25, r=25, b=25),
    autosize=False,
    width=1000,
    height=1000
)

```

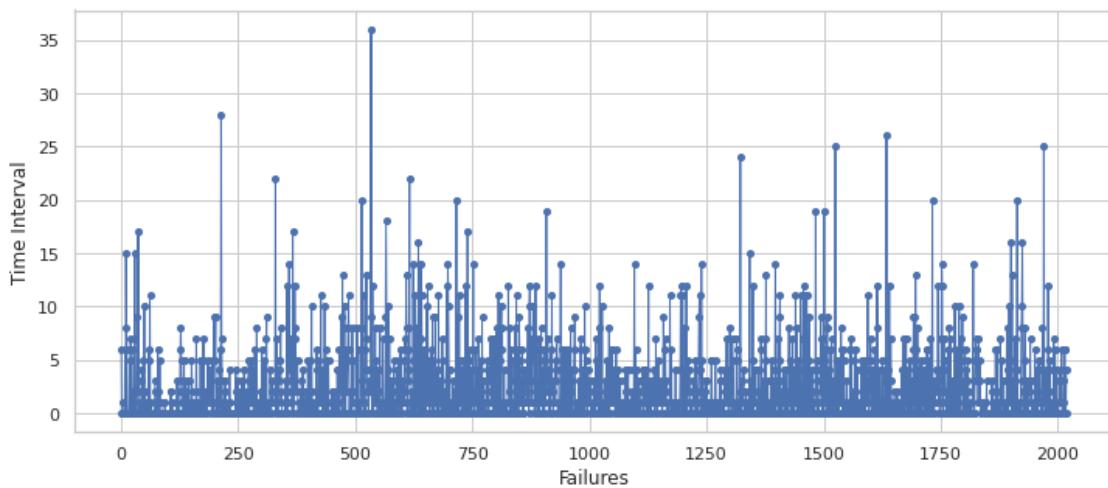
```
fig.write_html(f"reliability/{task_id}_reliability_map.html")
```

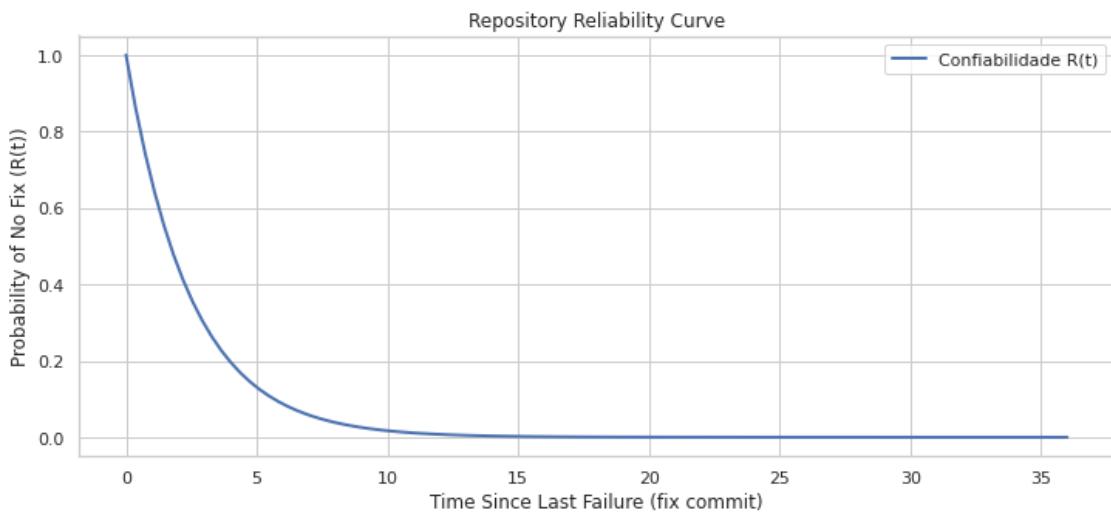
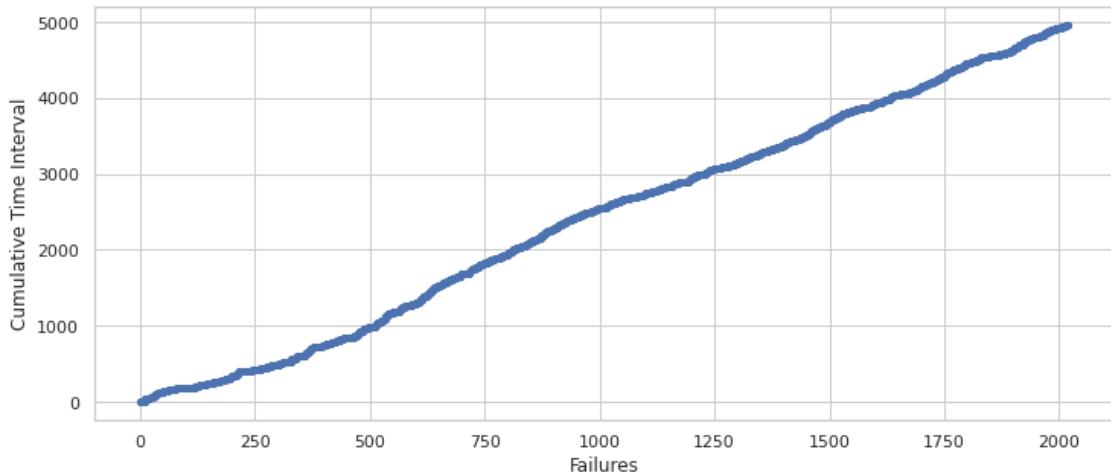
```
#process('ant')
```

```
[46]: import os
log_dir = "logs/"
for filename in os.listdir(log_dir):
    if filename.endswith("_all_files.csv"):
        task_id = filename.replace("_all_files.csv", "")
        process(task_id)
```

```
== jOOQ ==
```

The histogram of Time Between Failures (TBF) jOOQ





```

Confiabilidade R(1) = 0.6657
Confiabilidade R(5) = 0.1308
Confiabilidade R(10) = 0.0171
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000
  
```

```

filepath \
0   jOOQ-meta/src/main/java/org/jooq/meta/DefaultTableQualifier.java
1   jOOQ-test/src/org/jooq/test/_testcases/JsonLoaderTests.java
2   jOOQ-meta/src/main/java/org/jooq/meta/TableQualifier.java
3   jOOQ-meta/src/main/java/org/jooq/meta/ColumnQualifier.java
4   jOOQ-meta/src/main/java/org/jooq/meta/DefaultColumnQualifier.java
...
2022 jOOQ/src/main/java/org/jooq/exception/DataChangedException.java
  
```

```

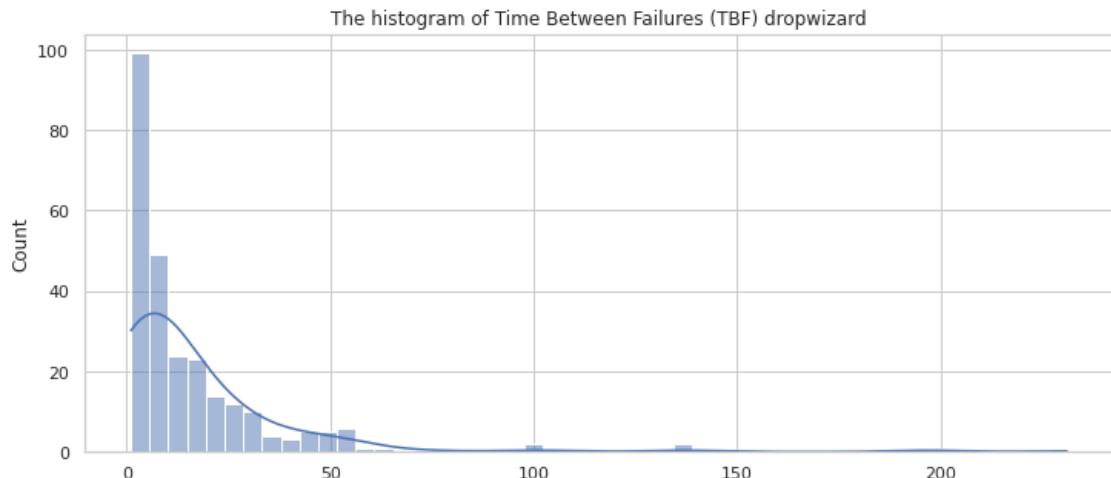
2023 jOOQ/src/main/java/org/jooq/impl/SettingsEnabledConnection.java
2024 jOOQ/src/main/java/org/jooq/Binding.java
2025 jOOQ/src/main/java/org/jooq/util/mysql/MySQLDSL.java
2026 jOOQ/src/main/java/org/jooq/DatePart.java

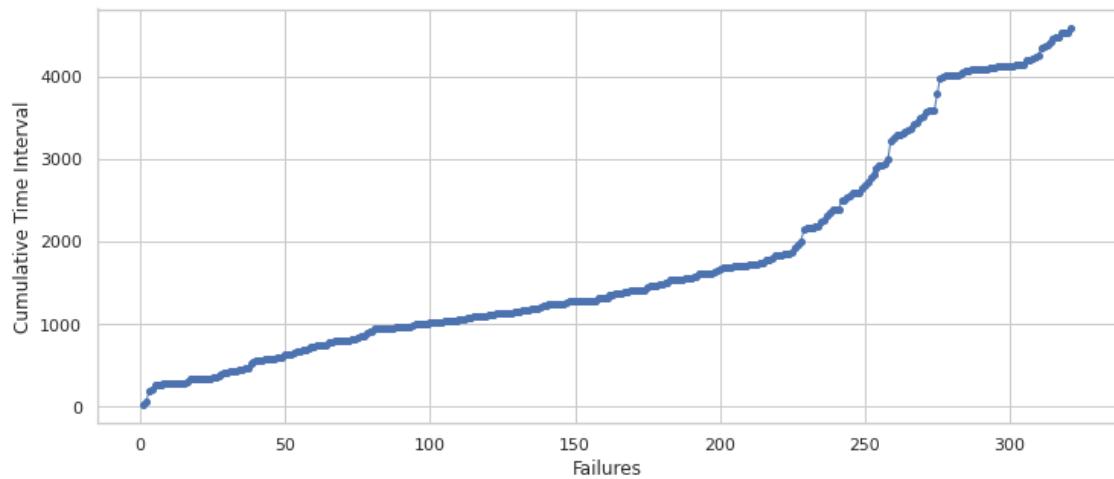
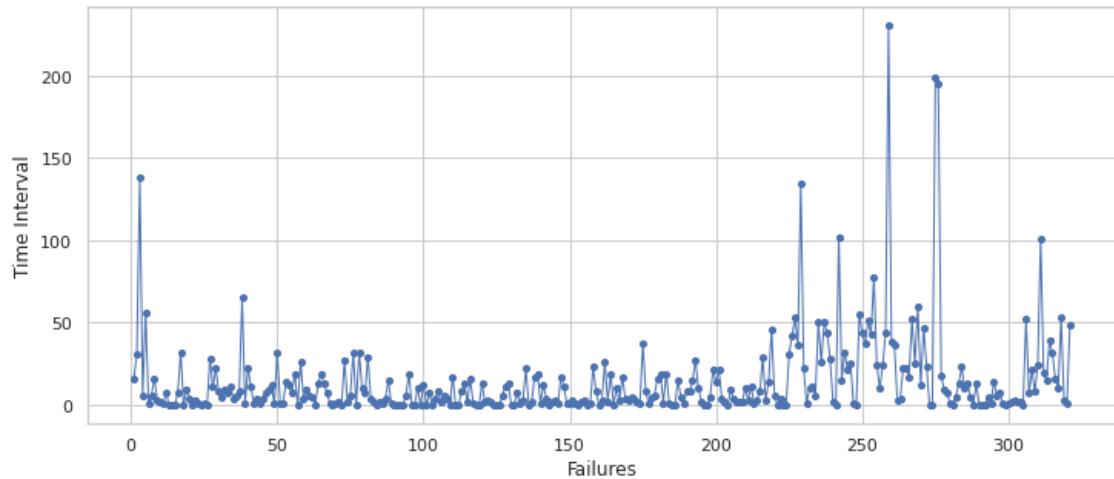
```

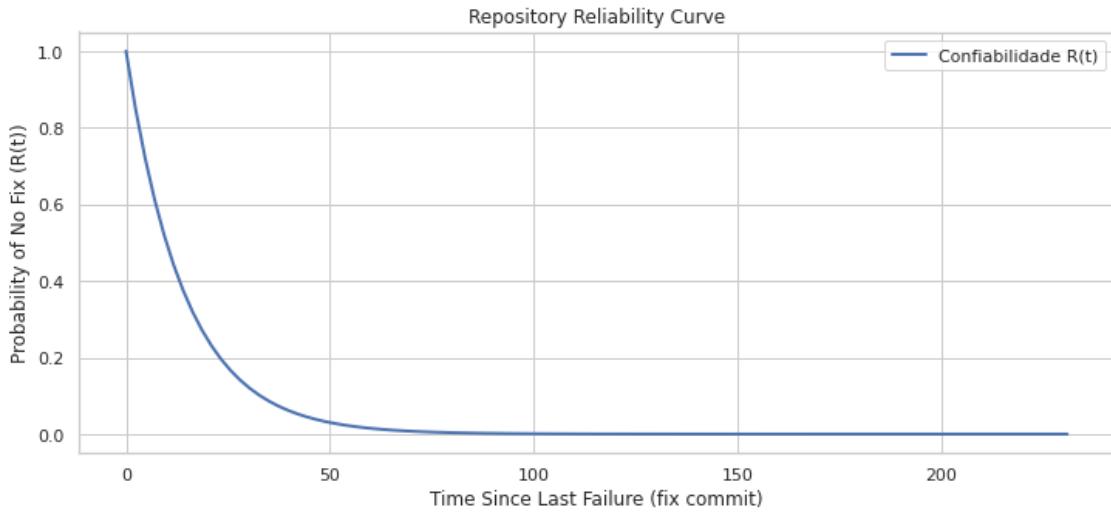
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| ... | .. | ... | ... | ... |
| 2022 | 2 | 2918.0 | 0.000343 | 0.999657 |
| 2023 | 2 | 3191.0 | 0.000313 | 0.999687 |
| 2024 | 2 | 3396.0 | 0.000294 | 0.999706 |
| 2025 | 2 | 3444.0 | 0.000290 | 0.999710 |
| 2026 | 2 | 3460.0 | 0.000289 | 0.999711 |

[2027 rows x 5 columns]

== dropwizard ==







```

Confiabilidade R(1) = 0.9325
Confiabilidade R(5) = 0.7050
Confiabilidade R(10) = 0.4970
Confiabilidade R(50) = 0.0303
Confiabilidade R(100) = 0.0009

```

```

0 dropwizard-testing/src/main/java/io/dropwizard/testing/junit/DAOTestRule.java
1 dropwizard-json-logging/src/test/java/io/dropwizard/logging/json/LayoutIntegrationTests.java
2 dropwizard-jetty/src/test/java/io/dropwizard/jetty/HttpsConnectorFactoryTest.java
3 dropwizard-testing/src/test/java/io/dropwizard/testing/app/GzipDefaultVaryBehaviourTest.java
4 dropwizard-configuration/src/main/java/io/dropwizard/configuration/YamlConfigurationFactor...
..
119 dropwizard-hibernate/src/test/java/io/dropwizard/hibernate/UnitOfWorkApplicationListenerTest.java
120 dropwizard-servlets/src/test/java/io/dropwizard/servlets/tasks/LogConfigurationTaskTest.java
121 dropwizard-metrics/src/test/java/io/dropwizard/metrics/BaseReporterFactoryTest.java
122 dropwizard-hibernate/src/main/java/io/dropwizard/hibernate/UnitOfWorkApplicationListener.java
123 dropwizard-hibernate/src/test/java/io/dropwizard/hibernate/JerseyIntegrationTest.java

```

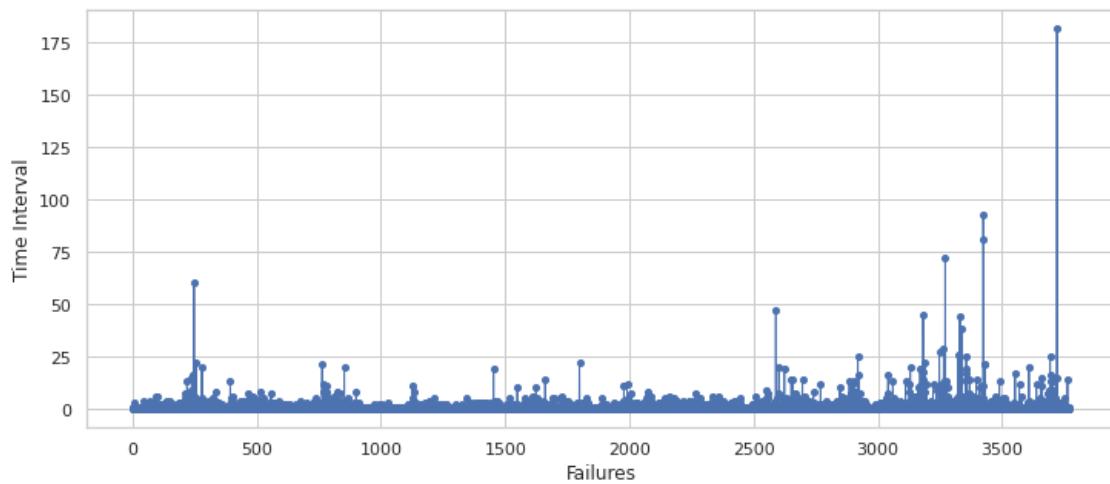
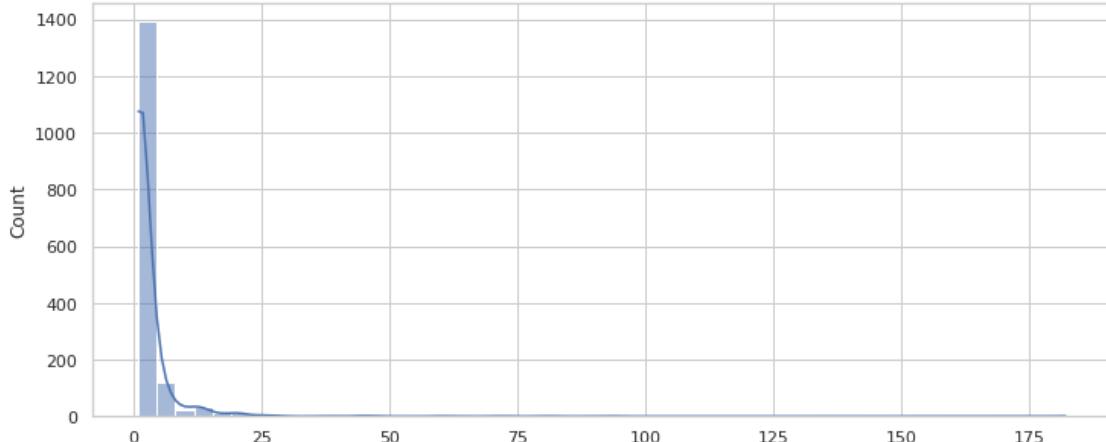
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 2.0 | 0.500000 | 0.606531 |
| 1 | 2 | 2.0 | 0.500000 | 0.606531 |
| 2 | 2 | 5.0 | 0.200000 | 0.818731 |
| 3 | 2 | 9.0 | 0.111111 | 0.894839 |
| 4 | 2 | 9.0 | 0.111111 | 0.894839 |
| .. | .. | ... | ... | ... |
| 119 | 2 | 2423.0 | 0.000413 | 0.999587 |
| 120 | 2 | 2555.0 | 0.000391 | 0.999609 |
| 121 | 2 | 2713.0 | 0.000369 | 0.999631 |
| 122 | 2 | 2893.0 | 0.000346 | 0.999654 |

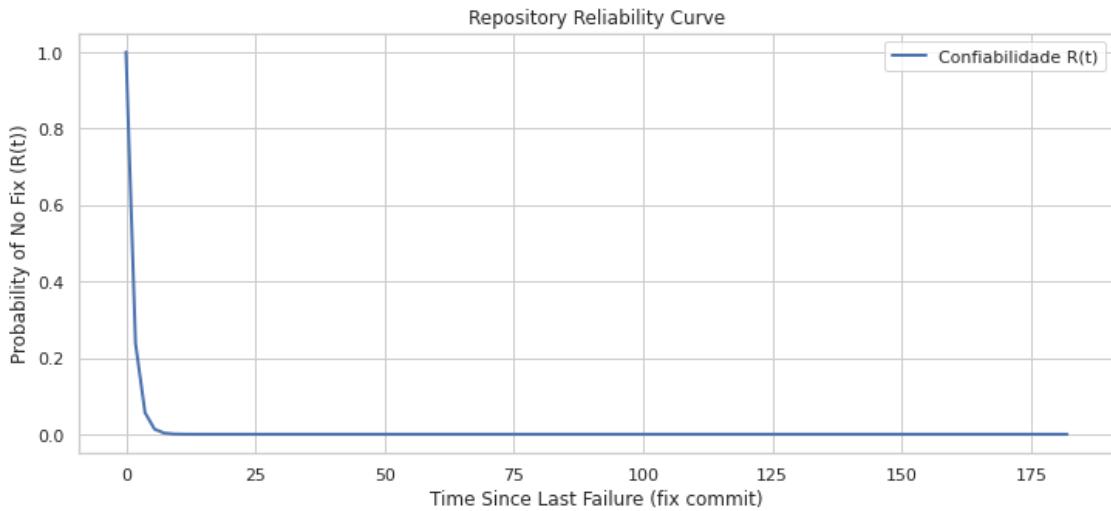
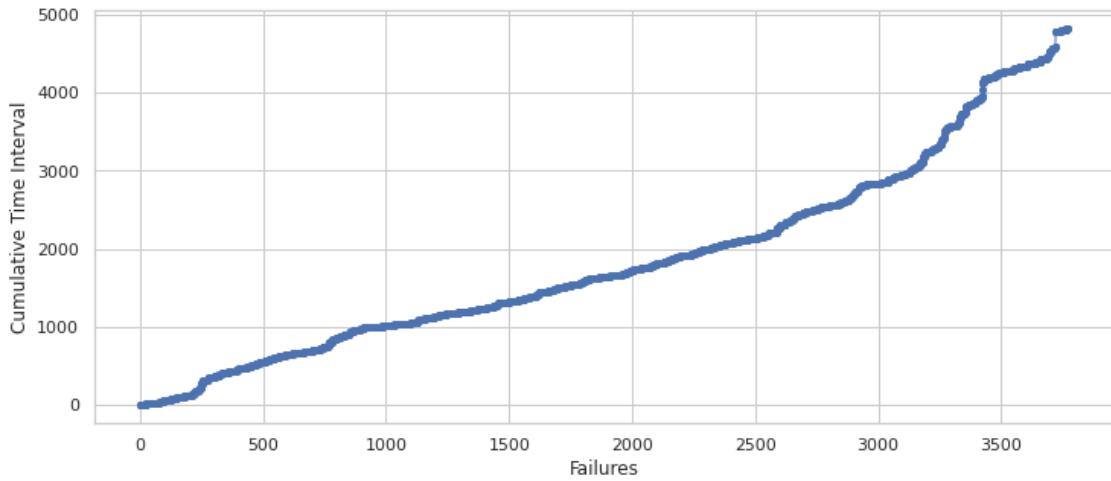
```
123 2          3069.0  0.000326          0.999674
```

```
[124 rows x 5 columns]
```

```
== findbugs ==
```

The histogram of Time Between Failures (TBF) findbugs





Confiabilidade $R(1) = 0.4577$

Confiabilidade $R(5) = 0.0201$

Confiabilidade $R(10) = 0.0004$

Confiabilidade $R(50) = 0.0000$

Confiabilidade $R(100) = 0.0000$

```

0    sandbox/appEngineCloudClient/src/junit/edu/umd/cs/findbugs/cloud/appEngine/AbstractAppEng
1    sandbox/appEngineCloudClient/src/junit/edu/umd/cs/findbugs/cloud/appEngine/AppEngineCloud
2    findbugs/src/java/edu/umd/cs/findbugs/FindTwoLockWait.java
3    findbugsTestCases/src/java/sfBugs/Bug3358161.java
4    findbugs/src/tools/edu/umd/cs/findbugs/tools/patcomp/Token.java
...
1667   findbugs/src/java/edu/umd/cs/findbugs/visitclass/BetterVisitor.java

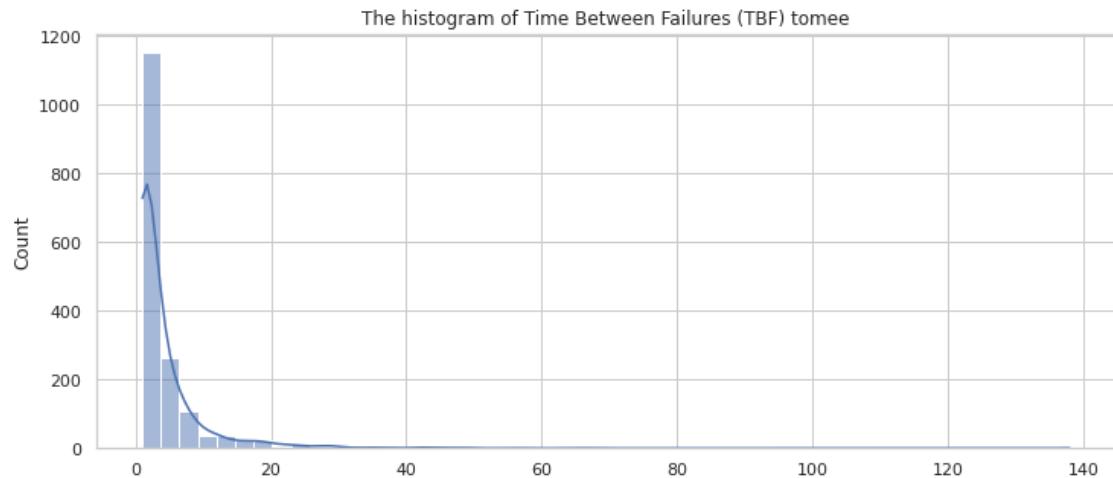
```

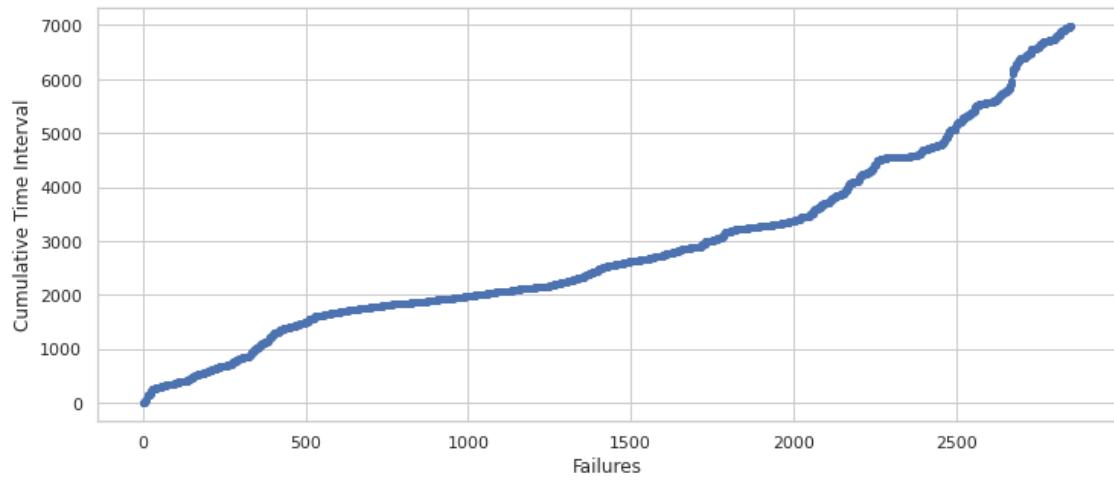
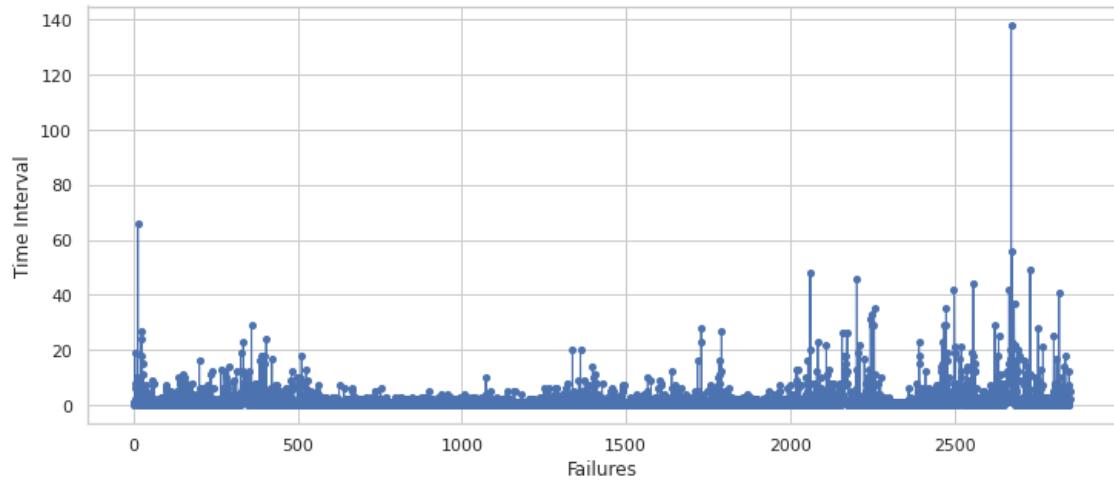
```
1668 findbugs/src/java/edu/umd/cs/findbugs/ba/ForwardDataflowAnalysis.java
1669 findbugs/src/java/edu/umd/cs/findbugs/ba/CFGBuilder.java
1670 findbugs/src/java/edu/umd/cs/findbugs/SelfCalls.java
1671 findbugs/src/java/edu/umd/cs/findbugs/ba/bcp/ByteCodePattern.java
```

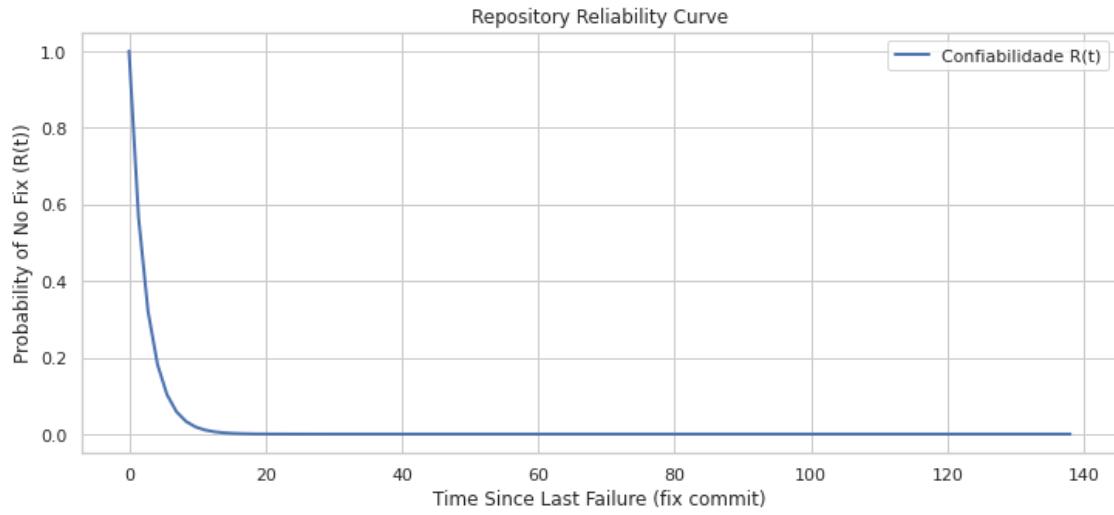
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 3 | 0.5 | 2.000000 | 0.135335 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| ... | .. | ... | ... | ... |
| 1667 | 2 | 2413.0 | 0.000414 | 0.999586 |
| 1668 | 2 | 2591.0 | 0.000386 | 0.999614 |
| 1669 | 2 | 2637.0 | 0.000379 | 0.999621 |
| 1670 | 2 | 2637.0 | 0.000379 | 0.999621 |
| 1671 | 2 | 2676.0 | 0.000374 | 0.999626 |

[1672 rows x 5 columns]

== tomeec ==







Confiabilidade $R(1) = 0.6649$

Confiabilidade $R(5) = 0.1300$

Confiabilidade $R(10) = 0.0169$

Confiabilidade $R(50) = 0.0000$

Confiabilidade $R(100) = 0.0000$

```

0    container/openejb-loader/src/main/java/org/apache/openejb/loader/ProvisioningUtil.java
1    container/openejb-jee/src/test/java/org/apache/openejb/jee/jpa/Cmp2ConversionTest.java
2    container/openejb-jee/src/test/java/org/apache/openejb/jee/jpa/OpenEjb2CmpConversion.java
3    server/openejb-multicast/src/test/java/org/apache/openejb/server/discovery/MulticastPulse
4    container/openejb-core/src/test/java/org/apache/openejb/core/mdb/PoolEndpointHandlerTest
...
1692   itests/openejb-itests-client/src/main/java/org/apache/openejb/test/entity/bmp/BmpAllowed
1693   server/openejb-http/src/test/java/org/apache/openejb/server/httpd/HttpEjbServerTest.java
1694   server/openejb-ejbd/src/test/java/org/apache/openejb/RemoteitTest.java
1695   container/openejb-jee/src/main/java/org/apache/openejb/jee/ManagedBean.java
1696   container/openejb-core/src/test/java/org/apache/openejb/core/mdb/MdbTest.java

```

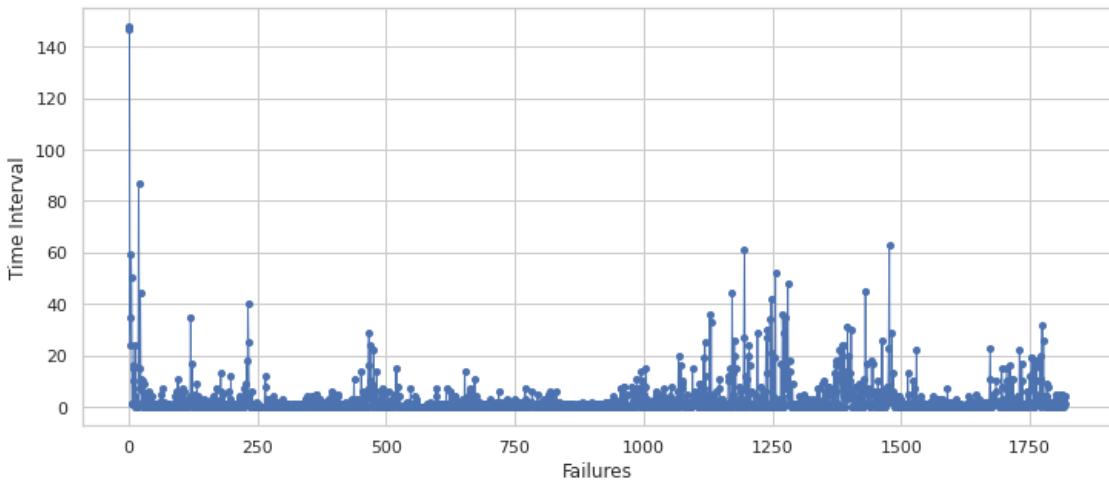
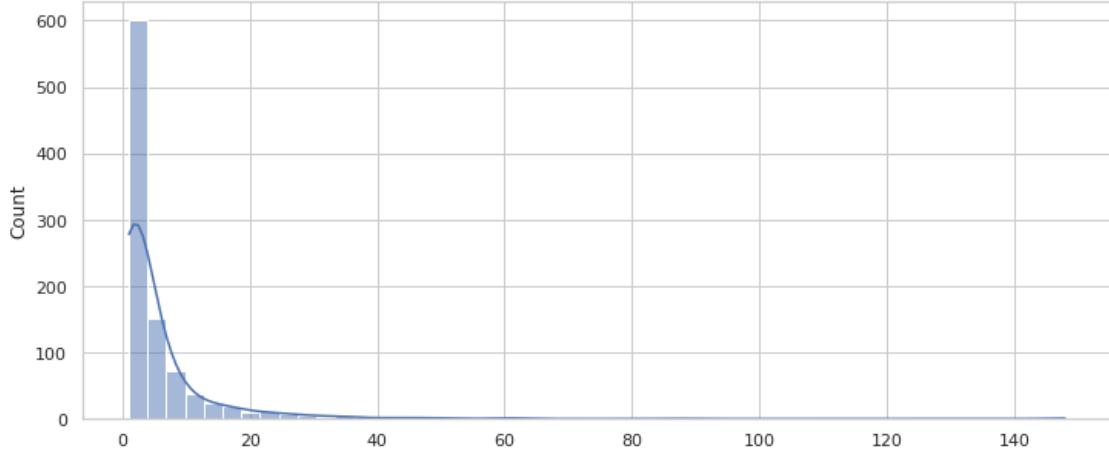
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|-------------|----------------|----------|
| 0 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 1 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 2 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 3 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 4 | 3 | 0.500000 | 2.000000 | 0.135335 |
| ... | ... | ... | ... | ... |
| 1692 | 2 | 4432.000000 | 0.000226 | 0.999774 |
| 1693 | 2 | 4546.000000 | 0.000220 | 0.999780 |
| 1694 | 2 | 4546.000000 | 0.000220 | 0.999780 |
| 1695 | 2 | 5394.000000 | 0.000185 | 0.999815 |

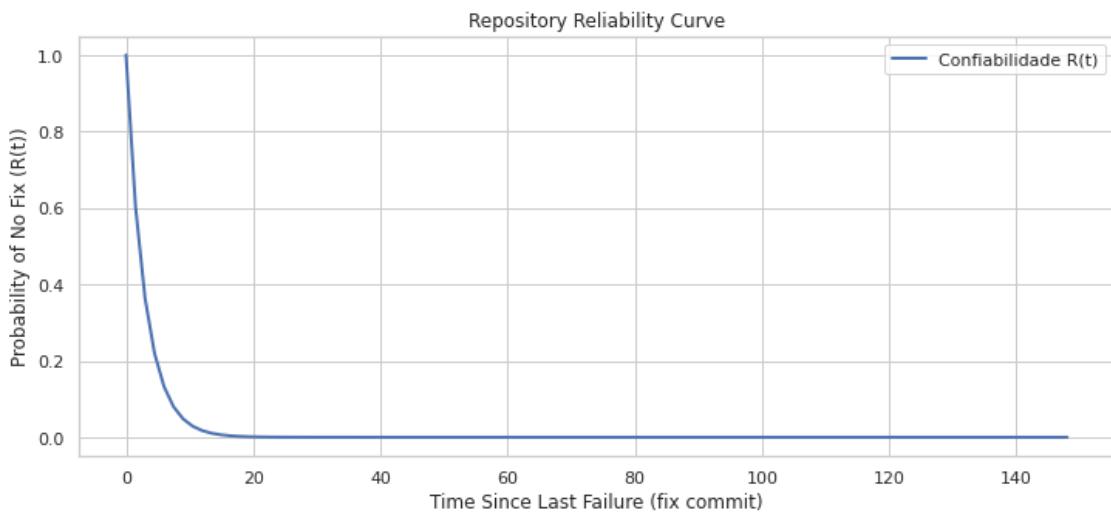
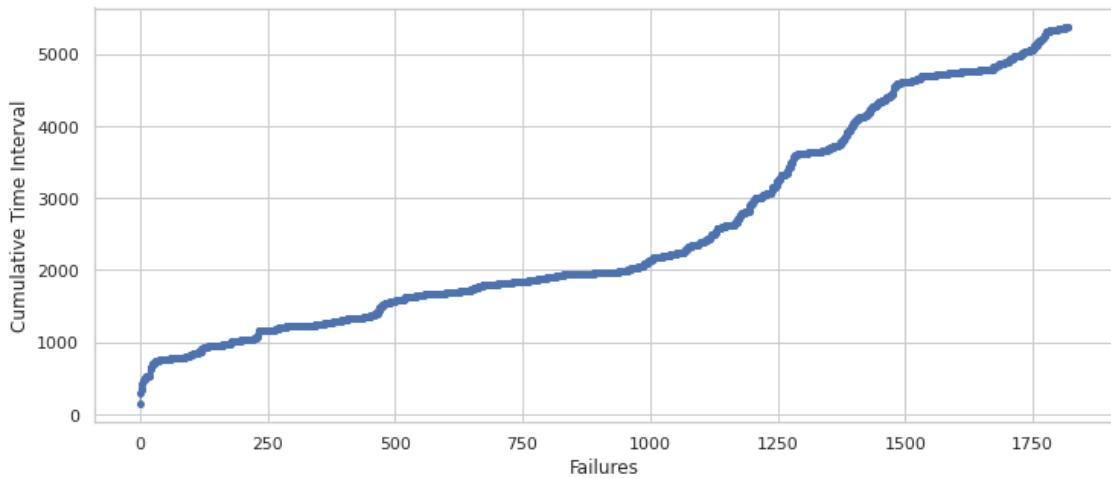
```
1696 2 5451.000000 0.000183 0.999817
```

```
[1697 rows x 5 columns]
```

```
-- logging-log4j2 ==
```

The histogram of Time Between Failures (TBF) logging-log4j2





```

Confiabilidade R(1) = 0.7131
Confiabilidade R(5) = 0.1844
Confiabilidade R(10) = 0.0340
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000
  
```

```

0   log4j-core/src/test/java/org/apache/logging/log4j/core/appender/CsvJsonParameterLayoutFile
1   log4j-mongodb/src/test/java/org/apache/logging/log4j/mongodb/MongoDbMapMessageTestJava8.j
2   log4j-core/src/main/java/org/apache/logging/log4j/core/appender/db/jdbc/JdbcAppender.java
3   log4j-core/src/test/java/org/apache/logging/log4j/core/appender/rolling/RollingAppenderDei
4   log4j-core/src/test/java/org/apache/logging/log4j/core/appender/rolling/RollingAppenderDei
..
782  log4j-api/src/test/java/org/apache/logging/log4j/MarkerTest.java
  
```

```

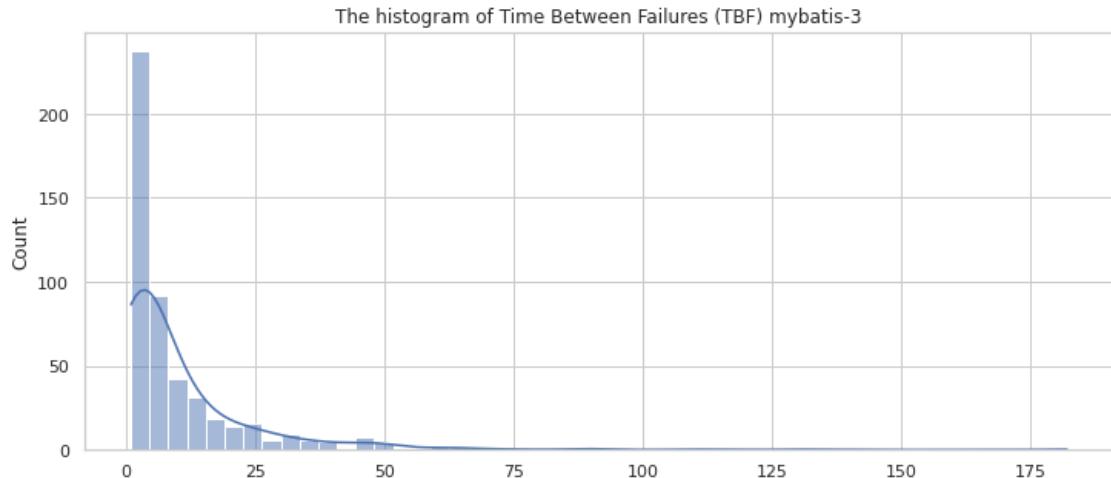
783 log4j-core/src/test/java/org/apache/logging/log4j/core/net/SocketMessageLossTest.java
784 log4j-core/src/main/java/org/apache/logging/log4j/core/appender/TlsSyslogFrame.java
785 log4j-api/src/main/java/org/apache/logging/log4j/message/MapMessage.java
786 log4j-api/src/main/java/org/apache/logging/log4j/message/StructuredDataMessage.java

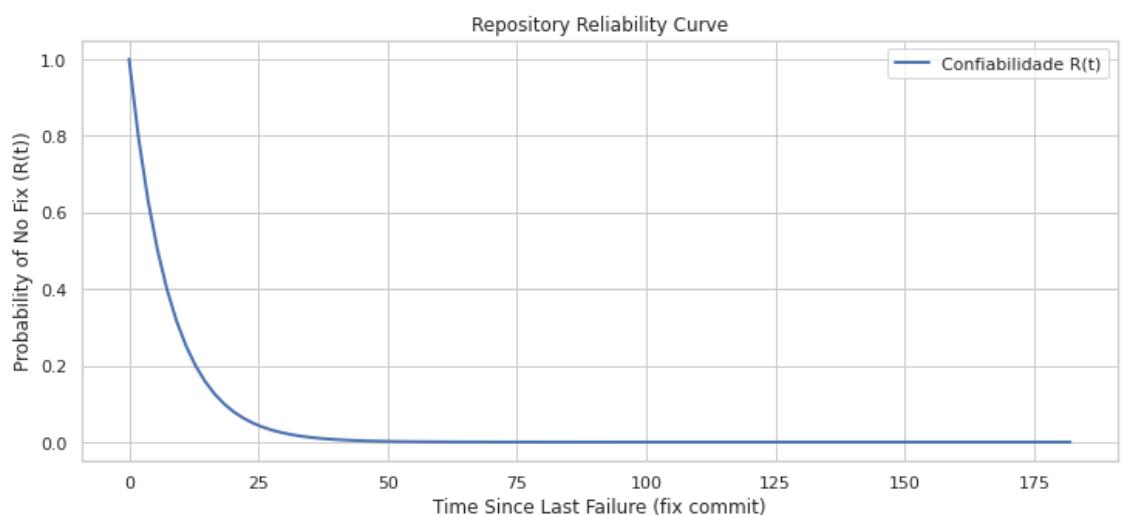
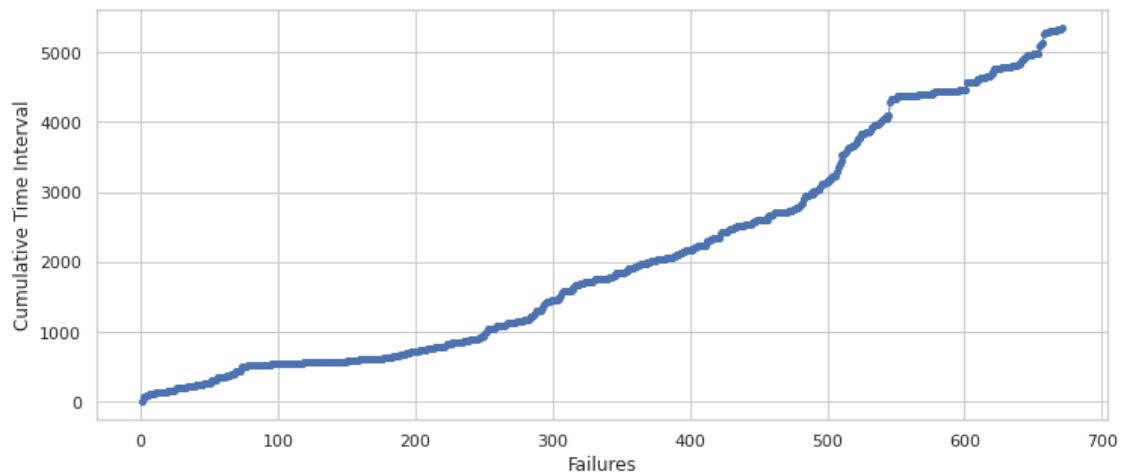
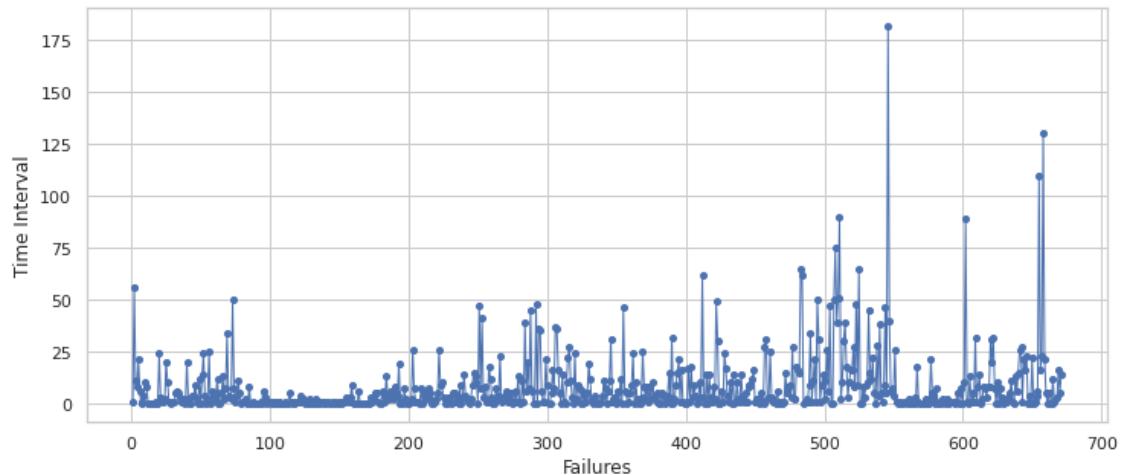
```

| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|-------------|----------------|----------|
| 0 | 6 | 0.200000 | 5.000000 | 0.006738 |
| 1 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 2 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 3 | 4 | 0.666667 | 1.500000 | 0.223130 |
| 4 | 4 | 0.666667 | 1.500000 | 0.223130 |
| .. | .. | ... | ... | ... |
| 782 | 2 | 2710.000000 | 0.000369 | 0.999631 |
| 783 | 2 | 2714.000000 | 0.000368 | 0.999632 |
| 784 | 2 | 3409.000000 | 0.000293 | 0.999707 |
| 785 | 2 | 3630.000000 | 0.000275 | 0.999725 |
| 786 | 2 | 3630.000000 | 0.000275 | 0.999725 |

[787 rows x 5 columns]

== mybatis-3 ==





```
Confiabilidade R(1) = 0.8822
Confiabilidade R(5) = 0.5344
Confiabilidade R(10) = 0.2856
Confiabilidade R(50) = 0.0019
Confiabilidade R(100) = 0.0000
```

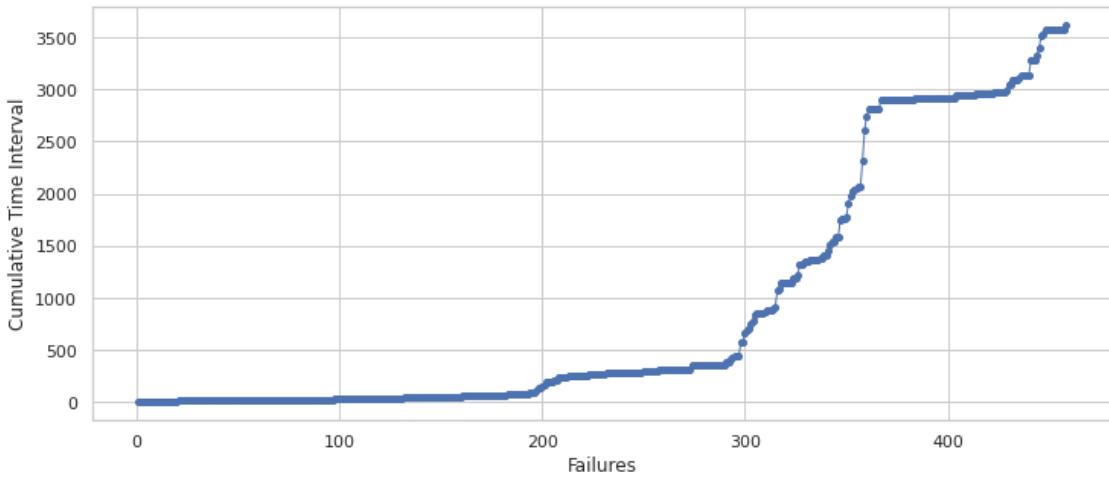
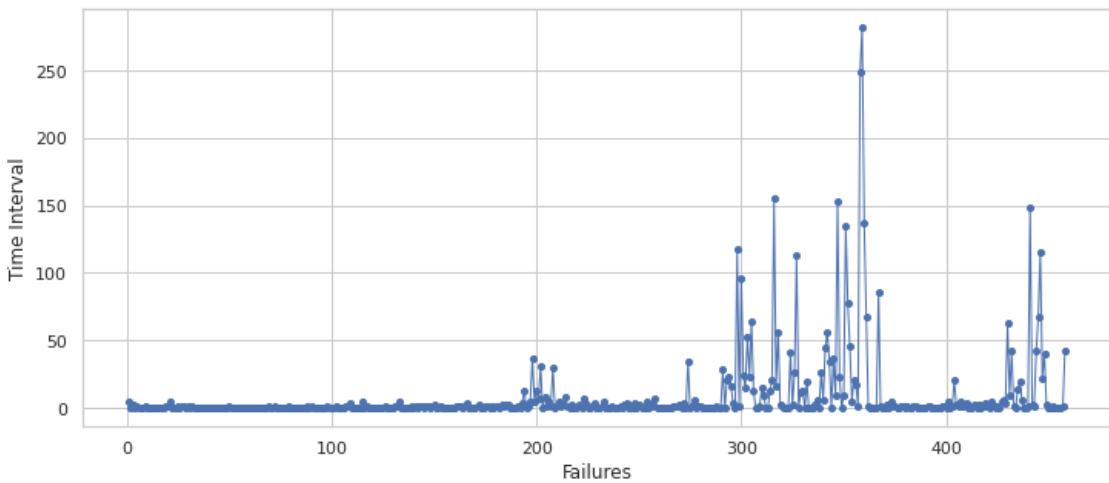
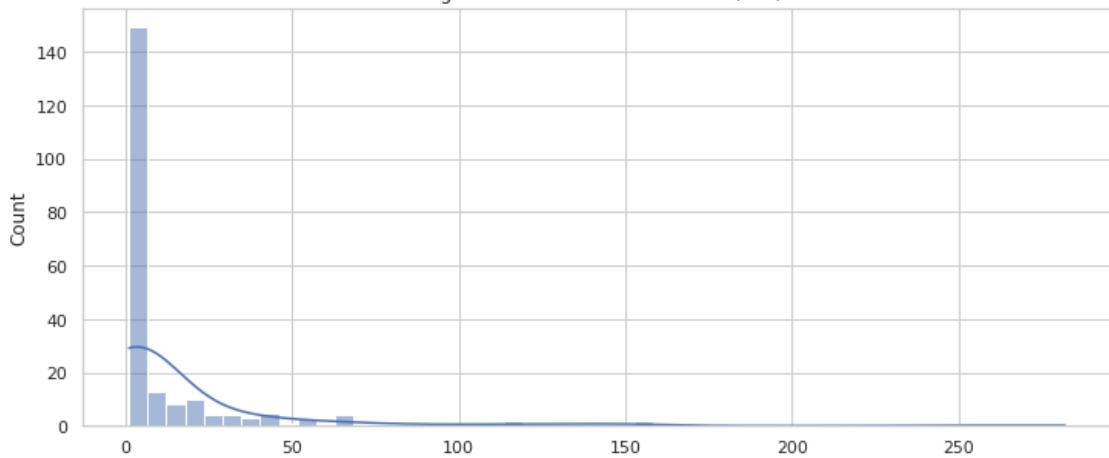
```
filepat
0   src/main/java/org/apache/builder/ResultMappingConstructorResolver.java
1   src/test/java/org/apache/ibatis/session/SqlSessionBuilderTest.java
2   src/test/java/org/apache/ibatis/submitted/null_with_no_jdbcType/NullWithNoJdbcTypeTest.java
3   src/test/java/org/apache/ibatis/submitted/array_binding/Mapper.java
4   src/test/java/org/apache/ibatis/submitted/array_binding/ArrayBindingTest.java
...
653  src/main/java/org/apache/ibatis/cache/impl/PerpetualCache.java
654  src/main/java/org/apache/ibatis/jdbc/RuntimeSqlException.java
655  src/main/java/org/apache/ibatis/logging/LogFactory.java
656  src/test/java/org/apache/ibatis/submitted/flush_statement_npe/PersonMapper.java
657  src/test/java/org/apache/ibatis/submitted/flush_statement_npe/Person.java
```

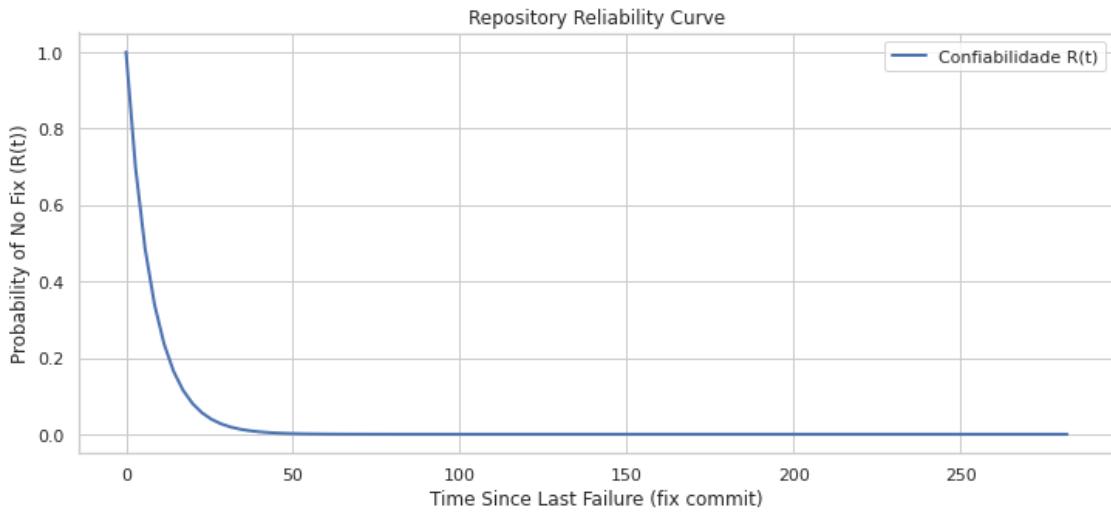
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 3 | 1.5 | 0.666667 | 0.513417 |
| 3 | 2 | 7.0 | 0.142857 | 0.866878 |
| 4 | 2 | 7.0 | 0.142857 | 0.866878 |
| ... | ... | ... | ... | ... |
| 653 | 2 | 3882.0 | 0.000258 | 0.999742 |
| 654 | 2 | 3882.0 | 0.000258 | 0.999742 |
| 655 | 2 | 3882.0 | 0.000258 | 0.999742 |
| 656 | 2 | 3890.0 | 0.000257 | 0.999743 |
| 657 | 2 | 3890.0 | 0.000257 | 0.999743 |

```
[658 rows x 5 columns]
```

```
== takes ==
```

The histogram of Time Between Failures (TBF) takes





```

Confiabilidade R(1) = 0.8812
Confiabilidade R(5) = 0.5312
Confiabilidade R(10) = 0.2822
Confiabilidade R(50) = 0.0018
Confiabilidade R(100) = 0.0000

```

| | | filepath | n_commits | \ |
|-----|--|----------|-----------|----|
| 0 | src/main/java/org/takes/misc/Utf8PrintStream.java | | 5 | |
| 1 | src/main/java/org/takes/misc/Utf8OutputStreamWriter.java | | 3 | |
| 2 | src/main/java/org/takes/misc/Utf8InputStreamReader.java | | 3 | |
| 3 | src/main/java/org/takes/facets/slf4j/package-info.java | | 4 | |
| 4 | src/main/java/org/takes/facets/slf4j/Slf4j.java | | 4 | |
| .. | | ... | | .. |
| 201 | src/main/java/org/takes/package-info.java | | 2 | |
| 202 | src/test/java/org/takes/rq/RqWithHeadersTest.java | | 2 | |
| 203 | src/test/java/org/takes/rs/RsWithHeaderTest.java | | 2 | |
| 204 | src/test/java/org/takes/rs/RsPrettyJsonTest.java | | 2 | |
| 205 | src/main/java/org/takes/facets/fork/FkWrap.java | | 2 | |

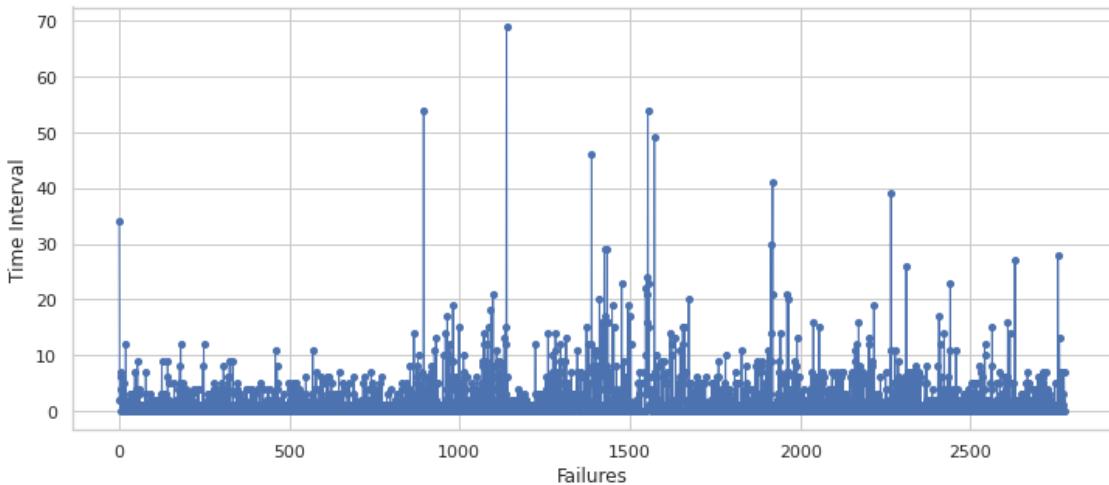
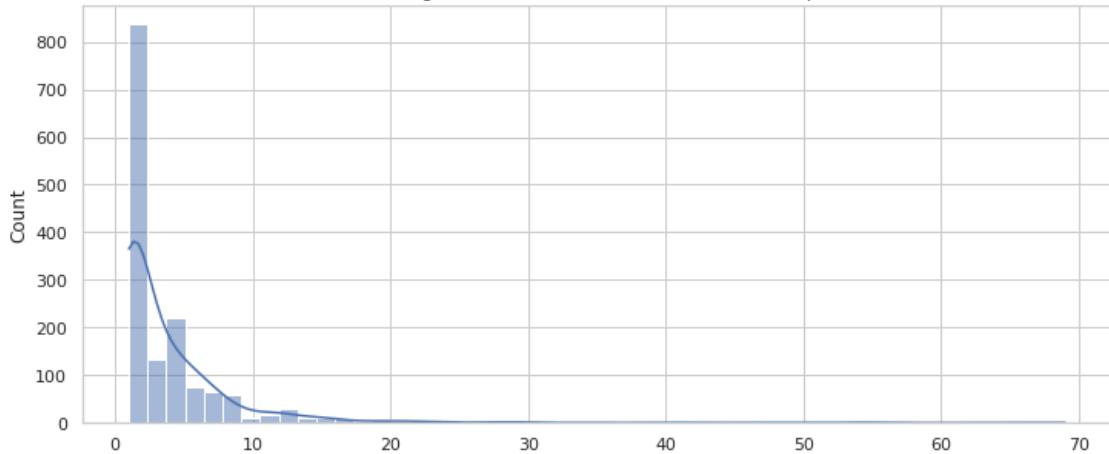
| | MTBF | lambda_failure | R_t |
|-----|-------------|----------------|----------|
| 0 | 0.250000 | 4.000000 | 0.018316 |
| 1 | 0.500000 | 2.000000 | 0.135335 |
| 2 | 0.500000 | 2.000000 | 0.135335 |
| 3 | 0.666667 | 1.500000 | 0.223130 |
| 4 | 0.666667 | 1.500000 | 0.223130 |
| .. | ... | ... | ... |
| 201 | 1724.000000 | 0.000580 | 0.999420 |
| 202 | 1876.000000 | 0.000533 | 0.999467 |

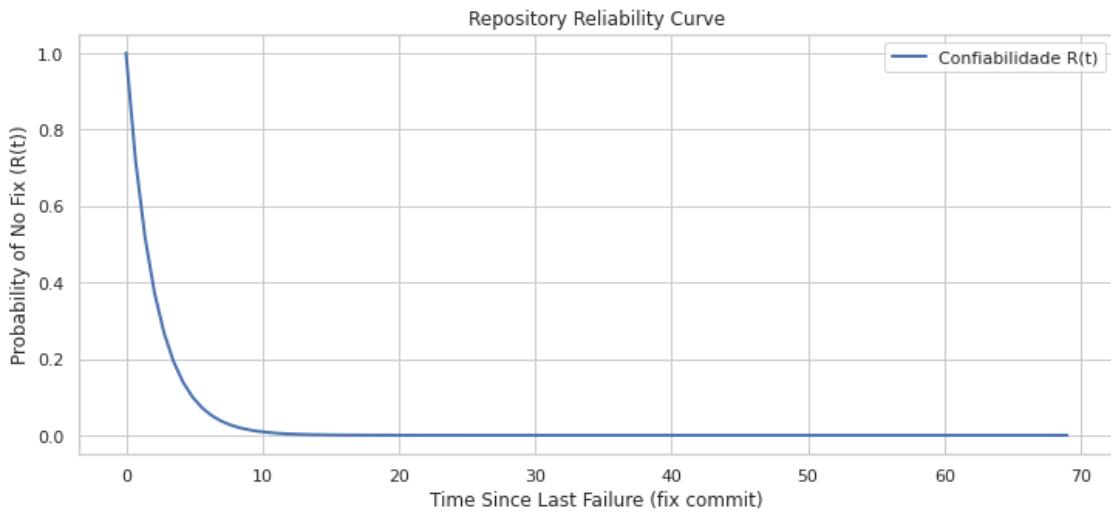
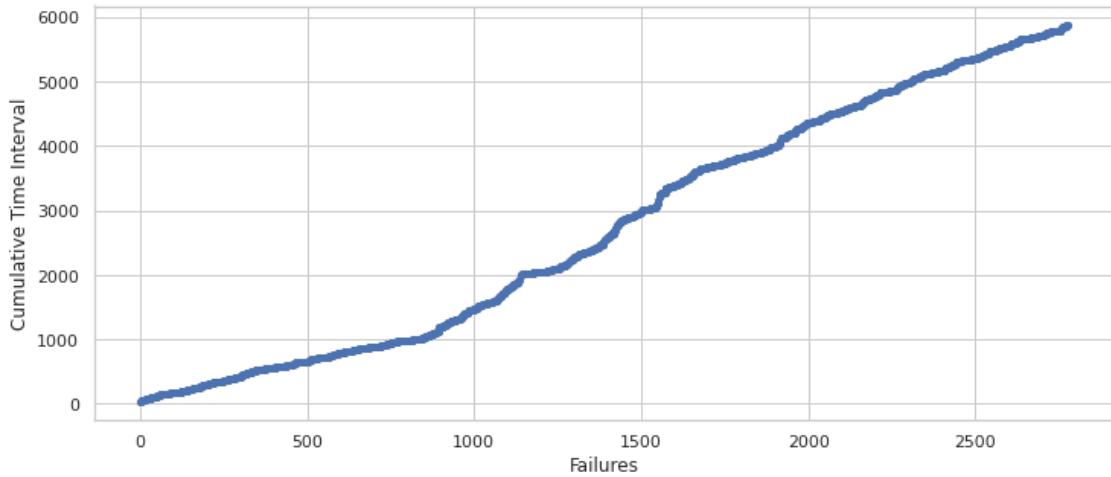
| | | | |
|-----|-------------|----------|----------|
| 203 | 1903.000000 | 0.000525 | 0.999475 |
| 204 | 2158.000000 | 0.000463 | 0.999537 |
| 205 | 2196.000000 | 0.000455 | 0.999545 |

[206 rows x 5 columns]

== freeplane ==

The histogram of Time Between Failures (TBF) freeplane





Confiabilidade $R(1) = 0.6236$

Confiabilidade $R(5) = 0.0943$

Confiabilidade $R(10) = 0.0089$

Confiabilidade $R(50) = 0.0000$

Confiabilidade $R(100) = 0.0000$

```

0   freeplane/src/org/freeplane/features/controller/print/PrintController.java
1   freeplane/src/main/java/org/freeplane/features/icon/mindmapmode/TagCategories.java
2   freeplane/src/main/java/org/freeplane/view/swing/map/MiniMapView.java
3   freeplane_plugin_formula/src/main/java/org/freeplane/plugin/formula/EvaluateAllAction.java
4   freeplane/src/main/java/org/freeplane/features/icon/mindmapmode/CategorizedTagForCategory...
...
1004  freeplane/src/main/java/org/freeplane/features/map/mindmapmode/SummaryNodeMapUpdater.java

```

```

1005 freeplane/src/main/java/org/freeplane/core/ui/menubuilders/menu/JToolbarComponentBuilder
1006 freeplane/src/main/java/org/freeplane/features/filter/condition/CompareConditionAdapter.j
1007 freeplane/src/main/java/org/freeplane/features/filter/condition/ASelectableCondition.java
1008 freeplane/src/main/java/org/freeplane/features/icon/IconNotFound.java

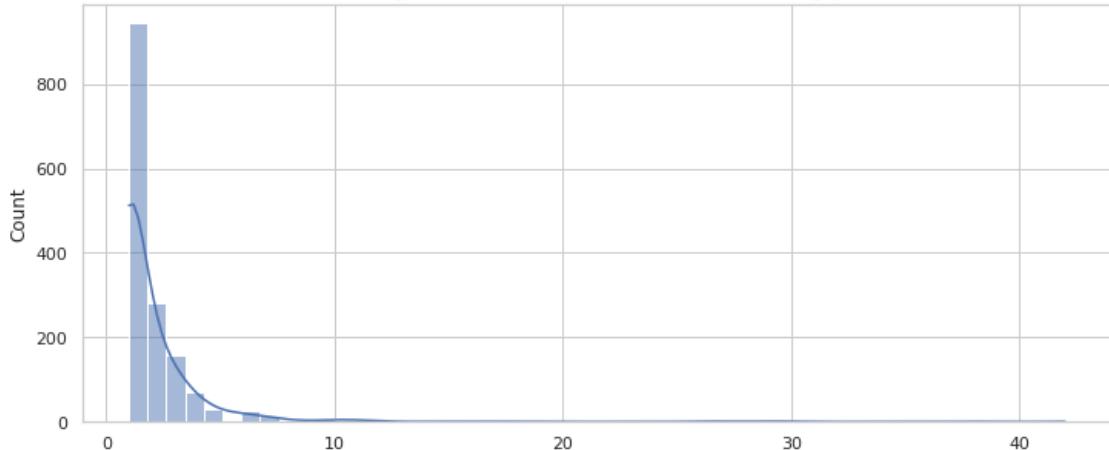
```

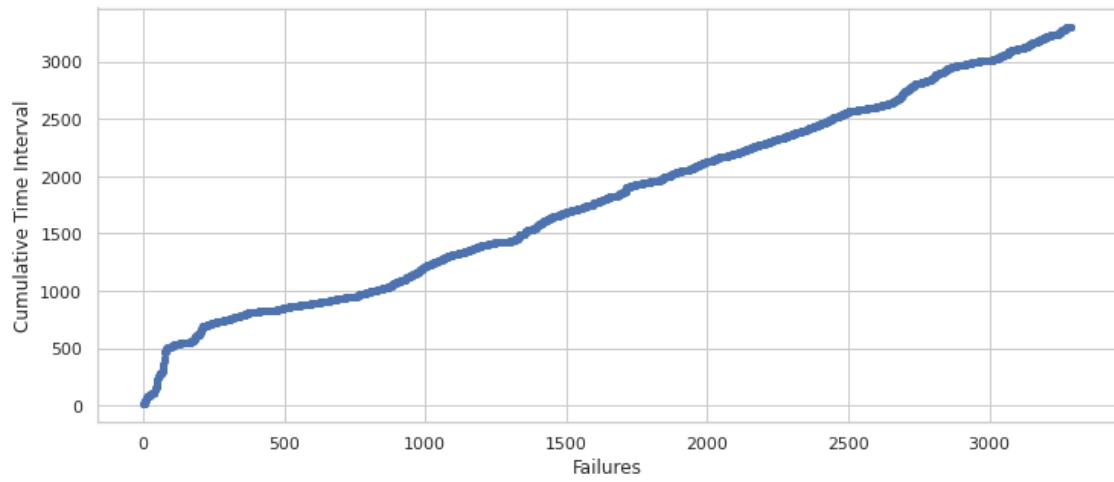
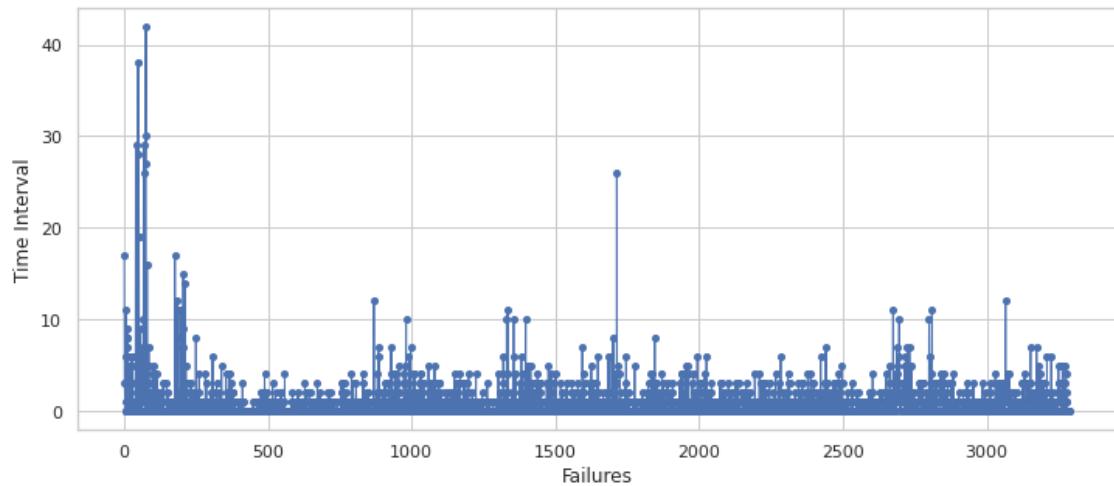
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|-------------|----------------|----------|
| 0 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 1 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 2 | 8 | 0.571429 | 1.750000 | 0.173774 |
| 3 | 2 | 1.000000 | 1.000000 | 0.367879 |
| 4 | 2 | 1.000000 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 1004 | 2 | 2428.000000 | 0.000412 | 0.999588 |
| 1005 | 2 | 2624.000000 | 0.000381 | 0.999619 |
| 1006 | 2 | 2772.000000 | 0.000361 | 0.999639 |
| 1007 | 2 | 2779.000000 | 0.000360 | 0.999640 |
| 1008 | 2 | 2820.000000 | 0.000355 | 0.999645 |

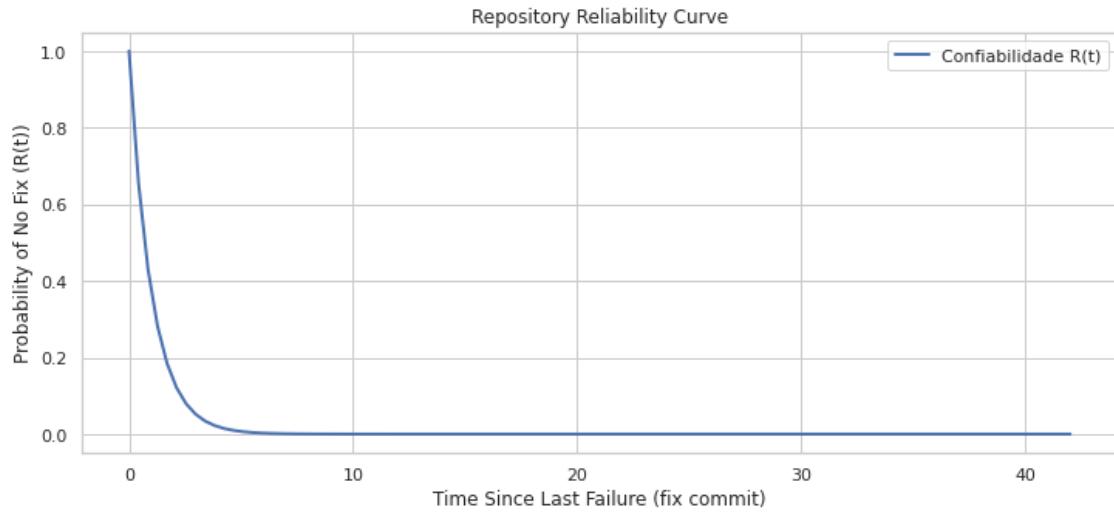
[1009 rows x 5 columns]

== shardingsphere ==

The histogram of Time Between Failures (TBF) shardingsphere







```

Confiabilidade R(1) = 0.3697
Confiabilidade R(5) = 0.0069
Confiabilidade R(10) = 0.0000
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

0      sharding-core/src/main/java/io/shardingsphere/core/parsing/antlr/filler/engnie/TableAndC...
1      sharding-core/src/main/java/io/shardingsphere/core/parsing/antlr/filler/engnie/TableSegm...
2      sharding-jdbc-core/src/test/java/io/shardingjdbc/dbtest/init/DatabaseEnvironmentManager.j...
3      sharding-jdbc-core/src/test/java/com/dangdang/ddframe/rdb/integrate/type/NullableSharding...
4      sharding-proxy-postgresql/src/main/java/org/apache/shardingsphere/shardingproxypg/transpo...
...
1794   features/sharding/core/src/test/java/org/apache/shardingsphere/sharding/merge/dql/groupby...
1795   features/sharding/core/src/test/java/org/apache/shardingsphere/sharding/merge/dql/orderby...
1796   features/sharding/core/src/test/java/org/apache/shardingsphere/sharding/merge/dql/orderby...
1797   features/sharding/core/src/test/java/org/apache/shardingsphere/sharding/merge/dql/Shardin...
1798   features/sharding/core/src/test/java/org/apache/shardingsphere/sharding/merge/dql/groupby...

```

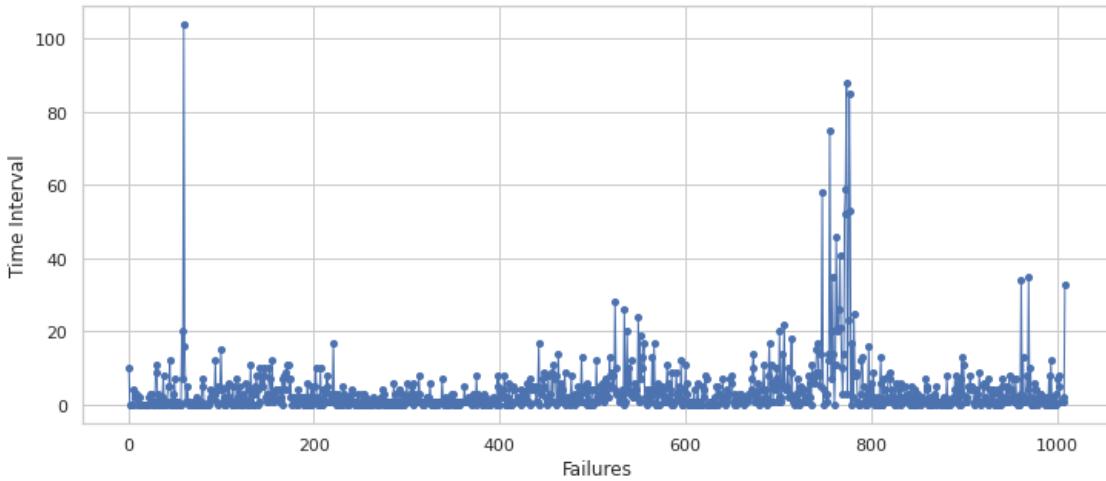
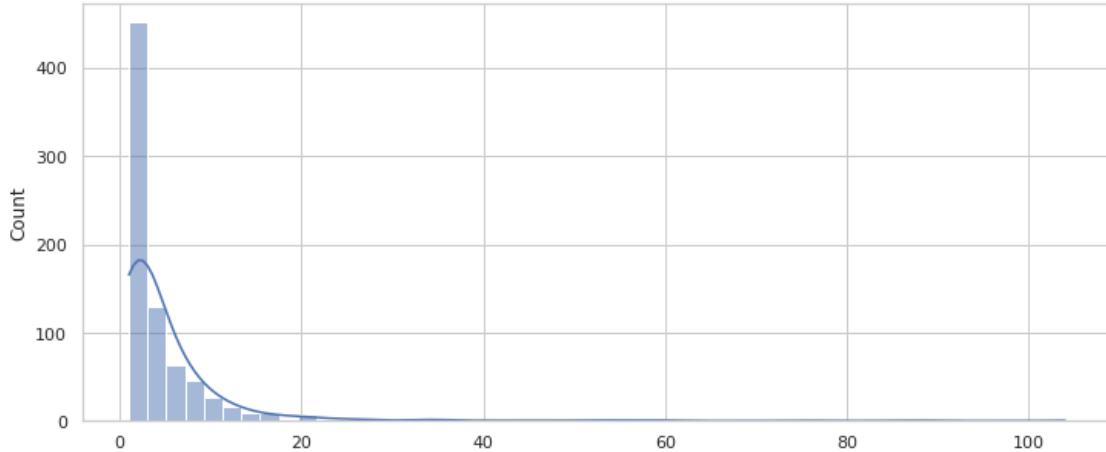
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|------------|----------------|----------|
| 0 | 4 | 0.333333 | 3.00000 | 0.049787 |
| 1 | 4 | 0.333333 | 3.00000 | 0.049787 |
| 2 | 3 | 0.500000 | 2.00000 | 0.135335 |
| 3 | 3 | 0.500000 | 2.00000 | 0.135335 |
| 4 | 3 | 0.500000 | 2.00000 | 0.135335 |
| ... | ... | ... | ... | ... |
| 1794 | 2 | 746.000000 | 0.00134 | 0.998660 |
| 1795 | 2 | 746.000000 | 0.00134 | 0.998660 |
| 1796 | 2 | 746.000000 | 0.00134 | 0.998660 |
| 1797 | 2 | 746.000000 | 0.00134 | 0.998660 |

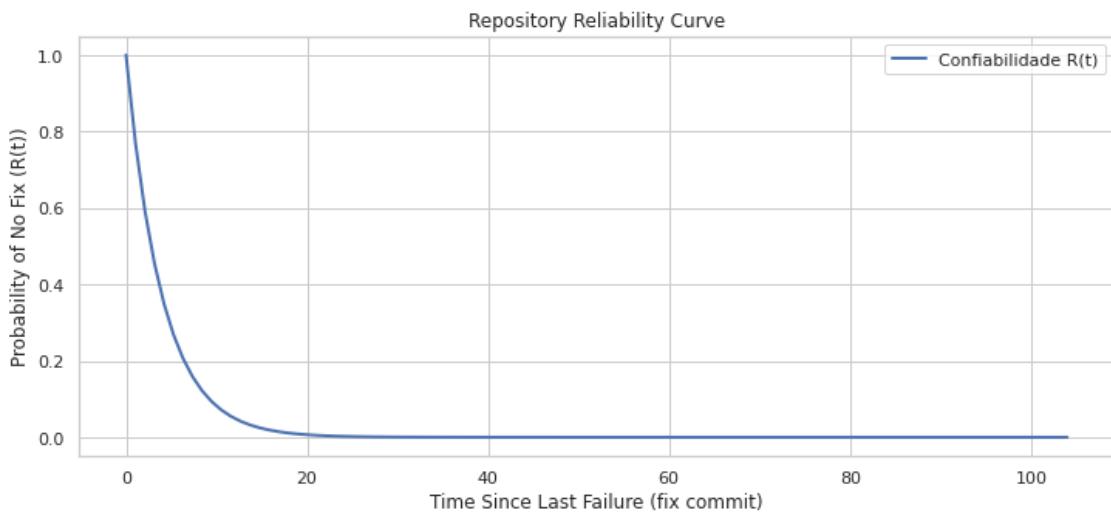
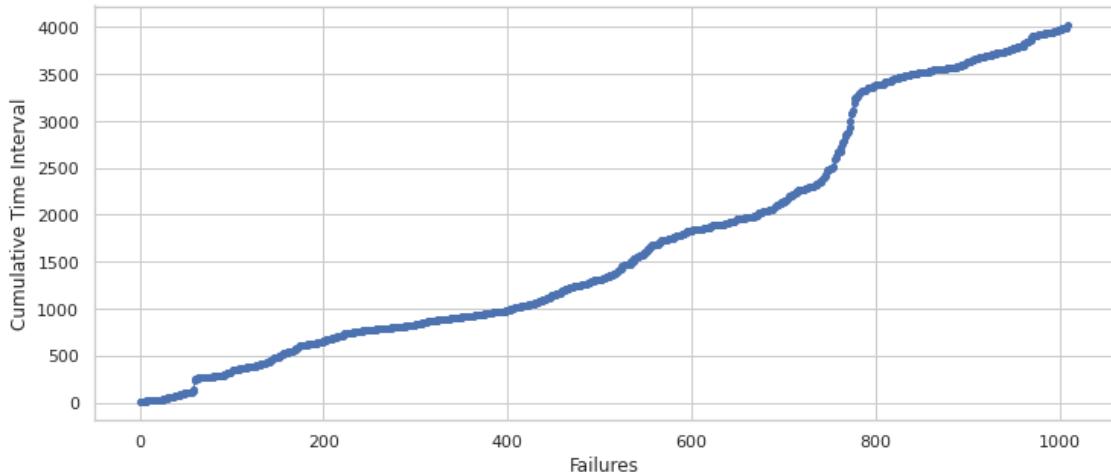
```
1798 2 746.000000 0.00134 0.998660
```

```
[1799 rows x 5 columns]
```

```
== zeppelin ==
```

The histogram of Time Between Failures (TBF) zeppelin





```

Confiabilidade R(1) = 0.7784
Confiabilidade R(5) = 0.2857
Confiabilidade R(10) = 0.0816
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

filepat
0  jdbc/src/main/java/org/apache/zeppelin/jdbc/hive/ProgressBar.java
1  zeppelin-server/src/main/java/com/nflabs/zeppelin/server/ZQLJob.java
2  zeppelin-server/src/main/java/com/nflabs/zeppelin/server/ZQLSession.java
3  zeppelin-interpreter/src/main/java/com/nflabs/zeppelin/interpreter/InterpreterUtils.java
4  zeppelin-zengine/src/test/java/com/nflabs/zeppelin/zengine/stmt/ZQLTest.java
...
280 jdbc/src/main/java/org/apache/zeppelin/jdbc/security/JDBCSecurityImpl.java

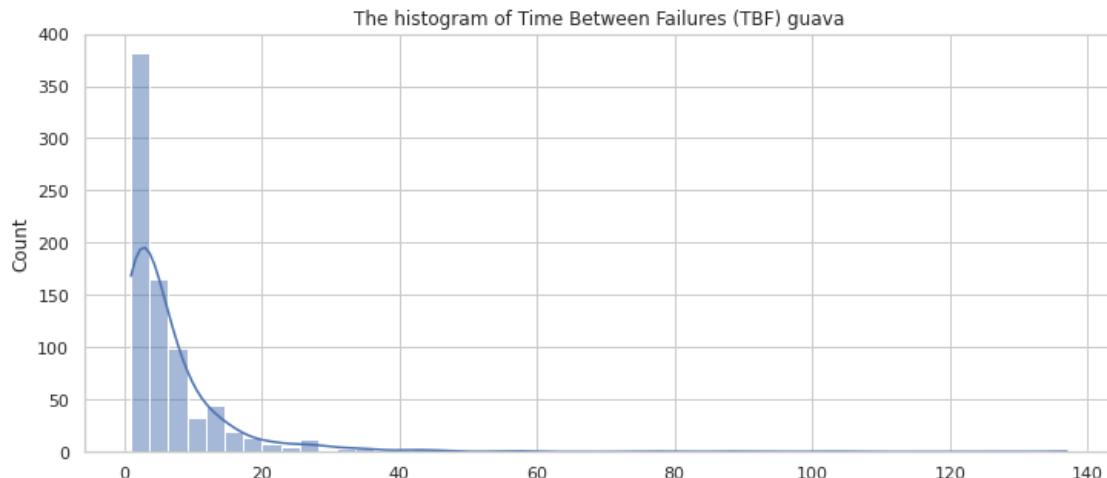
```

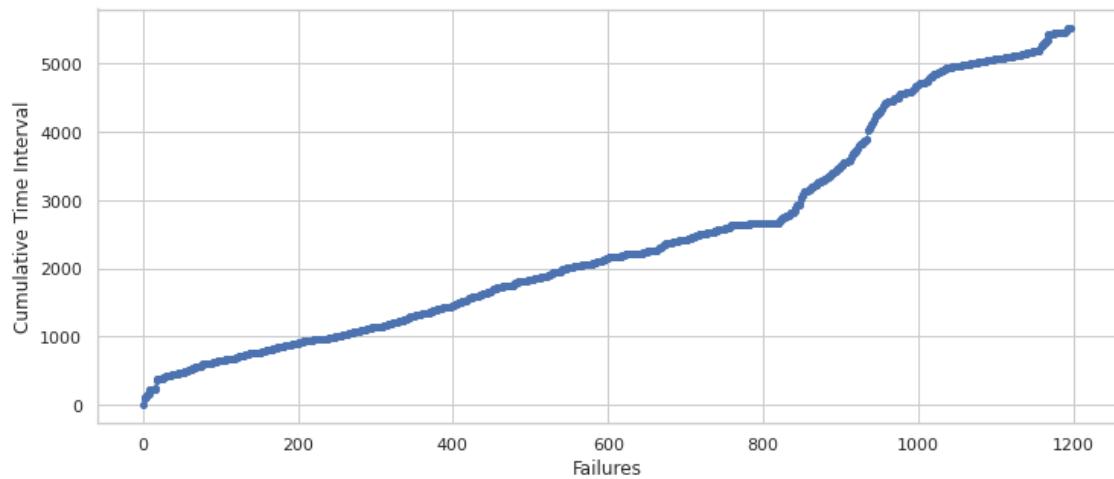
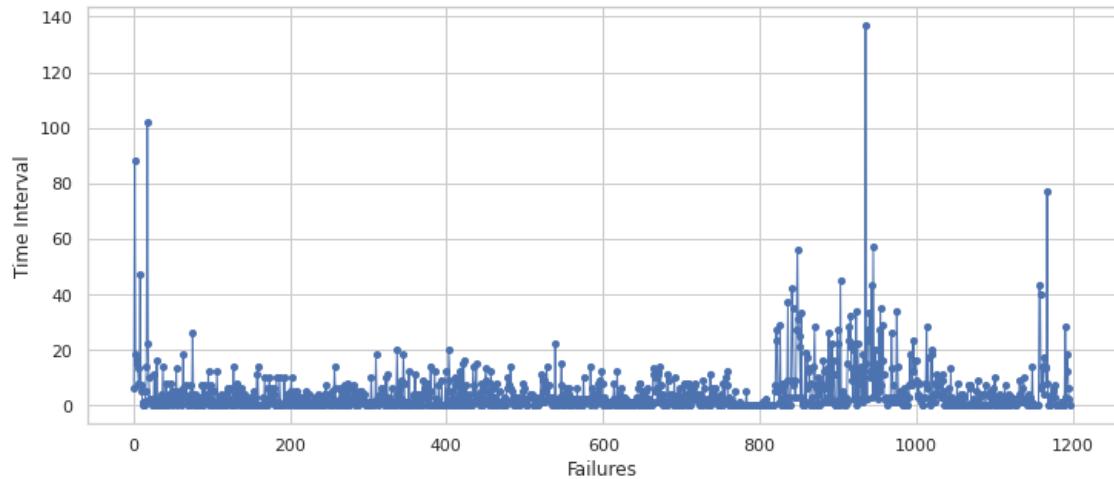
```
281 zeppelin-interpreter/src/main/java/org/apache/zeppelin/interpreter/KerberosInterpreter.java  
282 file/src/test/java/org/apache/zeppelin/file/HDFSFileInterpreterTest.java  
283 zeppelin-zengine/src/test/java/org/apache/zeppelin/interpreter/mock/MockInterpreter2.java  
284 zeppelin-zengine/src/test/java/org/apache/zeppelin/interpreter/mock/MockInterpreter1.java
```

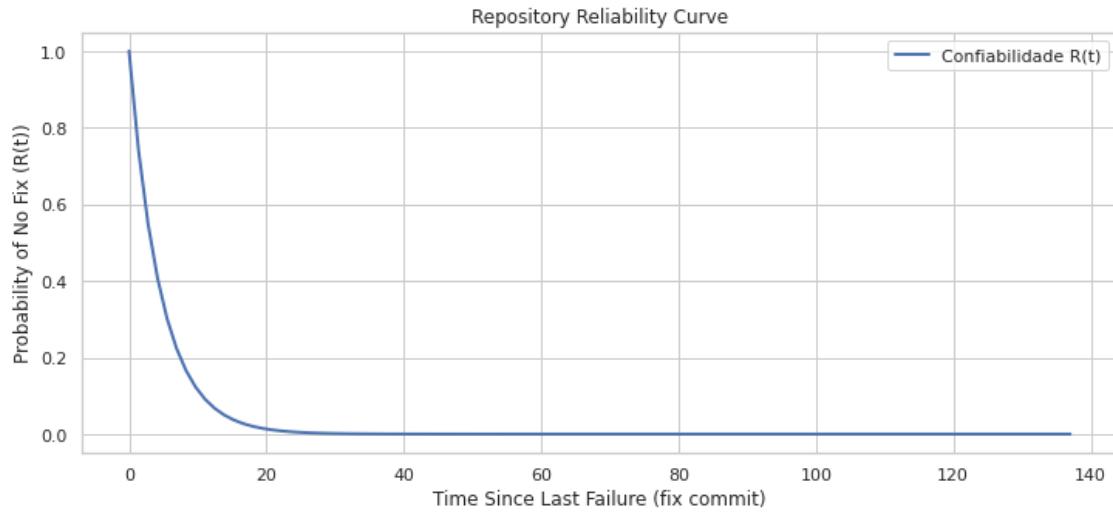
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 3 | 1.0 | 1.000000 | 0.367879 |
| 2 | 3 | 2.0 | 0.500000 | 0.606531 |
| 3 | 2 | 3.0 | 0.333333 | 0.716531 |
| 4 | 5 | 5.0 | 0.200000 | 0.818731 |
| .. | .. | ... | ... | ... |
| 280 | 3 | 1247.5 | 0.000802 | 0.999199 |
| 281 | 2 | 1281.0 | 0.000781 | 0.999220 |
| 282 | 2 | 1602.0 | 0.000624 | 0.999376 |
| 283 | 2 | 1615.0 | 0.000619 | 0.999381 |
| 284 | 2 | 1615.0 | 0.000619 | 0.999381 |

[285 rows x 5 columns]

== guava ==







```

Confiabilidade R(1) = 0.8054
Confiabilidade R(5) = 0.3389
Confiabilidade R(10) = 0.1148
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

filepath \
0    android/guava/src/com/google/common/collect/AbstractMapBasedMultiset.java
1    guava-tests/test/com/google/common/collect/ForwardingDequeTest.java
2    guava-tests/test/com/google/common/io/CleanPathTest.java
3    guava-tests/test/com/google/common/util/concurrent/FuturesGetUncheckedTest.java
4    guava-tests/test/com/google/common/util/concurrent/PackageSanityTests.java
...
1604   guava-tests/test/com/google/common/primitives/IntsTest.java
1605   guava/src/com/google/common/collect/Queues.java
1606   guava-testlib/test/com/google/common/testing/GcFinalizationTest.java
1607   guava/src/com/google/common/collect/HashMultiset.java
1608   guava/src/com/google/common/collect/EnumMultiset.java

```

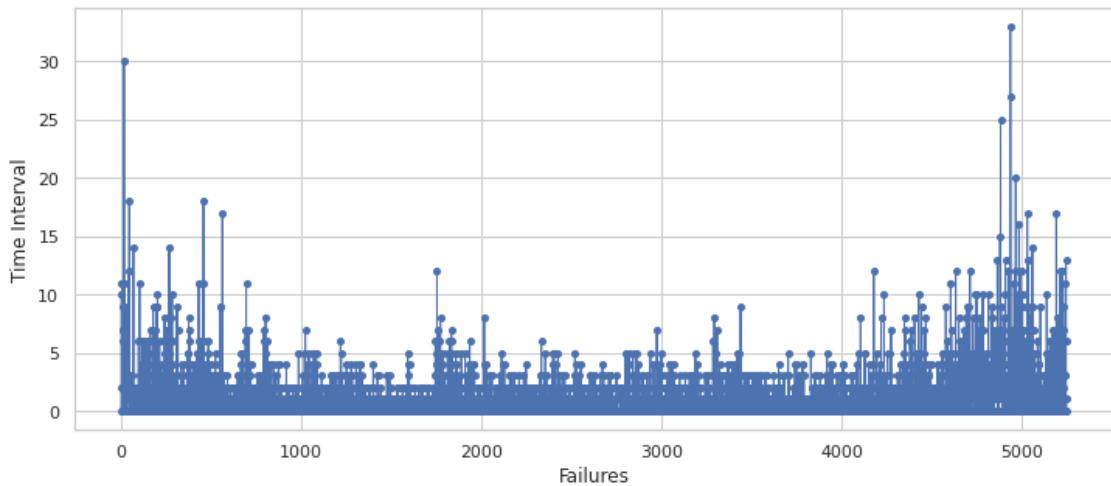
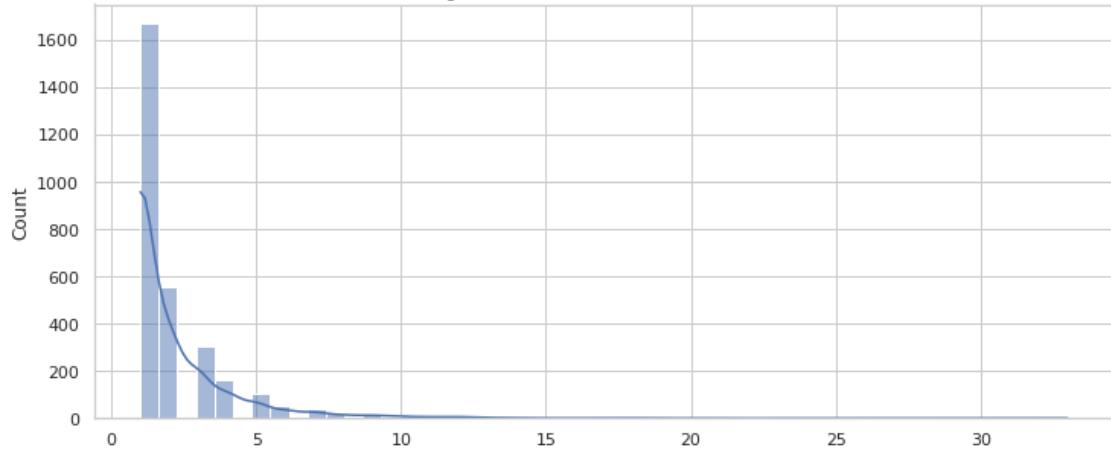
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 2.0 | 0.500000 | 0.606531 |
| 4 | 2 | 2.0 | 0.500000 | 0.606531 |
| ... | ... | ... | ... | ... |
| 1604 | 2 | 4491.0 | 0.000223 | 0.999777 |
| 1605 | 2 | 4519.0 | 0.000221 | 0.999779 |
| 1606 | 2 | 4637.0 | 0.000216 | 0.999784 |
| 1607 | 2 | 4667.0 | 0.000214 | 0.999786 |

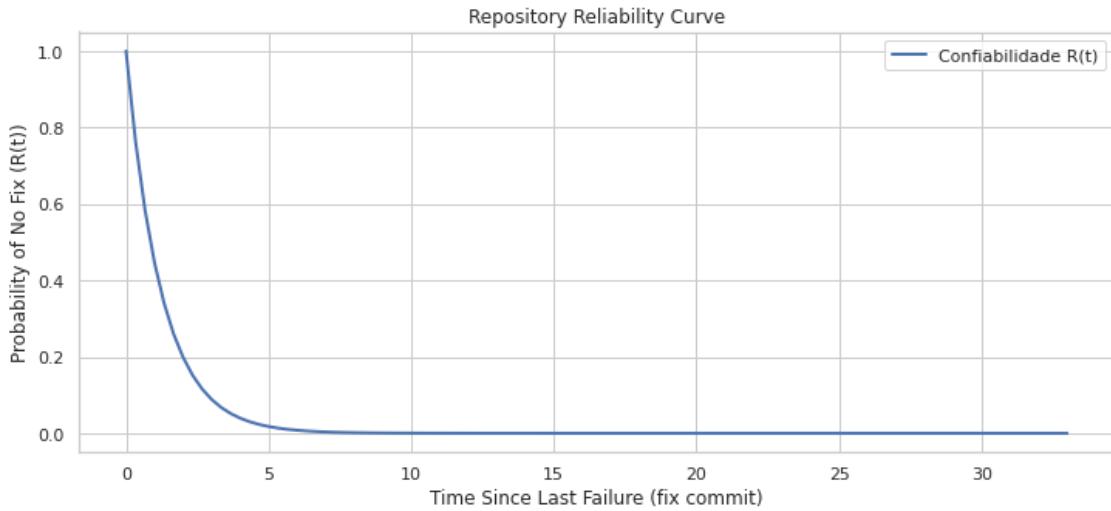
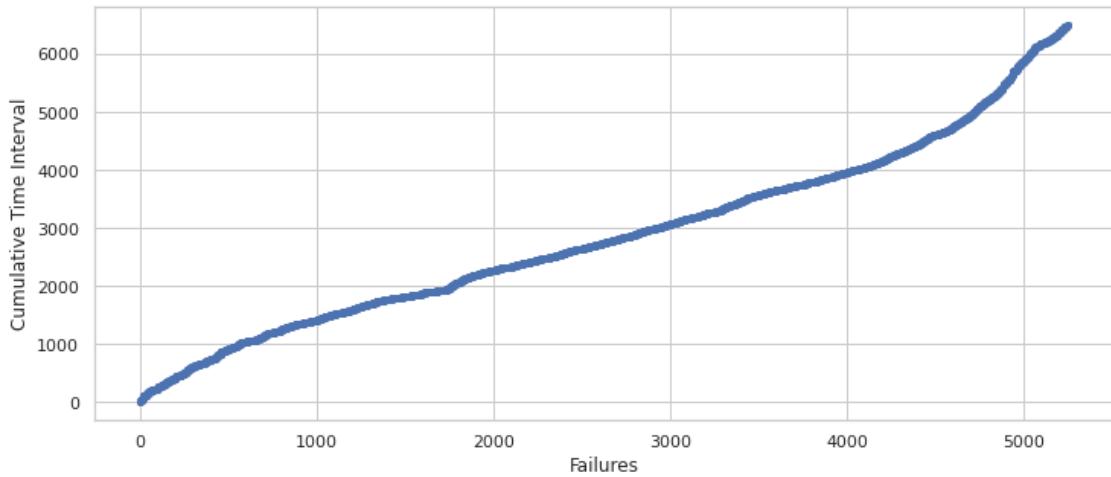
```
1608 2          4667.0  0.000214      0.999786
```

```
[1609 rows x 5 columns]
```

```
== hbase ==
```

The histogram of Time Between Failures (TBF) hbase





Confiabilidade $R(1) = 0.4459$

Confiabilidade $R(5) = 0.0176$

Confiabilidade $R(10) = 0.0003$

Confiabilidade $R(50) = 0.0000$

Confiabilidade $R(100) = 0.0000$

```

0   hbase-server/src/test/java/org/apache/hadoop/hbase/replication/TestReplicationTableBase.java
1   hbase-server/src/test/java/org/apache/hadoop/hbase/filter/TestFilterListOrOperatorWithBl
2   src/test/java/org/apache/hadoop/hbase/TestClusterBootOrder.java
3   hbase-server/src/test/java/org/apache/hadoop/hbase/replication/TestReplicationStateHBase
4   hbase-common/src/main/java/org/apache/hadoop/hbase/JitterScheduledThreadPoolExecutorImpl
...
2468  hbase-server/src/main/java/org/apache/hadoop/hbase/regionserver/wal/CompressionContext.java

```

```

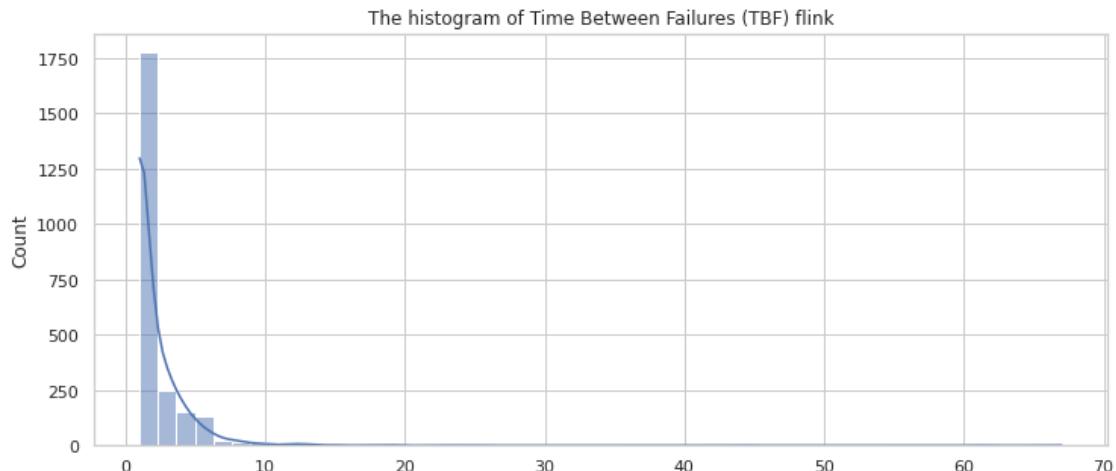
2469 hbase-server/src/main/java/org/apache/hadoop/hbase/mob/MobFileCache.java
2470 hbase-server/src/test/java/org/apache/hadoop/hbase/regionserver/TestRegionSplitPolicy.java
2471 hbase-server/src/main/java/org/apache/hadoop/hbase/util/DirectMemoryUtils.java
2472 hbase-rest/src/main/java/org/apache/hadoop/hbase/rest/model/ScannerModel.java

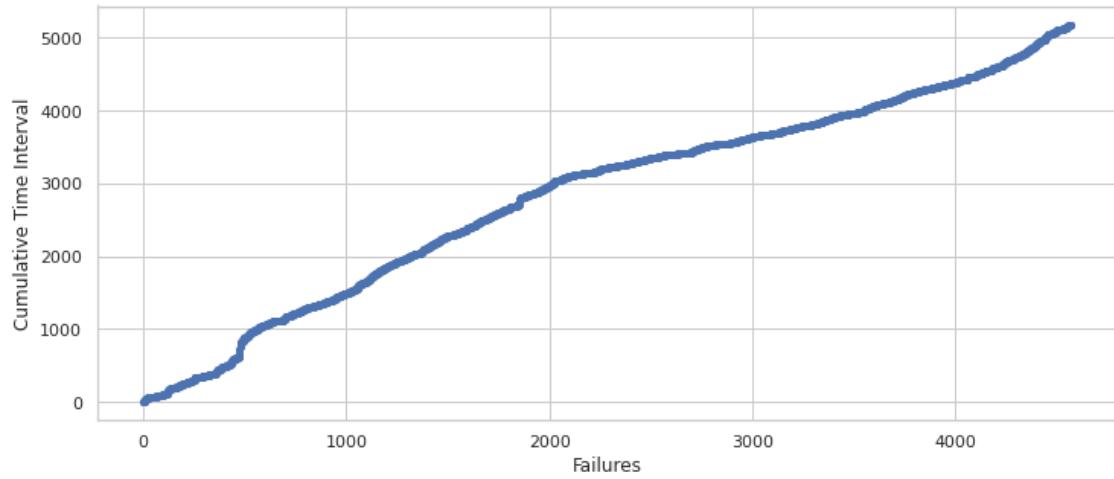
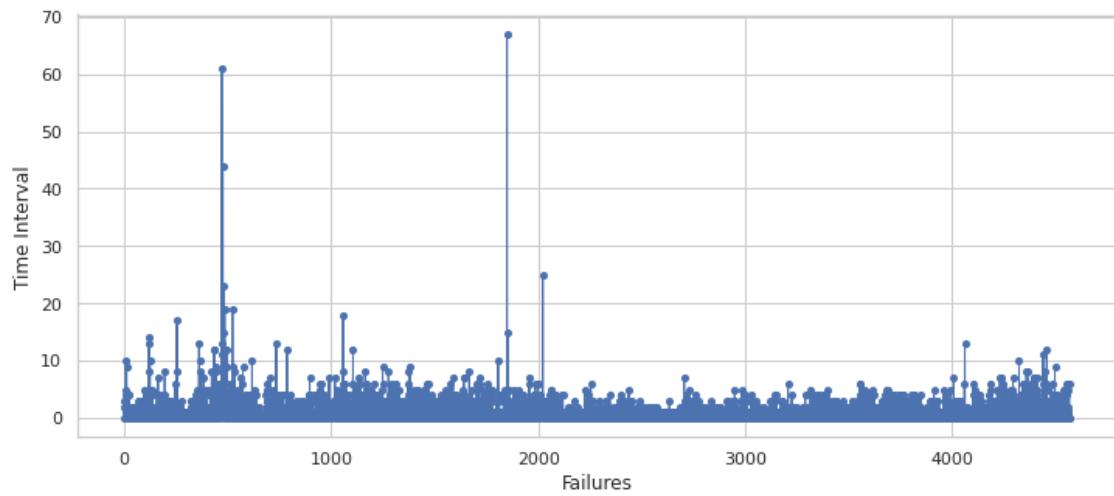
```

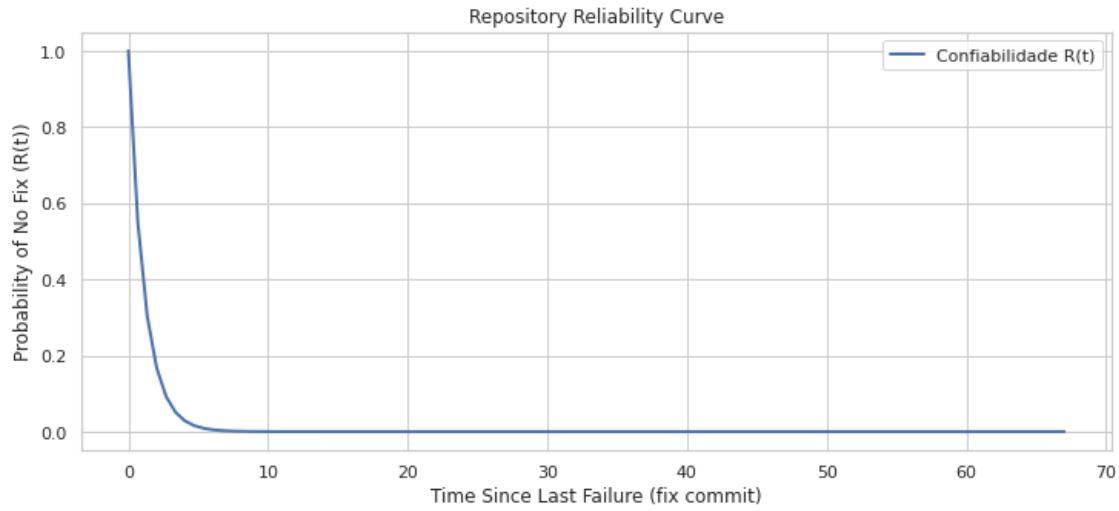
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 3 | 0.5 | 2.000000 | 0.135335 |
| 2 | 3 | 0.5 | 2.000000 | 0.135335 |
| 3 | 3 | 0.5 | 2.000000 | 0.135335 |
| 4 | 5 | 0.5 | 2.000000 | 0.135335 |
| ... | ... | ... | ... | ... |
| 2468 | 2 | 3003.0 | 0.000333 | 0.999667 |
| 2469 | 2 | 3057.0 | 0.000327 | 0.999673 |
| 2470 | 2 | 3197.0 | 0.000313 | 0.999687 |
| 2471 | 2 | 3204.0 | 0.000312 | 0.999688 |
| 2472 | 2 | 3273.0 | 0.000306 | 0.999695 |

[2473 rows x 5 columns]

== flink ==







```

Confiabilidade R(1) = 0.4140
Confiabilidade R(5) = 0.0122
Confiabilidade R(10) = 0.0001
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

0      nephele/nephele-server/src/main/java/eu/stratosphere/nephele/checkpointing/CheckpointDec...
1      flink-addons/flink-streaming/flink-streaming-examples/src/main/java/org/apache/flink/str...
2      flink-core/src/main/java/org/apache/flink/configuration/DelegatingConfiguration.java
3      nephele/nephele-visualization/src/main/java/eu/stratosphere/nephele/visualization/swt/SW...
4      flink-connectors/flink-connector-files/src/test/java/org/apache/flink/connector/file/sin...
...
2651   flink-runtime/src/main/java/org/apache/flink/runtime/execution/Environment.java
2652   flink-tests/src/test/java/org/apache/flink/test/checkpointing/EventTimeAllWindowCheckpoi...
2653   flink-runtime/src/main/java/org/apache/flink/runtime/util/SignalHandler.java
2654   flink-runtime/src/test/java/org/apache/flink/runtime/testutils/CommonTestUtils.java
2655   flink-core/src/test/java/org/apache/flink/configuration/GlobalConfigurationTest.java

```

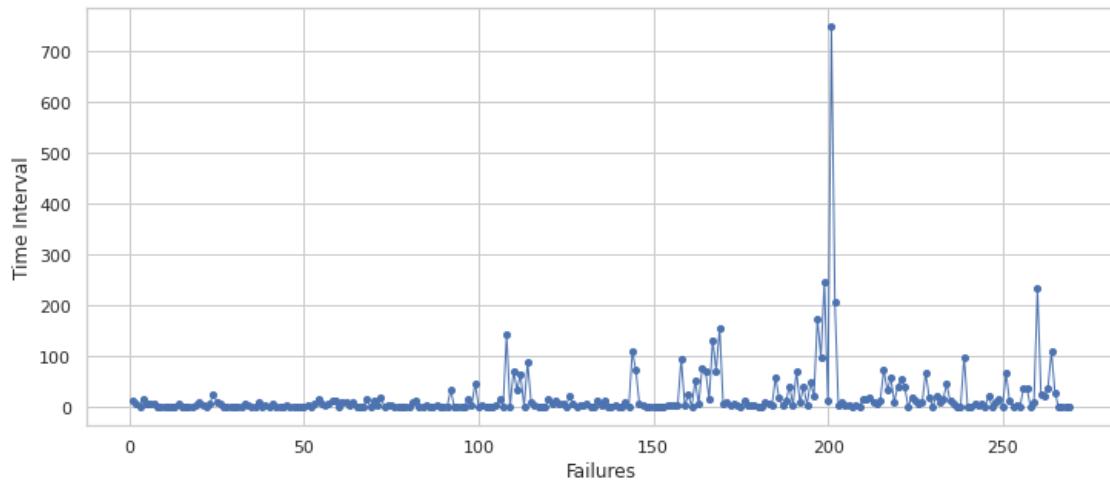
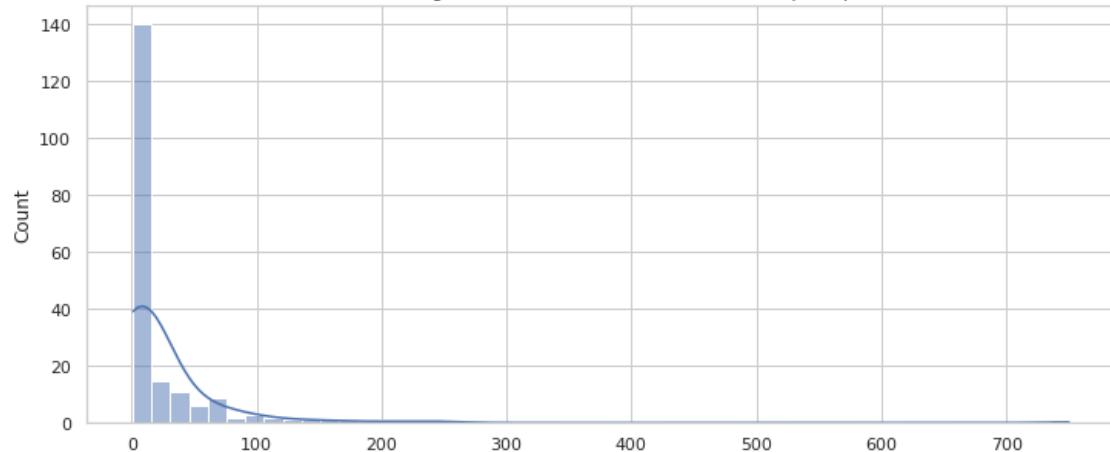
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|-------------|----------------|----------|
| 0 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 1 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 2 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 3 | 5 | 0.500000 | 2.000000 | 0.135335 |
| 4 | 2 | 1.000000 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 2651 | 2 | 3005.000000 | 0.000333 | 0.999667 |
| 2652 | 2 | 3051.000000 | 0.000328 | 0.999672 |
| 2653 | 2 | 3190.000000 | 0.000313 | 0.999687 |
| 2654 | 2 | 3265.000000 | 0.000306 | 0.999694 |

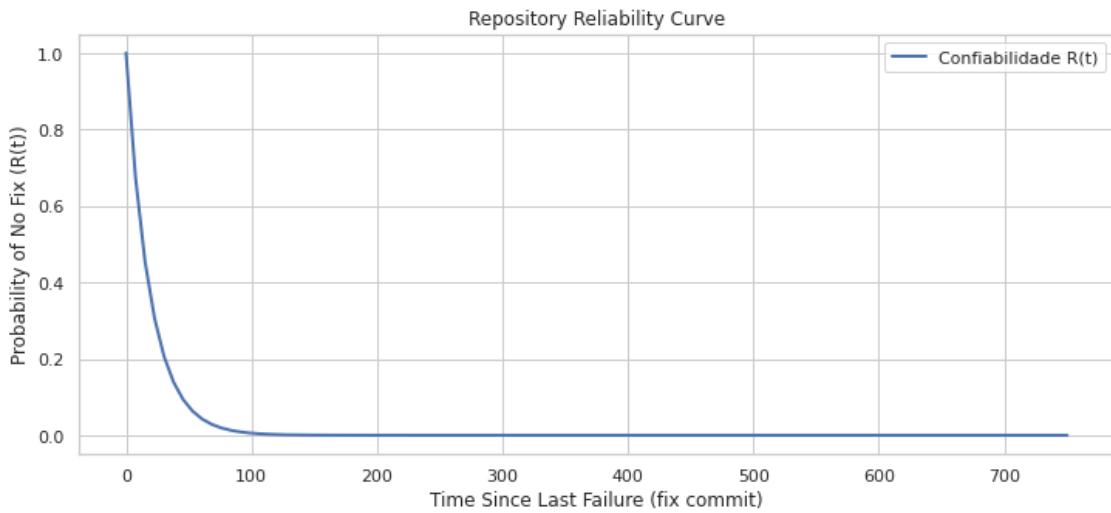
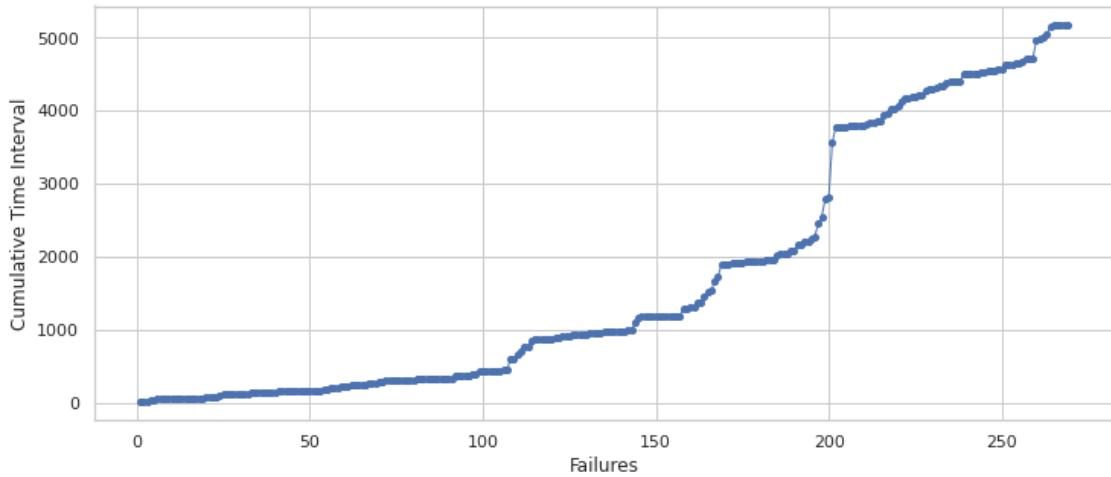
```
2655 2           3490.000000  0.000287          0.999714
```

```
[2656 rows x 5 columns]
```

```
-- opennlp ==
```

The histogram of Time Between Failures (TBF) opennlp





```

Confiabilidade R(1) = 0.9493
Confiabilidade R(5) = 0.7708
Confiabilidade R(10) = 0.5941
Confiabilidade R(50) = 0.0740
Confiabilidade R(100) = 0.0055

```

```

filepath \
0  opennlp-tools/src/main/java/opennlp/tools/chunker/ChunkerCrossValidator.java
1  opennlp-tools/src/main/java/opennlp/tools/formats/ad/ADSentenceSampleStream.java
2  opennlp-tools/src/main/java/opennlp/tools/util/MockInputStreamFactory.java
3  opennlp-tools/src/main/java/opennlp/tools/formats/ad/ADChunkSampleStream.java
4  opennlp-tools/src/main/java/opennlp/tools/namefind/NameFinderSequenceValidator.java
..
144 opennlp-tools/src/test/java/opennlp/tools/tokenize/TokenizerFactoryTest.java

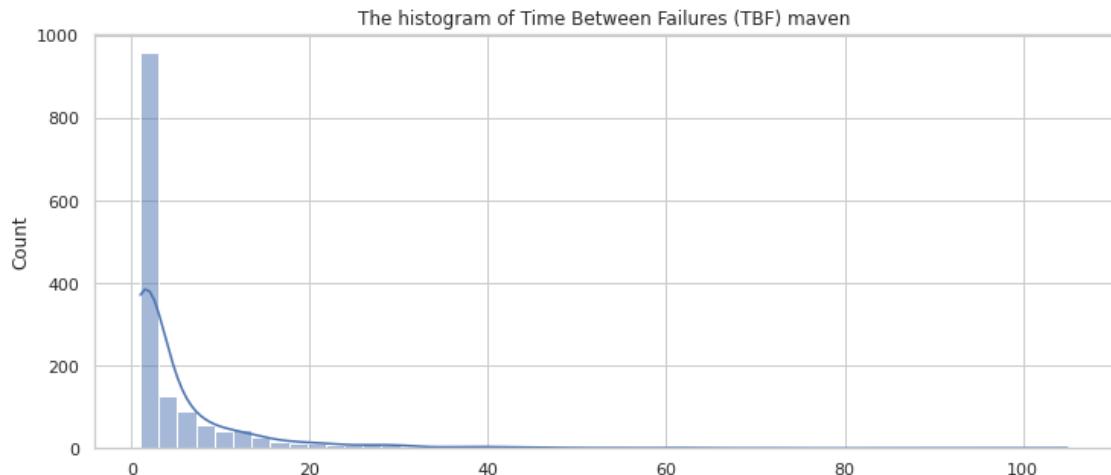
```

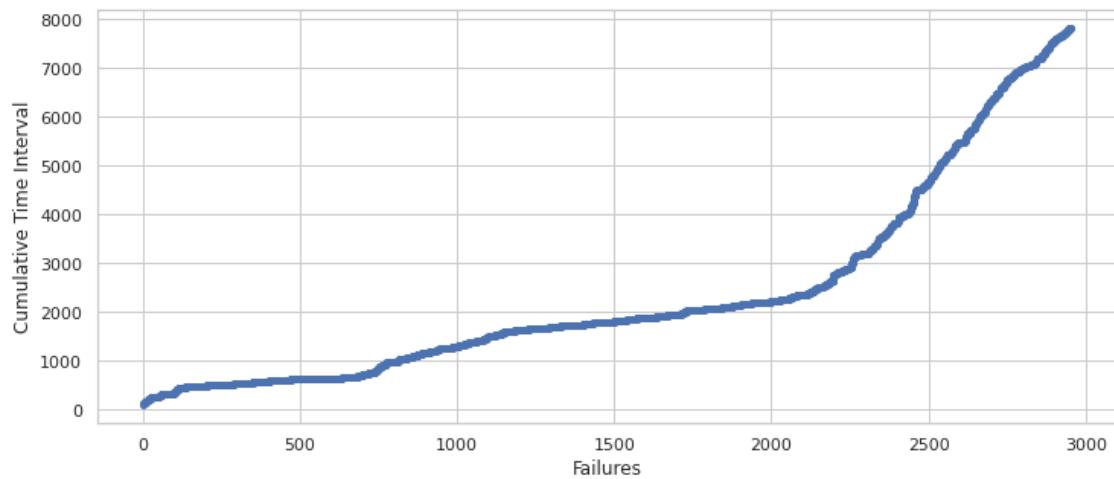
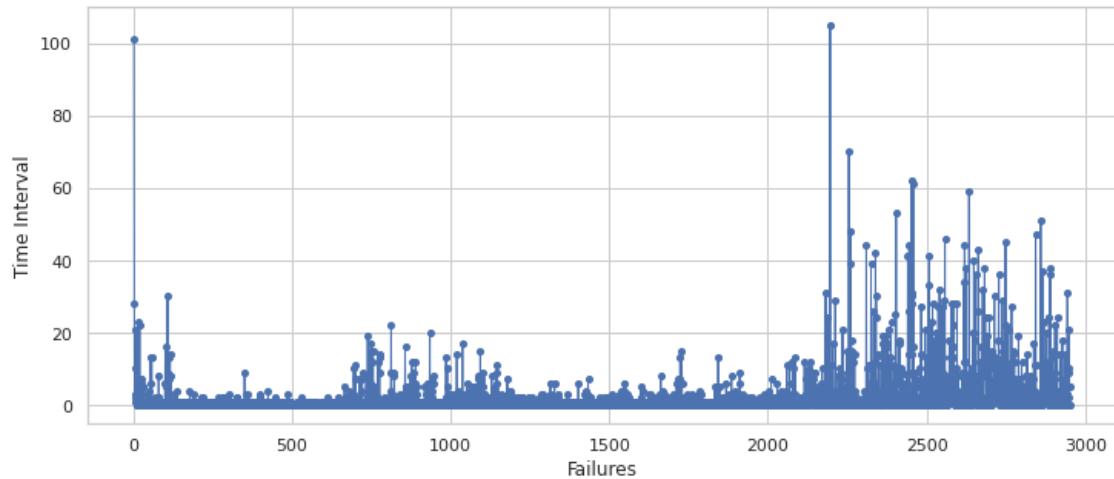
```
145 opennlp-tools/src/main/java/opennlp/tools/formats/brat/BratDocumentStream.java  
146 opennlp-tools/src/main/java/opennlp/tools/entitylinker/EntityLinkerFactory.java  
147 opennlp-tools/src/main/java/opennlp/tools/ml/perceptron/PerceptronTrainer.java  
148 opennlp-tools/src/main/java/opennlp/tools/sentdetect/DefaultSDContextGenerator.java
```

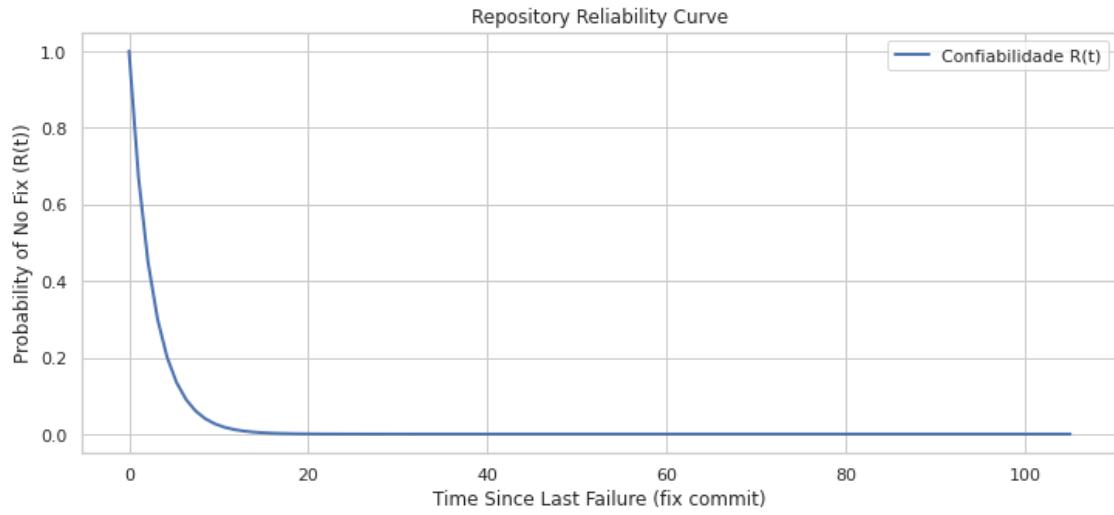
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 2.0 | 0.500000 | 0.606531 |
| 2 | 2 | 2.0 | 0.500000 | 0.606531 |
| 3 | 2 | 2.0 | 0.500000 | 0.606531 |
| 4 | 2 | 4.0 | 0.250000 | 0.778801 |
| .. | .. | ... | ... | ... |
| 144 | 2 | 3740.0 | 0.000267 | 0.999733 |
| 145 | 2 | 3755.0 | 0.000266 | 0.999734 |
| 146 | 2 | 3969.0 | 0.000252 | 0.999748 |
| 147 | 2 | 4188.0 | 0.000239 | 0.999761 |
| 148 | 2 | 4743.0 | 0.000211 | 0.999789 |

[149 rows x 5 columns]

== maven ==







Confiabilidade R(1) = 0.6853

Confiabilidade R(5) = 0.1512

Confiabilidade R(10) = 0.0229

Confiabilidade R(50) = 0.0000

Confiabilidade R(100) = 0.0000

```

0      sandbox/pom-pre-alpha-converter/src/main/java/org/apache/maven/tools/converter/Main.java
1      maven-repository/src/main/java/org/apache/maven/repository/DefaultMirrorBuilder.java
2      maven-core/src/main/java/org/apache/maven/plugin/DefaultPluginLoader.java
3      maven-xml/src/main/java/org/apache/maven/xml/Factories.java
4      maven-core/src/main/java/org/apache/maven/plugin/PluginManagerSupport.java
...
...
1321  its/core-it-suite/src/test/java/org/apache/maven/it/MavenITmng3813PluginClassPathOrdering
1322  maven-artifact/src/main/java/org/apache/maven/artifact/handler/ArtifactHandler.java
1323  maven-core/src/main/java/org/apache/maven/project/artifact/DefaultMetadataSource.java
1324  maven-settings-builder/src/test/java/org/apache/maven/settings/validation/DefaultSetting
1325  maven-artifact/src/test/java/org/apache/maven/artifact/DefaultArtifactTest.java

```

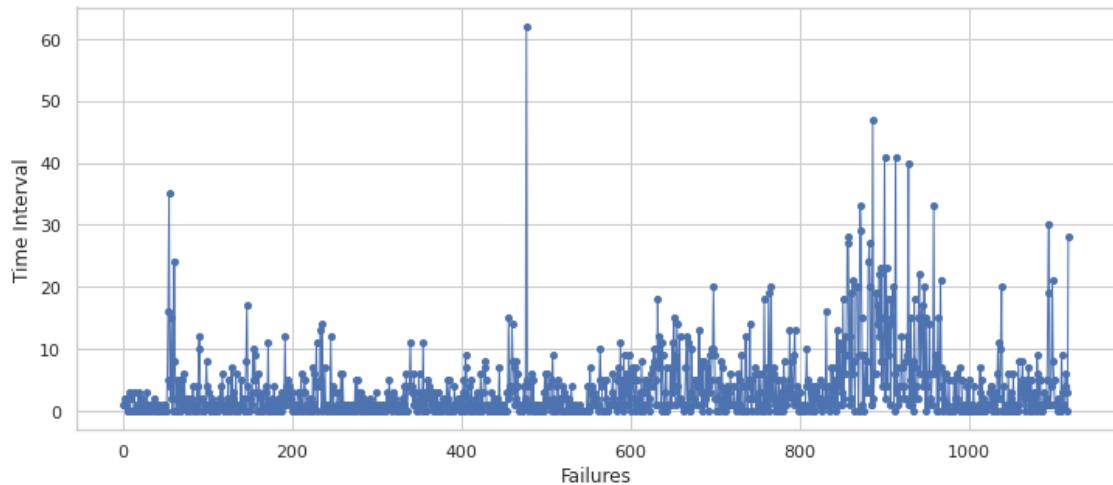
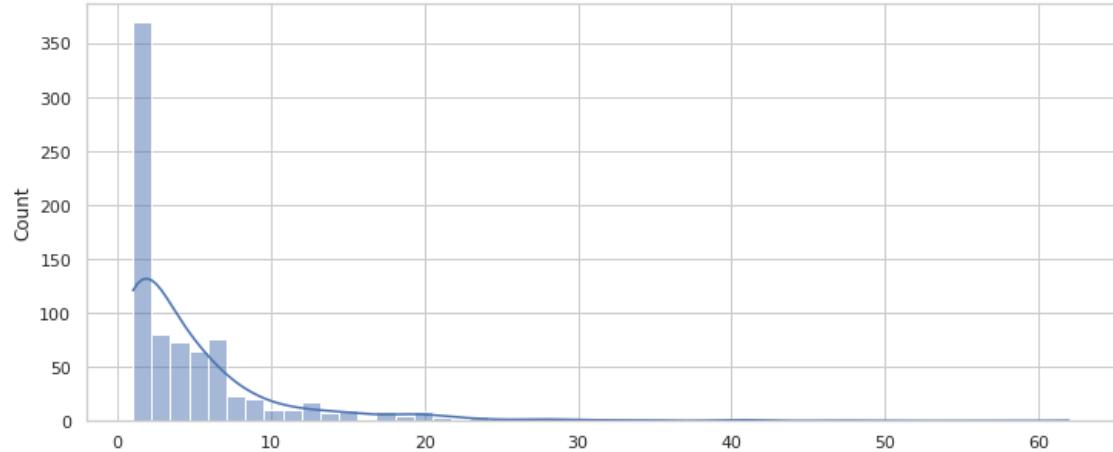
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|-------------|----------------|----------|
| 0 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 1 | 4 | 0.666667 | 1.500000 | 0.223130 |
| 2 | 2 | 1.000000 | 1.000000 | 0.367879 |
| 3 | 2 | 1.000000 | 1.000000 | 0.367879 |
| 4 | 2 | 1.000000 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 1321 | 2 | 4824.000000 | 0.000207 | 0.999793 |
| 1322 | 2 | 4870.000000 | 0.000205 | 0.999795 |
| 1323 | 2 | 4909.000000 | 0.000204 | 0.999796 |
| 1324 | 2 | 4999.000000 | 0.000200 | 0.999800 |

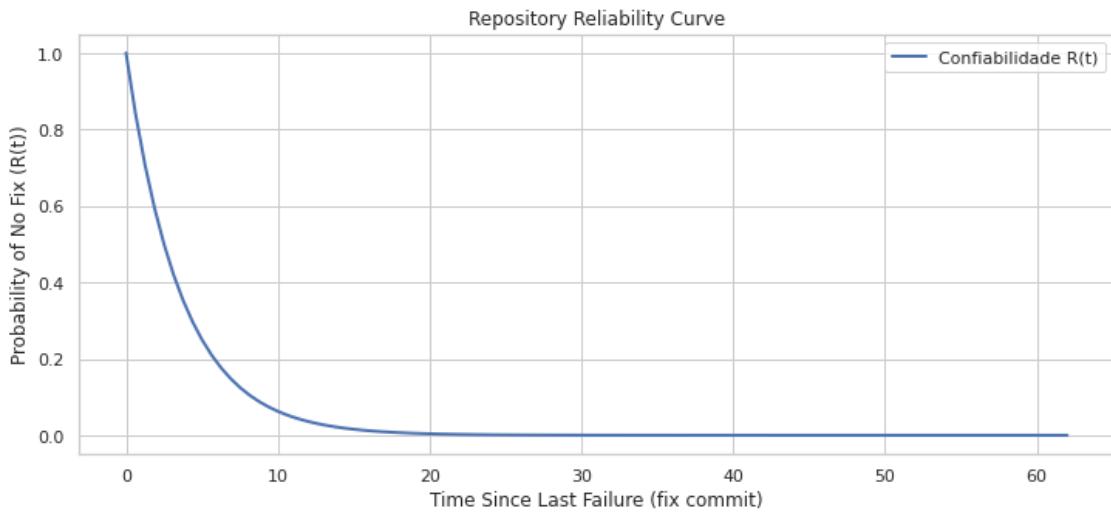
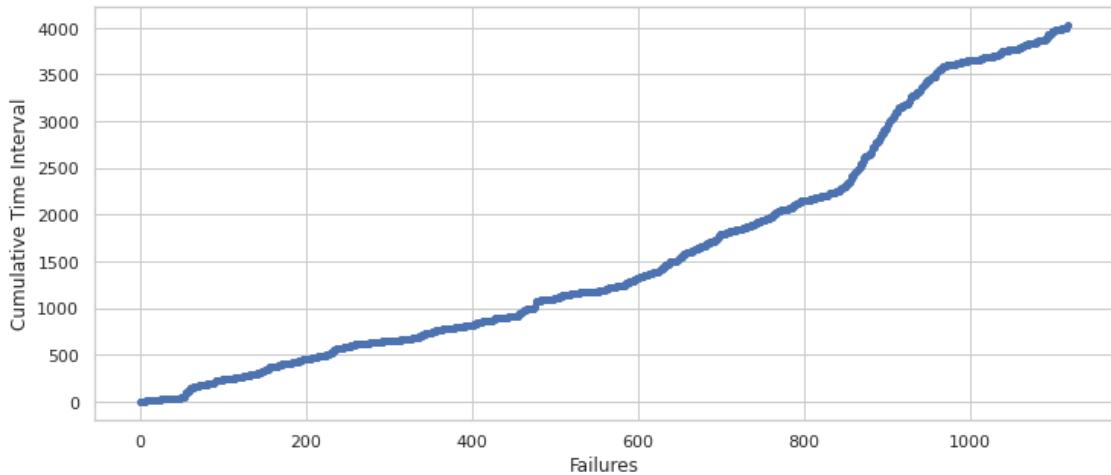
```
1325 2 5760.000000 0.000174 0.999826
```

```
[1326 rows x 5 columns]
```

```
-- phoenix ==
```

The histogram of Time Between Failures (TBF) phoenix





```

Confiabilidade R(1) = 0.7580
Confiabilidade R(5) = 0.2503
Confiabilidade R(10) = 0.0626
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000
  
```

```

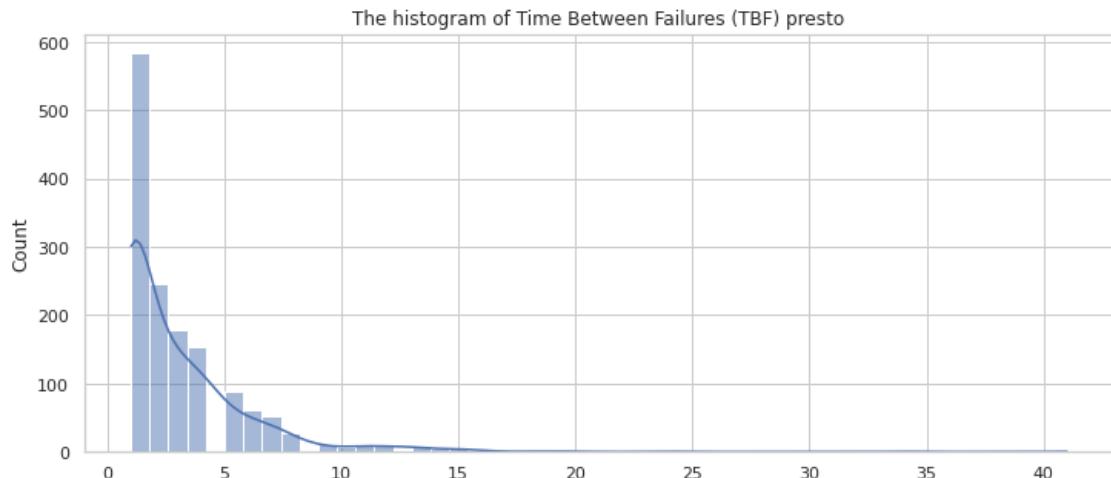
filepath
0   phoenix-core/src/it/java/org/apache/phoenix/end2end/StatsManagerIT.java
1   phoenix-core/src/it/java/org/apache/phoenix/end2end/index/GlobalImmutableTxIndexIT.java
2   phoenix-core/src/main/java/org/apache/phoenix/expression/function/PrefixFunction.java
3   phoenix-core/src/it/java/org/apache/phoenix/end2end/index/GlobalMutableTxIndexIT.java
4   phoenix-core/src/it/java/org/apache/phoenix/end2end/index/LocalMutableNonTxIndexIT.java
...
737  phoenix-core/src/it/java/org/apache/phoenix/end2end/salted/SaltedTableIT.java
  
```

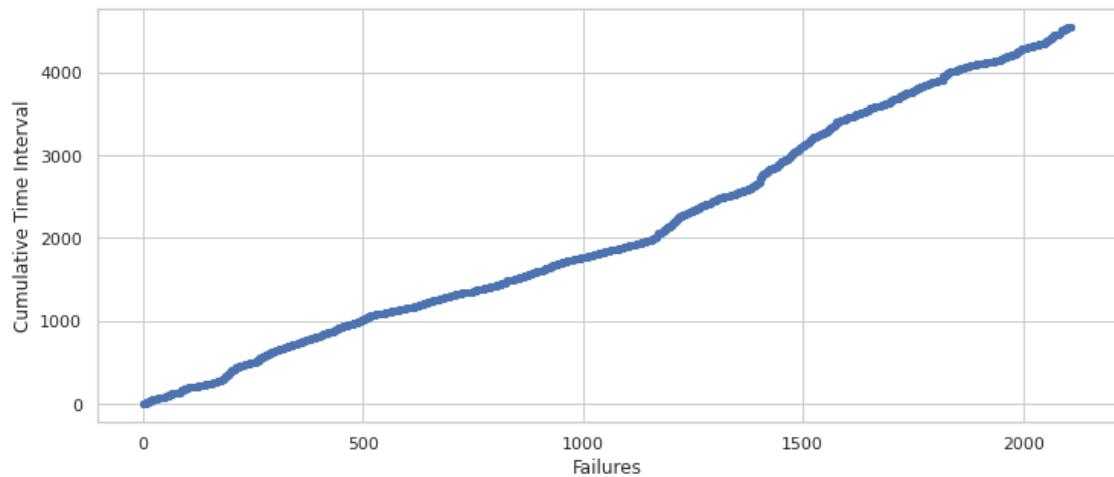
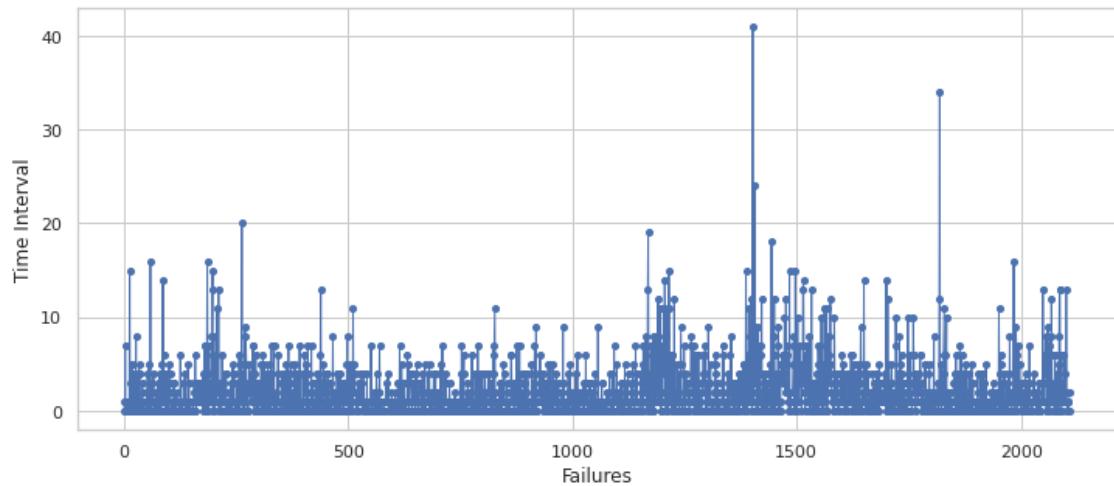
```
738 phoenix-core/src/main/java/org/apache/phoenix/expression/function/UpperFunction.java  
739 phoenix-core/src/main/java/org/apache/phoenix/query/DelegateQueryServices.java  
740 phoenix-core/src/test/java/org/apache/phoenix/filter/SkipScanFilterIntersectTest.java  
741 phoenix-core/src/main/java/org/apache/phoenix/parse/ExplainStatement.java
```

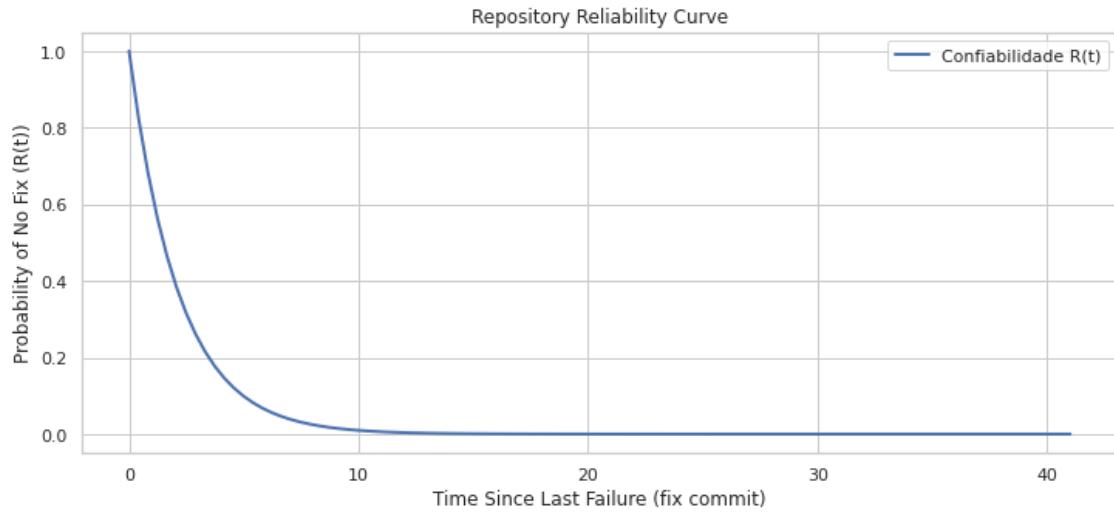
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 737 | 2 | 3101.0 | 0.000322 | 0.999678 |
| 738 | 2 | 3195.0 | 0.000313 | 0.999687 |
| 739 | 2 | 3285.0 | 0.000304 | 0.999696 |
| 740 | 2 | 3330.0 | 0.000300 | 0.999700 |
| 741 | 2 | 3420.0 | 0.000292 | 0.999708 |

[742 rows x 5 columns]

== presto ==







```

Confiabilidade R(1) = 0.6293
Confiabilidade R(5) = 0.0987
Confiabilidade R(10) = 0.0097
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

f
0      presto-parser/src/test/java/com/facebook/presto/sql/parser/TestSqlParserErrorHandler.java
1      presto-main/src/test/java/com/facebook/presto/operator/TestHttpPageBufferClient.java
2      presto-main/src/main/java/com/facebook/presto/server/TaskOutput.java
3      presto-main/src/main/java/com/facebook/presto/operator/aggregation/LongMaxAggregation.java
4      presto-main/src/main/java/com/facebook/presto/operator/aggregation/LongAverageAggregation.java
...
1161    presto-main/src/main/java/com/facebook/presto/operator/scalar/ArrayMaxFunction.java
1162    presto-main/src/main/java/com/facebook/presto/operator/scalar/ArrayMinFunction.java
1163    presto-main/src/main/java/com/facebook/presto/execution/ExecutionFailureInfo.java
1164    presto-main/src/main/java/com/facebook/presto/server/QueryResource.java
1165    presto-main/src/main/java/com/facebook/presto/sql/planner/optimizations/IndexJoinOptimization.java

```

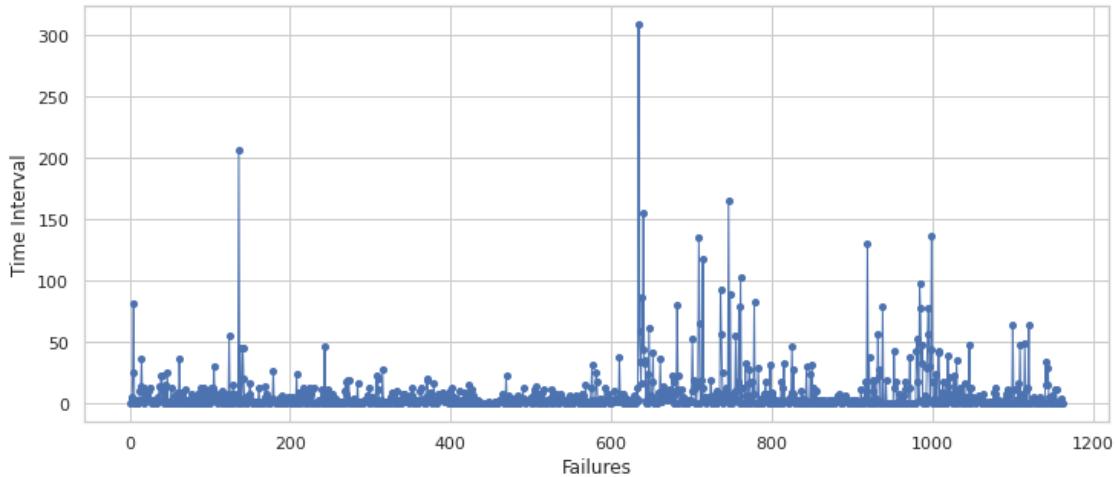
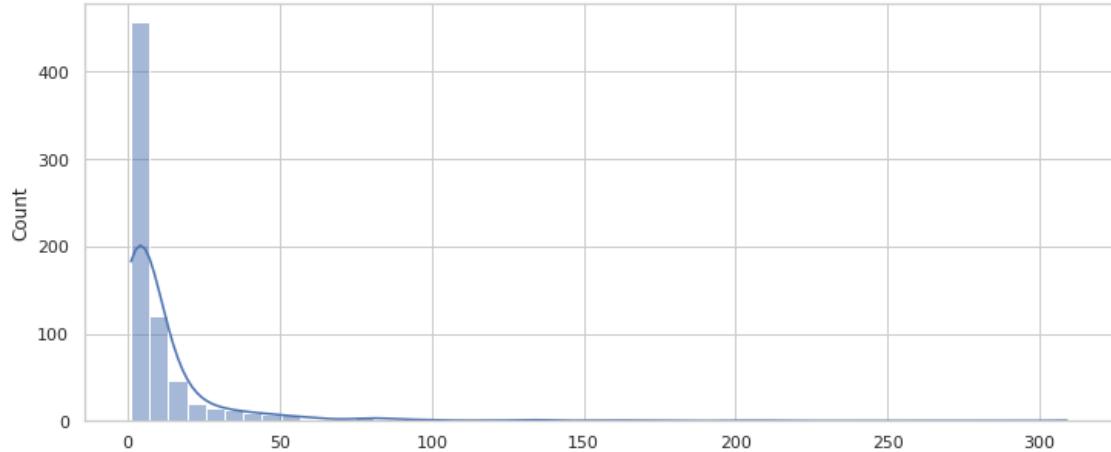
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 3 | 0.5 | 2.000000 | 0.135335 |
| 2 | 3 | 0.5 | 2.000000 | 0.135335 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 1161 | 2 | 2946.0 | 0.000339 | 0.999661 |
| 1162 | 2 | 2946.0 | 0.000339 | 0.999661 |
| 1163 | 2 | 3101.0 | 0.000322 | 0.999678 |
| 1164 | 2 | 3399.0 | 0.000294 | 0.999706 |

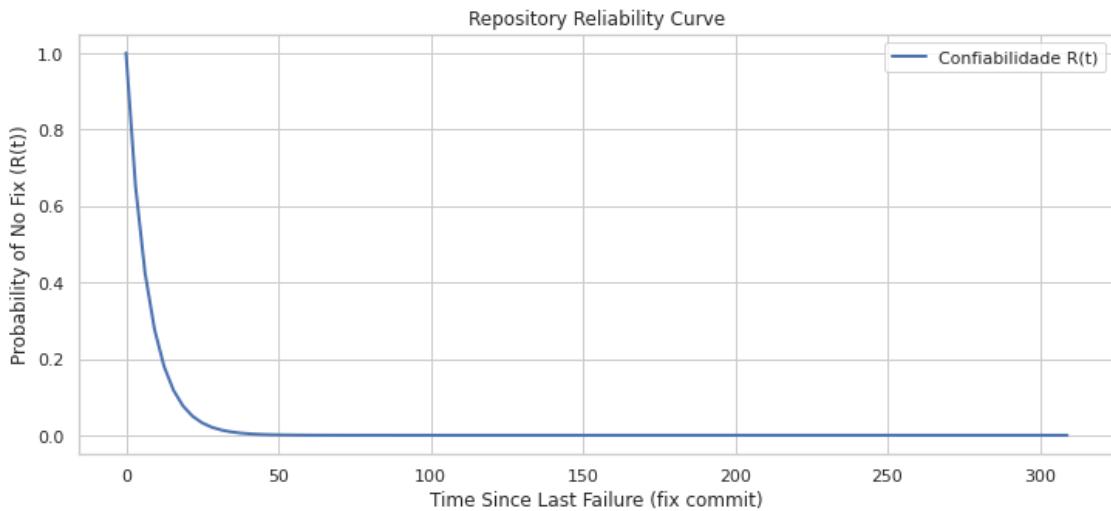
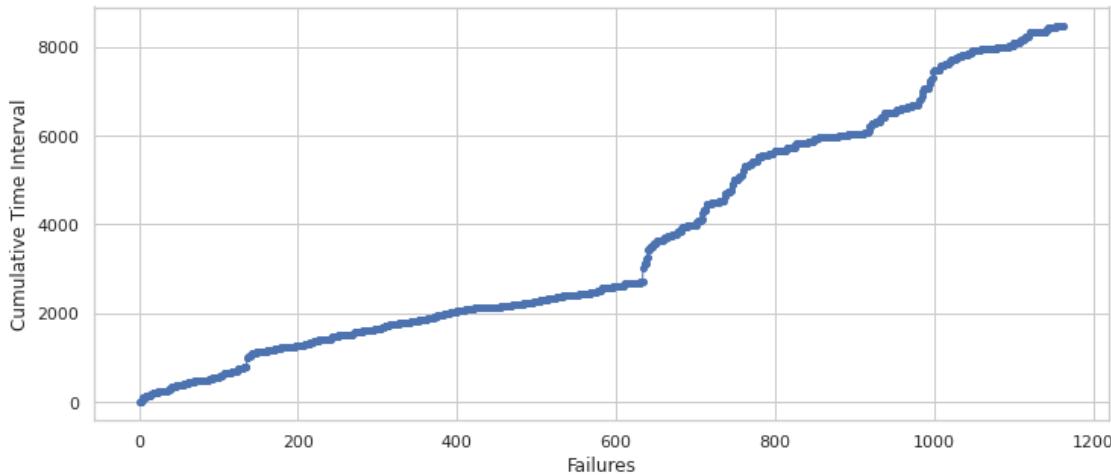
```
1165 2          3530.0  0.000283      0.999717
```

```
[1166 rows x 5 columns]
```

```
-- jspwiki ==
```

The histogram of Time Between Failures (TBF) jspwiki





```

Confiabilidade R(1) = 0.8718
Confiabilidade R(5) = 0.5035
Confiabilidade R(10) = 0.2535
Confiabilidade R(50) = 0.0010
Confiabilidade R(100) = 0.0000

```

```

filepath \
0 jspwiki-main/src/test/java/org/apache/wiki/providers/BasicAttachmentProviderTest.java
1 jspwiki-event/src/main/java/org/apache/wiki/event/WorkflowEvent.java
2 src/com/ecyrd/jspwiki/action/UserProfileActionBean.java
3 src/com/ecyrd/jspwiki/ui/stripes/WikiActionBeanContext.java
4 src/com/ecyrd/jspwiki/action/ViewActionBean.java
..
555 tests/stress/Benchmark.java

```

```

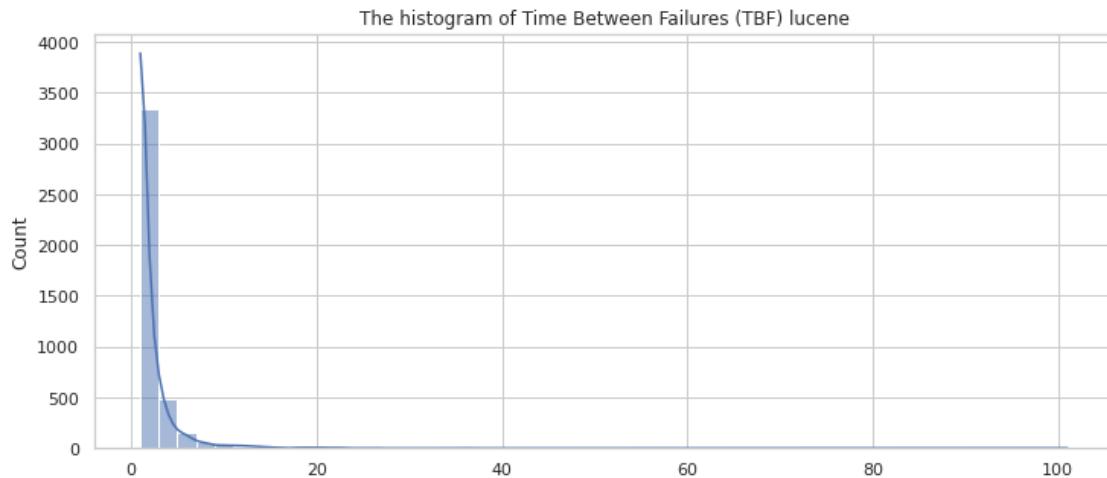
556 src/com/ecyrd/jspwiki/tags/PageDateTag.java
557 tests/com/ecyrd/jspwiki/attachment/AttachmentManagerTest.java
558 src/com/ecyrd/jspwiki/QueryItem.java
559 tests/com/ecyrd/jspwiki/TextUtilTest.java

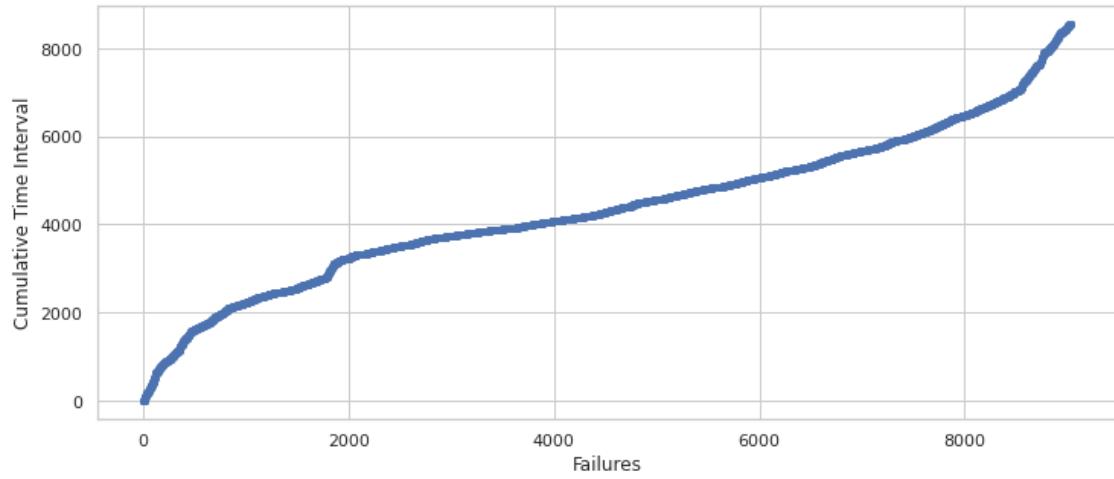
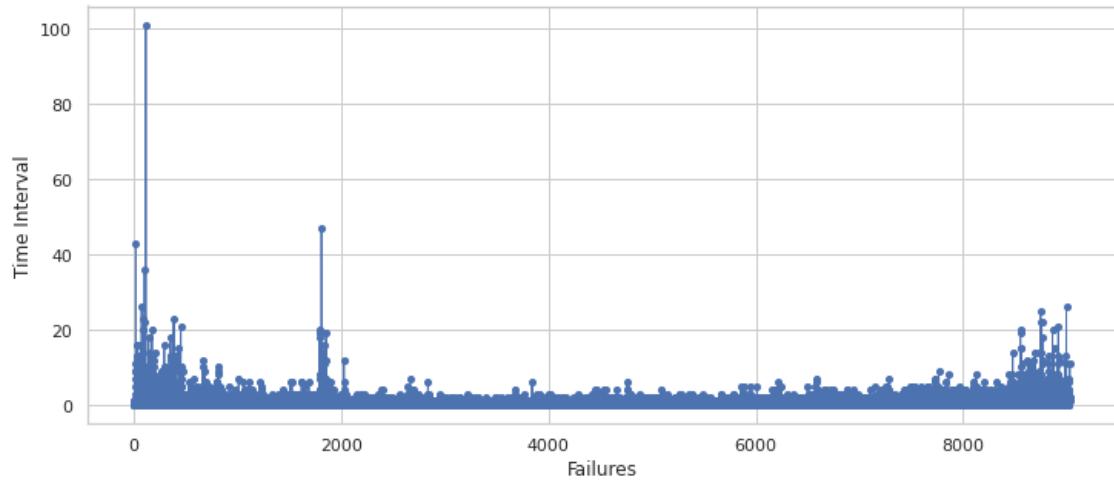
```

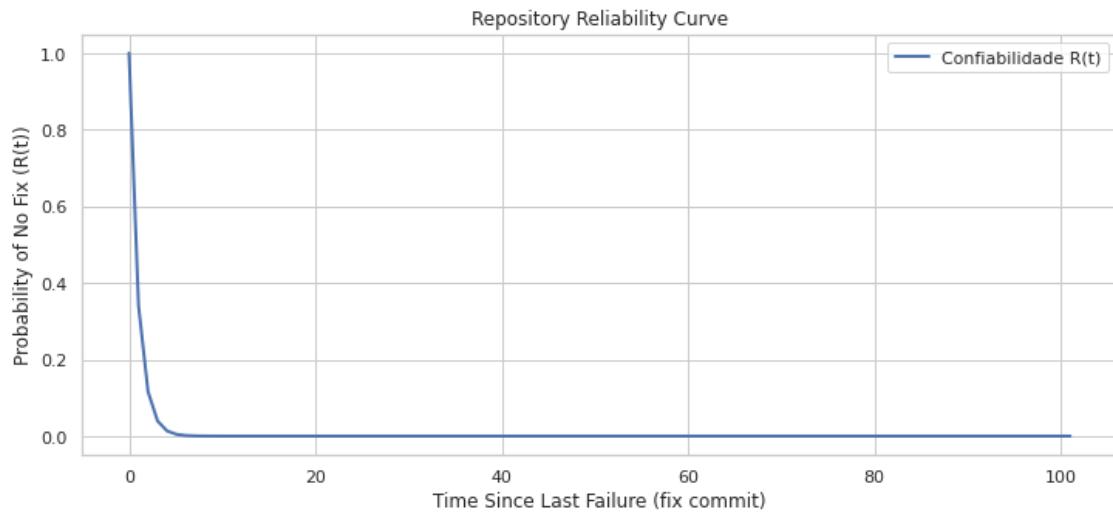
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 555 | 2 | 1778.0 | 0.000562 | 0.999438 |
| 556 | 2 | 2072.0 | 0.000483 | 0.999517 |
| 557 | 2 | 2153.0 | 0.000464 | 0.999536 |
| 558 | 2 | 2245.0 | 0.000445 | 0.999555 |
| 559 | 2 | 2453.0 | 0.000408 | 0.999592 |

[560 rows x 5 columns]

== lucene ==







```

Confiabilidade R(1) = 0.3481
Confiabilidade R(5) = 0.0051
Confiabilidade R(10) = 0.0000
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

0      solr/contrib/analytics/src/test/org/apache/solr/analytics/facet/FacetSortingTest.java
1      solr/core/src/test/org/apache/solr/search/LargeFieldTest.java
2      lucene/contrib/queryparser/src/test/org/apache/lucene/queryParser/standard/TestNumericQu
3      lucene/test-framework/src/java/org/apache/lucene/mockfile/FilterFileSystem.java
4      lucene/core/src/test/org/apache/lucene/search/TermInSetQueryTest.java
...
5857    lucene/queryparser/src/test/org/apache/lucene/queryparser/flexible/messages/TestNLS.java
5858    lucene/benchmark/src/java/org/apache/lucene/benchmark/byTask/tasks/NewLocaleTask.java
5859    lucene/core/src/java/org/apache/lucene/store/LockVerifyServer.java
5860    lucene/benchmark/src/java/org/apache/lucene/benchmark/byTask/tasks/SearchWithCollectorTa
5861    lucene/core/src/java/org/apache/lucene/index/StoredFieldVisitor.java

```

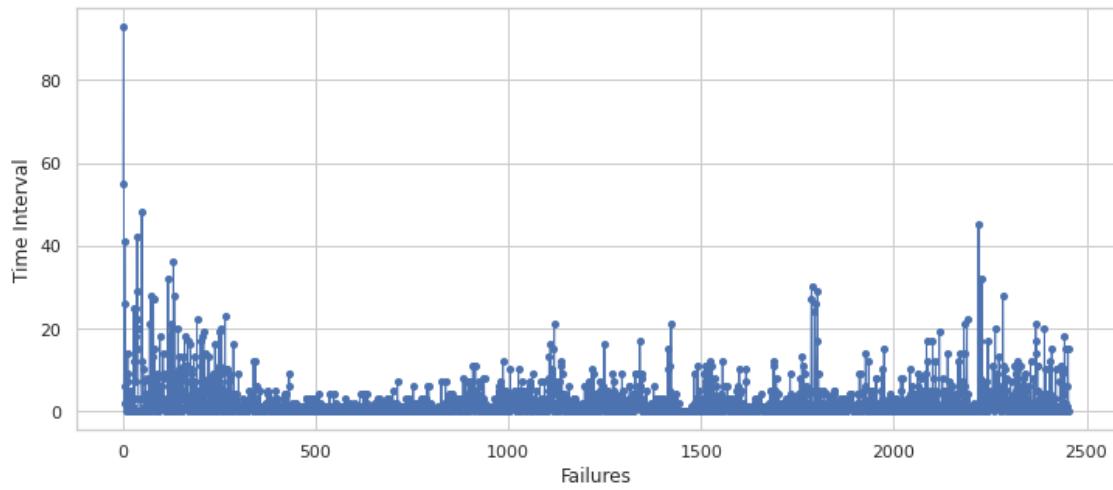
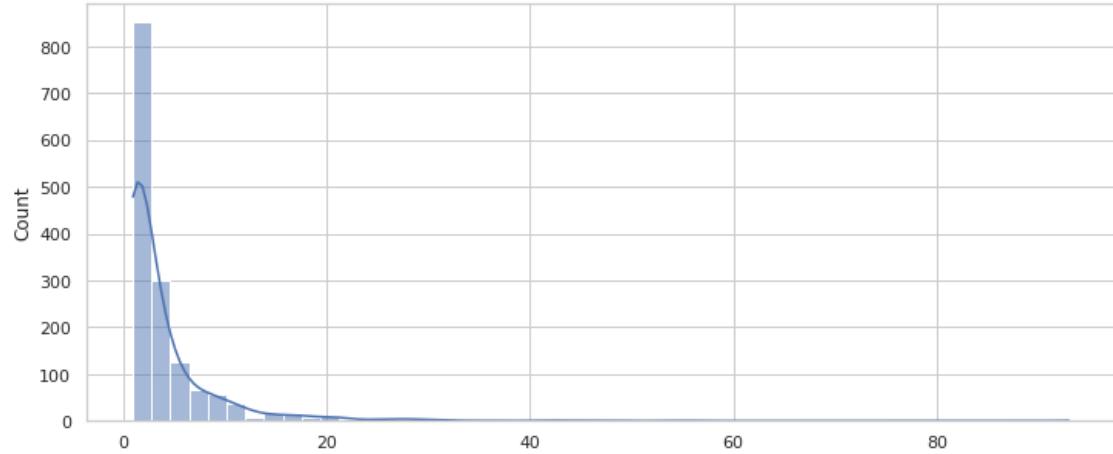
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|-------------|----------------|----------|
| 0 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 1 | 6 | 0.400000 | 2.500000 | 0.082085 |
| 2 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 3 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 4 | 3 | 0.500000 | 2.000000 | 0.135335 |
| ... | ... | ... | ... | ... |
| 5857 | 2 | 4162.000000 | 0.000240 | 0.999760 |
| 5858 | 2 | 4162.000000 | 0.000240 | 0.999760 |
| 5859 | 2 | 4228.000000 | 0.000237 | 0.999764 |
| 5860 | 2 | 4462.000000 | 0.000224 | 0.999776 |

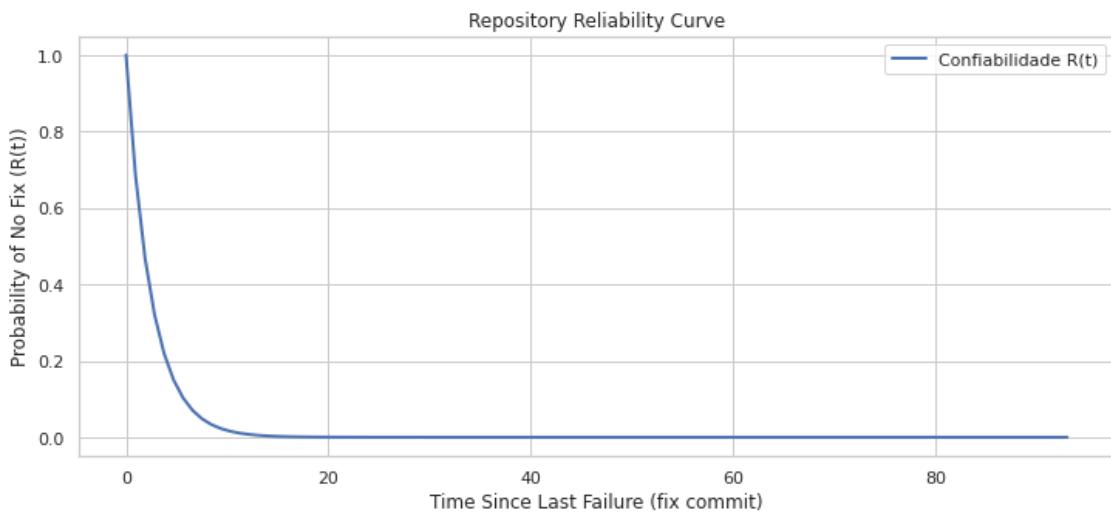
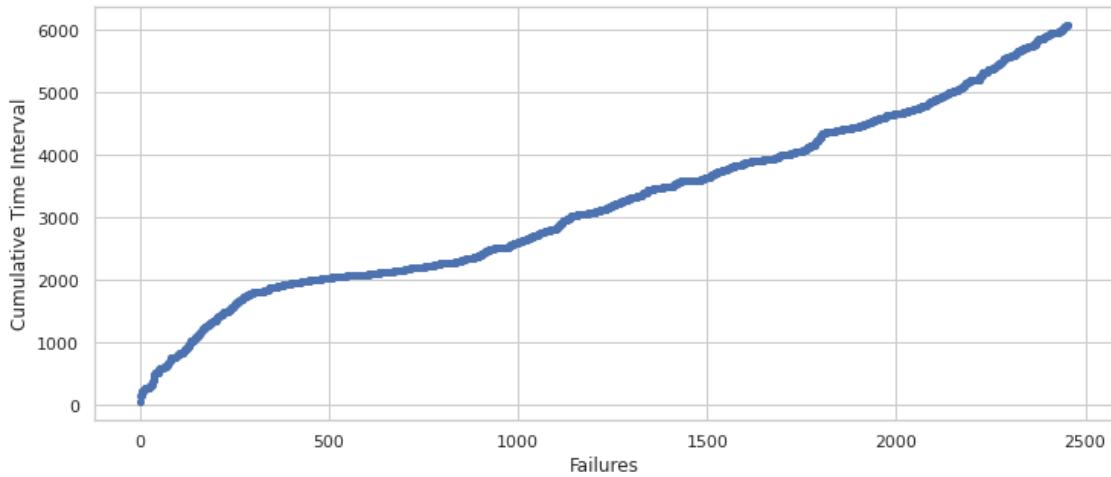
5861 2 4602.000000 0.000217 0.999783

[5862 rows x 5 columns]

== pdfbox ==

The histogram of Time Between Failures (TBF) pdfbox





```

Confiabilidade R(1) = 0.6681
Confiabilidade R(5) = 0.1331
Confiabilidade R(10) = 0.0177
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000
  
```

```

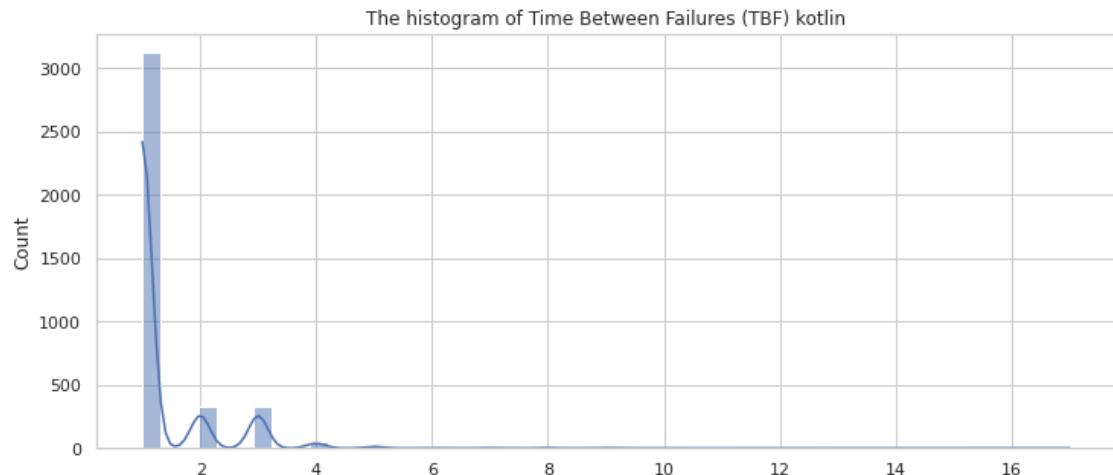
0   pdfbox/src/test/java/org/apache/pdfbox/pdmodel/interactive/documentnavigation/outline/PDO
1   pdfbox/src/test/java/org/apache/pdfbox/io/RandomAccessReadViewTest.java
2   tools/src/main/java/org/apache/pdfbox/tools/gui/ErrorDialog.java
3   fontbox/src/main/java/org/apache/fontbox/FontBoxFont.java
4   src/main/java/org/apache/pdfbox/pdmodel/graphics/xobject/PDCcitt.java
...
744 examples/src/main/java/org/apache/pdfbox/examples/util/PrintTextLocations.java
  
```

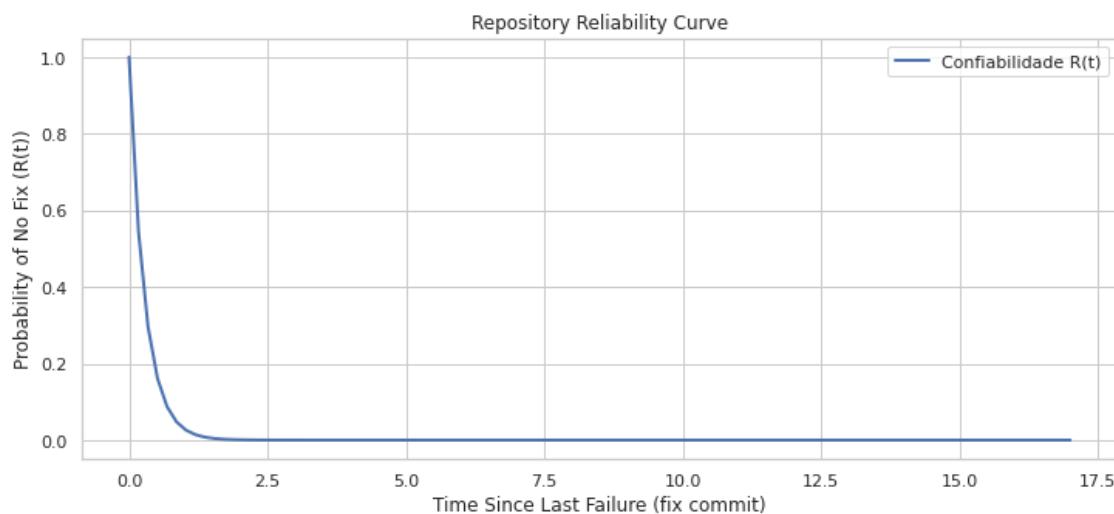
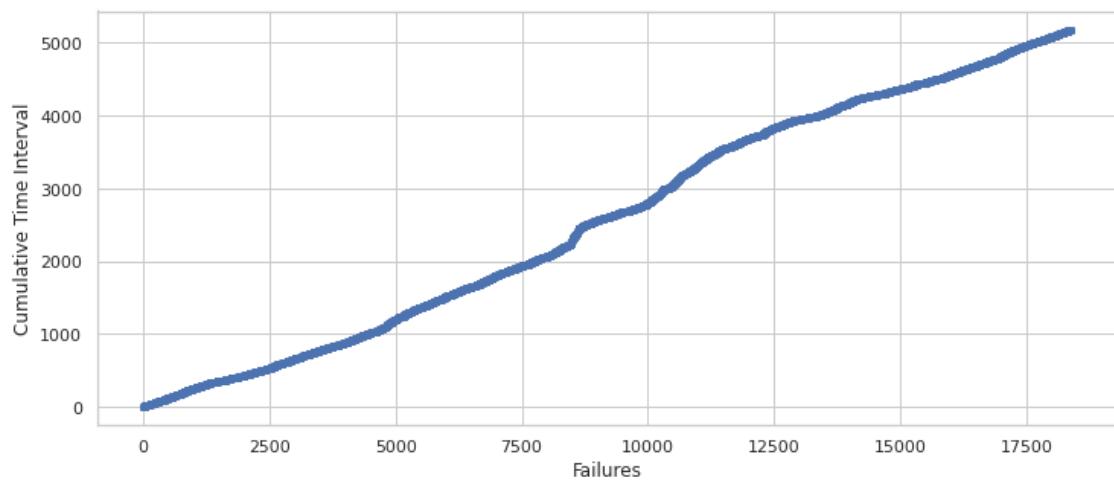
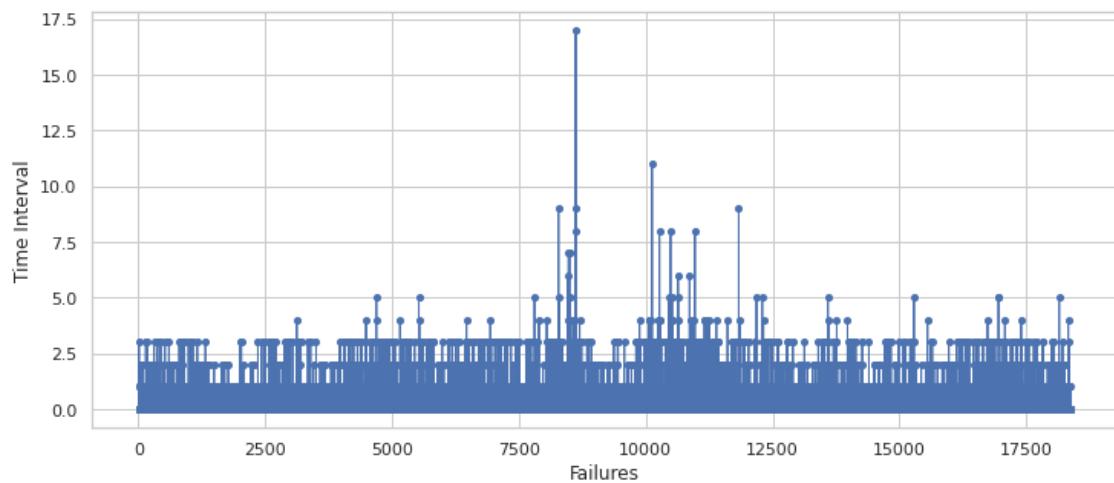
```
745 pdfbox/src/main/java/org/apache/pdfbox/contentstream/operator/graphics/DrawObject.java  
746 pdfbox/src/test/java/org/apache/pdfbox/pdmodel/common/TestPDNameTreeNode.java  
747 fontbox/src/main/java/org/apache/fontbox/ttf/GlyfCompositeComp.java  
748 fontbox/src/main/java/org/apache/fontbox/ttf/GlyfDescriptor.java
```

| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 744 | 2 | 3391.0 | 0.000295 | 0.999705 |
| 745 | 2 | 3583.0 | 0.000279 | 0.999721 |
| 746 | 2 | 3803.0 | 0.000263 | 0.999737 |
| 747 | 2 | 4505.0 | 0.000222 | 0.999778 |
| 748 | 2 | 4507.0 | 0.000222 | 0.999778 |

[749 rows x 5 columns]

== kotlin ==





```

Confiabilidade R(1) = 0.0288
Confiabilidade R(5) = 0.0000
Confiabilidade R(10) = 0.0000
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

0    compiler/preloader/instrumentation/src/org/jetbrains/jet/preloading/instrumentation/Inte...
1    idea/tests/org/jetbrains/jet/plugin/navigation/JetGotoImplementationTest.java
2    idea/tests/org/jetbrains/jet/plugin/refactoring/rename/AbstractRenameTest.java
3    idea/tests/org/jetbrains/jet/plugin/refactoring/rename/RenameTestGenerated.java
4    idea/src/org/jetbrains/jet/plugin/compiler/MessageCollectorAdapter.java
...
3148   compiler/testData/javaModules/dependOnManyModules/moduleD/module-info.java
3149   compiler/testData/javaModules/nonTransitiveDoesNotAffectExplicitDependency/moduleD/module...
3150   compiler/testData/javaModules/jdkModulesFromNamed/main/module-info.java
3151   core/descriptors/src/org/jetbrains/kotlin/descriptors/annotations/AnnotationDescriptorImp...
3152   compiler/backend/src/org/jetbrains/kotlin/codegen/AbstractClassBuilder.java

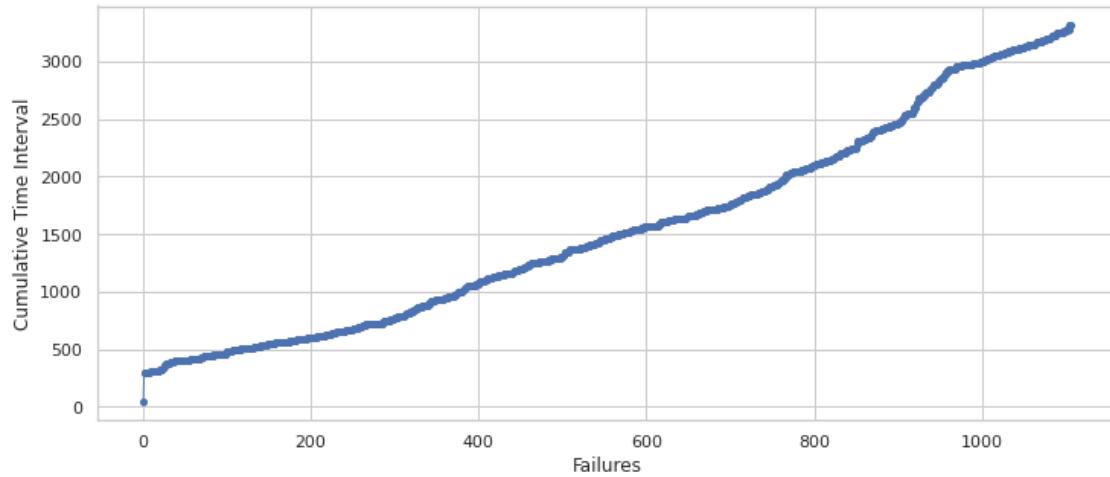
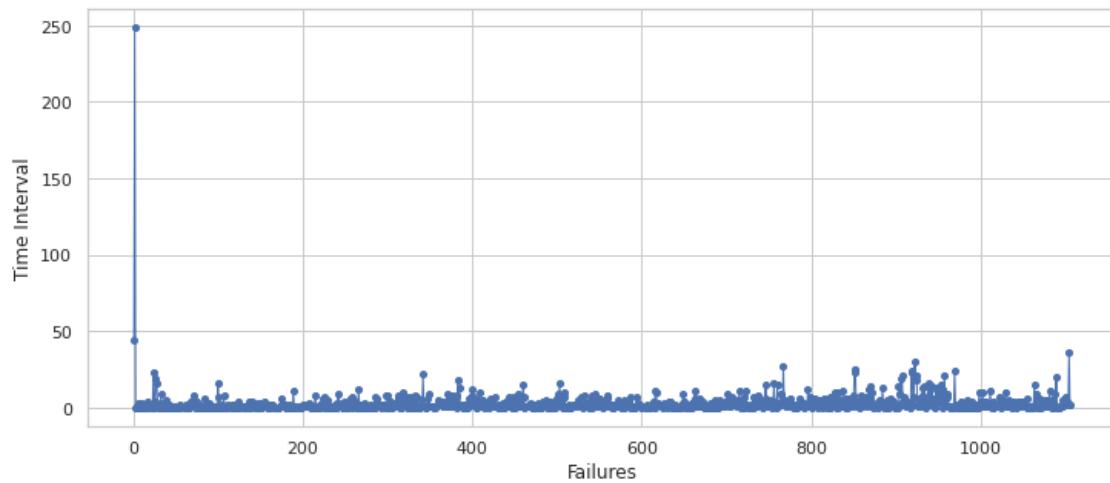
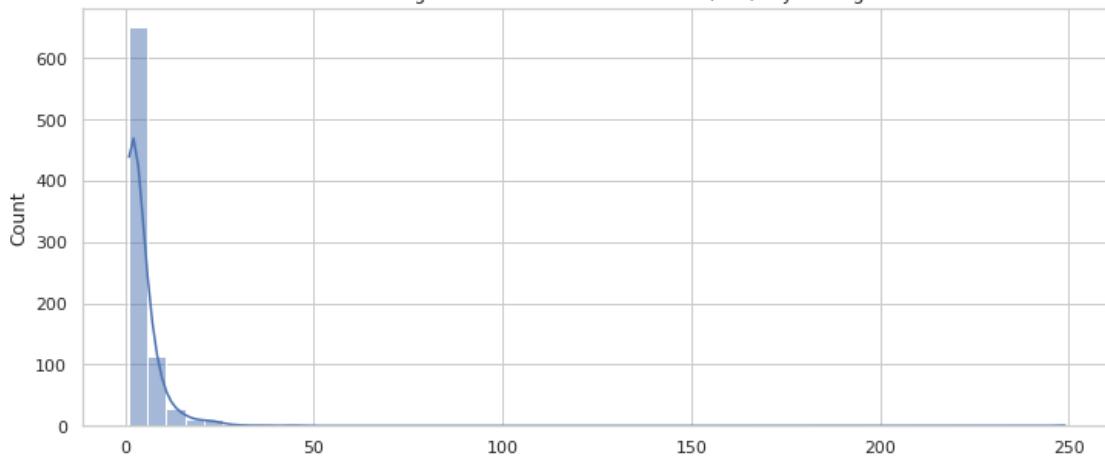
      n_commits      MTBF  lambda_failure      R_t
0      5        0.250000  4.000000  0.018316
1      4        0.333333  3.000000  0.049787
2      3        0.500000  2.000000  0.135335
3      3        0.500000  2.000000  0.135335
4      3        0.500000  2.000000  0.135335
...
3148   ...        ...        ...
3148   2        2291.000000  0.000436  0.999564
3149   2        2291.000000  0.000436  0.999564
3150   2        2291.000000  0.000436  0.999564
3151   2        2503.000000  0.000400  0.999601
3152   2        2537.000000  0.000394  0.999606

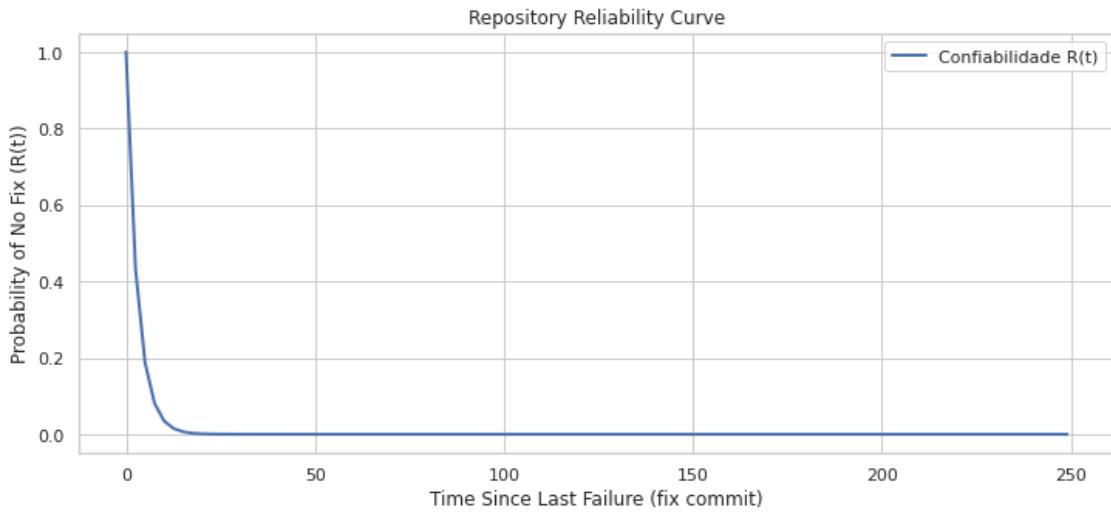
[3153 rows x 5 columns]

== skywalking ==

```

The histogram of Time Between Failures (TBF) skywalking





Confiabilidade $R(1) = 0.7167$

Confiabilidade $R(5) = 0.1891$

Confiabilidade $R(10) = 0.0357$

Confiabilidade $R(50) = 0.0000$

Confiabilidade $R(100) = 0.0000$

```

0    apm-sniffer/apm-agent-core/src/main/java/org/skywalking/apm/agent/core/boot/DefaultNamedTl
1    skywalking-sniffer/skywalking-toolkit-activation/skywalking-toolkit-opentracing-activation
2    apm-collector/apm-collector-worker/src/main/java/org/skywalking/apm/collector/worker/confi
3    apm-collector/apm-collector-worker/src/main/java/org/skywalking/apm/collector/worker/confi
4    apm-sniffer/apm-sdk-plugin/motan-plugin/src/test/java/org/skywalking/apm/plugin/motan/Mota
..
916   oap-server/server-core/src/main/java/org/apache/skywalking/oap/server/core/storage/query/
917   oap-server/server-core/src/main/java/org/apache/skywalking/oap/server/core/analysis/manual
918   oap-server/server-core/src/main/java/org/apache/skywalking/oap/server/core/analysis/manual
919   oap-server/server-core/src/main/java/org/apache/skywalking/oap/server/core/analysis/manual
920   oap-server/server-core/src/main/java/org/apache/skywalking/oap/server/core/analysis/manual

```

| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 3 | 0.5 | 2.000000 | 0.135335 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 916 | 2 | 1784.0 | 0.000561 | 0.999440 |
| 917 | 2 | 1790.0 | 0.000559 | 0.999441 |

```

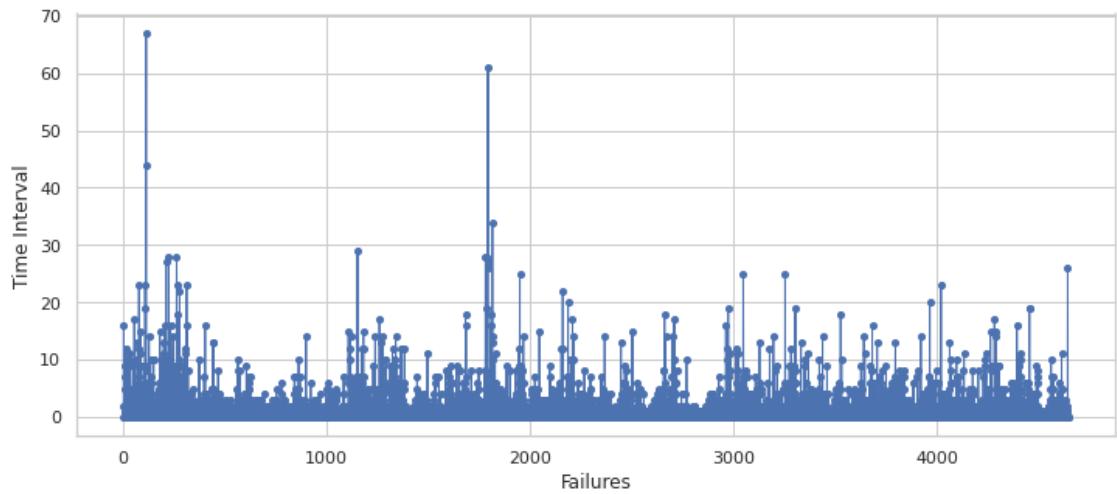
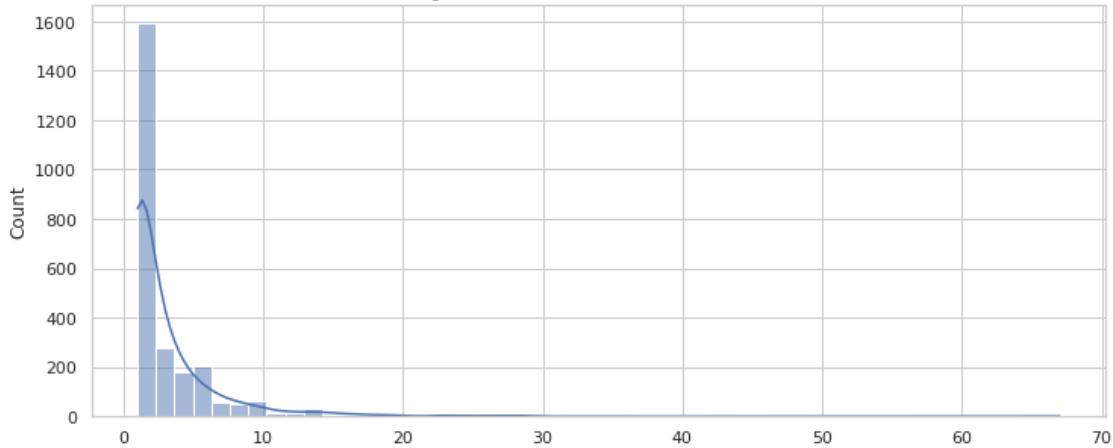
918 2          1790.0  0.000559      0.999441
919 2          1790.0  0.000559      0.999441
920 2          1790.0  0.000559      0.999441

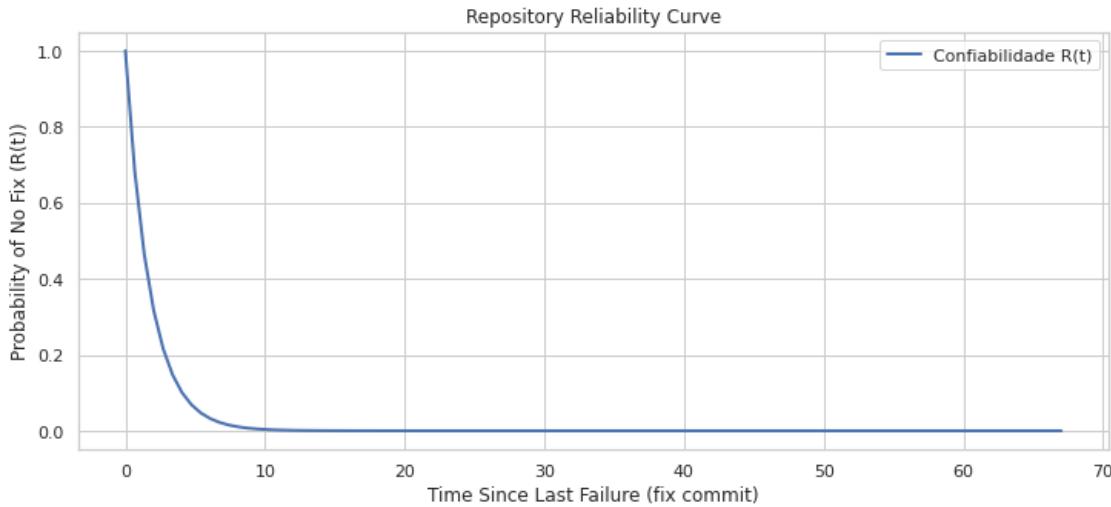
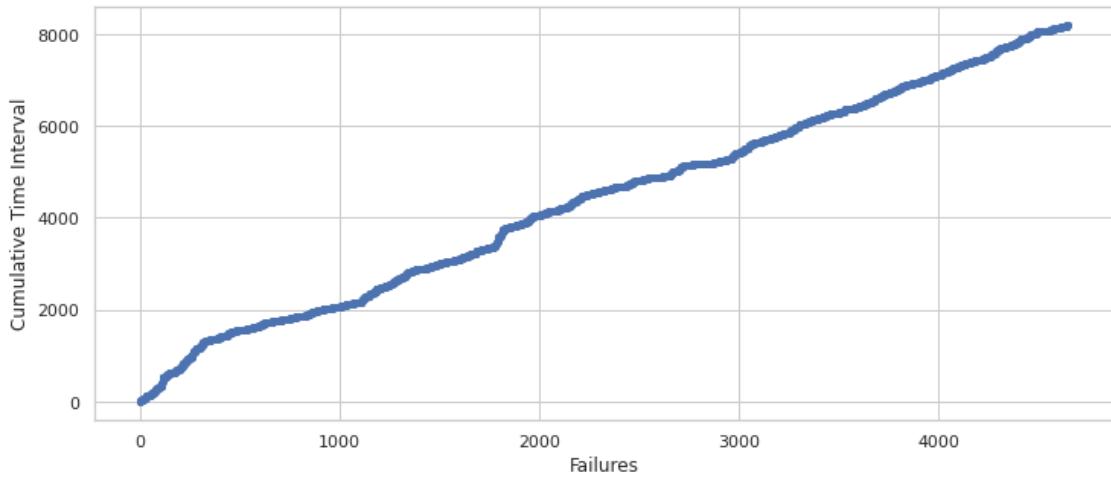
```

[921 rows x 5 columns]

== htmlunit ==

The histogram of Time Between Failures (TBF) htmlunit





Confiabilidade $R(1) = 0.5676$

Confiabilidade $R(5) = 0.0589$

Confiabilidade $R(10) = 0.0035$

Confiabilidade $R(50) = 0.0000$

Confiabilidade $R(100) = 0.0000$

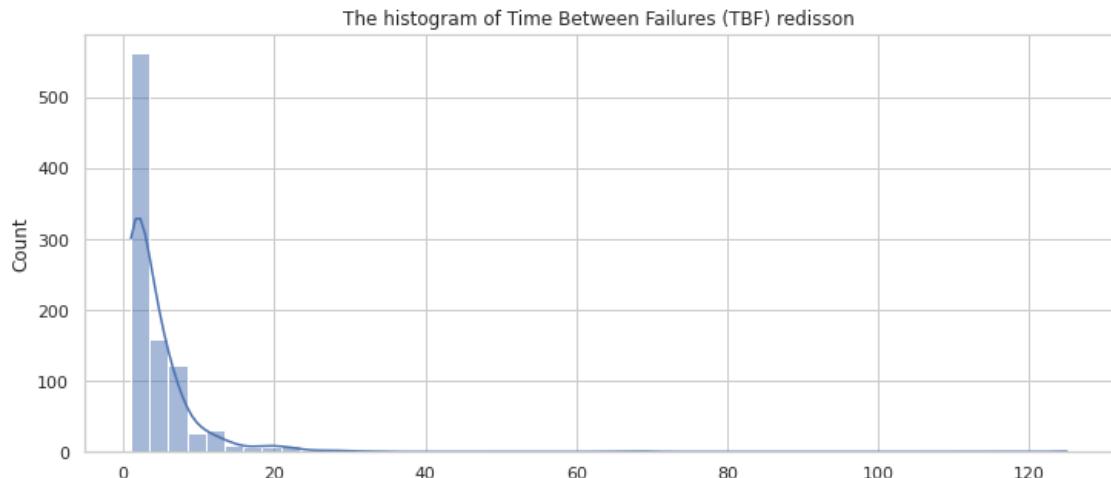
```
filepath \
0    src/main/java/com/gargoylesoftware/htmlunit/javascript/HTMLCollection.java
1    src/java/com/gargoylesoftware/htmlunit/javascript/TimeoutError.java
2    src/main/java/com/gargoylesoftware/htmlunit/javascript/host/html/Image.java
3    src/test/java/org/htmlunit/javascript/ScriptableObjectTest.java
4    src/test/java/org/htmlunit/javascript/host/css/property/ElementClientWidthTest.java
...
1705   src/main/java/com/gargoylesoftware/htmlunit/html/HtmlParameter.java
```

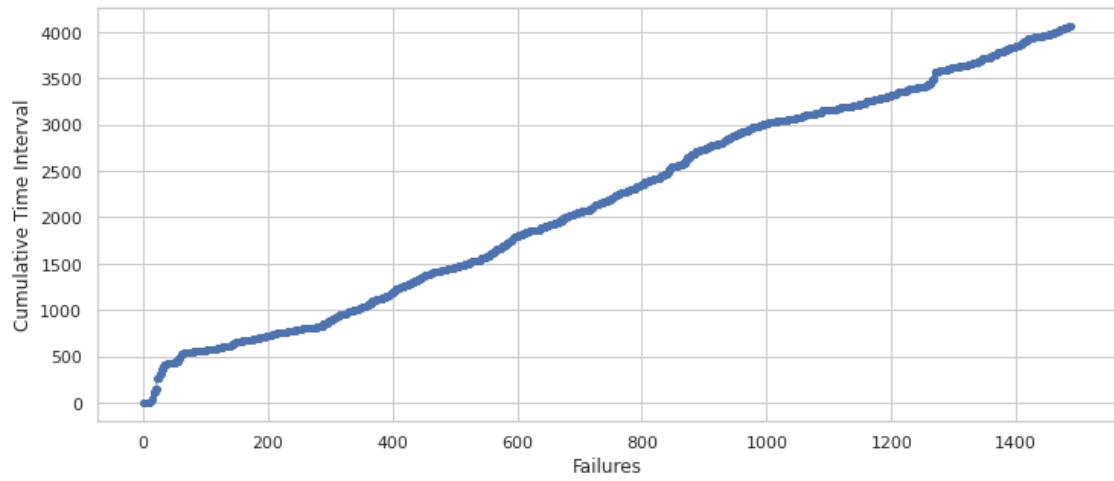
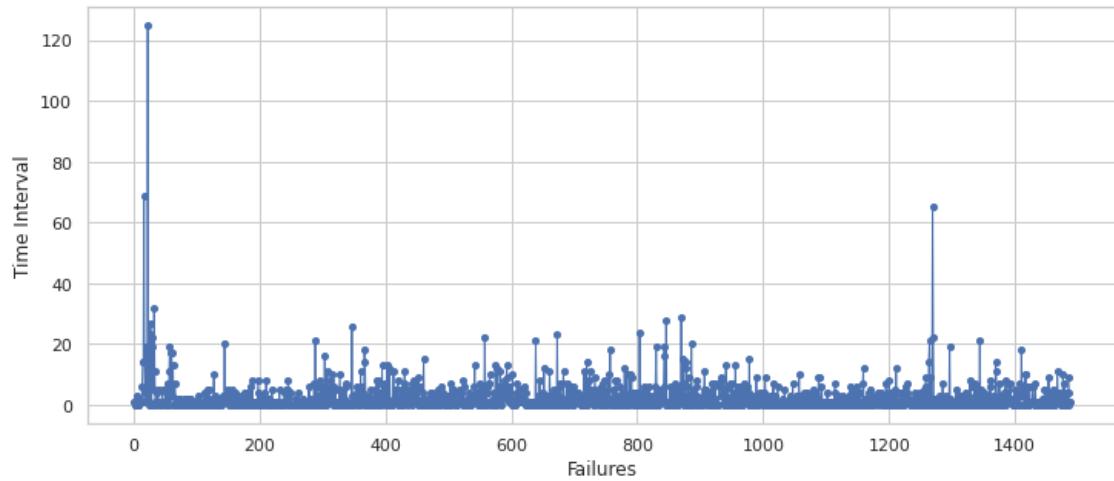
```
1706 src/main/java/com/gargoylesoftware/htmlunit/html/HtmlStyle.java
1707 src/main/java/com/gargoylesoftware/htmlunit/html/HtmlBaseFont.java
1708 src/main/java/com/gargoylesoftware/htmlunit/html/HtmlBase.java
1709 src/main/java/com/gargoylesoftware/htmlunit/AjaxController.java
```

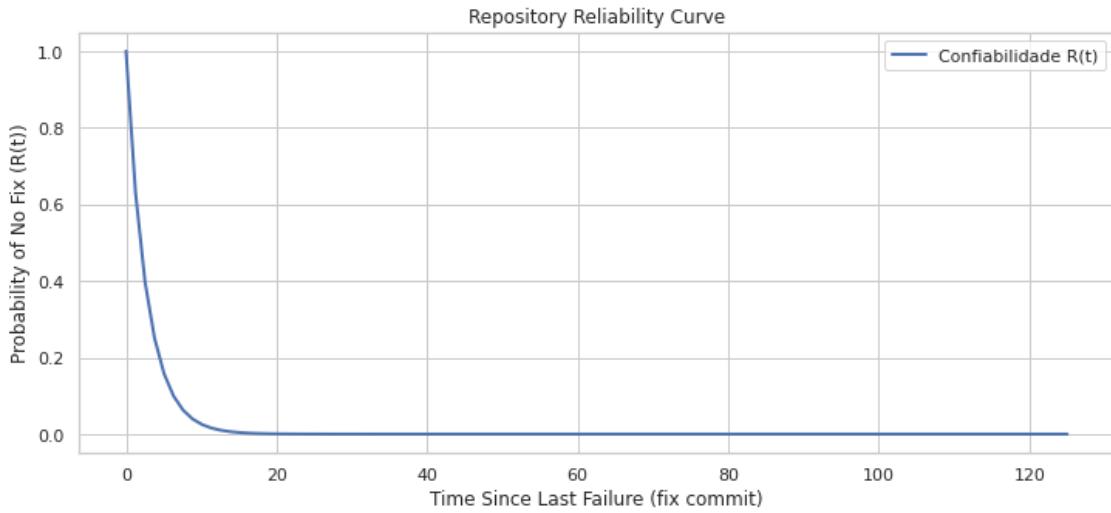
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 3 | 0.5 | 2.000000 | 0.135335 |
| 2 | 3 | 0.5 | 2.000000 | 0.135335 |
| 3 | 3 | 0.5 | 2.000000 | 0.135335 |
| 4 | 3 | 0.5 | 2.000000 | 0.135335 |
| ... | ... | ... | ... | ... |
| 1705 | 2 | 5257.0 | 0.000190 | 0.999810 |
| 1706 | 2 | 5257.0 | 0.000190 | 0.999810 |
| 1707 | 2 | 5273.0 | 0.000190 | 0.999810 |
| 1708 | 2 | 5273.0 | 0.000190 | 0.999810 |
| 1709 | 2 | 5457.0 | 0.000183 | 0.999817 |

[1710 rows x 5 columns]

== redisson ==







```

Confiabilidade R(1) = 0.6938
Confiabilidade R(5) = 0.1608
Confiabilidade R(10) = 0.0259
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

filepath \
0   src/main/java/org/redisson/core/RCountDownLatch.java
1   src/main/java/org/redisson/client/RedisPubSubListener.java
2   src/main/java/org/redisson/RedisPubSubTopicListenerWrapper.java
3   src/main/java/org/redisson/core/RScript.java
4   redisson/src/main/java/org/redisson/connection/balancer/CommandsLoadBalancer.java
..
596  redisson/src/main/java/org/redisson/api/RObject.java
597  redisson/src/main/java/org/redisson/PubSubPatternMessageListener.java
598  redisson/src/main/java/org/redisson/PubSubMessageListener.java
599  redisson/src/main/java/org/redisson/PubSubPatternStatusListener.java
600  redisson/src/test/java/org/redisson/RedissonMapTest.java

```

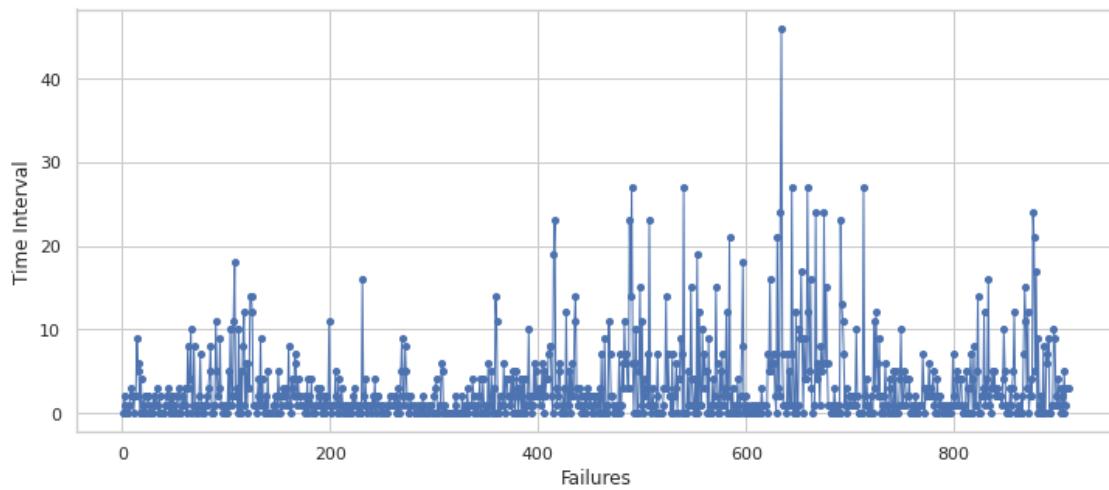
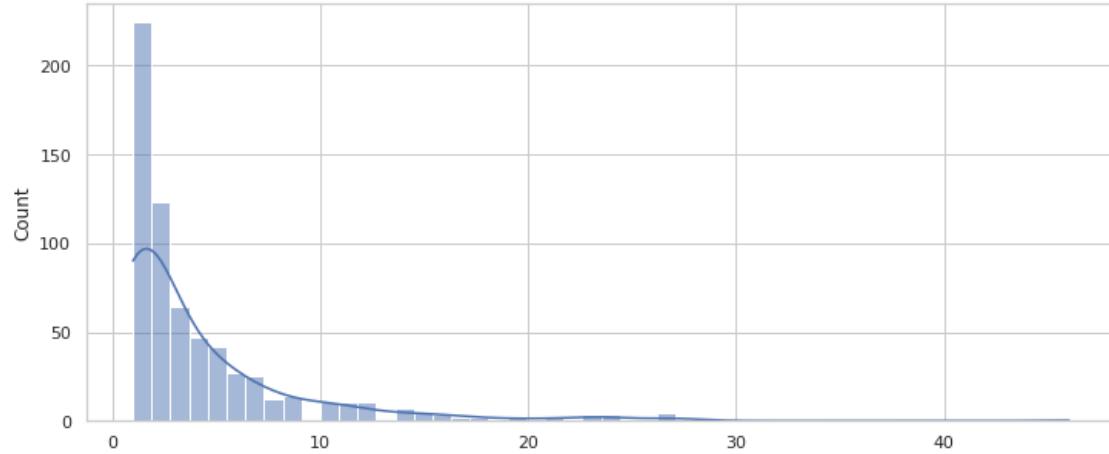
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 596 | 2 | 2944.0 | 0.000340 | 0.999660 |
| 597 | 2 | 3003.0 | 0.000333 | 0.999667 |
| 598 | 2 | 3003.0 | 0.000333 | 0.999667 |
| 599 | 2 | 3003.0 | 0.000333 | 0.999667 |

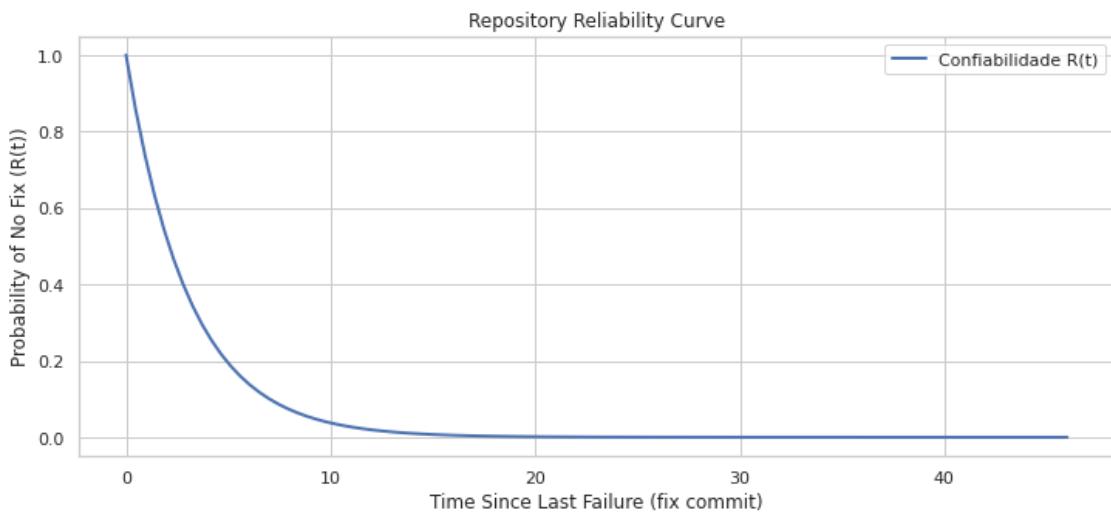
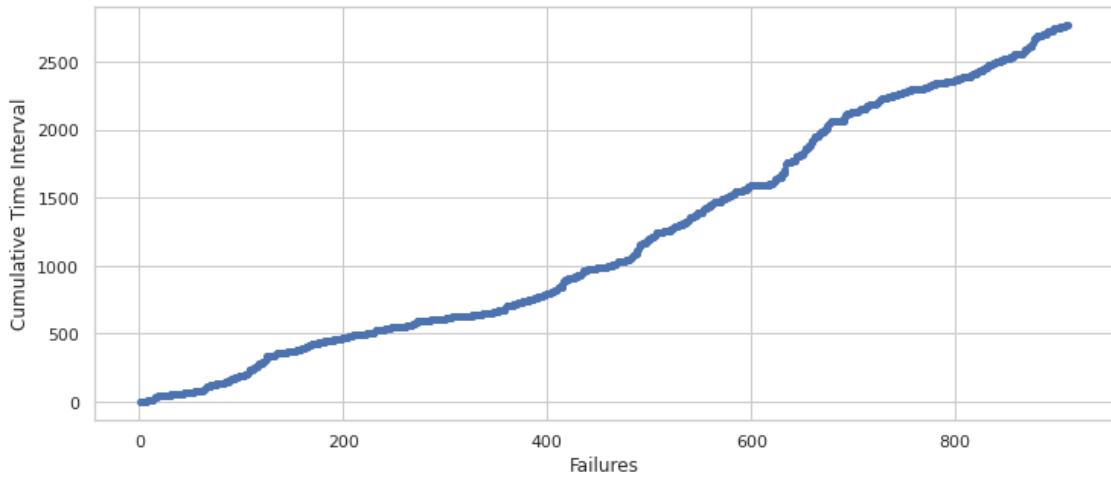
600 2 3020.0 0.000331 0.999669

[601 rows x 5 columns]

== BiglyBT ==

The histogram of Time Between Failures (TBF) BiglyBT





```

Confiabilidade R(1) = 0.7202
Confiabilidade R(5) = 0.1937
Confiabilidade R(10) = 0.0375
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

filepath

```

0   uis/src/com/biglybt/ui/swt/views/tableitems/files/FileAvailabilityItem.java
1   uis/src/com/biglybt/ui/swt/views/tableitems/files/PercentItem.java
2   uis/src/com/biglybt/ui/swt/components/DoubleBufferedLabel.java
3   uis/src/com/biglybt/ui/swt/components/BufferedLabel.java
4   uis/src/com/biglybt/ui/swt/columns/torrent/ColumnProgressETA.java
...
346  uis/src/com/biglybt/ui/swt/shells/SpeedScaleShell.java

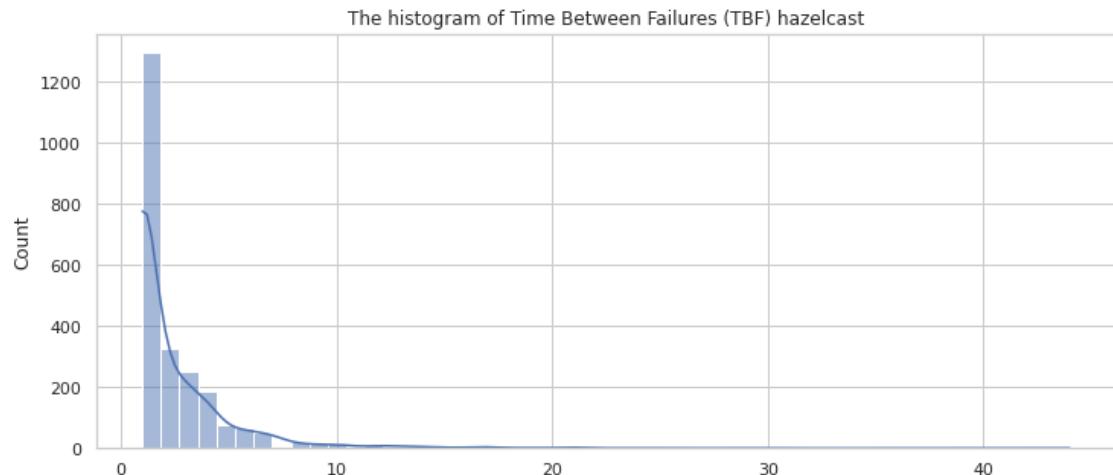
```

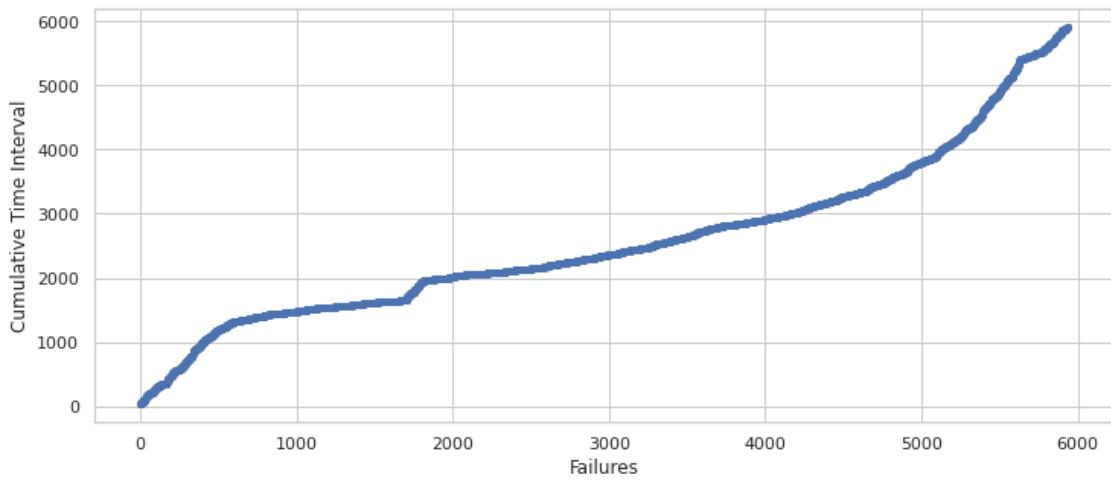
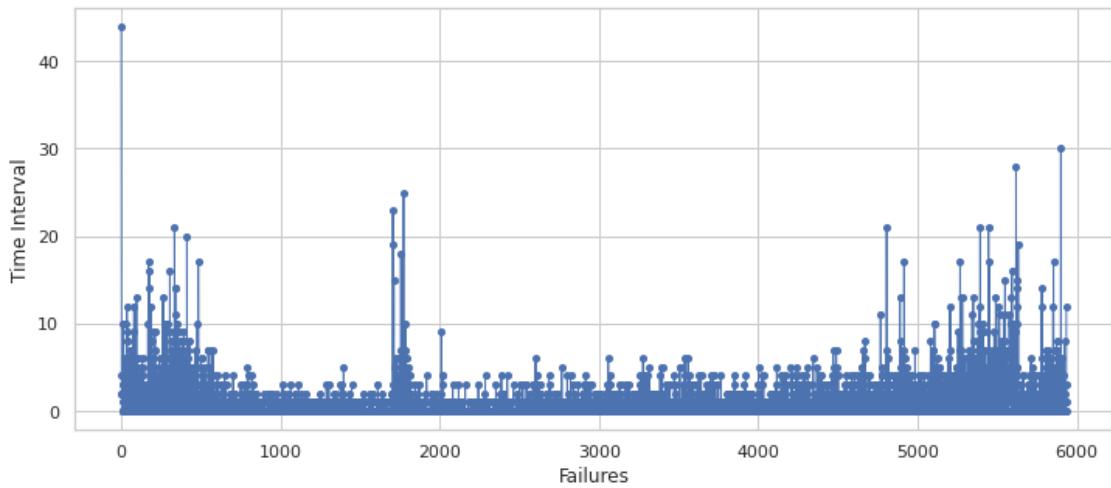
```
347 core/src/com/biglybt/ui/common/table/impl/TableColumnImpl.java
348 uis/src/com/biglybt/ui/swt/views/stats/VivaldiPanel.java
349 uis/src/com/biglybt/ui/swt/views/skin/SkinnedDialog.java
350 core/src/com/biglybt/pifimpl/local/utils/resourcedownloader/ResourceDownloaderURLImpl.java
```

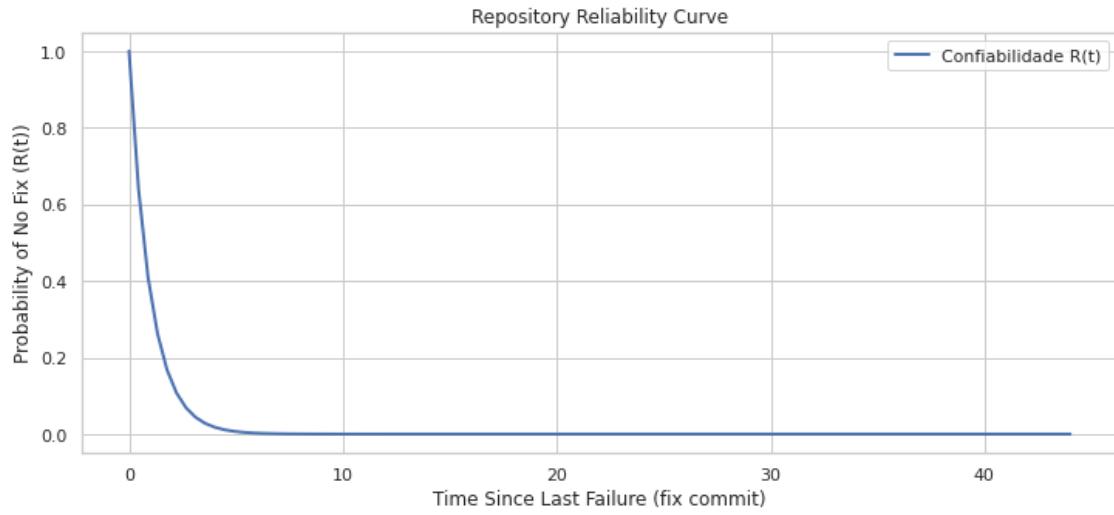
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 346 | 2 | 1939.0 | 0.000516 | 0.999484 |
| 347 | 2 | 1989.0 | 0.000503 | 0.999497 |
| 348 | 2 | 2001.0 | 0.000500 | 0.999500 |
| 349 | 2 | 2319.0 | 0.000431 | 0.999569 |
| 350 | 2 | 2353.0 | 0.000425 | 0.999575 |

[351 rows x 5 columns]

== hazelcast ==







```

Confiabilidade R(1) = 0.3663
Confiabilidade R(5) = 0.0066
Confiabilidade R(10) = 0.0000
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

| | filepath |
|------|---|
| 0 | hazelcast/src/main/java/com/hazelcast/nio/tcp/nonblocking/iobalancer/LoadTracker.java |
| 1 | hazelcast/src/main/java/com/hazelcast/cache/impl/operation/CacheDestroyOperation.java |
| 2 | hazelcast/src/main/java/com/hazelcast/queue/impl/proxy/QueueProxyImpl.java |
| 3 | hazelcast-ra/src/test/java/com/hazelcast/jca/HazelcastXaTest.java |
| 4 | hazelcast/src/test/java/com/hazelcast/query/impl/OrResultSetTest.java |
| ... | ... |
| 4337 | hazelcast/src/main/java/com/hazelcast/cache/impl/CachePartitionEventData.java |
| 4338 | hazelcast/src/test/java/com/hazelcast/cache/impl/InternalCacheRecordStoreTest.java |
| 4339 | hazelcast/src/test/java/com/hazelcast/query/impl/IndexImplTest.java |
| 4340 | hazelcast/src/main/java/com/hazelcast/config/WanReplicationConfig.java |
| 4341 | hazelcast/src/main/java/com/hazelcast/config/GlobalSerializerConfig.java |

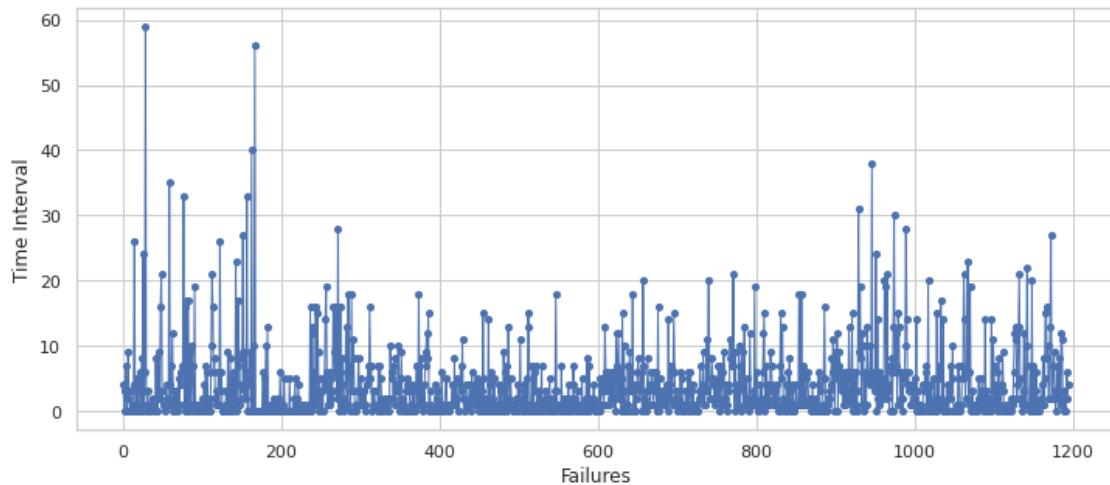
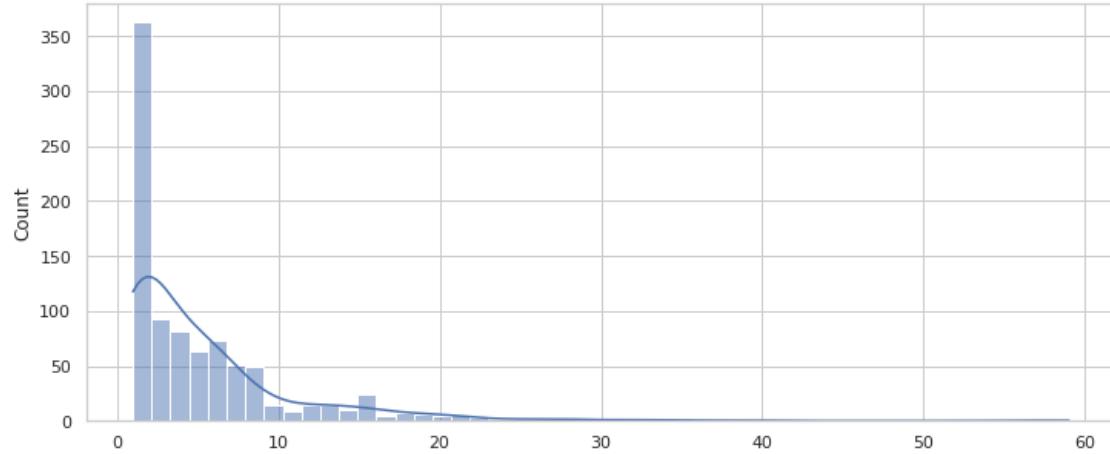
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|-------------|----------------|----------|
| 0 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 1 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 2 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 3 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 4 | 4 | 0.333333 | 3.000000 | 0.049787 |
| ... | ... | ... | ... | ... |
| 4337 | 2 | 2973.000000 | 0.000336 | 0.999664 |
| 4338 | 2 | 3020.000000 | 0.000331 | 0.999669 |
| 4339 | 2 | 3063.000000 | 0.000326 | 0.999674 |
| 4340 | 2 | 3654.000000 | 0.000274 | 0.999726 |

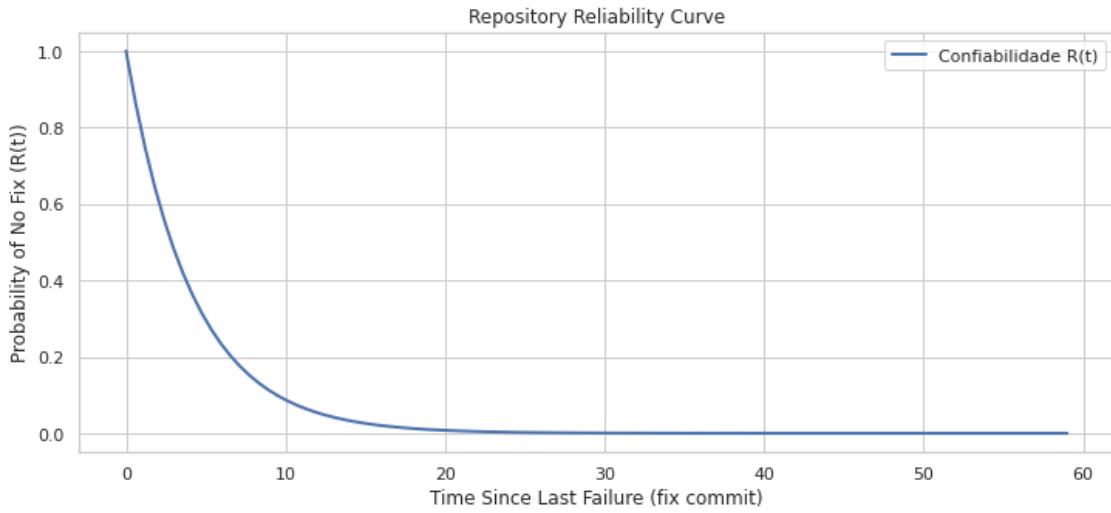
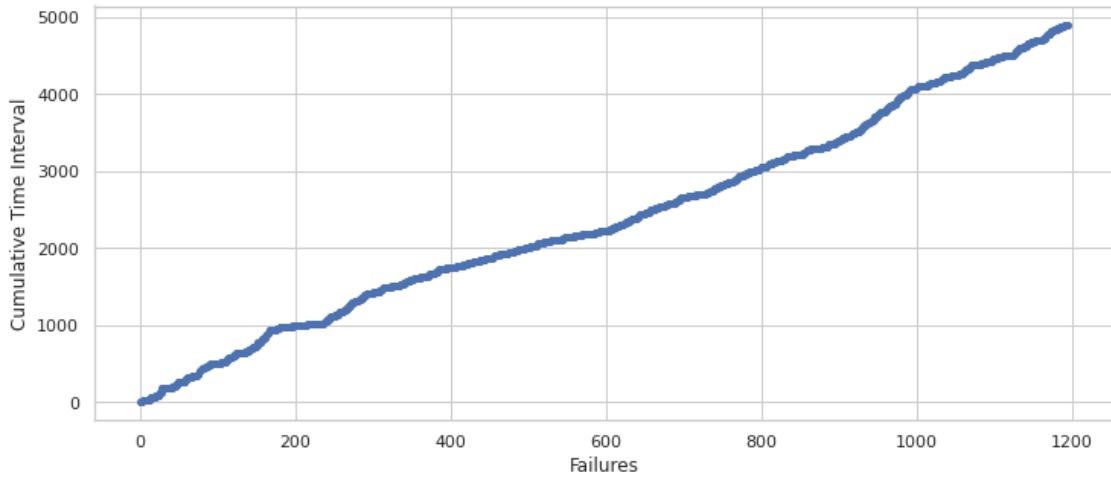
4341 2 3654.000000 0.000274 0.999726

[4342 rows x 5 columns]

== error-prone ==

The histogram of Time Between Failures (TBF) error-prone





Confiabilidade $R(1) = 0.7836$

Confiabilidade $R(5) = 0.2955$

Confiabilidade $R(10) = 0.0873$

Confiabilidade $R(50) = 0.0000$

Confiabilidade $R(100) = 0.0000$

```

0   core/src/test/resources/com/google/errorprone/bugpatterns/ChainingConstructorIgnoresParametersTest.java
1   core/src/test/resources/com/google/errorprone/refactors/covariant_equals/NegativeCases.java
2   core/src/main/java/com/google/errorprone/bugpatterns/PreconditionsExpensiveString.java
3   core/src/test/java/com/google/errorprone/bugpatterns/inject/dagger/PrivateConstructorForNonInjectableFieldsTest.java
4   core/src/test/java/com/google/errorprone/bugpatterns/time/InvalidJavaTimeConstantTest.java
...
775  core/src/test/java/com/google/errorprone/bugpatterns/inject/guice/OverridesJavaxInjectableTest.java

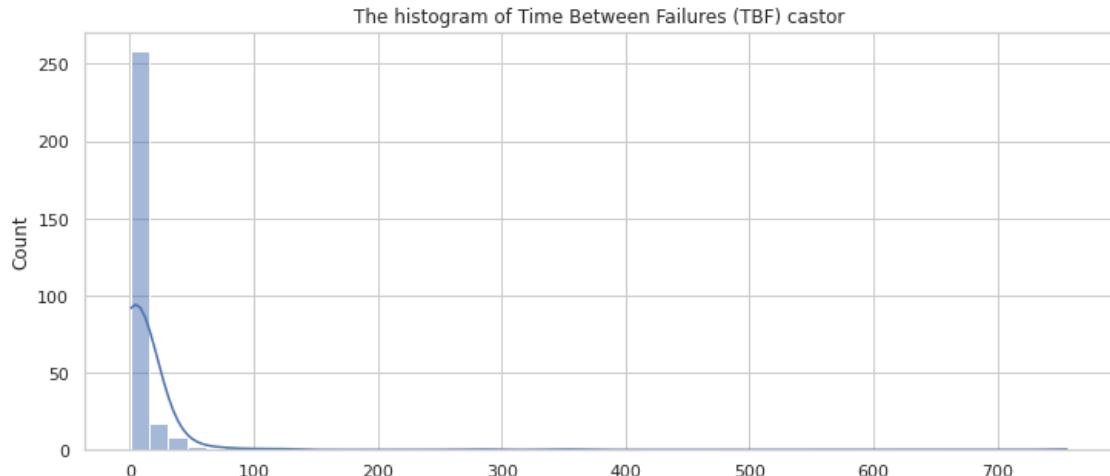
```

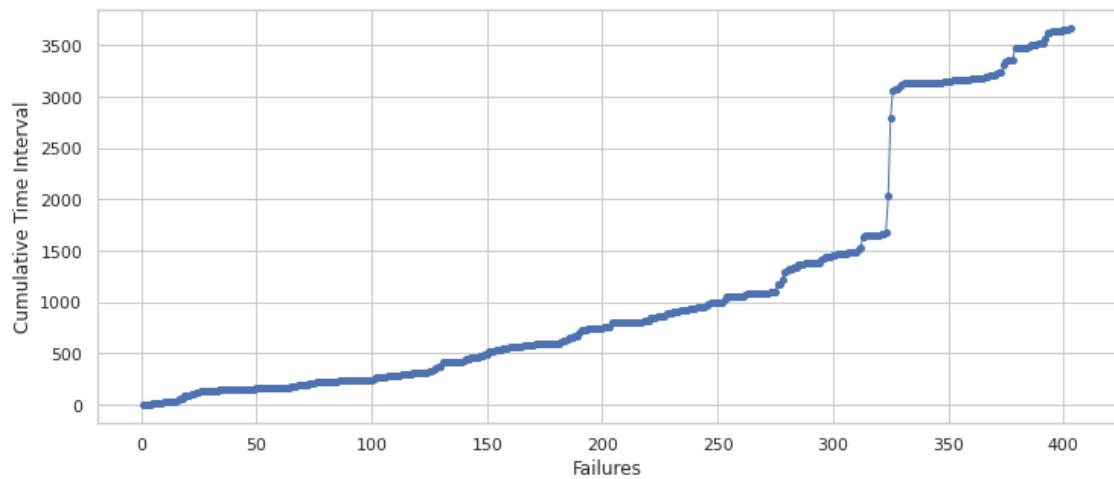
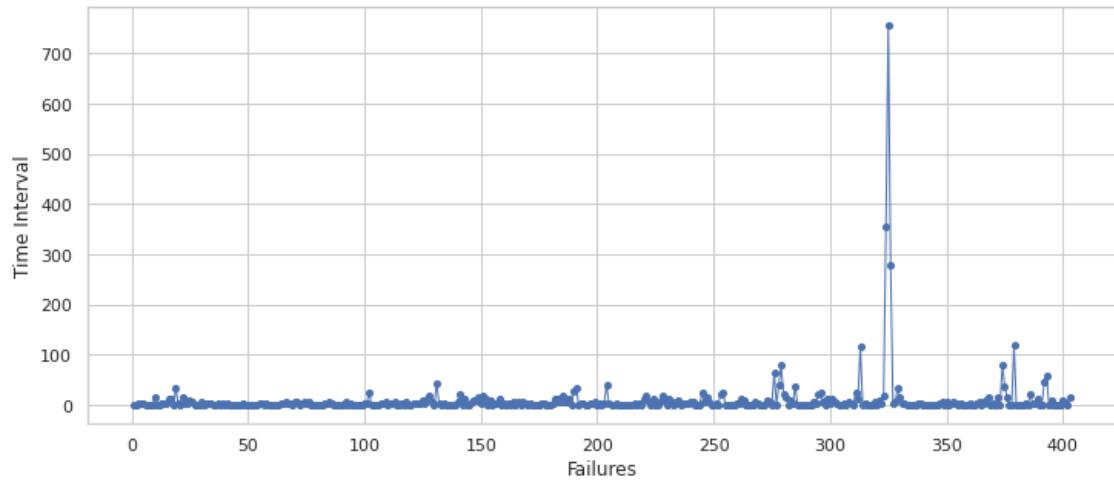
```
776 core/src/test/java/com/google/errorprone/dataflow/nullnesspropagation/NullnessPropagationTest.java
777 core/src/test/java/com/google/errorprone/bugpatterns/android/RectIntersectReturnValueIgnoredTest.java
778 core/src/test/java/com/google/errorprone/bugpatterns/AsyncFunctionReturnsNullTest.java
779 core/src/test/java/com/google/errorprone/bugpatterns/MisusedWeekYearTest.java
```

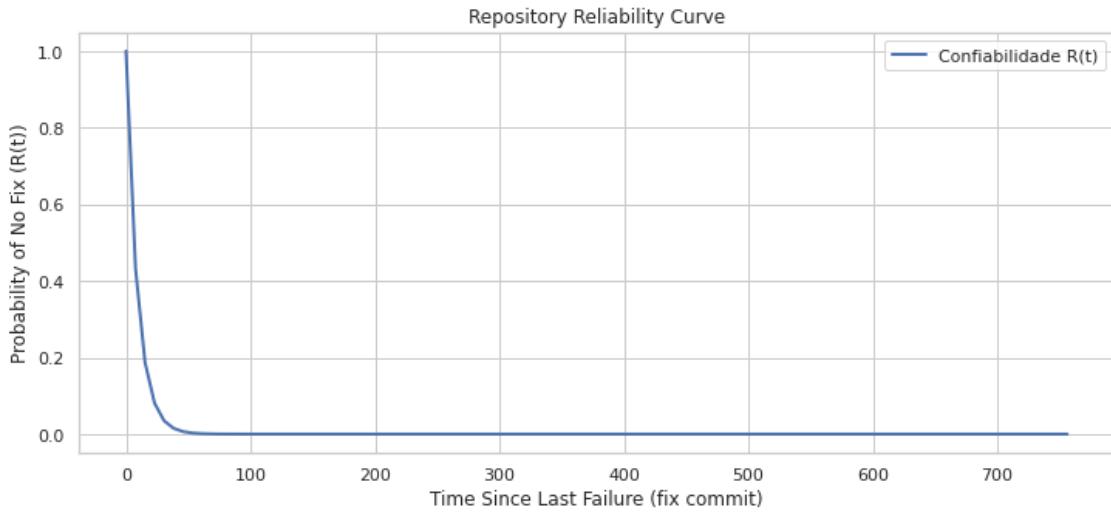
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|-------------|----------------|----------|
| 0 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 1 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 2 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 3 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 4 | 2 | 1.000000 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 775 | 2 | 3139.000000 | 0.000319 | 0.999681 |
| 776 | 2 | 3161.000000 | 0.000316 | 0.999684 |
| 777 | 2 | 3255.000000 | 0.000307 | 0.999693 |
| 778 | 2 | 3556.000000 | 0.000281 | 0.999719 |
| 779 | 2 | 3591.000000 | 0.000278 | 0.999722 |

[780 rows x 5 columns]

== castor ==







```

Confiabilidade R(1) = 0.8961
Confiabilidade R(5) = 0.5777
Confiabilidade R(10) = 0.3337
Confiabilidade R(50) = 0.0041
Confiabilidade R(100) = 0.0000

```

```

filepath \
0 cpactf/src/test/java/org/castor/cpa/test/test19/TestInstanceFactory.java
1 xml/src/test/java/org/exolab/castor/xml/BaseMarshallerTest.java
2 src/main/java/org/exolab/castor/builder/descriptors/DescriptorJClass.java
3 cpactf/src/test/java/org/castor/cpa/test/test2788/Book.java
4 cpactf/src/test/java/org/castor/cpa/test/test2788/FindWithNewInstanceTest.java
...
146 ...
147 ...
148 ...
149 ...
150 ...

146 xml/src/main/java/org/castor/mapping/MappingUnmarshaller.java
147 xml/src/main/java/org/castor/xml/BackwardCompatibilityContext.java
148 xml/src/test/java/org/exolab/castor/xml/SetPropertyXmlNamingTest.java
149 xml/src/test/java/org/exolab/castor/xml/TestUnmarshaller.java
150 codegen/src/main/java/org/exolab/castor/builder/BuilderConfiguration.java

```

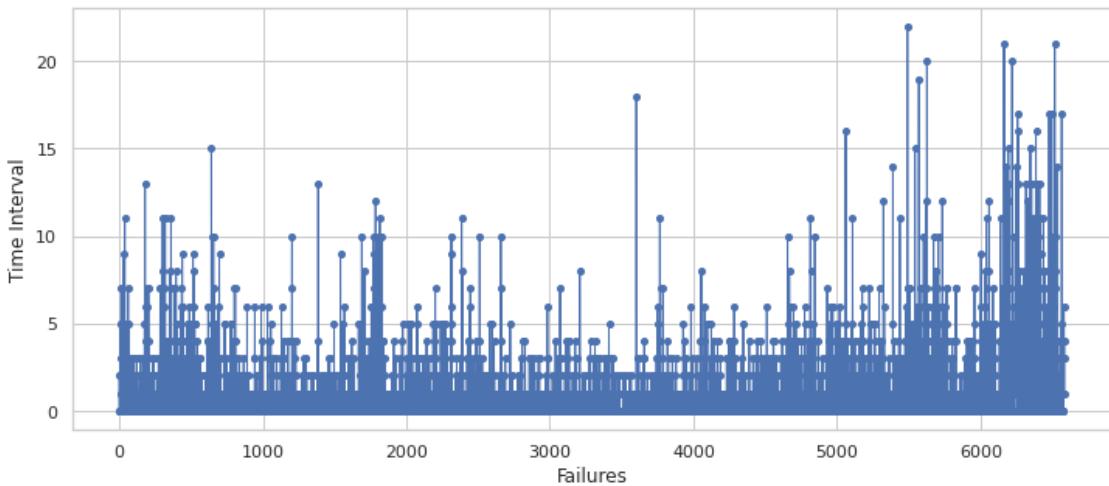
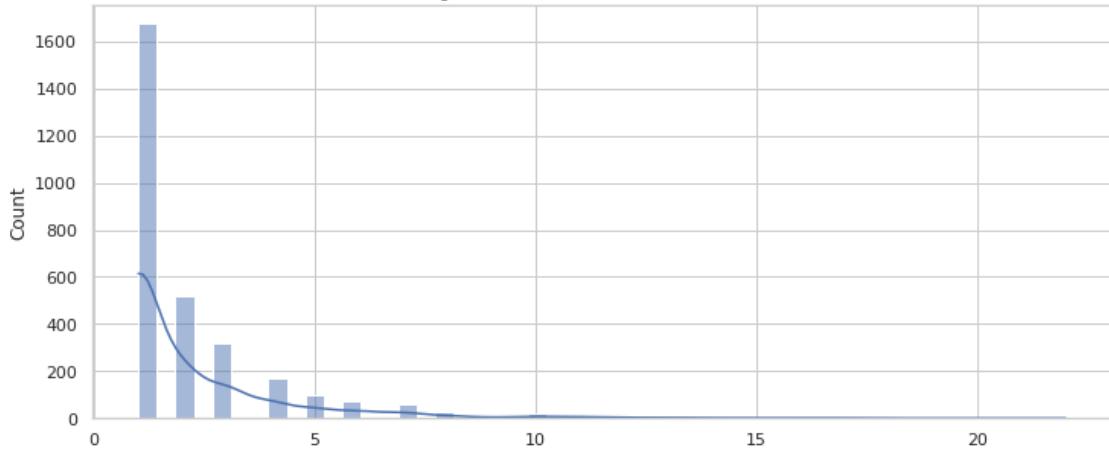
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 3.0 | 0.333333 | 0.716531 |
| 3 | 2 | 3.0 | 0.333333 | 0.716531 |
| 4 | 2 | 3.0 | 0.333333 | 0.716531 |
| ... | ... | ... | ... | ... |
| 146 | 2 | 1122.0 | 0.000891 | 0.999109 |
| 147 | 2 | 1542.0 | 0.000649 | 0.999352 |
| 148 | 2 | 1712.0 | 0.000584 | 0.999416 |
| 149 | 2 | 1721.0 | 0.000581 | 0.999419 |

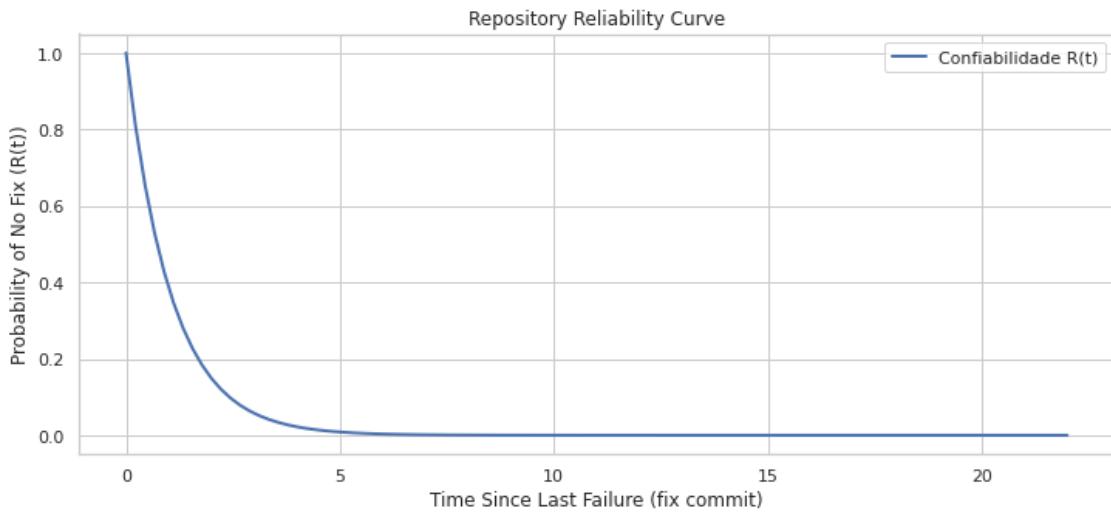
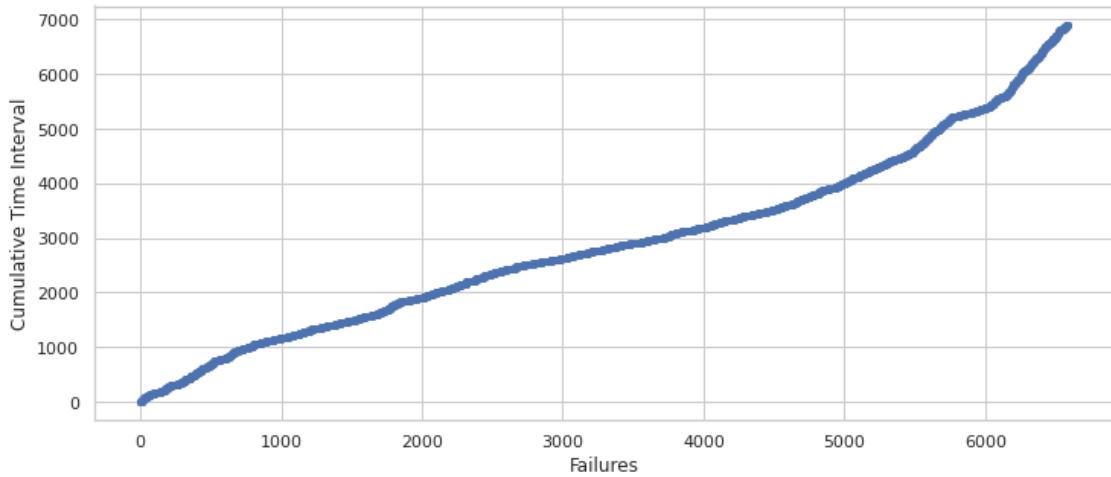
```
150 2 2432.0 0.000411 0.999589
```

```
[151 rows x 5 columns]
```

```
== tomcat ==
```

The histogram of Time Between Failures (TBF) tomcat





```

Confiabilidade R(1) = 0.3853
Confiabilidade R(5) = 0.0085
Confiabilidade R(10) = 0.0001
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000
  
```

```

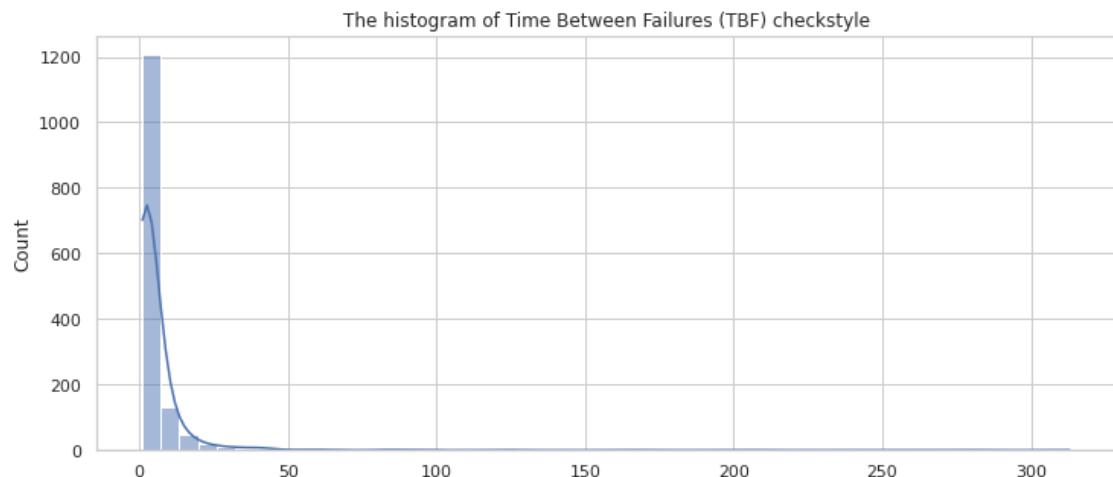
filepath
0   test/org/apache/catalina/servlets/TestDefaultServletRfc9110Section13Parameterized.java
1   modules/jdbc-pool/test/org/apache/tomcat/jdbc/test/AlternateUsernameTest.java
2   test/org/apache/catalina/mbeans/RegistrationTest.java
3   test/org/apache/catalina/startup/TestWebRuleSet.java
4   java/org/apache/tomcat/websocket/WsFrame.java
...
1765  java/org/apache/jasper/el/VariableResolverImpl.java
  
```

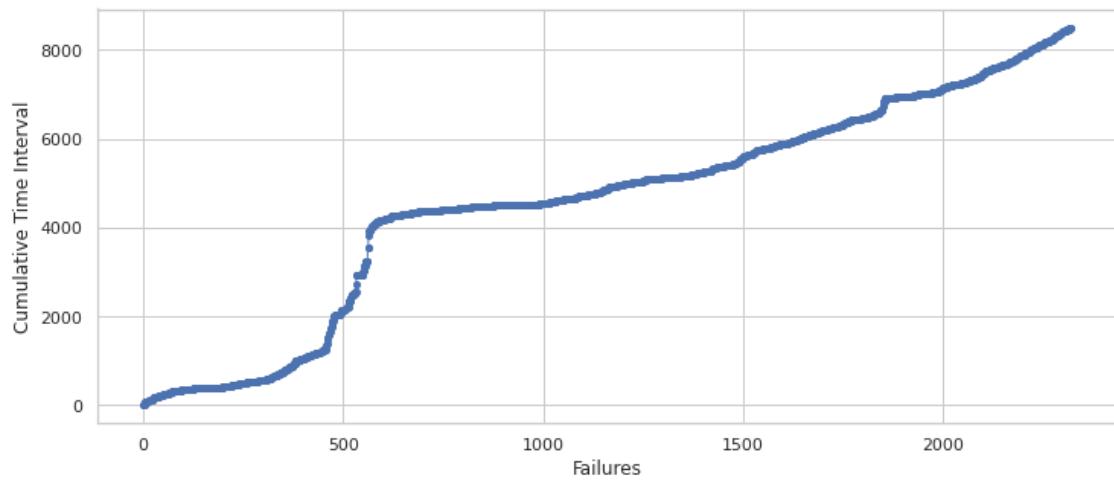
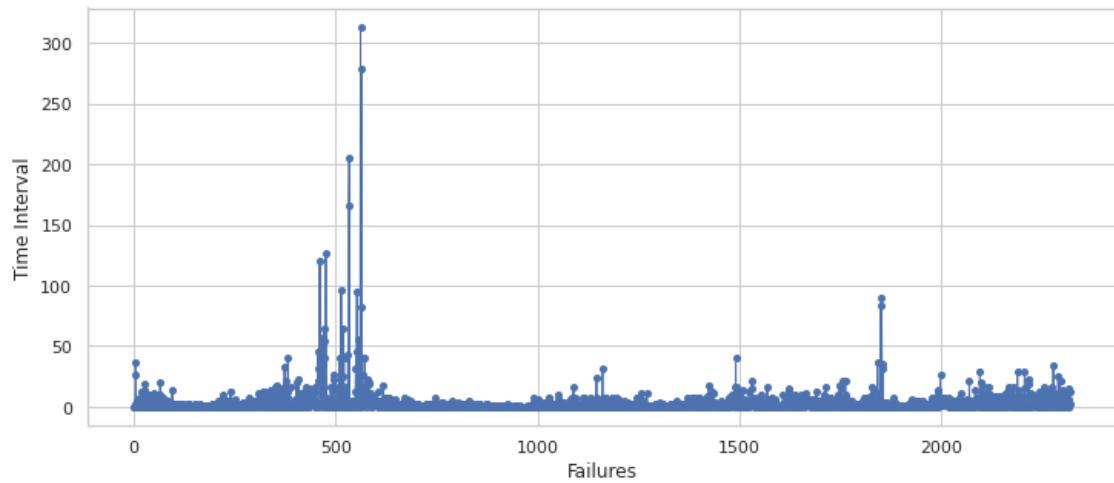
```
1766 webapps/examples/WEB-INF/classes/listeners/SessionListener.java
1767 webapps/examples/WEB-INF/classes/listeners/ContextListener.java
1768 java/org/apache/catalina/ssi/SSIStopProcessingException.java
1769 test/org/apache/catalina/tribes/test/transport/SocketNioReceive.java
```

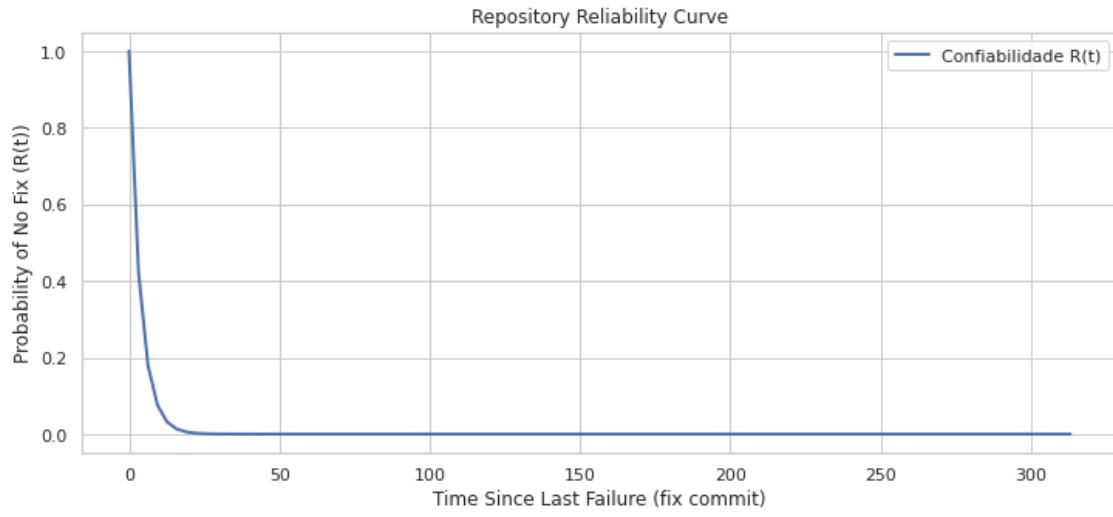
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|-------------|----------------|----------|
| 0 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 1 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 2 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 3 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 4 | 7 | 0.833333 | 1.200000 | 0.301194 |
| ... | ... | ... | ... | ... |
| 1765 | 2 | 4888.000000 | 0.000205 | 0.999795 |
| 1766 | 2 | 4931.000000 | 0.000203 | 0.999797 |
| 1767 | 2 | 4931.000000 | 0.000203 | 0.999797 |
| 1768 | 2 | 5596.000000 | 0.000179 | 0.999821 |
| 1769 | 2 | 5964.000000 | 0.000168 | 0.999832 |

[1770 rows x 5 columns]

== checkstyle ==







```

Confiabilidade R(1) = 0.7614
Confiabilidade R(5) = 0.2559
Confiabilidade R(10) = 0.0655
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000
  
```

```

0      src/test/java/com/puppycrawl/tools/checkstyle/grammar/antlr4/Antlr4AstRegressionTest.java
1      contrib/j2ee/src/checkstyle/com/puppycrawl/tools/checkstyle/checks/j2ee/EntityBeanEjbHome
2      contrib/j2ee/src/tests/AllTests.java
3      contrib/j2ee/src/testinputs/com/puppycrawl/tools/checkstyle/InputEntityBean.java
4      src/it/resources/com/google/checkstyle/test/chapter4formatting/rule462horizontalwhitespace
...
1185    src/checkstyle/com/puppycrawl/tools/checkstyle/checks/imports/ImportControlLoader.java
1186    src/test/java/com/puppycrawl/tools/checkstyle/checks/coding/ReturnCountCheckTest.java
1187    src/main/java/com/puppycrawl/tools/checkstyle/checks/naming/MethodTypeParameterNameCheck
1188    src/main/java/com/puppycrawl/tools/checkstyle/checks/naming/InterfaceTypeParameterNameCheck
1189    src/main/java/com/puppycrawl/tools/checkstyle/package-info.java
  
```

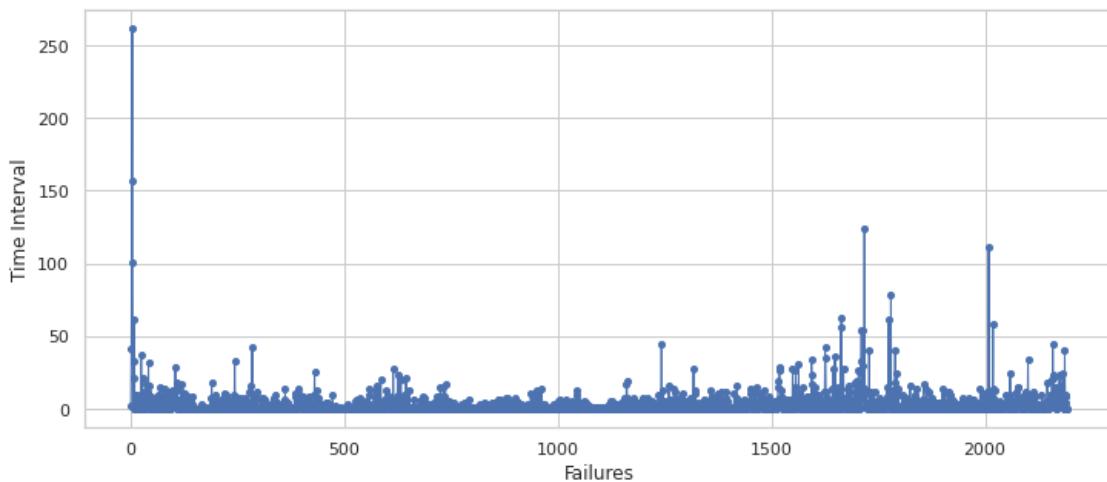
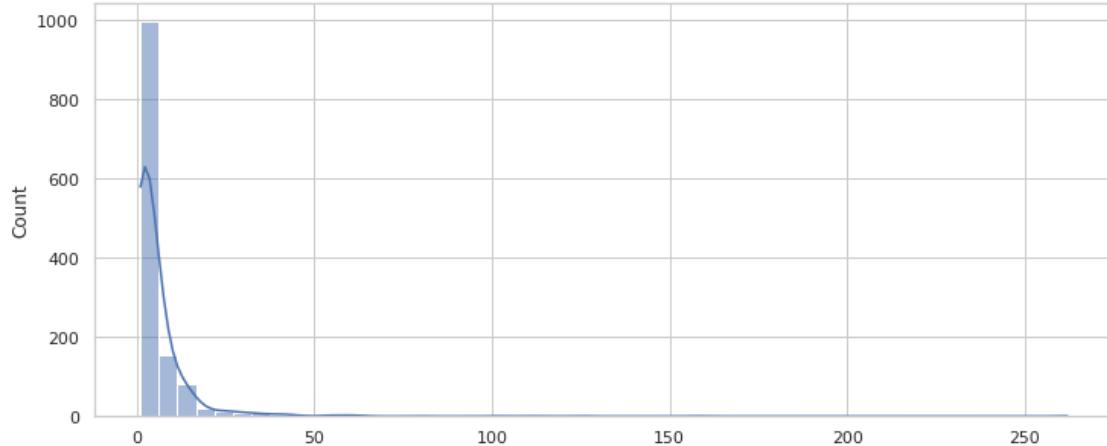
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|---------|----------------|----------|
| 0 | 5 | 0.25 | 4.000000 | 0.018316 |
| 1 | 3 | 0.50 | 2.000000 | 0.135335 |
| 2 | 2 | 1.00 | 1.000000 | 0.367879 |
| 3 | 2 | 1.00 | 1.000000 | 0.367879 |
| 4 | 2 | 1.00 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 1185 | 2 | 2969.00 | 0.000337 | 0.999663 |
| 1186 | 2 | 3000.00 | 0.000333 | 0.999667 |
| 1187 | 2 | 3511.00 | 0.000285 | 0.999715 |
| 1188 | 2 | 3737.00 | 0.000268 | 0.999732 |

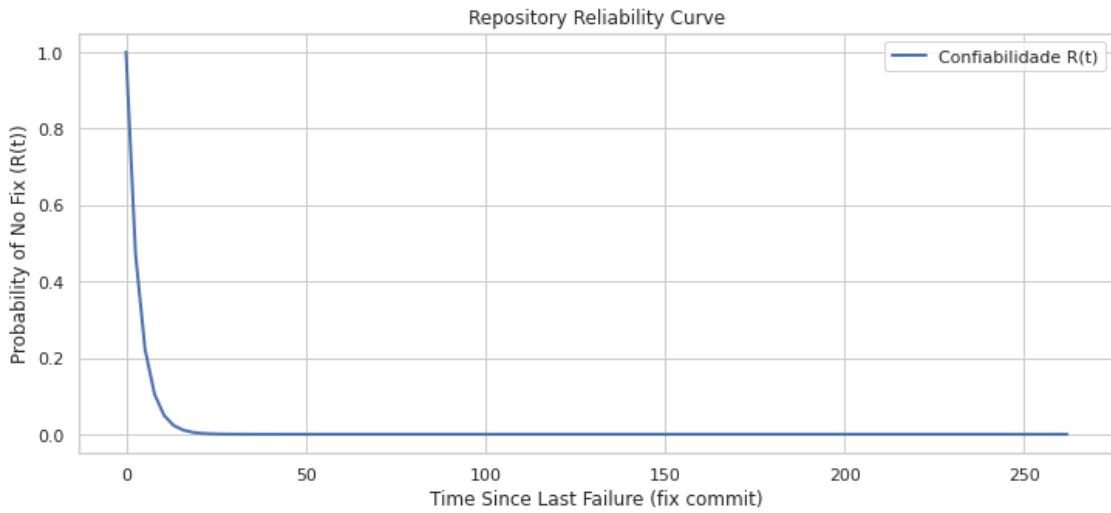
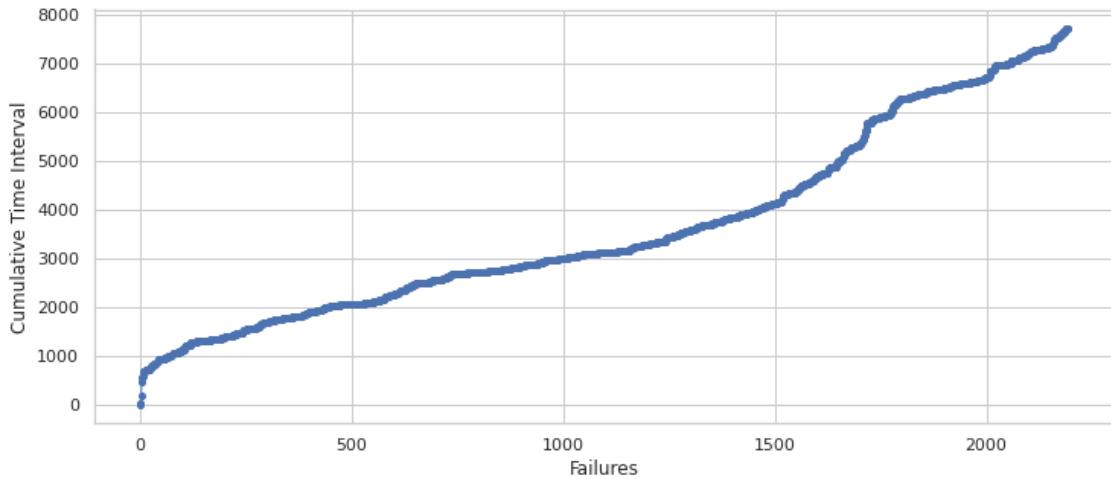
```
1189 2 3738.00 0.000268 0.999733
```

```
[1190 rows x 5 columns]
```

```
-- jasperreports ==
```

The histogram of Time Between Failures (TBF) jasperreports





Confiabilidade $R(1) = 0.7527$

Confiabilidade $R(5) = 0.2417$

Confiabilidade $R(10) = 0.0584$

Confiabilidade $R(50) = 0.0000$

Confiabilidade $R(100) = 0.0000$

```

0      jasperreports/demo/samples/spiderchartcomponent/src/net/sf/jasperreports/components/spider
1      jasperreports/src/net/sf/jasperreports/engine/export/ooxml/CellHelper.java
2      ext/charts/src/main/java/net/sf/jasperreports/charts/fill/JRFillChart.java
3      jasperreports/src/net/sf/jasperreports/data/cache/DataSnapshotException.java
4      jasperreports/src/net/sf/jasperreports/components/headertoolbar/actions/ResizeColumnAndPa...
...
1630   jasperreports/src/net/sf/jasperreports/components/table/fill/TableReportScriptlet.java

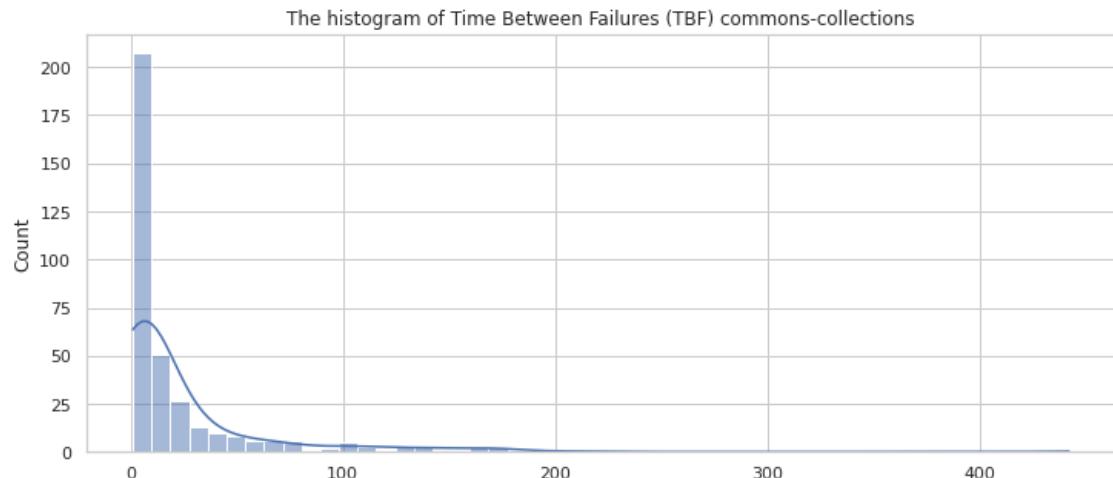
```

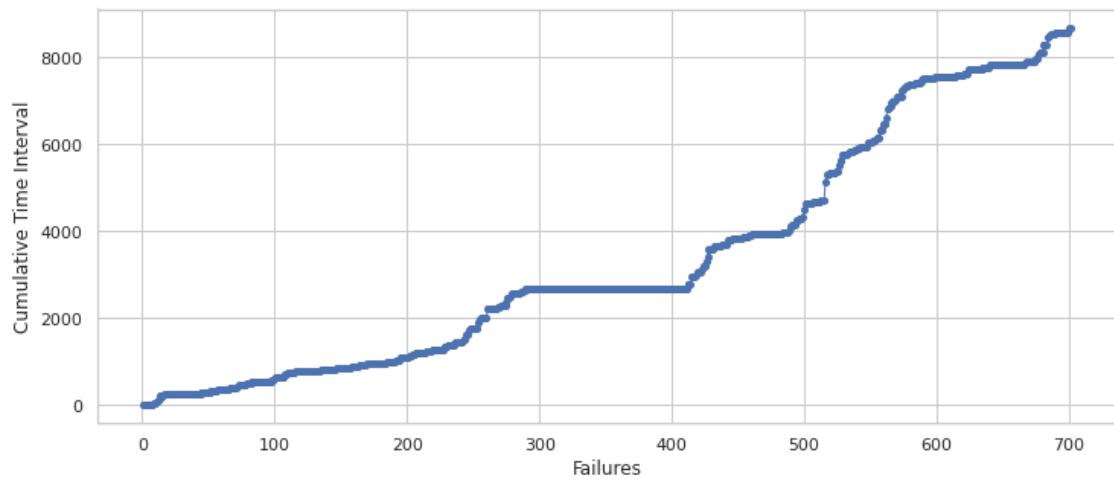
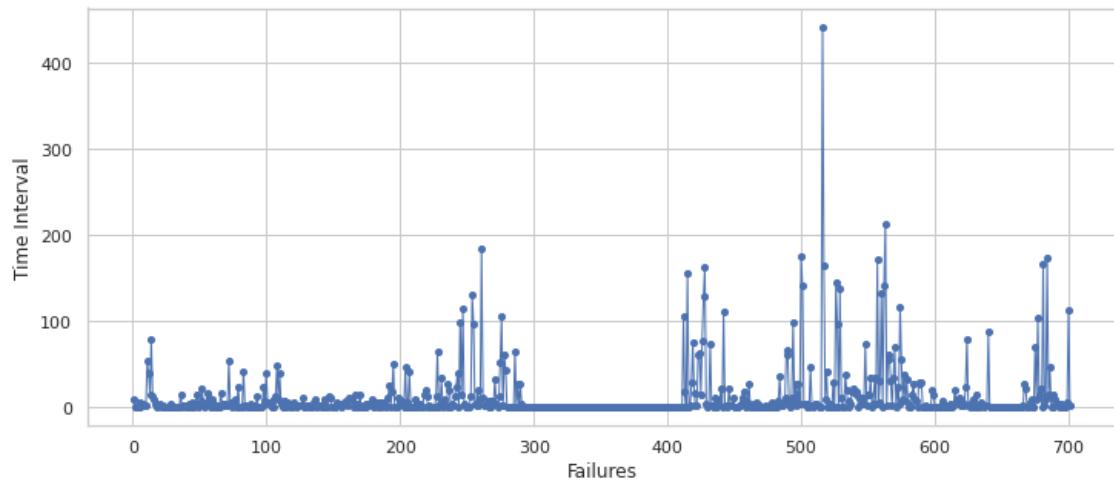
```
1631 jasperreports/src/net/sf/jasperreports/engine/export/ooxml/XlsxStyleInfo.java  
1632 jasperreports/src/net/sf/jasperreports/engine/JRSubreportReturnValue.java  
1633 jasperreports/src/net/sf/jasperreports/engine/fill/JRIncrementerFactory.java  
1634 jasperreports/src/net/sf/jasperreports/engine/fill/JRExtendedIncrementerFactory.java
```

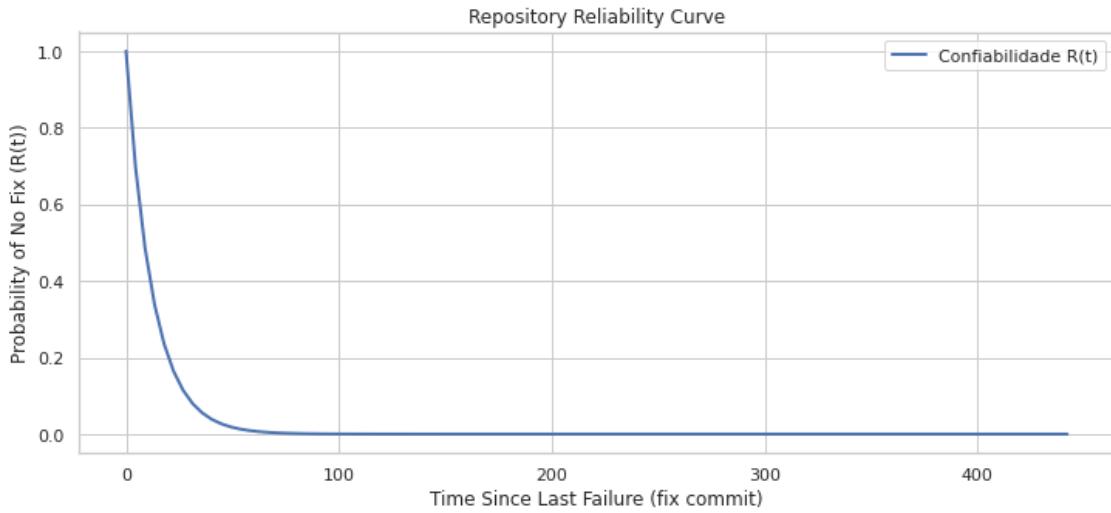
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|-------------|----------------|----------|
| 0 | 5 | 0.500000 | 2.000000 | 0.135335 |
| 1 | 4 | 0.666667 | 1.500000 | 0.223130 |
| 2 | 2 | 1.000000 | 1.000000 | 0.367879 |
| 3 | 2 | 1.000000 | 1.000000 | 0.367879 |
| 4 | 2 | 1.000000 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 1630 | 2 | 4057.000000 | 0.000246 | 0.999754 |
| 1631 | 2 | 4234.000000 | 0.000236 | 0.999764 |
| 1632 | 2 | 5139.000000 | 0.000195 | 0.999805 |
| 1633 | 2 | 5285.000000 | 0.000189 | 0.999811 |
| 1634 | 2 | 5285.000000 | 0.000189 | 0.999811 |

[1635 rows x 5 columns]

== commons-collections ==







```

Confiabilidade R(1) = 0.9223
Confiabilidade R(5) = 0.6674
Confiabilidade R(10) = 0.4455
Confiabilidade R(50) = 0.0175
Confiabilidade R(100) = 0.0003

```

filepath

```

0   src/java/org/apache/commons/collections/observed/ObservableList.java
1   src/java/org/apache/commons/collections/observed/ModificationHandler.java
2   src/java/org/apache/commons/collections/observed/standard/StandardModificationHandler.java
3   src/java/org/apache/commons/collections/observed/standard/StandardPreModificationEvent.java
4   src/java/org/apache/commons/collections/observed/standard/StandardModificationEvent.java
...
762  src/main/java/org/apache/commons/collections4/ArrayStack.java
763  src/main/java/org/apache/commons/collections4/ListValuedMap.java
764  src/main/java/org/apache/commons/collections4/iterators/LazyIteratorChain.java
765  src/main/java/org/apache/commons/collections4/map/StaticBucketMap.java
766  src/main/java/org/apache/commons/collections4/collection/AbstractCollectionDecorator.java

```

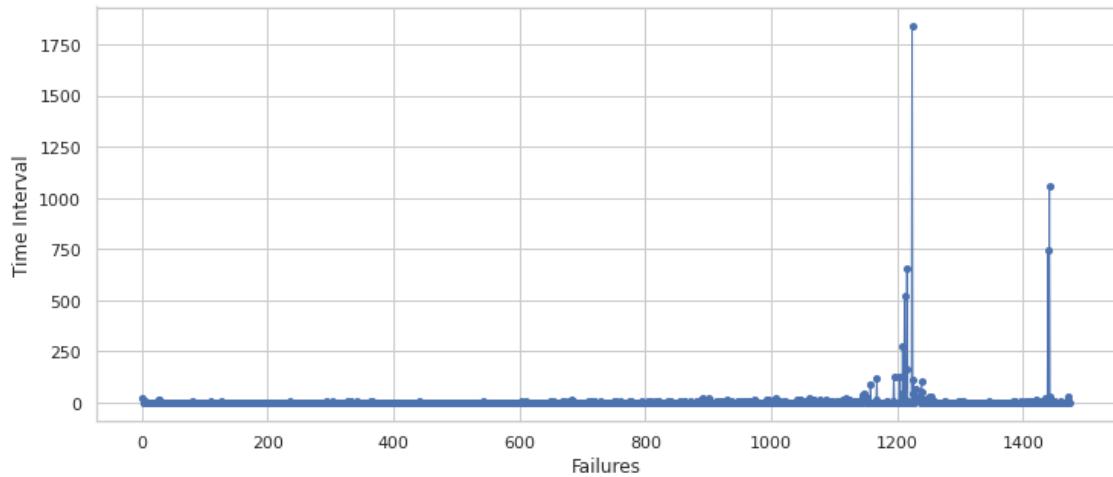
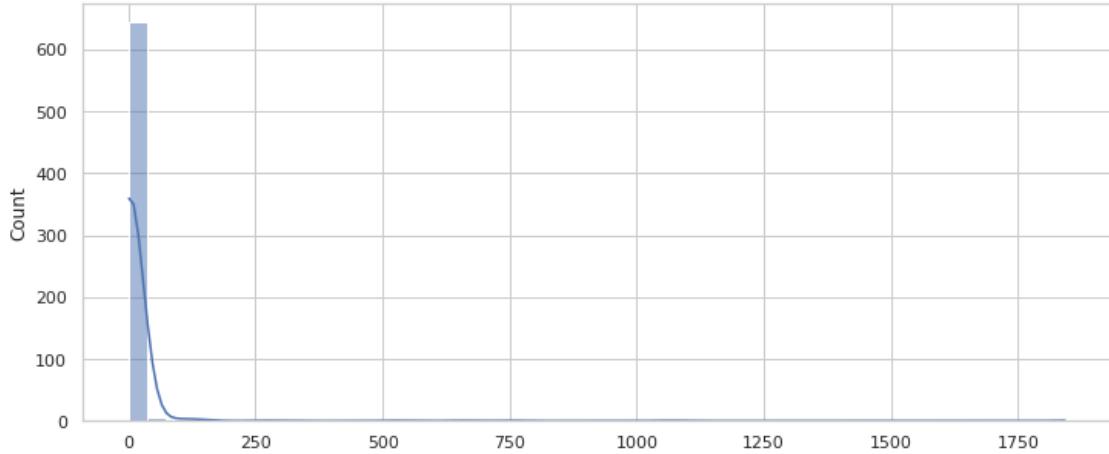
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 762 | 2 | 2621.0 | 0.000382 | 0.999619 |
| 763 | 2 | 2621.0 | 0.000382 | 0.999619 |
| 764 | 2 | 2621.0 | 0.000382 | 0.999619 |
| 765 | 2 | 2621.0 | 0.000382 | 0.999619 |

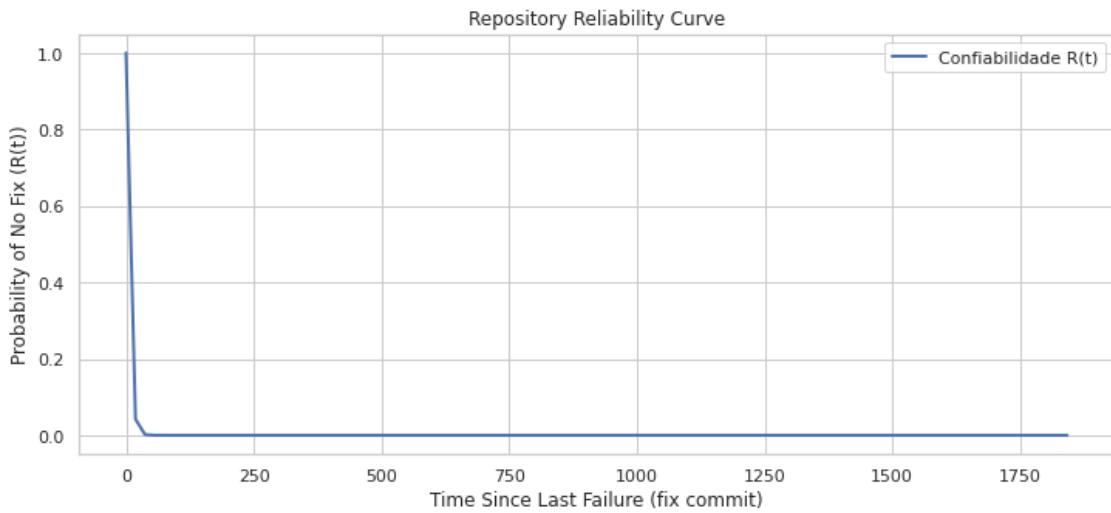
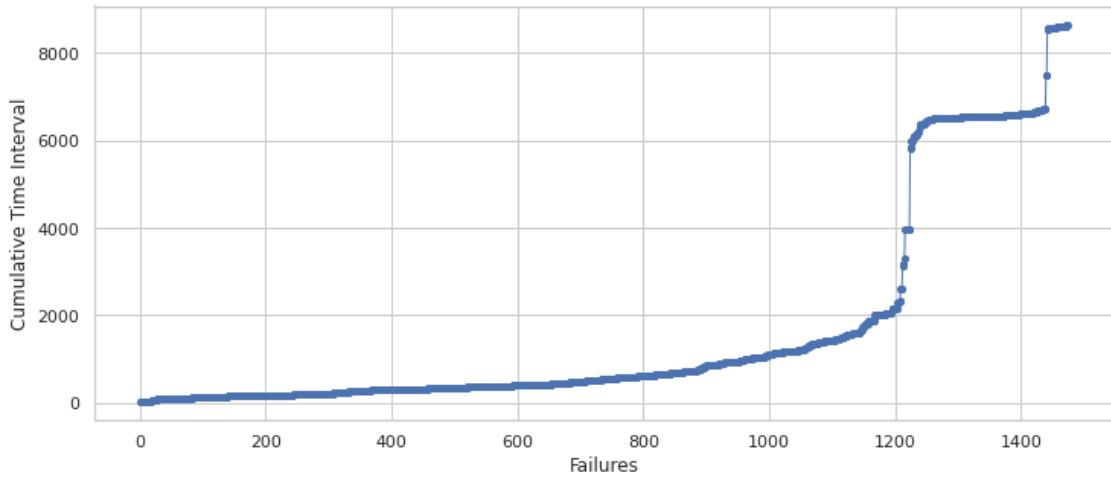
766 2 2621.0 0.000382 0.999619

[767 rows x 5 columns]

== xalan-java ==

The histogram of Time Between Failures (TBF) xalan-java





```

Confiabilidade R(1) = 0.8432
Confiabilidade R(5) = 0.4263
Confiabilidade R(10) = 0.1817
Confiabilidade R(50) = 0.0002
Confiabilidade R(100) = 0.0000

```

```

filepath \
0   src/org/apache/xml/serializer/EncodingInfo.java
1   src/org/apache/xalan/xslt/XSLTResultTarget.java
2   serializer/src/main/java/org/apache/xml/serializer/ToStream.java
3   src/org/apache/xalan/extensions/ExtensionFunctionHandler.java
4   compat_src/org/apache/xalan>xpath/xml/ProblemListenerDefault.java
...
613  src/org/apache>xpath/jaxp/XPathExpressionImpl.java

```

```

614 src/org/apache/xml/serializer/Version.java
615 src/org/apache/xml/serializer/ToHTMLSAXHandler.java
616 src/org/apache/xalan/xsltc/compiler/XPathLexer.java
617 src/org/apache/xalan/xsltc/compiler/XPathParser.java

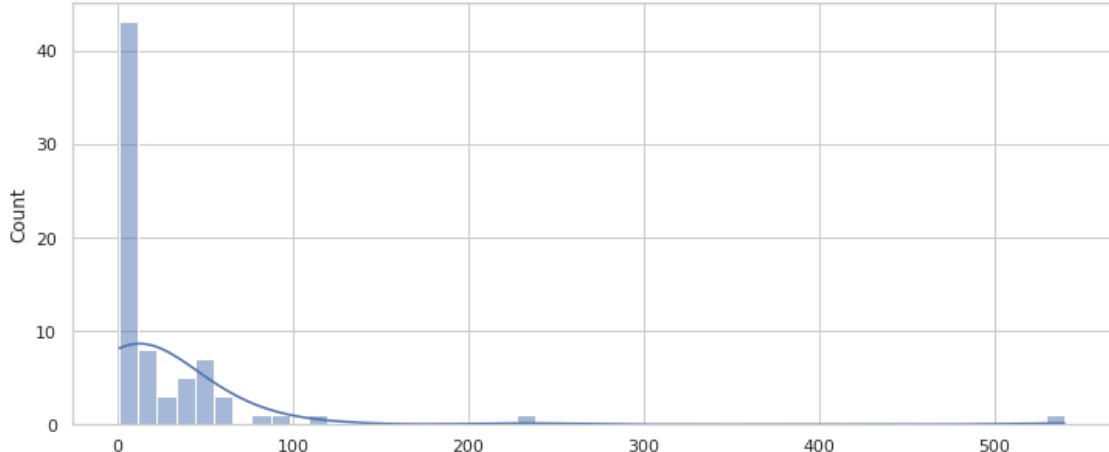
```

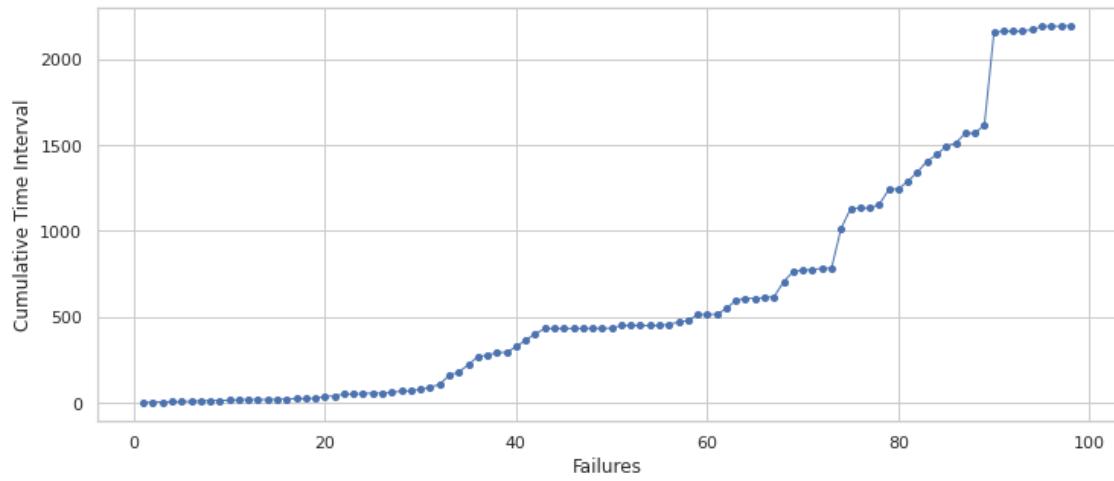
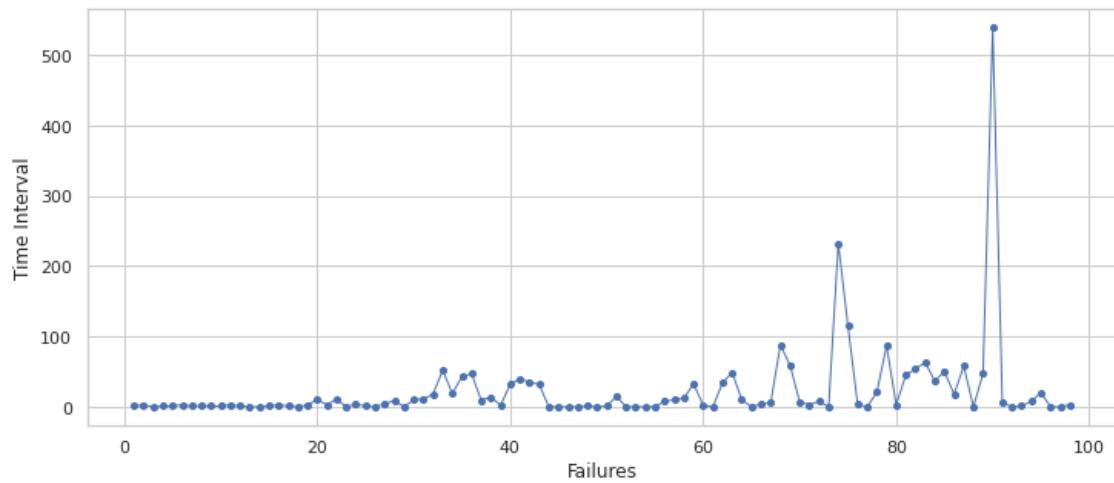
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 3 | 1.0 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 613 | 2 | 6068.0 | 0.000165 | 0.999835 |
| 614 | 2 | 6462.0 | 0.000155 | 0.999845 |
| 615 | 2 | 7447.0 | 0.000134 | 0.999866 |
| 616 | 2 | 8030.0 | 0.000125 | 0.999875 |
| 617 | 2 | 8030.0 | 0.000125 | 0.999875 |

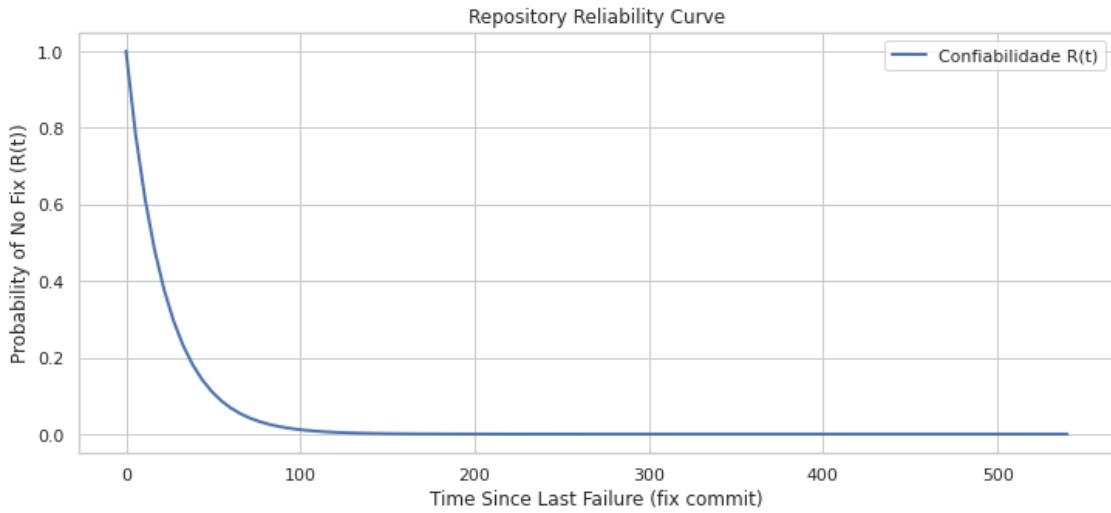
[618 rows x 5 columns]

== SimianArmy ==

The histogram of Time Between Failures (TBF) SimianArmy







```

Confiabilidade R(1) = 0.9563
Confiabilidade R(5) = 0.7998
Confiabilidade R(10) = 0.6398
Confiabilidade R(50) = 0.1072
Confiabilidade R(100) = 0.0115

```

```

filepath \\\n
0 src/main/java/com/netflix/simianarmy/client/libvirt/VSphereClient.java
1 src/main/java/com/netflix/simianarmy/chaos/ChaosType.java
2 src/main/java/com/netflix/simianarmy/Monkey.java
3 src/main/java/com/netflix/simianarmy/MonkeyRunner.java
4 src/main/java/com/netflix/simianarmy/janitor/AbstractJanitor.java
...
35 src/test/java/com/netflix/simianarmy/basic/TestBasicScheduler.java
36 src/main/java/com/netflix/simianarmy/basic/conformity/BasicConformityMonkeyContext.java
37 src/test/java/com/netflix/simianarmy/janitor/TestAbstractJanitor.java
38 src/main/java/com/netflix/simianarmy/aws/conformity/crawler/AWSClusterCrawler.java
39 src/main/java/com/netflix/simianarmy/janitor/JanitorEmailNotifier.java

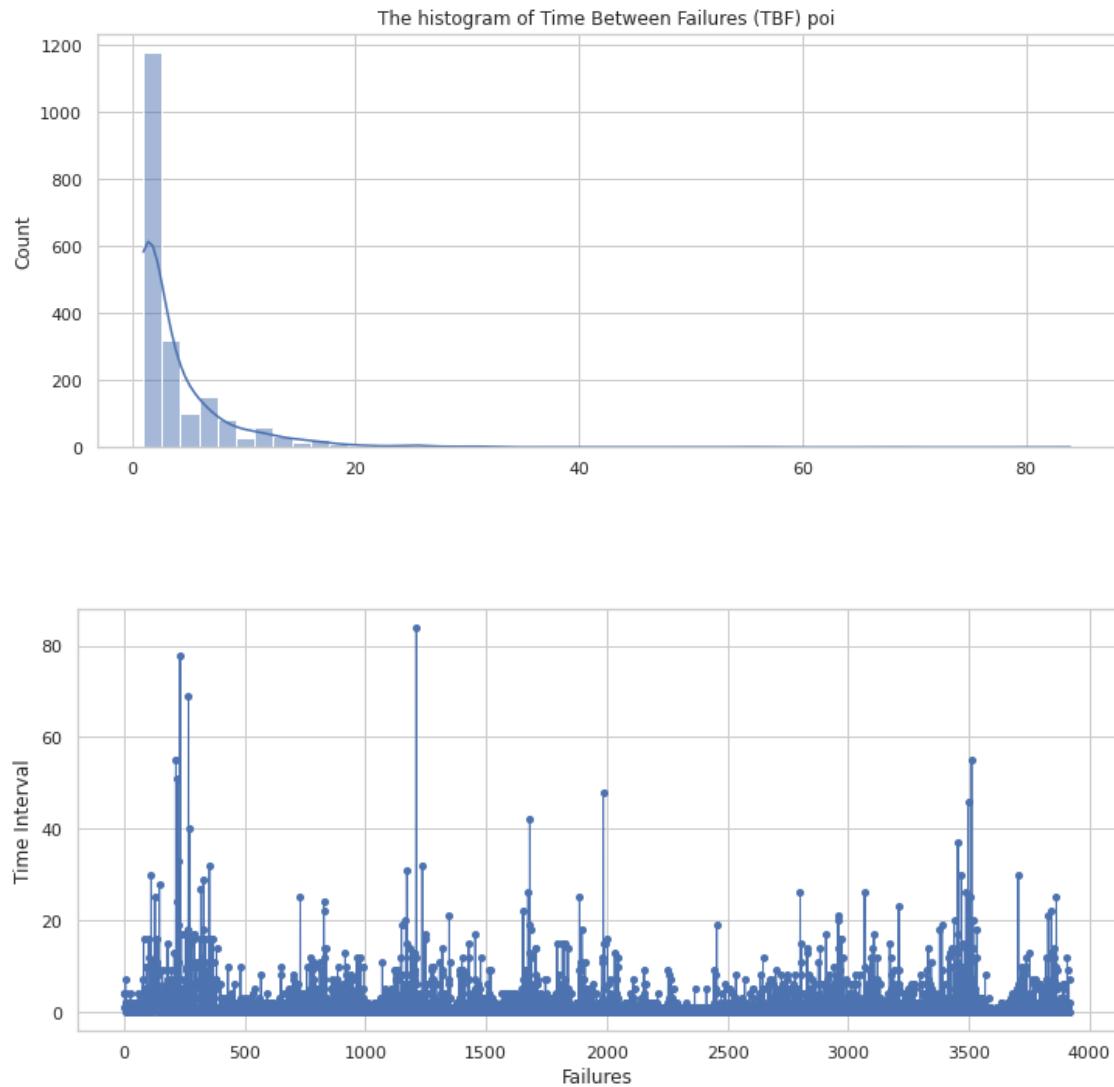
```

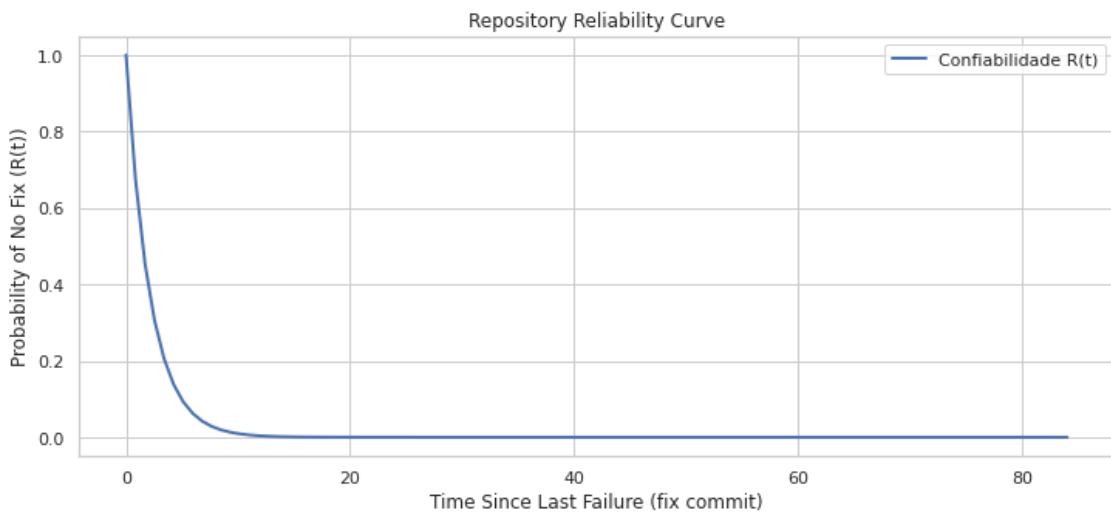
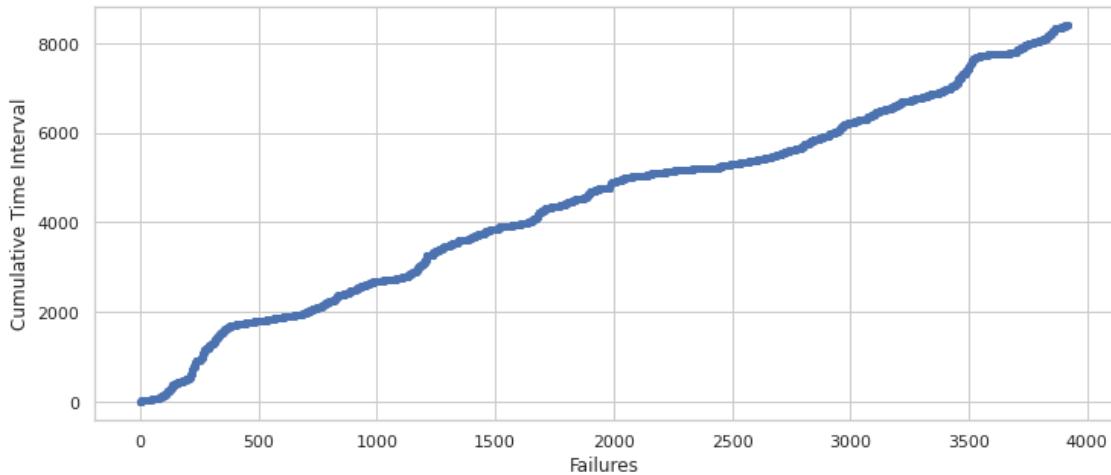
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|-------------|----------------|----------|
| 0 | 3 | 2.500000 | 0.400000 | 0.670320 |
| 1 | 4 | 5.666667 | 0.176471 | 0.838223 |
| 2 | 3 | 6.000000 | 0.166667 | 0.846482 |
| 3 | 3 | 6.500000 | 0.153846 | 0.857404 |
| 4 | 2 | 7.000000 | 0.142857 | 0.866878 |
| ... | ... | ... | ... | ... |
| 35 | 2 | 497.000000 | 0.002012 | 0.997990 |
| 36 | 2 | 736.000000 | 0.001359 | 0.998642 |
| 37 | 2 | 1030.000000 | 0.000971 | 0.999030 |
| 38 | 2 | 1044.000000 | 0.000958 | 0.999043 |

39 2 1351.000000 0.000740 0.999260

[40 rows x 5 columns]

== poi ==





```

Confiabilidade R(1) = 0.6277
Confiabilidade R(5) = 0.0974
Confiabilidade R(10) = 0.0095
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

filepath \
0   src/java/org/apache/poi/ss/util/BorderPropertyTemplate.java
1   src/ooxml/testcases/org/apache/poi/xddf/usermodel/TestNecessaryOOXMLClasses.java
2   src/testcases/org/apache/poi/ss/util/TestCellRangeUtil.java
3   poi/src/main/java/org/apache/poi/poifs/storage/HeaderBlock.java
4   src/java/org/apache/poi/hssf/record/formula/Ref2DPtgBase.java
...
2875  src/scratchpad/src/org/apache/poi/hslf/record/EscherTextboxWrapper.java

```

```

2876 src/java/org/apache/poi/hssf/eventusermodel/HSSFListener.java
2877 src/scratchpad/src/org/apache/poi/hwpf/usermodel/Section.java
2878 src/scratchpad/testcases/org/apache/poi/hwpf/model/TestSectionTable.java
2879 src/scratchpad/src/org/apache/poi/hwpf/usermodel/DropCapSpecifier.java

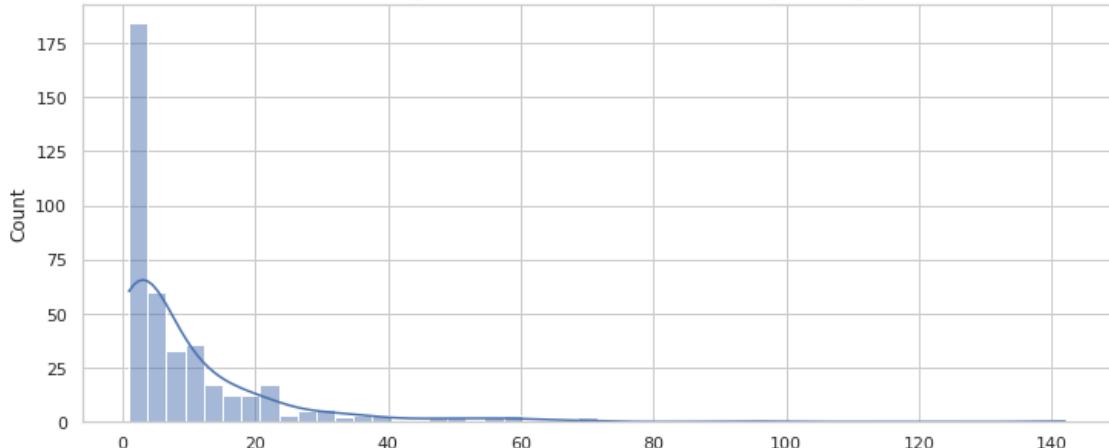
```

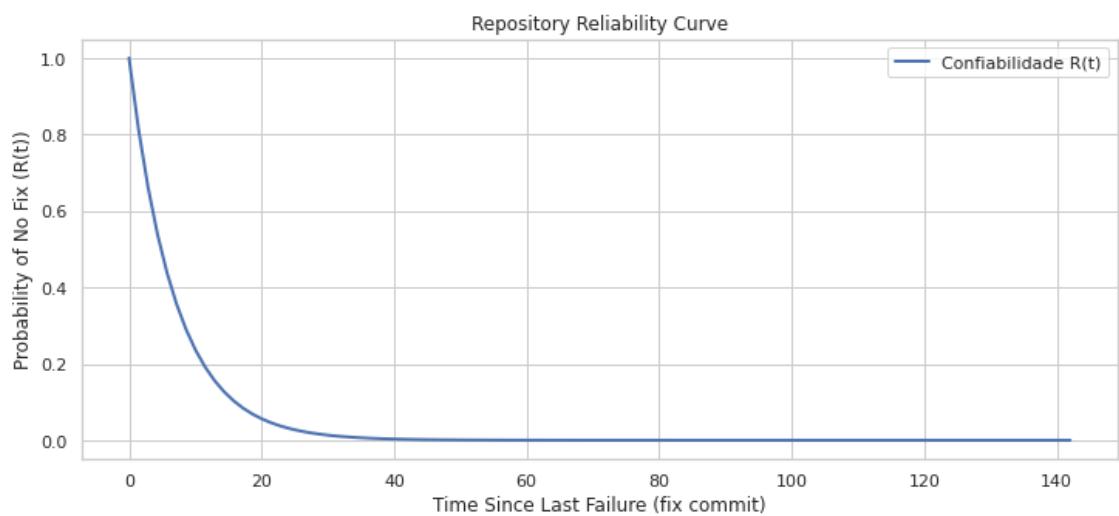
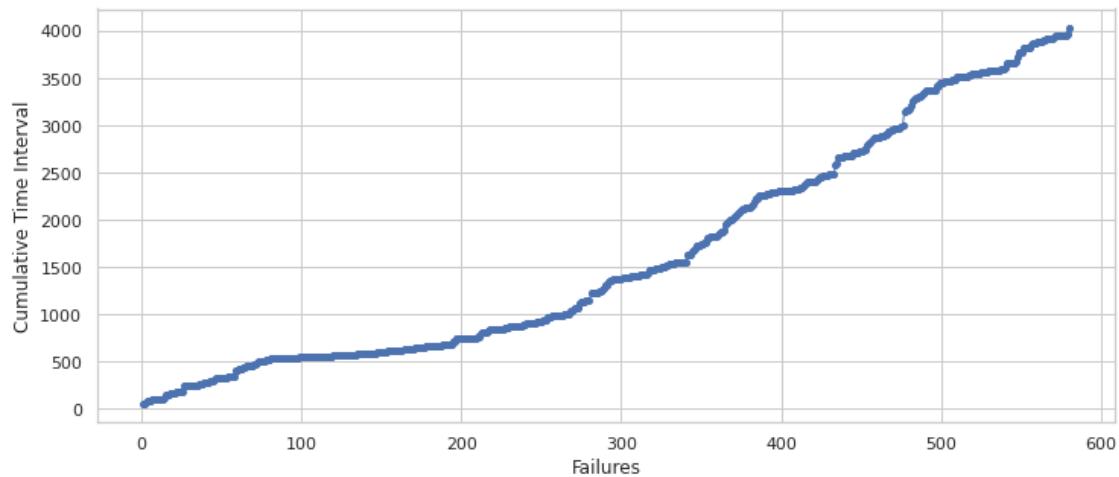
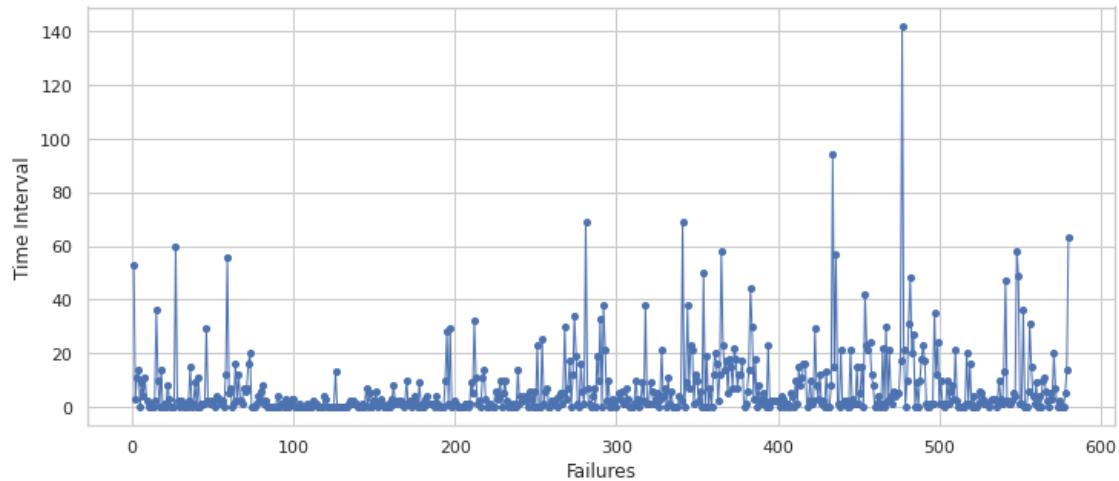
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|-------------|----------------|----------|
| 0 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 1 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 2 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 3 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 4 | 2 | 1.000000 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 2875 | 2 | 5021.000000 | 0.000199 | 0.999801 |
| 2876 | 2 | 5486.000000 | 0.000182 | 0.999818 |
| 2877 | 2 | 5644.000000 | 0.000177 | 0.999823 |
| 2878 | 2 | 5741.000000 | 0.000174 | 0.999826 |
| 2879 | 2 | 5762.000000 | 0.000174 | 0.999826 |

[2880 rows x 5 columns]

== byte-buddy ==

The histogram of Time Between Failures (TBF) byte-buddy





```

Confiabilidade R(1) = 0.8660
Confiabilidade R(5) = 0.4870
Confiabilidade R(10) = 0.2372
Confiabilidade R(50) = 0.0008
Confiabilidade R(100) = 0.0000

```

```

0   src/main/java/com/blogspot/mydailyjava/bytebuddy/dynamic/scaffold/SubclassInstru
1   src/test/java/com/blogspot/mydailyjava/bytebuddy/instrumentation/MethodDelegationSuperTest
2   src/main/java/com/blogspot/mydailyjava/bytebuddy/instrumentation/method/bytocode/stack/con
3   src/main/java/com/blogspot/mydailyjava/bytebuddy/instrumentation/Exceptional.java
4   byte-buddy-dep/src/test/java/net/bytebuddy/dynamic/scaffold/MethodGraphCompilerDefaultKey
..
381  byte-buddy-dep/src/main/java/net/bytebuddy/matcher/MethodSortMatcher.java
382  byte-buddy-dep/src/main/java/net/bytebuddy/dynamic/TargetType.java
383  byte-buddy-dep/src/test/java/net/bytebuddy/implementation/InvocationHandlerAdapterTest.ja
384  byte-buddy-dep/src/test/java/net/bytebuddy/implementation/MethodDelegationOriginTest.java
385  byte-buddy-agent/src/main/java/net/bytebuddy/agent/package-info.java

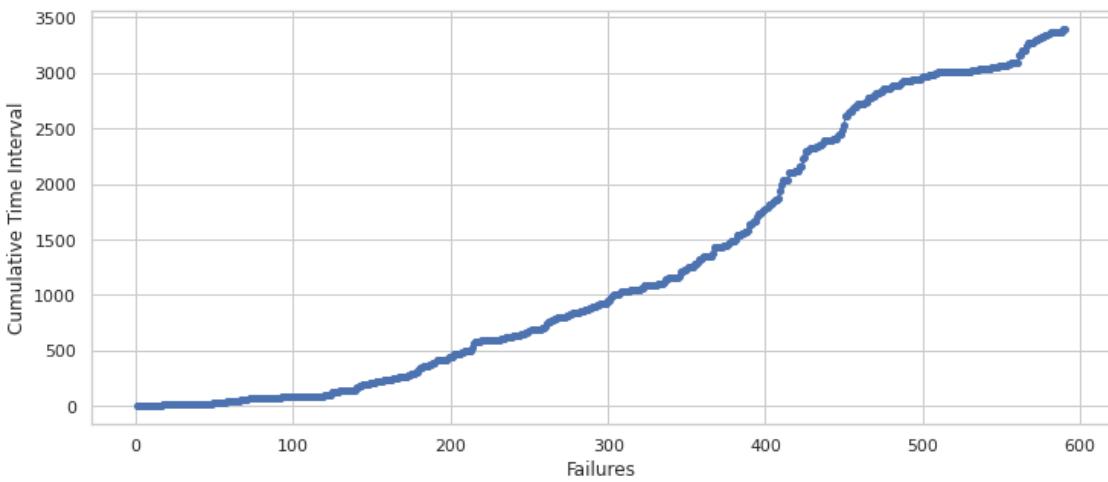
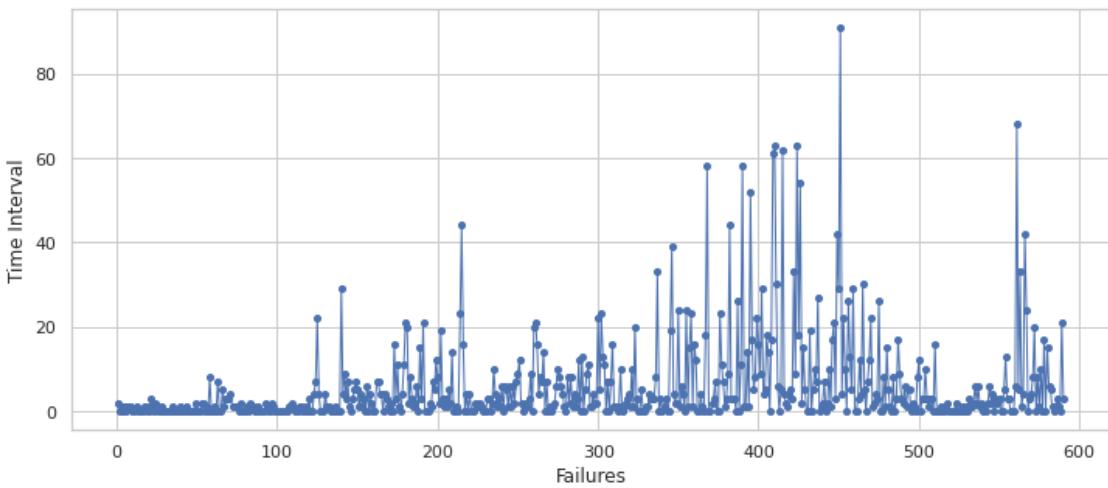
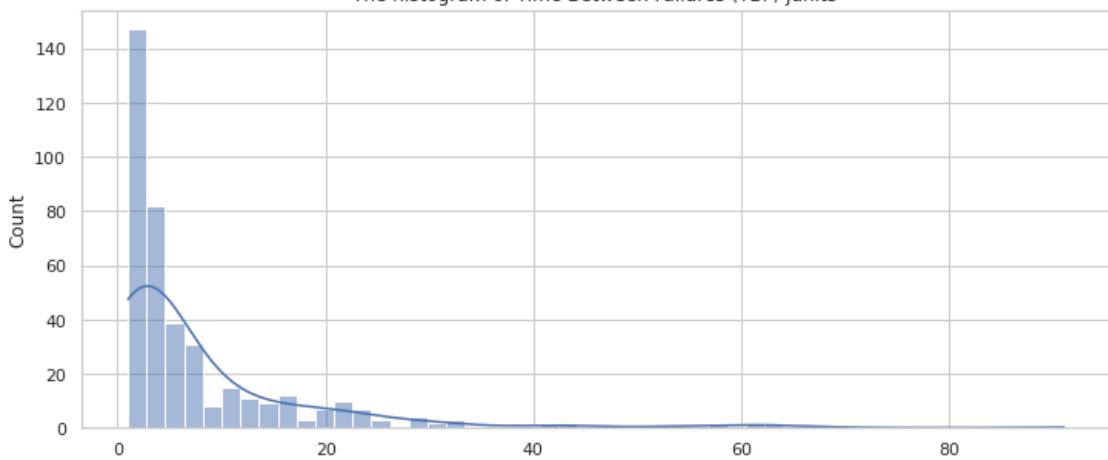
```

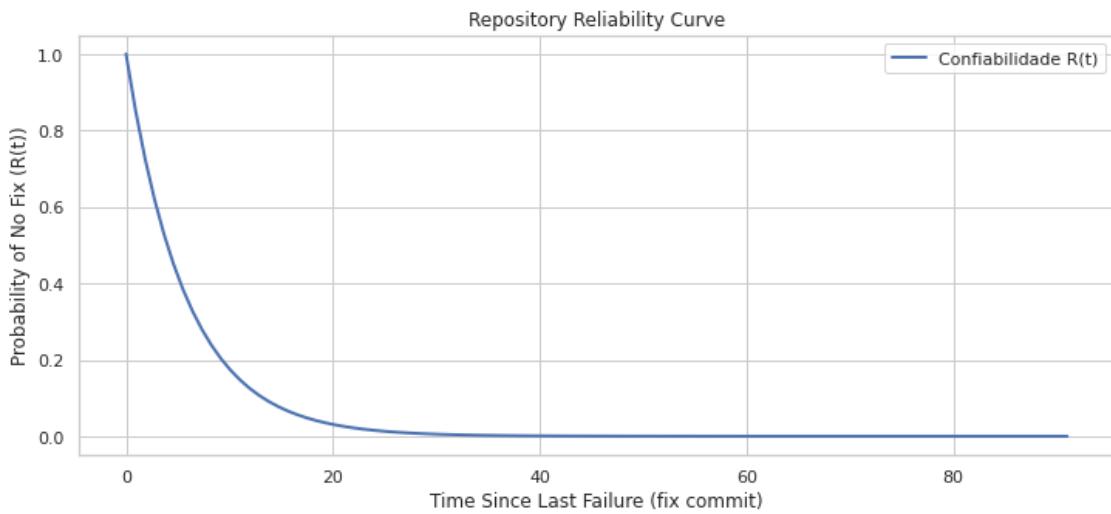
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 3 | 1.0 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 381 | 2 | 1626.0 | 0.000615 | 0.999385 |
| 382 | 2 | 1682.0 | 0.000595 | 0.999406 |
| 383 | 2 | 1786.0 | 0.000560 | 0.999440 |
| 384 | 2 | 1786.0 | 0.000560 | 0.999440 |
| 385 | 2 | 1960.0 | 0.000510 | 0.999490 |

[386 rows x 5 columns]

== junit5 ==

The histogram of Time Between Failures (TBF) junit5





Confiabilidade $R(1) = 0.8406$

Confiabilidade $R(5) = 0.4196$

Confiabilidade $R(10) = 0.1761$

Confiabilidade $R(50) = 0.0002$

Confiabilidade $R(100) = 0.0000$

```

0  junit-console/src/main/java/org/junit/gen5/console/tasks/XmlReportWriter.java
1  junit-tests/src/test/java/org/junit/gen5/console/tasks/XmlReportsWritingListenerTests.java
2  junit5-engine/src/test/java/org/junit/gen5/engine/junit5/SpecificationResolverTest.java
3  junit5-engine/src/test/java/org/junit/gen5/engine/junit5/JUnit5TestEngineTests.java
4  junit-tests/src/test/java/org/junit/gen5/engine/junit4/JUnit4TestEngineClassExecutionTests.java
..
233 junit-platform-engine/src/main/java/org/junit/platform/engine/support/hierarchical/NodeTreeTests.java
234 junit-platform-engine/src/main/java/org/junit/platform/engine/discovery/MethodSelectorTests.java
235 platform-tests/src/test/java/org/junit/platform/engine/discovery/DiscoverySelectorsTests.java
236 junit-jupiter-engine/src/test/java/org/junit/jupiter/api/condition/EnabledOnJreIntegrationTests.java
237 junit-platform-console/src/main/java/org/junit/platform/console/tasks/DiscoveryRequestCreationTests.java

```

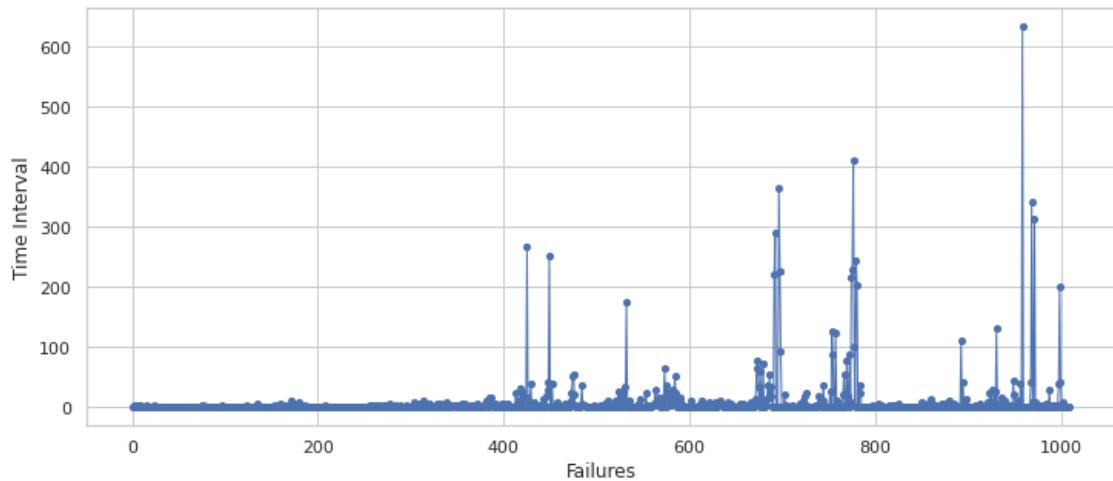
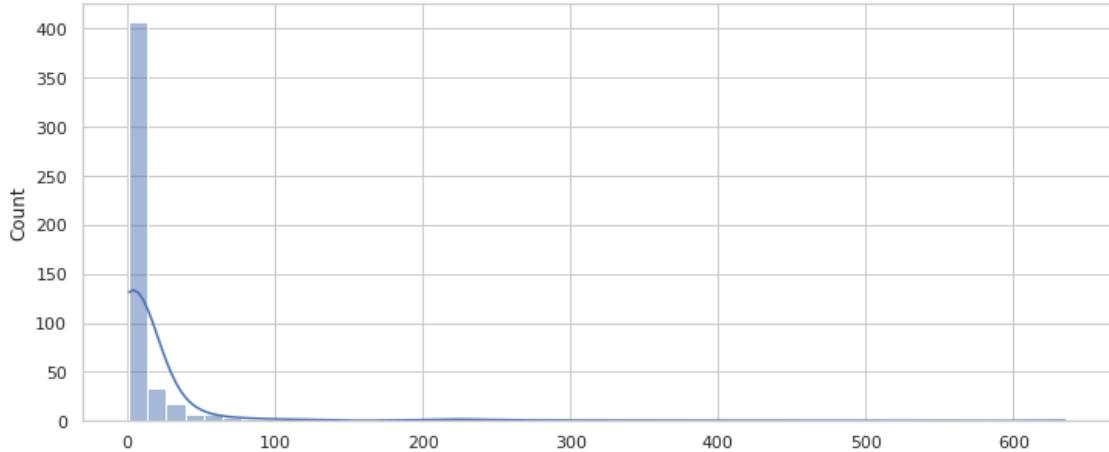
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|-------------|----------------|----------|
| 0 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 1 | 4 | 0.666667 | 1.500000 | 0.223130 |
| 2 | 7 | 0.666667 | 1.500000 | 0.223130 |
| 3 | 14 | 0.923077 | 1.083333 | 0.338465 |
| 4 | 2 | 1.000000 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 233 | 2 | 2119.000000 | 0.000472 | 0.999528 |
| 234 | 2 | 2214.000000 | 0.000452 | 0.999548 |

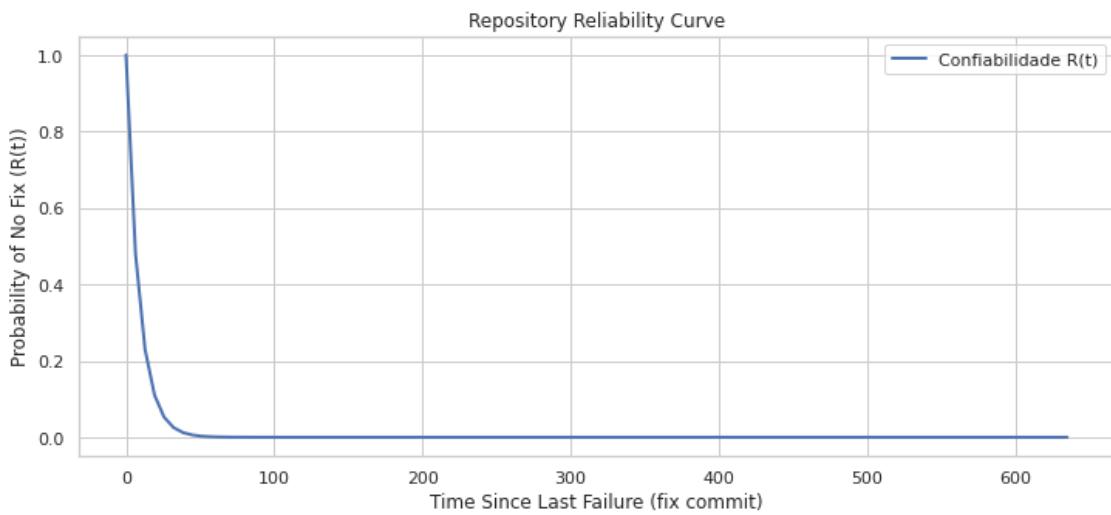
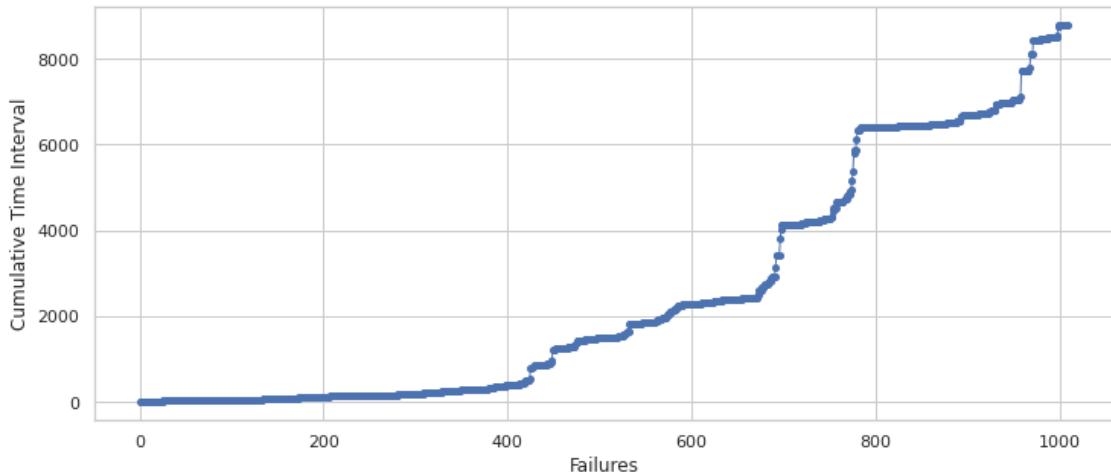
| | | | | |
|-----|---|-------------|----------|----------|
| 235 | 2 | 2214.000000 | 0.000452 | 0.999548 |
| 236 | 2 | 2218.000000 | 0.000451 | 0.999549 |
| 237 | 2 | 2251.000000 | 0.000444 | 0.999556 |

[238 rows x 5 columns]

== velocity-engine ==

The histogram of Time Between Failures (TBF) velocity-engine





```

Confiabilidade R(1) = 0.8917
Confiabilidade R(5) = 0.5639
Confiabilidade R(10) = 0.3180
Confiabilidade R(50) = 0.0033
Confiabilidade R(100) = 0.0000
  
```

```

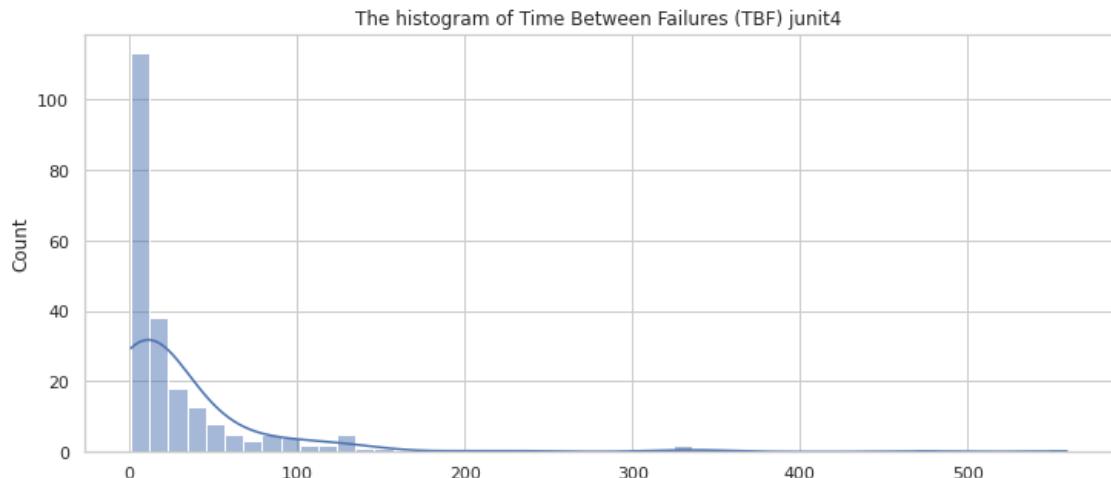
0   src/java/org/apache/velocity/runtime/configuration/Configurations.java
1   src/java/org/apache/velocity/util/introspection/ClassMethodMap.java
2   src/java/org/apache/velocity/runtime/parser/ASTReference.java
3   src/test/org/apache/velocity/test/issues/Velocity682TestCase.java
4   src/test/org/apache/velocity/test/ClasspathResourceTestCase.java
...
497  src/java/org/apache/velocity/runtime/parser/node/ASTprocess.java
  
```

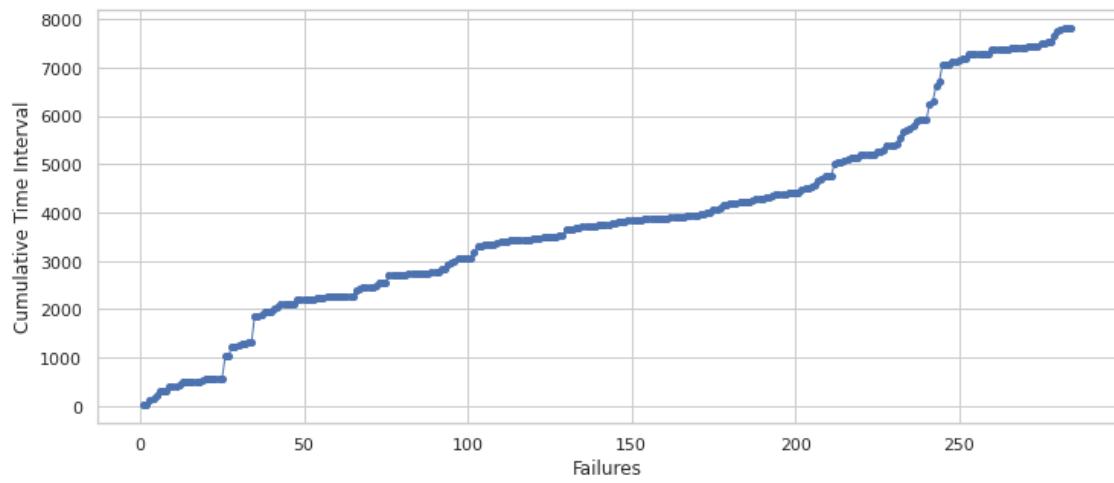
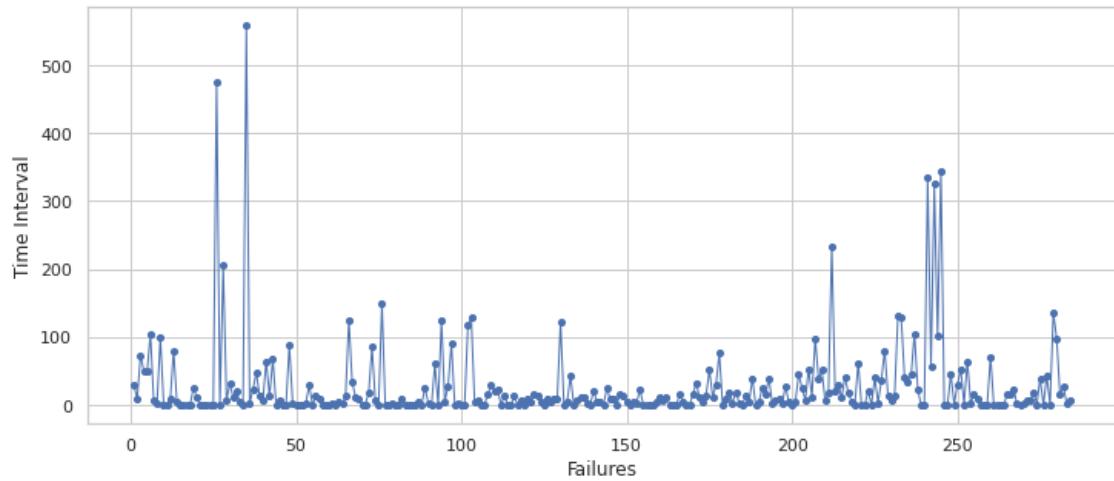
```
498 src/java/org/apache/velocity/runtime/parser/Token.java
499 src/java/org/apache/velocity/util/SimplePool.java
500 velocity-engine-core/src/main/java/org/apache/velocity/runtime/parser/node/SetPropertyExe
501 velocity-engine-core/src/main/java/org/apache/velocity/app/event/implement/EscapeSqlReferenc
```

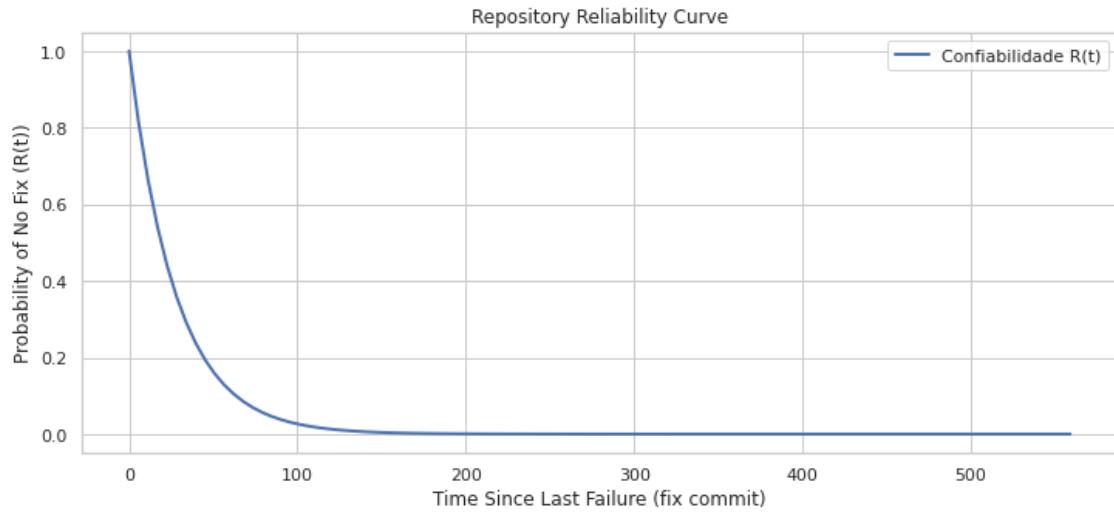
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 2.0 | 0.500000 | 0.606531 |
| 3 | 2 | 2.0 | 0.500000 | 0.606531 |
| 4 | 2 | 2.0 | 0.500000 | 0.606531 |
| .. | .. | ... | ... | ... |
| 497 | 2 | 1835.0 | 0.000545 | 0.999455 |
| 498 | 2 | 1838.0 | 0.000544 | 0.999456 |
| 499 | 2 | 1998.0 | 0.000501 | 0.999500 |
| 500 | 2 | 2055.0 | 0.000487 | 0.999514 |
| 501 | 2 | 2248.0 | 0.000445 | 0.999555 |

[502 rows x 5 columns]

== junit4 ==







```

Confiabilidade R(1) = 0.9644
Confiabilidade R(5) = 0.8340
Confiabilidade R(10) = 0.6956
Confiabilidade R(50) = 0.1629
Confiabilidade R(100) = 0.0265

```

```

filepath \
0   src/org/junit/internal/runners/model/TestMethod.java
1   src/org/junit/internal/runners/links/WithBeforeAndAfter.java
2   src/org/junit/internal/runners/links/Link.java
3   src/org/junit/internal/runners/links/ExpectingException.java
4   src/org/junit/internal/runners/links/Invoke.java
...
154  ...
155  src/main/java/org/junit/experimental/theories/internal/Assignments.java
156  src/main/java/org/junit/internal/TextListener.java
157  src/main/java/org/junit/runner/FilterFactories.java
158  src/main/java/org/junit/experimental/max/MaxHistory.java

```

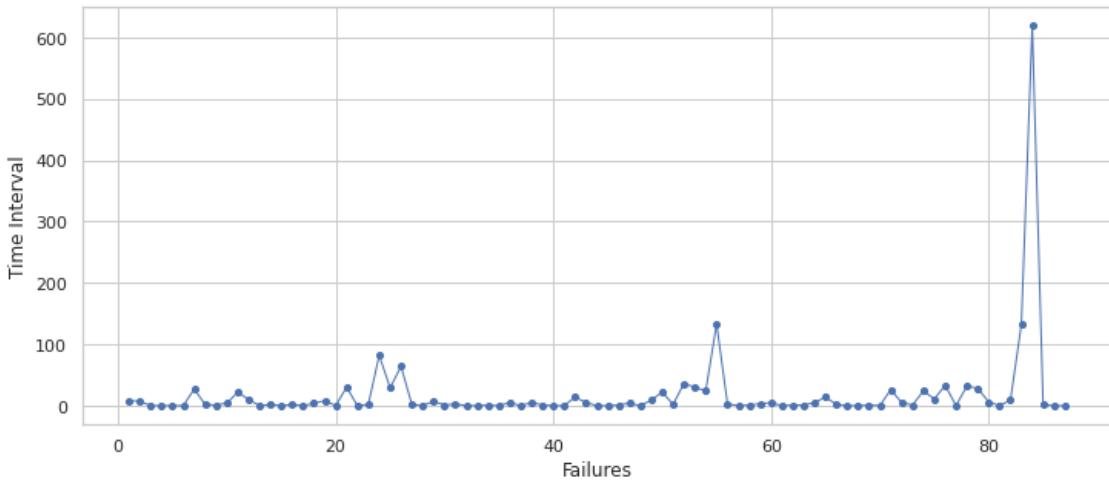
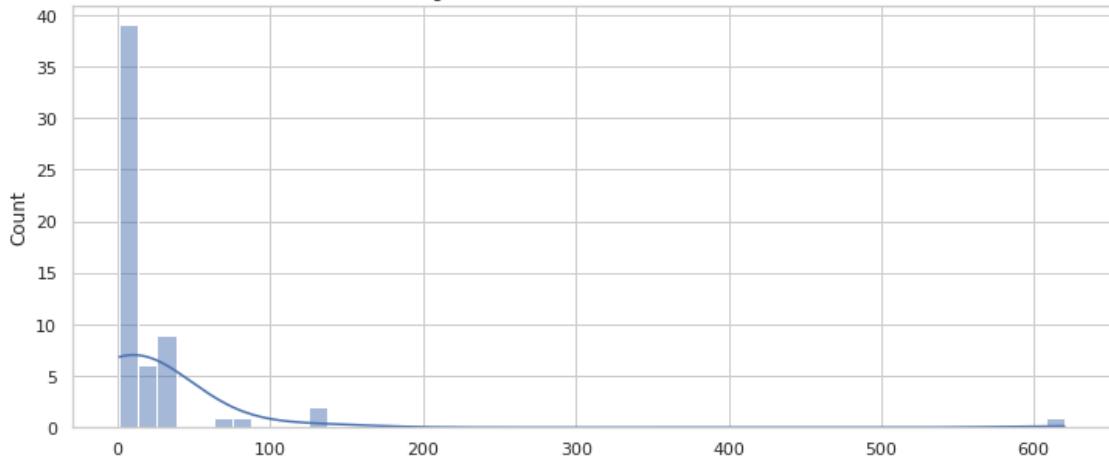
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 154 | 2 | 2692.0 | 0.000371 | 0.999629 |
| 155 | 2 | 2707.0 | 0.000369 | 0.999631 |
| 156 | 2 | 2807.0 | 0.000356 | 0.999644 |
| 157 | 2 | 3444.0 | 0.000290 | 0.999710 |

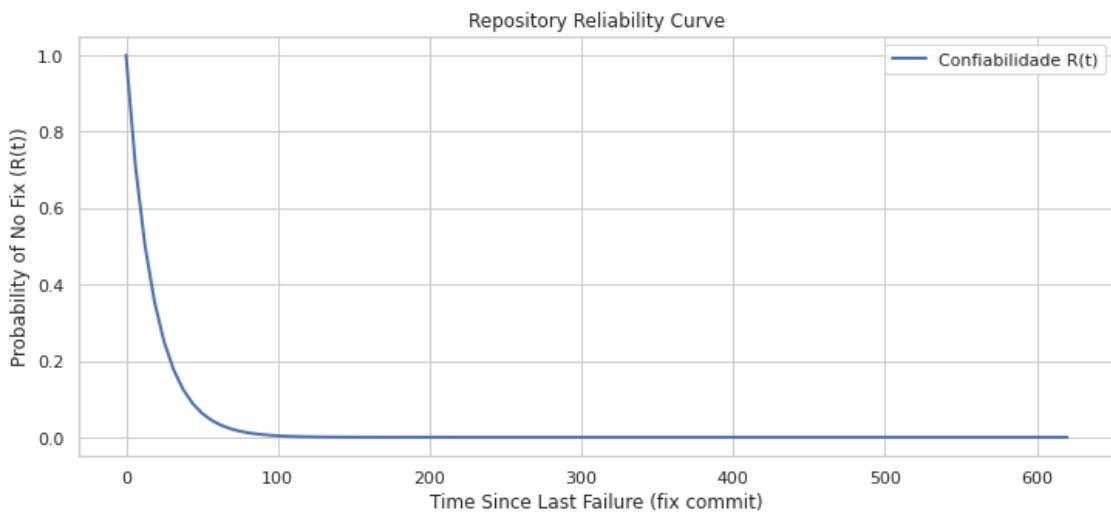
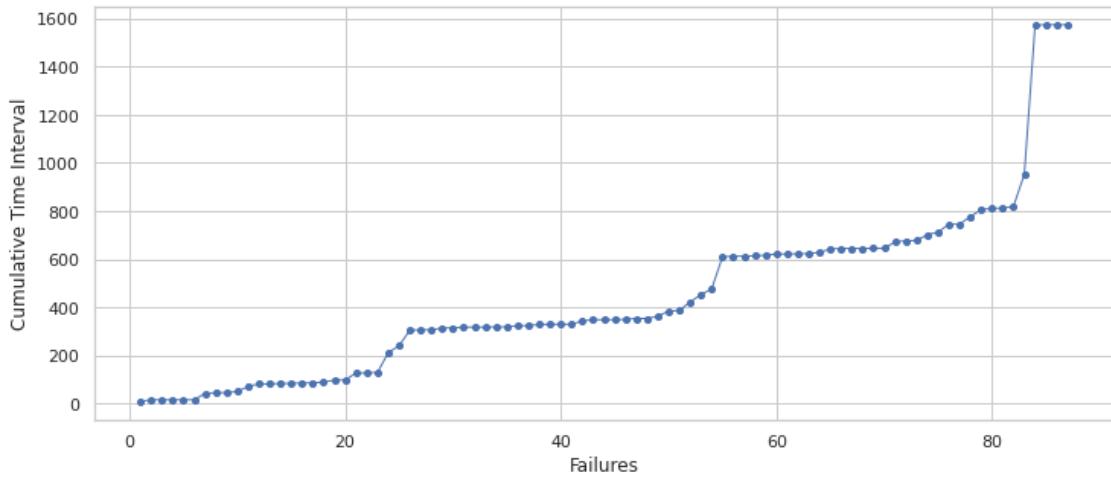
158 2 5267.0 0.000190 0.999810

[159 rows x 5 columns]

== antlr3 ==

The histogram of Time Between Failures (TBF) antlr3





Confiabilidade $R(1) = 0.9462$
 Confiabilidade $R(5) = 0.7585$
 Confiabilidade $R(10) = 0.5754$
 Confiabilidade $R(50) = 0.0631$
 Confiabilidade $R(100) = 0.0040$

```

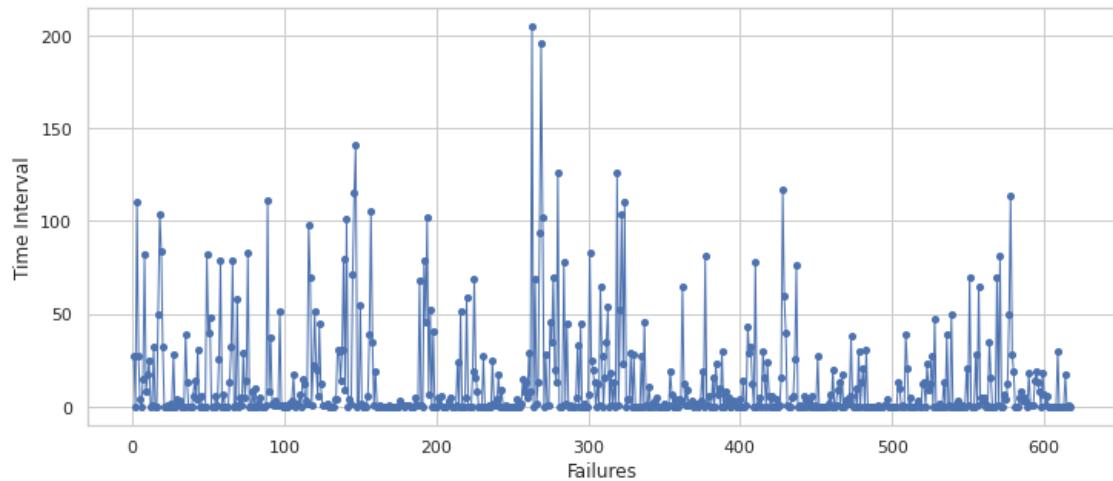
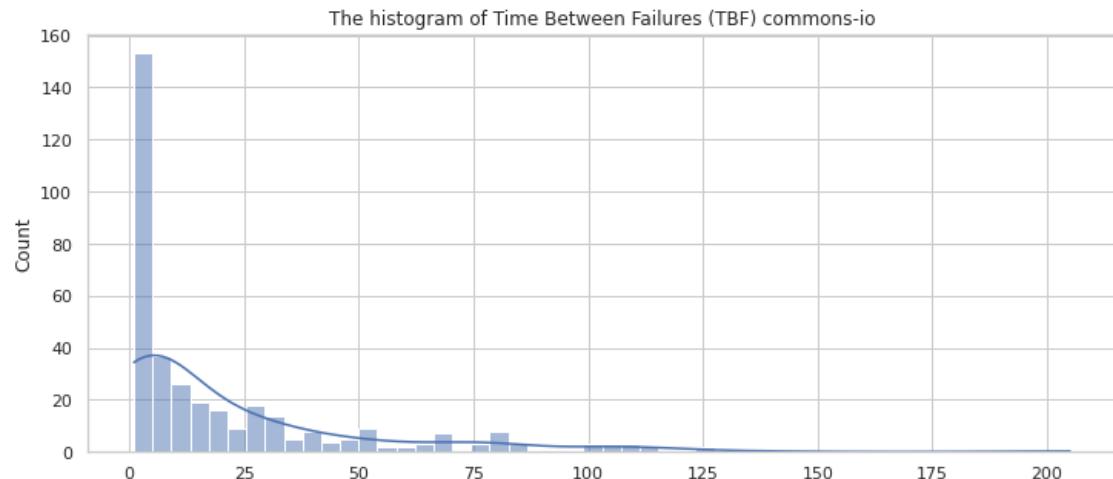
filepath \
0 tool/src/main/java/org/antlr/tool/BuildDependencyGenerator.java
1 tool/src/main/java/org/antlr/codegen/CodeGenerator.java
2 tool/src/test/java/org/antlr/test/BaseTest.java
3 tool/src/main/java/org/antlr/analysis/SemanticContext.java
4 tool/src/main/java/org/antlr/tool/LeftRecursiveRuleAnalyzer.java
5 runtime/Java/src/main/java/org/antlr/runtime/tree/BaseTree.java
6 tool/src/main/java/org/antlr/tool/GrammarAST.java

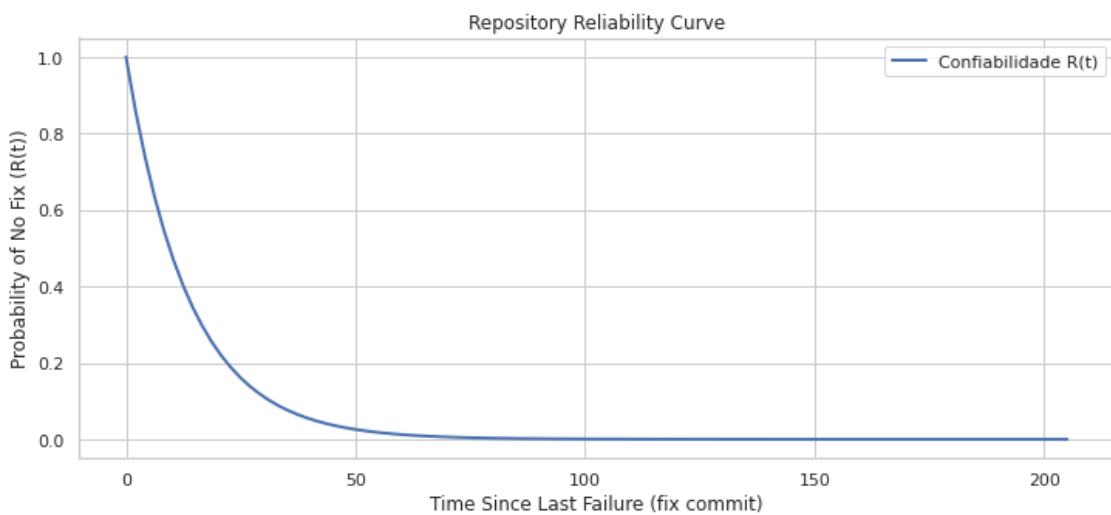
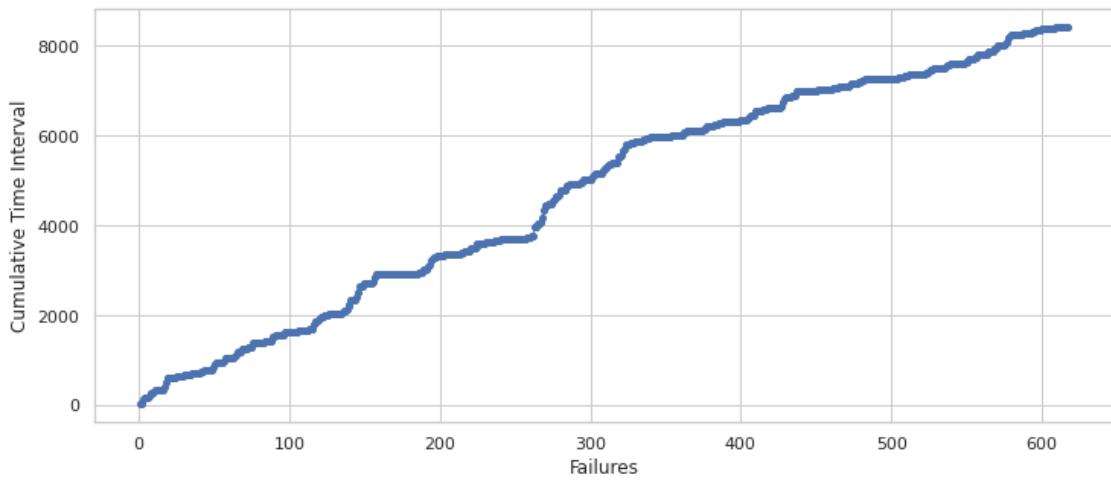
```

```
7 tool/src/main/java/org/antlr/misc/IntervalSet.java  
8 tool/src/main/java/org/antlr/Tool.java
```

| | n_commits | MTBF | lambda_failure | R_t |
|---|-----------|--------|----------------|----------|
| 0 | 2 | 24.00 | 0.041667 | 0.959189 |
| 1 | 5 | 140.75 | 0.007105 | 0.992920 |
| 2 | 3 | 147.00 | 0.006803 | 0.993220 |
| 3 | 2 | 285.00 | 0.003509 | 0.996497 |
| 4 | 2 | 294.00 | 0.003401 | 0.996604 |
| 5 | 2 | 315.00 | 0.003175 | 0.996830 |
| 6 | 3 | 317.50 | 0.003150 | 0.996855 |
| 7 | 2 | 349.00 | 0.002865 | 0.997139 |
| 8 | 2 | 620.00 | 0.001613 | 0.998388 |

```
== commons-io ==
```





```

Confiabilidade R(1) = 0.9294
Confiabilidade R(5) = 0.6934
Confiabilidade R(10) = 0.4808
Confiabilidade R(50) = 0.0257
Confiabilidade R(100) = 0.0007

```

```

filepath \
0   src/test/java/org/apache/commons/io/FileUtilsListFilesTest.java
1   src/test/java/org/apache/commons/io/DeleteDirectoryTest.java
2   src/java/org/apache/commons/io/input/Tailer.java
3   src/test/java/org/apache/commons/io/FileCleaningTrackerTestCase.java

```

```

4   src/test/java/org/apache/commons/io/ThreadMonitorTestCase.java
..
208  src/main/java/org/apache/commons/io/input/WindowsLineEndingInputStream.java
209  src/main/java/org/apache/commons/io/input/TailerListener.java
210  src/main/java/org/apache/commons/io/input/TailerListenerAdapter.java
211  src/main/java/org/apache/commons/io/input/NullReader.java
212  src/test/java/org/apache/commons/io/input/NullReaderTest.java

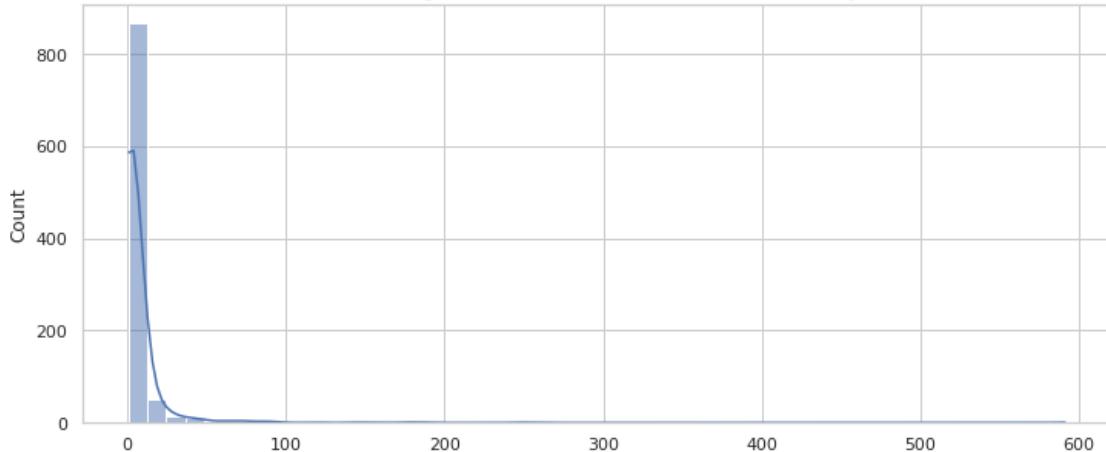
```

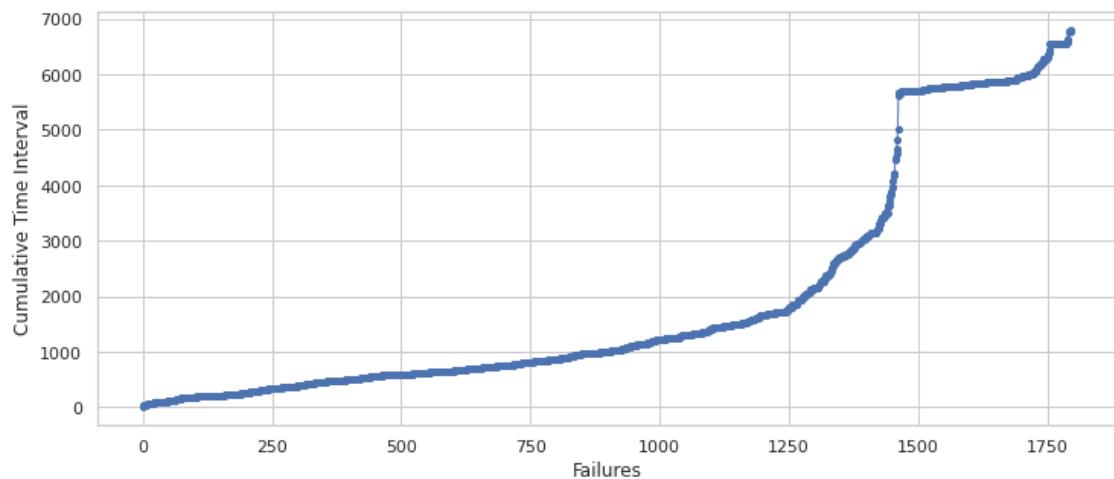
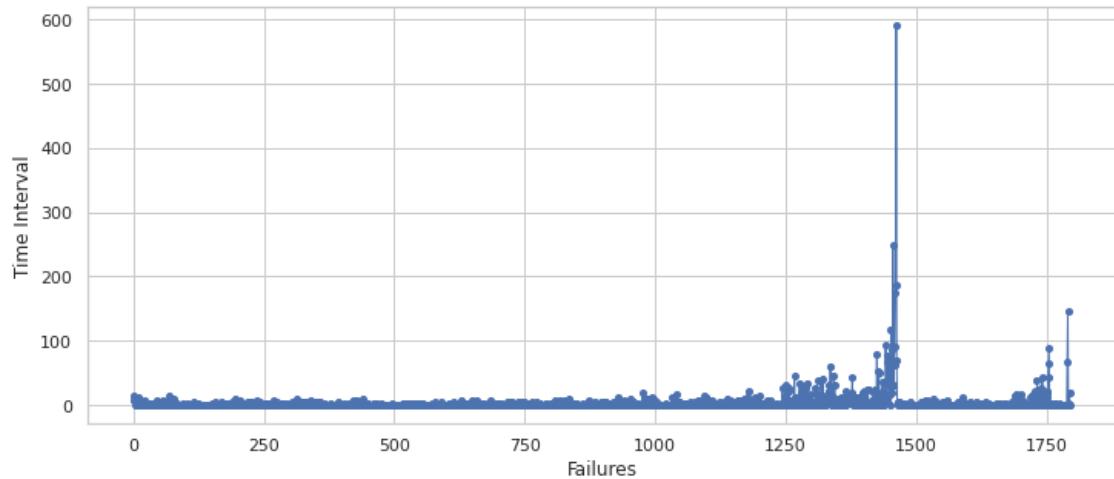
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|---------|----------------|----------|
| 0 | 3 | 0.50 | 2.000000 | 0.135335 |
| 1 | 3 | 0.50 | 2.000000 | 0.135335 |
| 2 | 5 | 0.75 | 1.333333 | 0.263597 |
| 3 | 2 | 1.00 | 1.000000 | 0.367879 |
| 4 | 2 | 1.00 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 208 | 2 | 3050.00 | 0.000328 | 0.999672 |
| 209 | 2 | 3435.00 | 0.000291 | 0.999709 |
| 210 | 2 | 3435.00 | 0.000291 | 0.999709 |
| 211 | 2 | 3556.00 | 0.000281 | 0.999719 |
| 212 | 2 | 3921.00 | 0.000255 | 0.999745 |

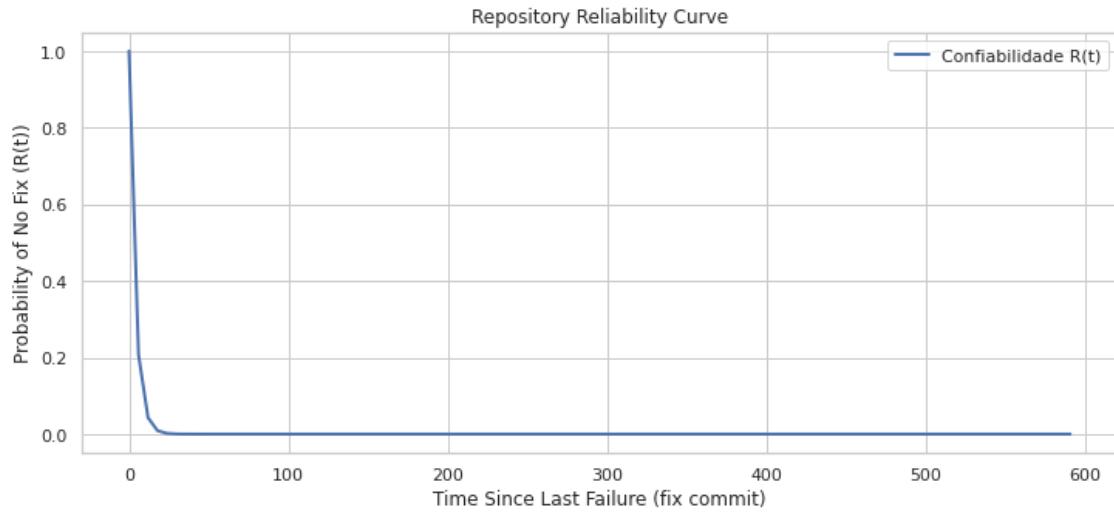
[213 rows x 5 columns]

== xerces2-j ==

The histogram of Time Between Failures (TBF) xerces2-j







```

Confiabilidade R(1) = 0.7681
Confiabilidade R(5) = 0.2674
Confiabilidade R(10) = 0.0715
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

filepath \
0   src/org/apache/xerces/impl/v2/XSWildcardDecl.java
1   src/org/apache/xerces/utils/regex/ParserForXMLSchema.java
2   tests/dom/events/DeferredDOM.java
3   src/org/apache/xerces/impl/v2/XSDHandler.java
4   src/org/apache/xerces/impl/v2/SchemaValidator.java
...
623  src/org/apache/html/dom/HTMLCollectionImpl.java
624  src/org/apache/xerces/jaxp/validation/StAXValidatorHelper.java
625  src/org/apache/xerces/util/MessageFormatter.java
626  samples/sax/Counter.java
627  src/org/apache/xerces/util/XMLStringBuffer.java

```

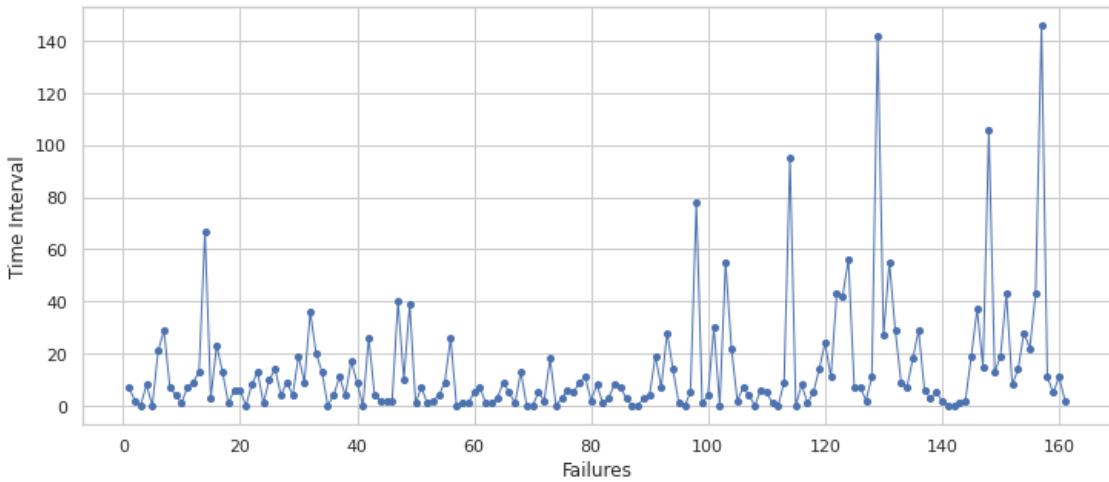
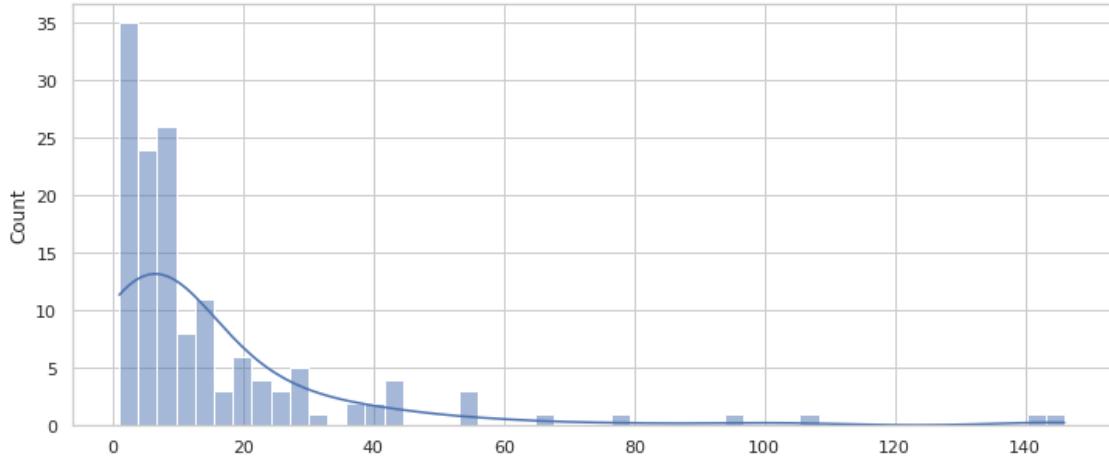
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|-------------|----------------|----------|
| 0 | 2 | 1.000000 | 1.000000 | 0.367879 |
| 1 | 2 | 1.000000 | 1.000000 | 0.367879 |
| 2 | 2 | 1.000000 | 1.000000 | 0.367879 |
| 3 | 24 | 2.695652 | 0.370968 | 0.690066 |
| 4 | 17 | 2.812500 | 0.355556 | 0.700784 |
| .. | .. | ... | ... | ... |
| 623 | 3 | 1794.500000 | 0.000557 | 0.999443 |
| 624 | 2 | 2324.000000 | 0.000430 | 0.999570 |
| 625 | 2 | 2789.000000 | 0.000359 | 0.999642 |
| 626 | 2 | 2908.000000 | 0.000344 | 0.999656 |

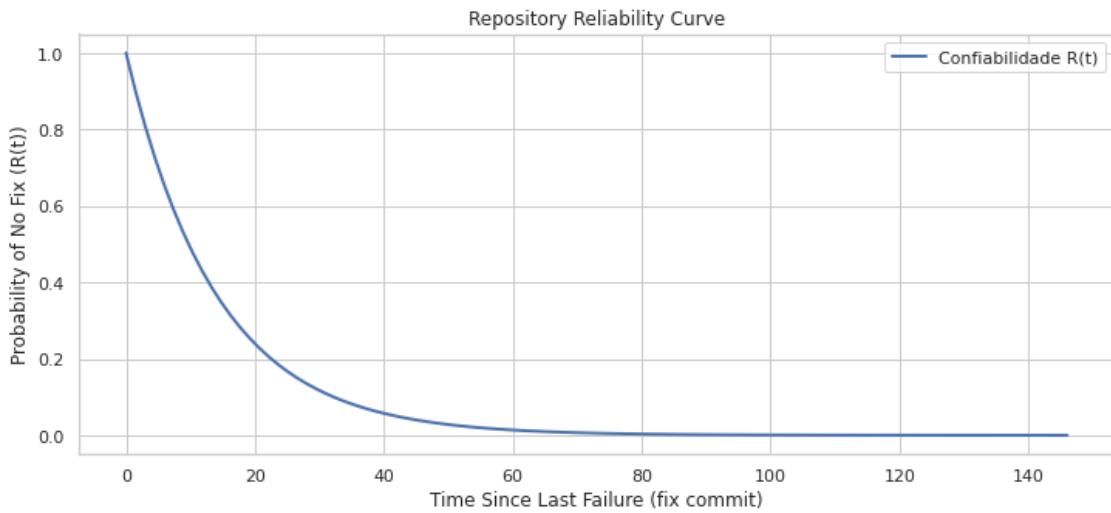
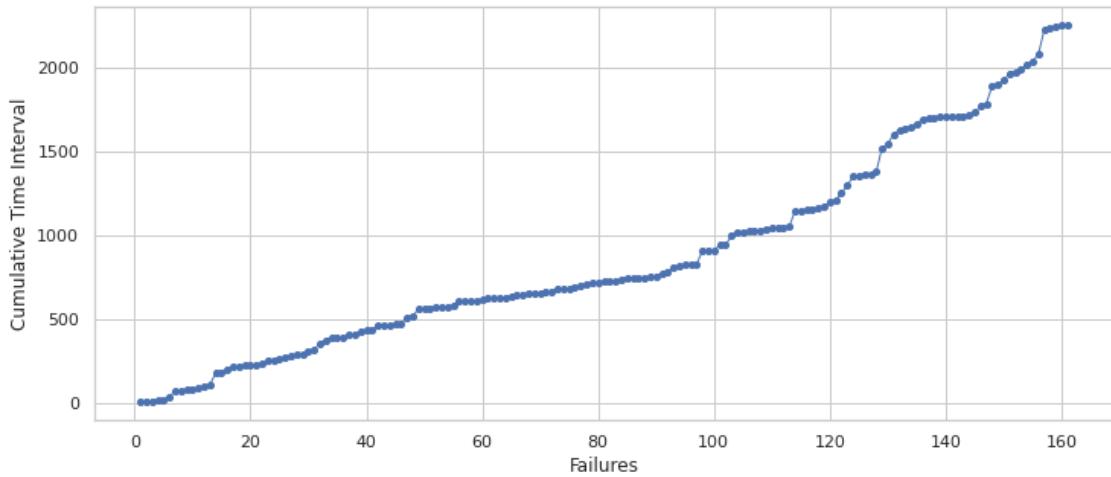
627 2 3650.000000 0.000274 0.999726

[628 rows x 5 columns]

== giraph ==

The histogram of Time Between Failures (TBF) giraph





```

Confiabilidade R(1) = 0.9310
Confiabilidade R(5) = 0.6996
Confiabilidade R(10) = 0.4894
Confiabilidade R(50) = 0.0281
Confiabilidade R(100) = 0.0008

```

```

filepath \
0   src/main/java/com/yahoo/hadoop_bsp/BspResolver.java
1   src/main/java/com/yahoo/hadoop_bsp/examples/TestFailVertex.java
2   src/main/java/com/yahoo/hadoop_bsp/BspUtils.java
3   src/test/java/com/yahoo/hadoop_bsp/SimpleBspTest.java
4   src/main/java/org/apache/giraph/GiraphRunner.java
...
146  giraph-core/src/main/java/org/apache/giraph/partition/PartitionStore.java

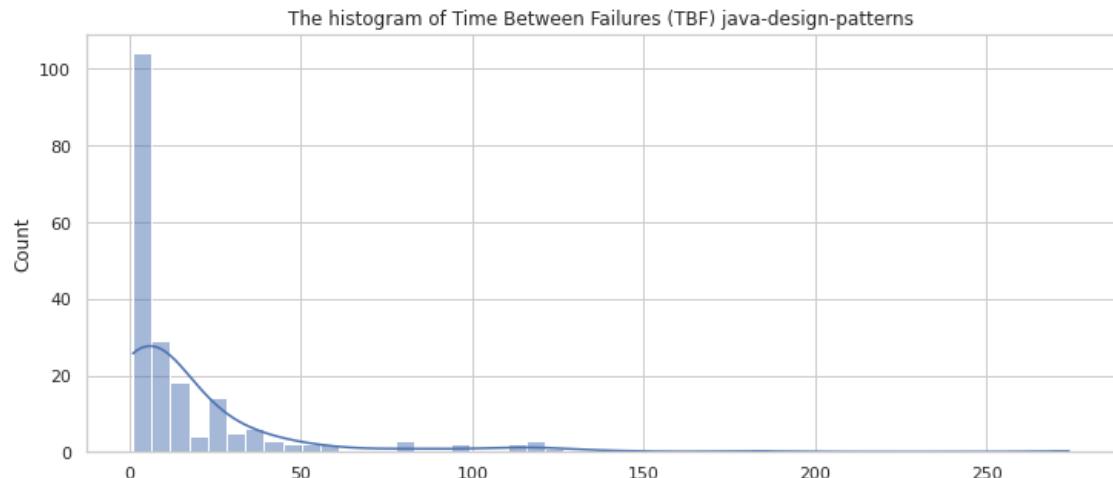
```

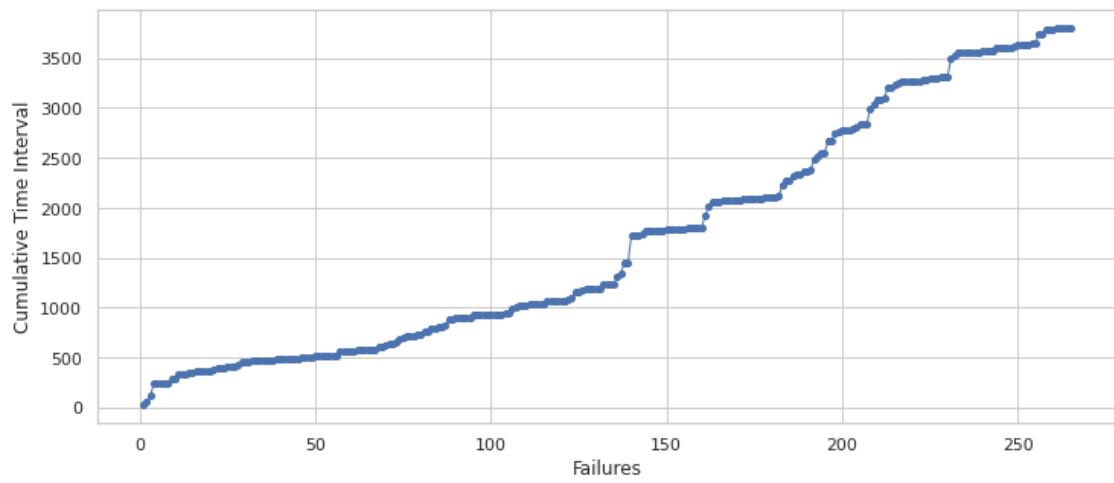
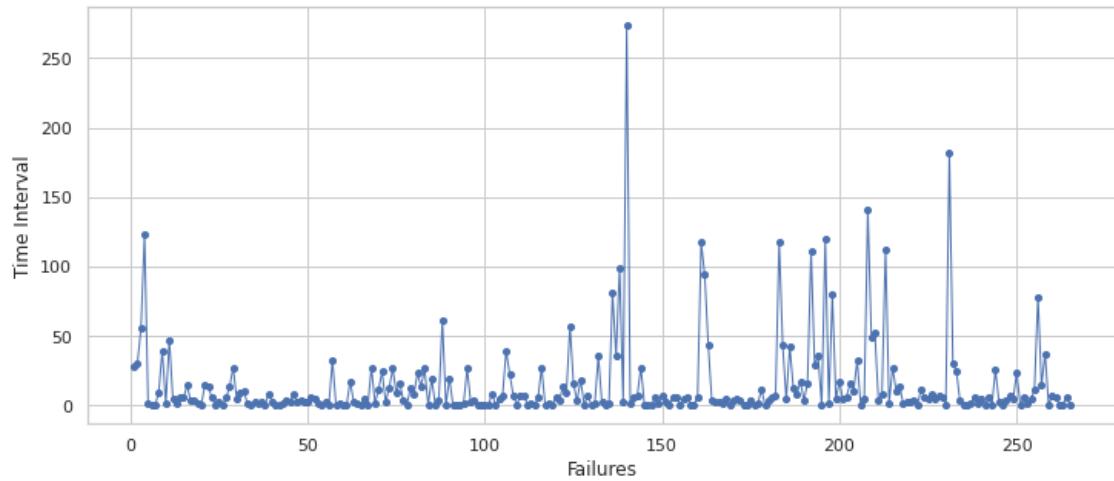
```
147 giraph-core/src/main/java/org/apache/giraph/comm/requests/RequestType.java  
148 giraph-core/src/main/java/org/apache/giraph/graph/AddressesAndPartitionsWritable.java  
149 giraph-core/src/test/java/org/apache/giraph/BspCase.java  
150 giraph-core/src/main/java/org/apache/giraph/bsp/CentralizedServiceWorker.java
```

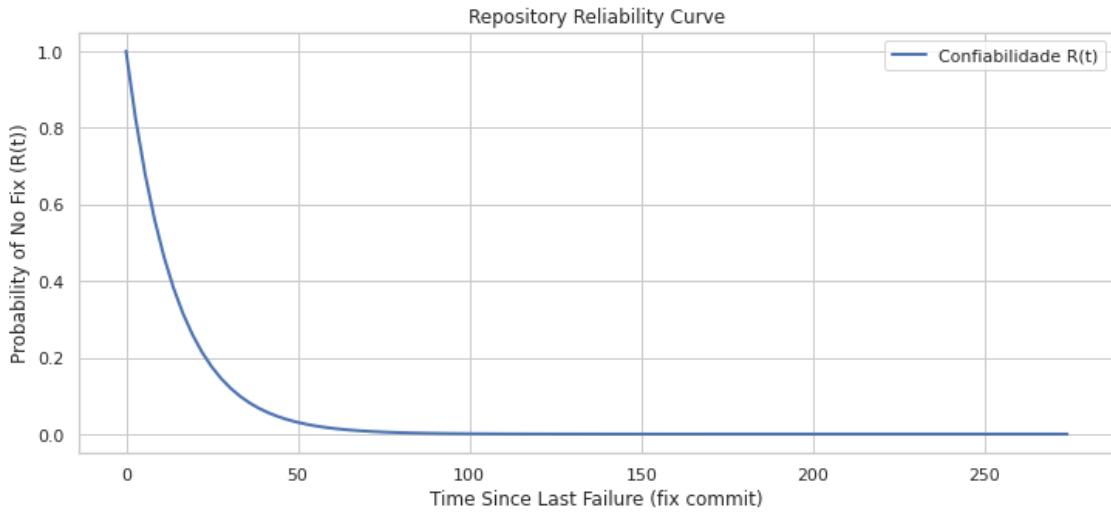
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 3 | 3.0 | 0.333333 | 0.716531 |
| .. | .. | ... | ... | ... |
| 146 | 2 | 970.0 | 0.001031 | 0.998970 |
| 147 | 2 | 1078.0 | 0.000928 | 0.999073 |
| 148 | 2 | 1239.0 | 0.000807 | 0.999193 |
| 149 | 2 | 1251.0 | 0.000799 | 0.999201 |
| 150 | 2 | 1262.0 | 0.000792 | 0.999208 |

[151 rows x 5 columns]

== java-design-patterns ==







```

Confiabilidade R(1) = 0.9327
Confiabilidade R(5) = 0.7057
Confiabilidade R(10) = 0.4981
Confiabilidade R(50) = 0.0307
Confiabilidade R(100) = 0.0009

```

filepath

```

0   filterer/src/main/java/com/iluwatar/filterer/App.java
1   monad/src/test/java/com/iluwatar/monad/MonadTest.java
2   reader-writer-lock/src/test/java/com/iluwatar/reader/writer/lock/ReaderAndWriterTest.java
3   reader-writer-lock/src/test/java/com/iluwatar/reader/writer/lock/ReaderTest.java
4   reader-writer-lock/src/test/java/com/iluwatar/reader/writer/lock/WriterTest.java
...
163  visitor/src/main/java/com/iluwatar/visitor/SoldierVisitor.java
164  visitor/src/main/java/com/iluwatar/visitor/SergeantVisitor.java
165  observer/src/test/java/com/iluwatar/observer/generic/GHobbitsTest.java
166  execute-around/src/test/java/com/iluwatar/execute/around/SimpleFileWriterTest.java
167  object-pool/src/main/java/com/iluwatar/object/pool/Oliphaunt.java

```

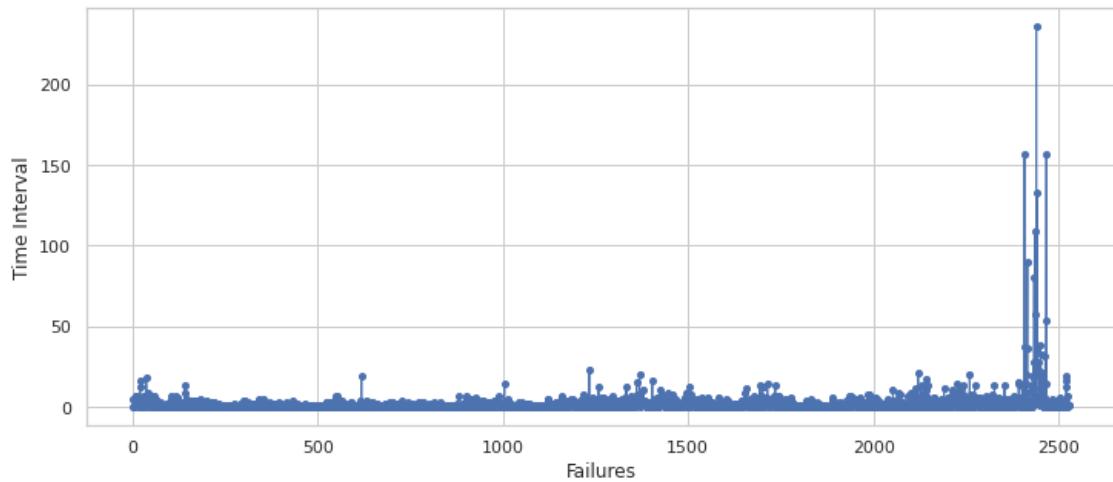
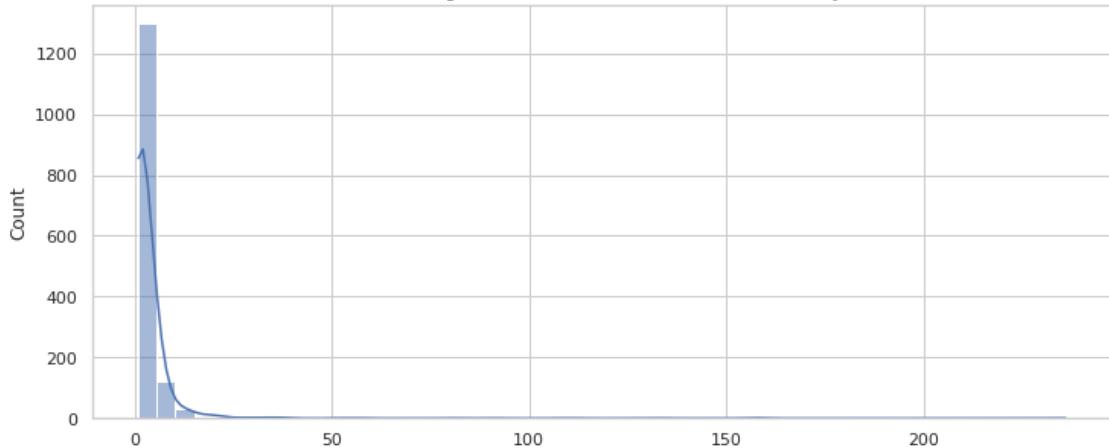
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 4 | 1.0 | 1.000000 | 0.367879 |
| 3 | 3 | 1.5 | 0.666667 | 0.513417 |
| 4 | 3 | 1.5 | 0.666667 | 0.513417 |
| ... | ... | ... | ... | ... |
| 163 | 2 | 2426.0 | 0.000412 | 0.999588 |
| 164 | 2 | 2426.0 | 0.000412 | 0.999588 |
| 165 | 2 | 3004.0 | 0.000333 | 0.999667 |
| 166 | 2 | 3053.0 | 0.000328 | 0.999673 |

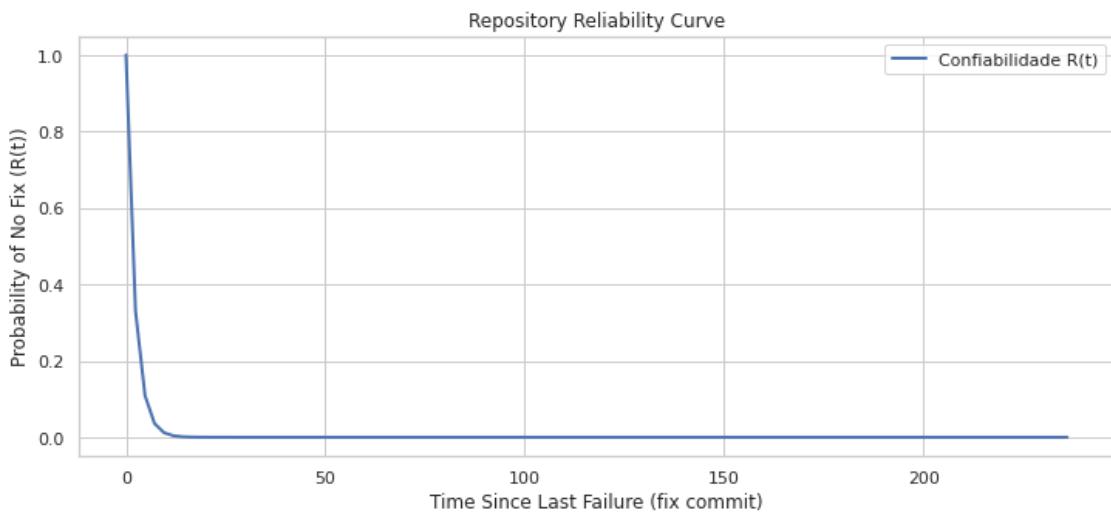
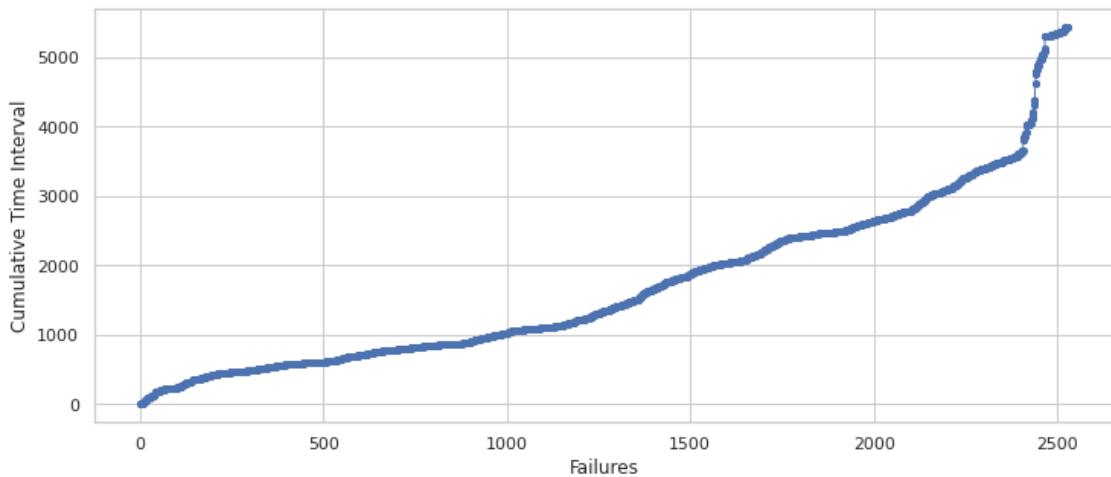
```
167 2 3063.0 0.000326 0.999674
```

```
[168 rows x 5 columns]
```

```
== derby ==
```

The histogram of Time Between Failures (TBF) derby





```

Confiabilidade R(1) = 0.6281
Confiabilidade R(5) = 0.0977
Confiabilidade R(10) = 0.0095
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

0      java/testing/org/apache/derbyTesting/functionTests/tests/lang/RawDBReaderTest.java
1      java/testing/org/apache/derbyTesting/functionTests/tests/upgradeTests/DriverUnloader.java
2      java/testing/org/apache/derbyTesting/functionTests/tests/jdbcapi/ClobUpdateableReaderTest.java
3      java/testing/org/apache/derbyTesting/functionTests/tests/store/EncryptionKeyTest.java
4      java/testing/org/apache/derbyTesting/functionTests/util/streams/LoopingAlphabetStream.java
...
1220   java/build/org/apache/derbyBuild/ClassSizeCrawler.java

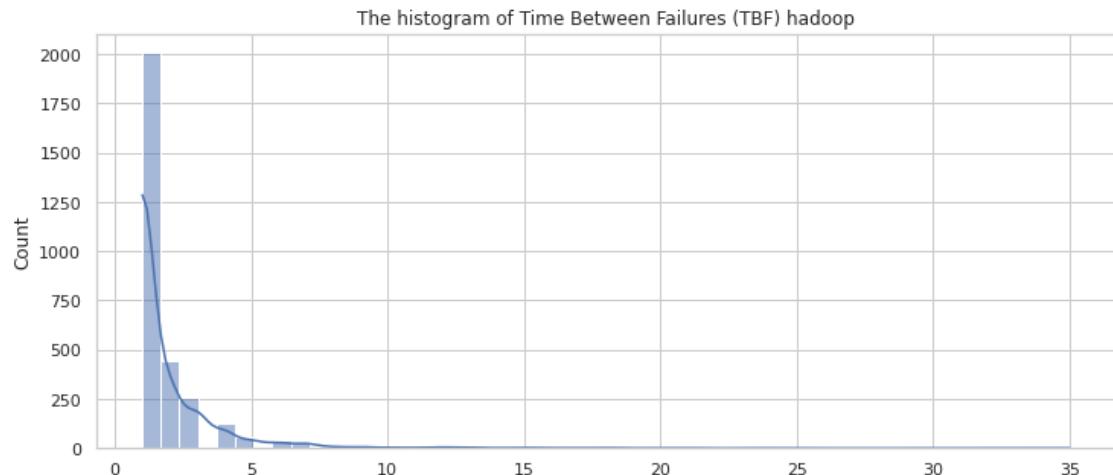
```

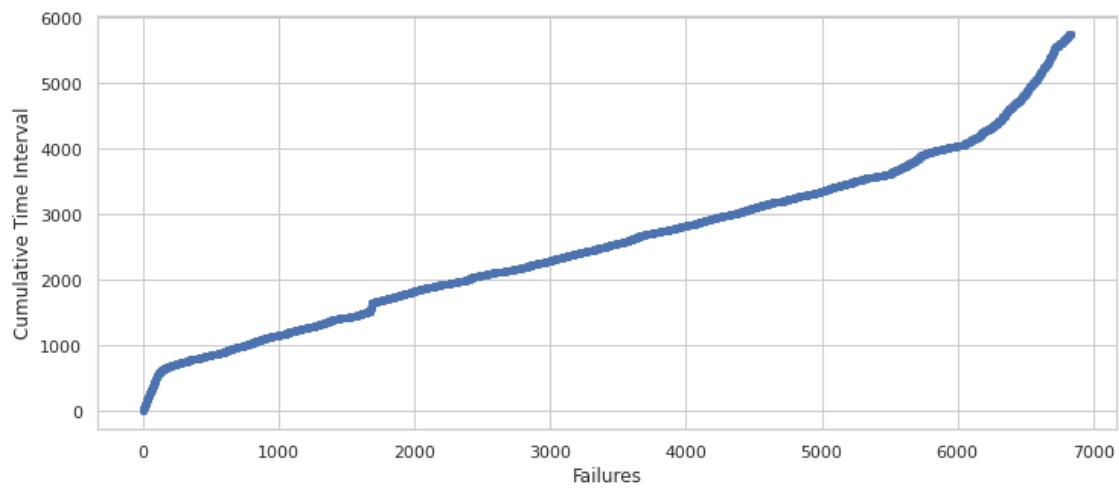
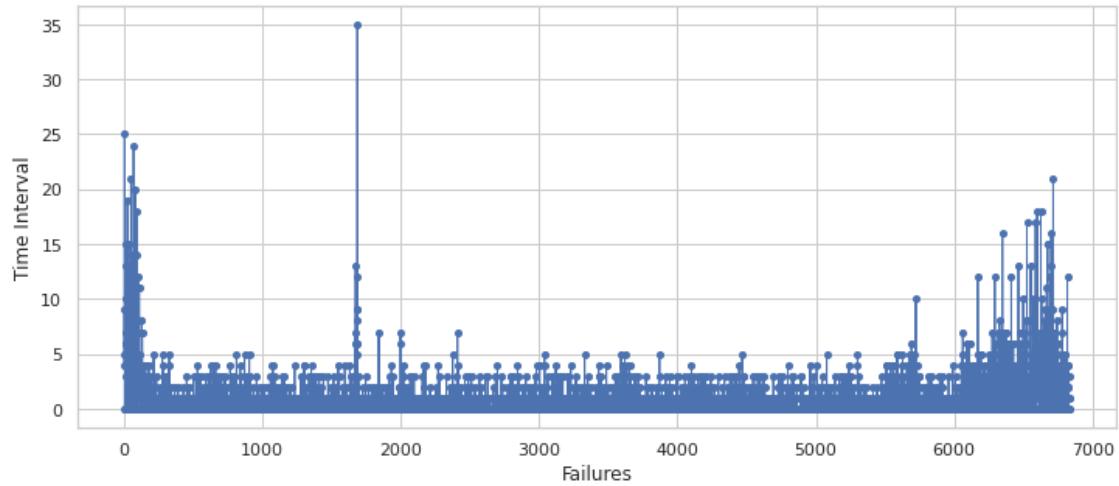
```
1221  java/engine/org/apache/derby/impl/sql/execute/IndexChanger.java  
1222  java/engine/org/apache/derby/iapi/types/SQLLongint.java  
1223  java/engine/org/apache/derby/iapi/types/SQLBoolean.java  
1224  java/build/org/apache/derbyBuild/maintversion2props.java
```

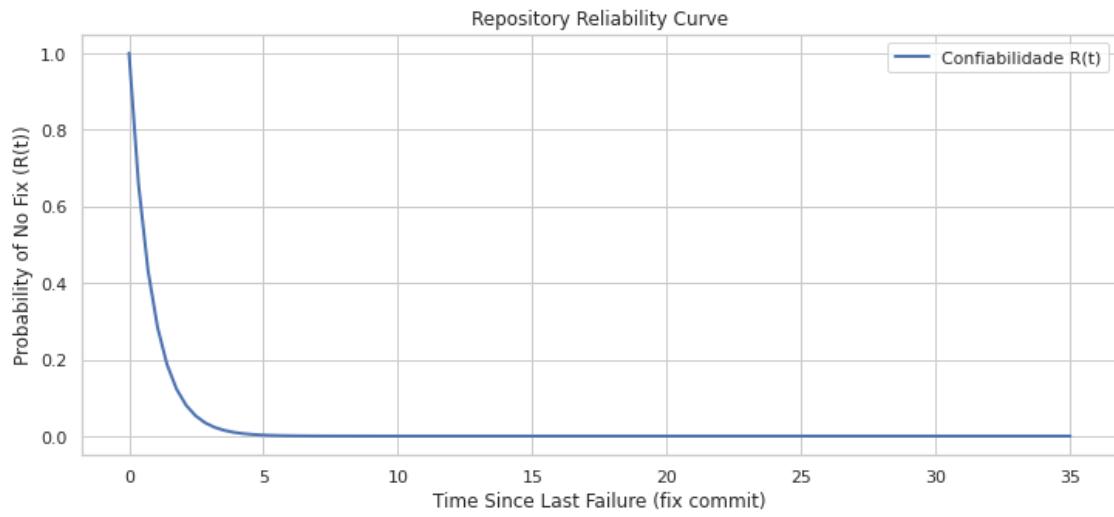
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 1220 | 2 | 3563.0 | 0.000281 | 0.999719 |
| 1221 | 2 | 3699.0 | 0.000270 | 0.999730 |
| 1222 | 2 | 4114.0 | 0.000243 | 0.999757 |
| 1223 | 2 | 4114.0 | 0.000243 | 0.999757 |
| 1224 | 2 | 4496.0 | 0.000222 | 0.999778 |

[1225 rows x 5 columns]

== hadoop ==







Confiabilidade $R(1) = 0.3053$

Confiabilidade $R(5) = 0.0027$

Confiabilidade $R(10) = 0.0000$

Confiabilidade $R(50) = 0.0000$

Confiabilidade $R(100) = 0.0000$

```

0      hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager/src
1      hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager/src
2      hadoop-hdfs-project/hadoop-hdfs/src/test/java/org/apache/hadoop/hdfs/server/blockmanagement
3      hadoop-yarn-project/hadoop-yarn/hadoop-yarn-server/hadoop-yarn-server-resourcemanager/src
4      hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/server/blockmanagement
...
3247    hadoop-hdfs-project/hadoop-hdfs/src/main/java/org/apache/hadoop/hdfs/security/token/block
3248    hadoop-hdfs-project/hadoop-hdfs/src/test/java/org/apache/hadoop/hdfs/TestHDFSTrash.java
3249    hadoop-mapreduce-project/hadoop-mapreduce-client/hadoop-mapreduce-client-jobclient/src/t
3250    hadoop-mapreduce-project/hadoop-mapreduce-client/hadoop-mapreduce-client-core/src/main/ja
3251    hadoop-mapreduce-project/hadoop-mapreduce-client/hadoop-mapreduce-client-core/src/main/ja

```

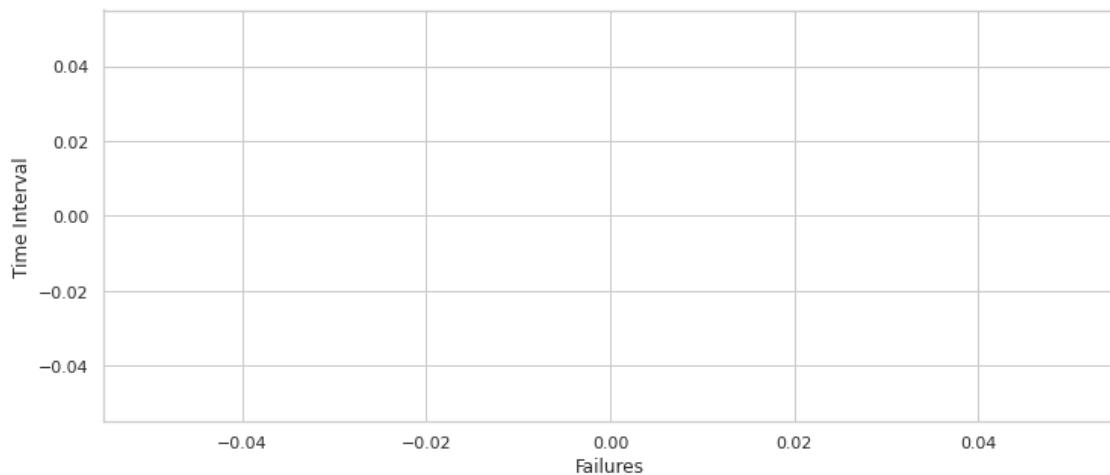
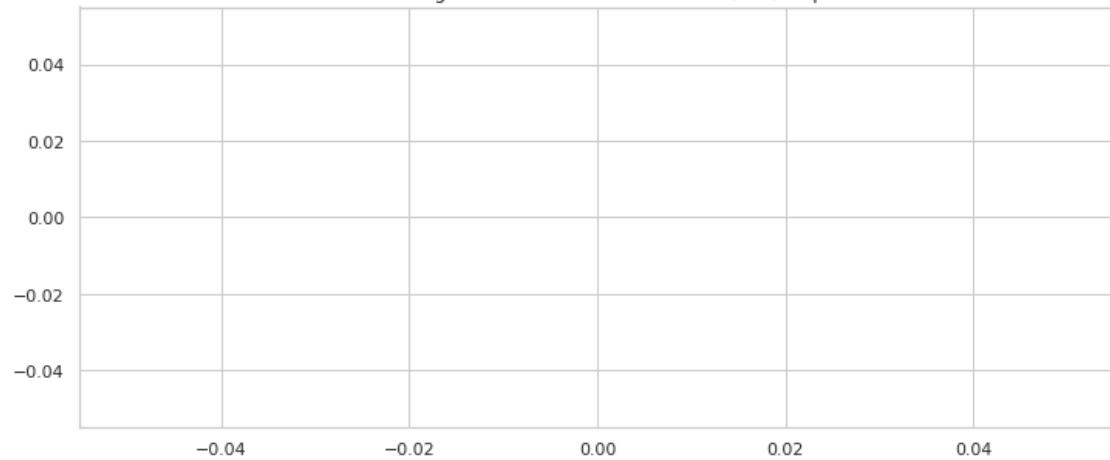
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|---------|----------------|----------|
| 0 | 5 | 0.25 | 4.000000 | 0.018316 |
| 1 | 3 | 0.50 | 2.000000 | 0.135335 |
| 2 | 3 | 0.50 | 2.000000 | 0.135335 |
| 3 | 3 | 0.50 | 2.000000 | 0.135335 |
| 4 | 3 | 0.50 | 2.000000 | 0.135335 |
| ... | ... | ... | ... | ... |
| 3247 | 2 | 4301.00 | 0.000233 | 0.999768 |
| 3248 | 2 | 4365.00 | 0.000229 | 0.999771 |
| 3249 | 2 | 4504.00 | 0.000222 | 0.999778 |
| 3250 | 2 | 4632.00 | 0.000216 | 0.999784 |

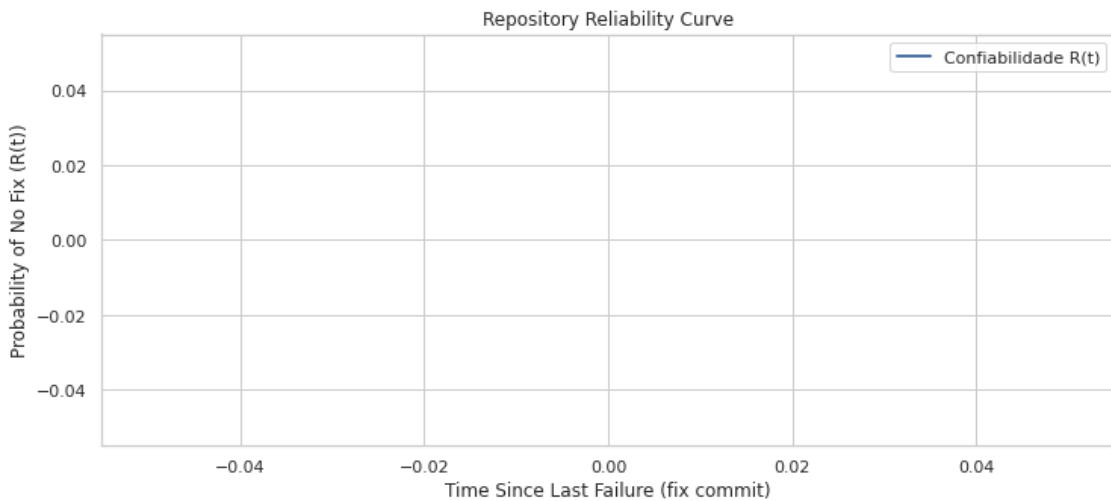
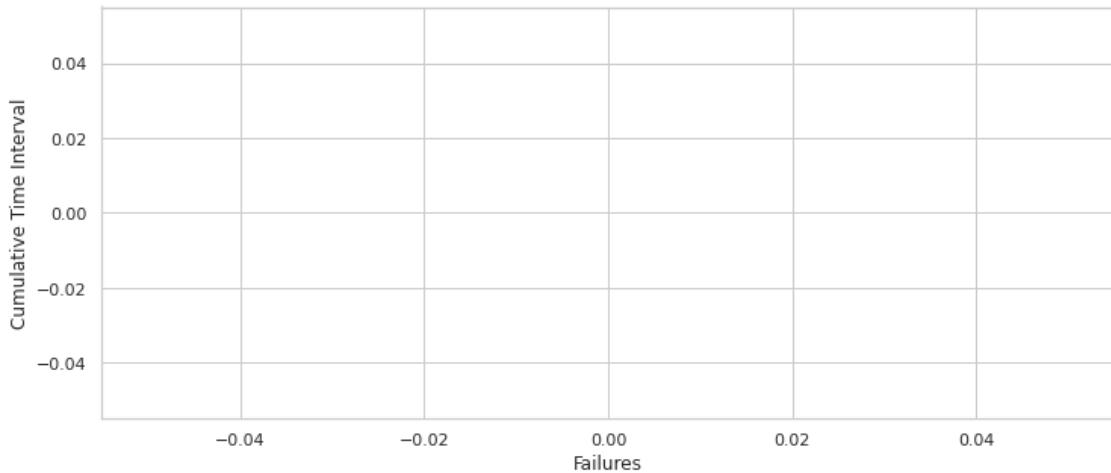
```
3251 2          4735.00  0.000211          0.999789
```

```
[3252 rows x 5 columns]
```

```
-- hsqlDb ==
```

The histogram of Time Between Failures (TBF) hsqlDb



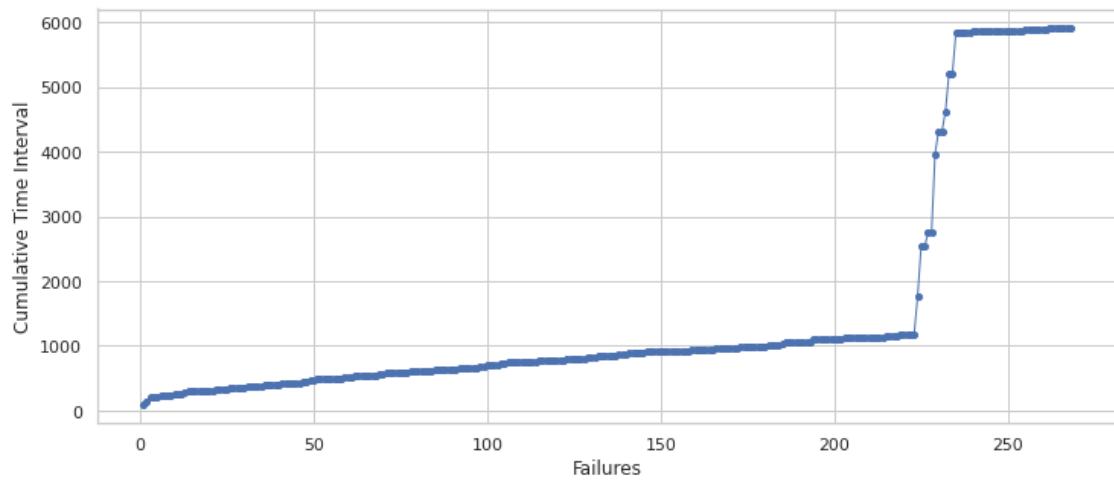
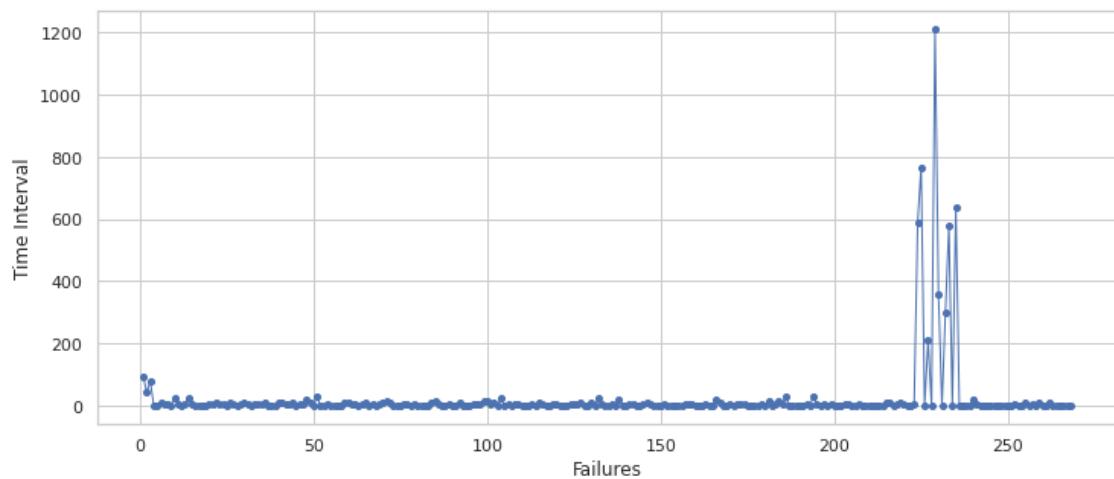
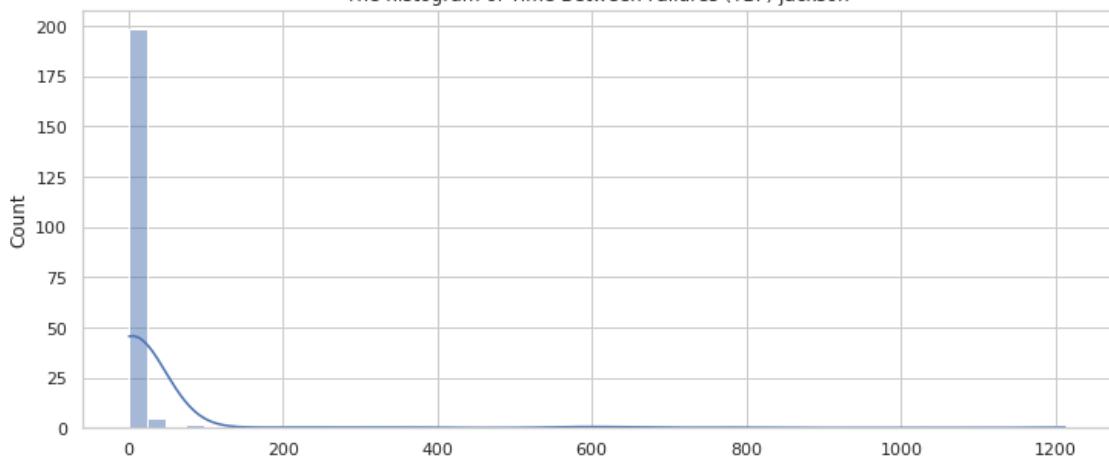


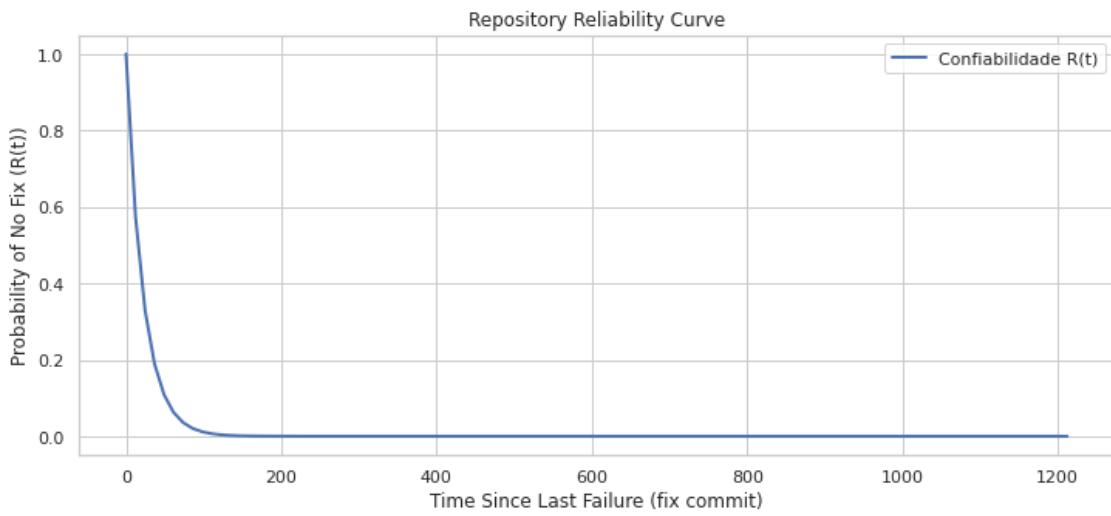
```
Confiabilidade R(1) = nan
Confiabilidade R(5) = nan
Confiabilidade R(10) = nan
Confiabilidade R(50) = nan
Confiabilidade R(100) = nan
```

```
Empty DataFrame
Columns: [filepath, n_commits, MTBF, lambda_failure, R_t]
Index: []
```

```
== jackson ==
```

The histogram of Time Between Failures (TBF) jackson





```

Confiabilidade R(1) = 0.9557
Confiabilidade R(5) = 0.7973
Confiabilidade R(10) = 0.6358
Confiabilidade R(50) = 0.1039
Confiabilidade R(100) = 0.0108

```

```

filepath \
0   src/mapper/java/org/codehaus/jackson/map/jsonstype/impl/AsArrayTypeDeserializer.java
1   src/mapper/java/org/codehaus/jackson/map/deser/ValueInstantiator.java
2   src/java/org/codehaus/jackson/sym/NameCanonicalizer.java
3   src/mapper/java/org/codehaus/jackson/map/jsonstype/impl/AsWrapperTypeDeserializer.java
4   src/test/org/codehaus/jackson/map/module/TestValueInstantiator.java
...
212  src/mapper/java/org/codehaus/jackson/map/deser/StdDeserializers.java
213  src/test/main/BaseTest.java
214  src/test/org/codehaus/jackson/map/deser/TestUnknownProperties.java
215  src/java/org/codehaus/jackson/impl/StreamBasedParserBase.java
216  src/test/org/codehaus/jackson/map/ser/TestSerializationOrder.java

```

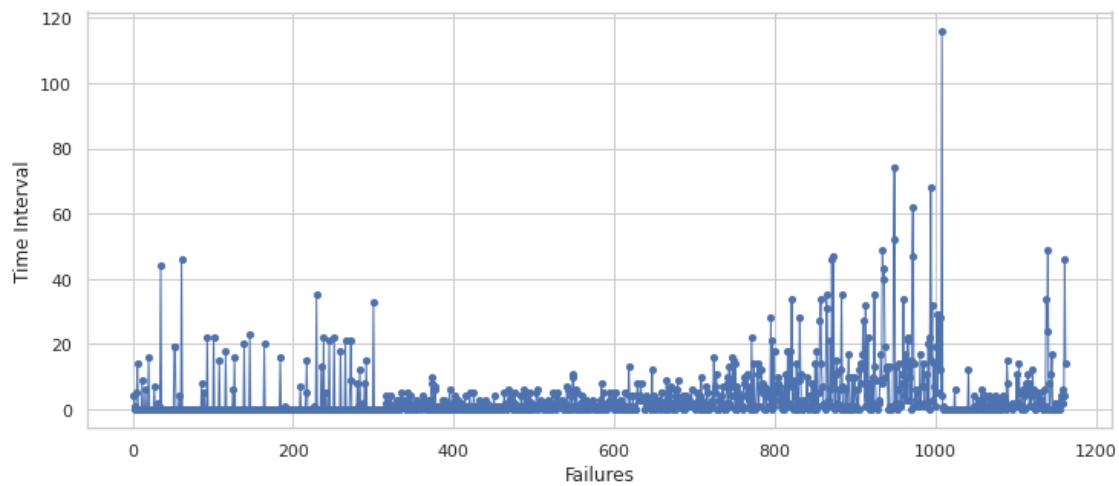
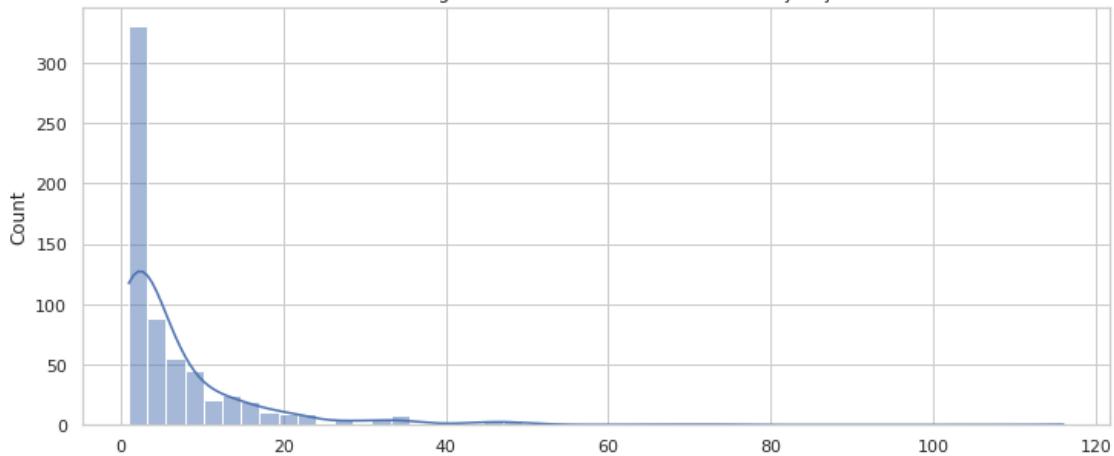
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|-------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 212 | 2 | 599.0 | 0.001669 | 0.998332 |
| 213 | 2 | 616.0 | 0.001623 | 0.998378 |

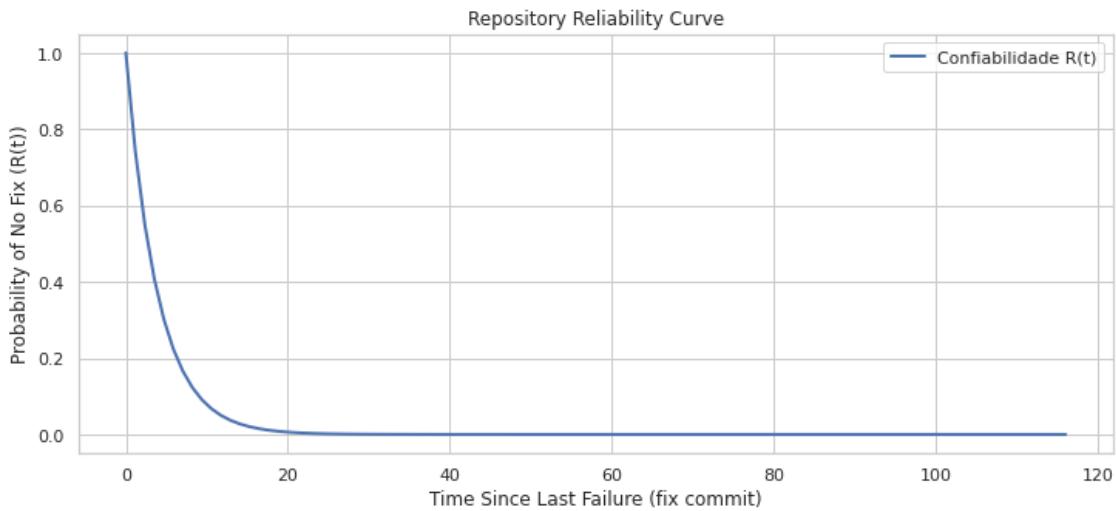
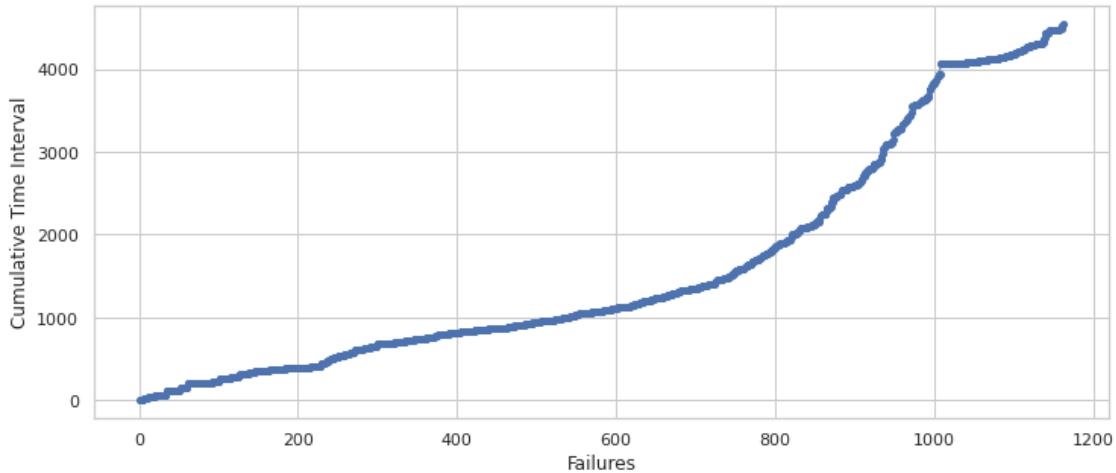
| | | | | |
|-----|---|-------|----------|----------|
| 214 | 2 | 649.0 | 0.001541 | 0.998460 |
| 215 | 2 | 660.0 | 0.001515 | 0.998486 |
| 216 | 2 | 676.0 | 0.001479 | 0.998522 |

[217 rows x 5 columns]

== j2objc ==

The histogram of Time Between Failures (TBF) j2objc





Confiabilidade $R(1) = 0.7747$

Confiabilidade $R(5) = 0.2790$

Confiabilidade $R(10) = 0.0778$

Confiabilidade $R(50) = 0.0000$

Confiabilidade $R(100) = 0.0000$

```

0      jre_emul/Tests/com/google/j2objc/util/NativeTimeZoneTest.java
1      jre_emul/android/platform/libcore/harmony-tests/src/test/java/org/apache/harmony/tests/ja
2      jre_emul/android/libcore/luni/src/main/java/java/nio/NioUtils.java
3      jre_emul/android/libcore/luni/src/main/java/java/util/concurrent/ThreadPoolExecutor.java
4      translator/src/main/java/com/google/devtools/j2objc/javac/JavacJ2ObjCIncompatibleStripper
..
402    jre_emul/Classes/com/google/j2objc/util/logging/IOSLogHandler.java

```

```
403 jre_emul/stub_classes/java/lang/reflect/Method.java
```

```
404 jre_emul/android/platform/libcore/harmony-tests/src/test/java/org/apache/harmony/tests/ja
```

```
405 jre_emul/apache_harmony/classlib/modules/beans/src/test/support/java/org/apache/harmony/be
```

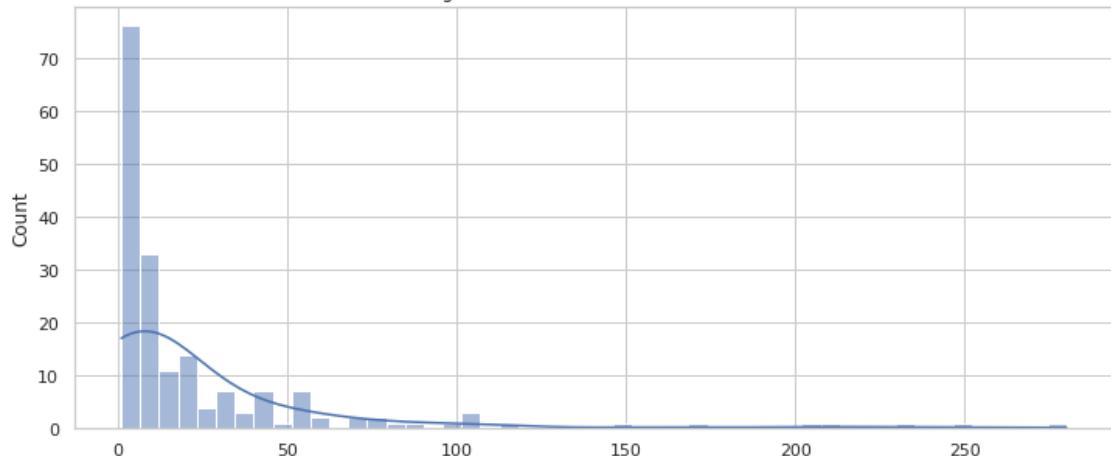
```
406 protobuf/tests/StringsTest.java
```

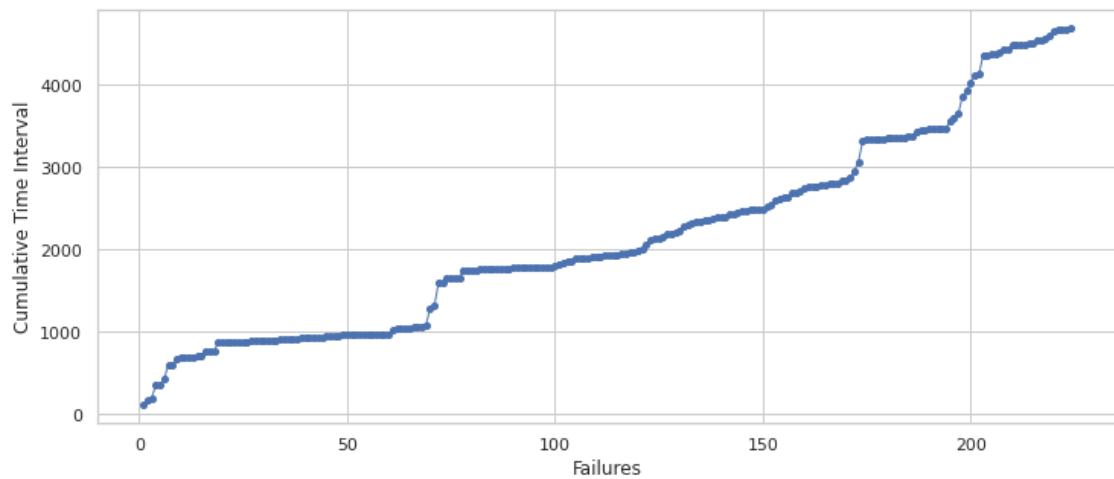
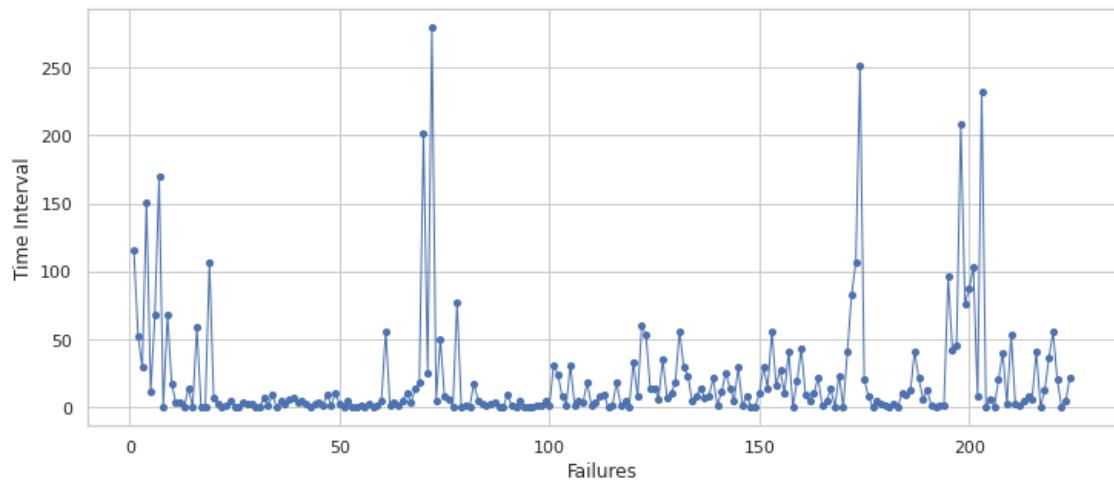
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 402 | 2 | 1774.0 | 0.000564 | 0.999436 |
| 403 | 2 | 1788.0 | 0.000559 | 0.999441 |
| 404 | 2 | 2325.0 | 0.000430 | 0.999570 |
| 405 | 2 | 2957.0 | 0.000338 | 0.999662 |
| 406 | 2 | 3227.0 | 0.000310 | 0.999690 |

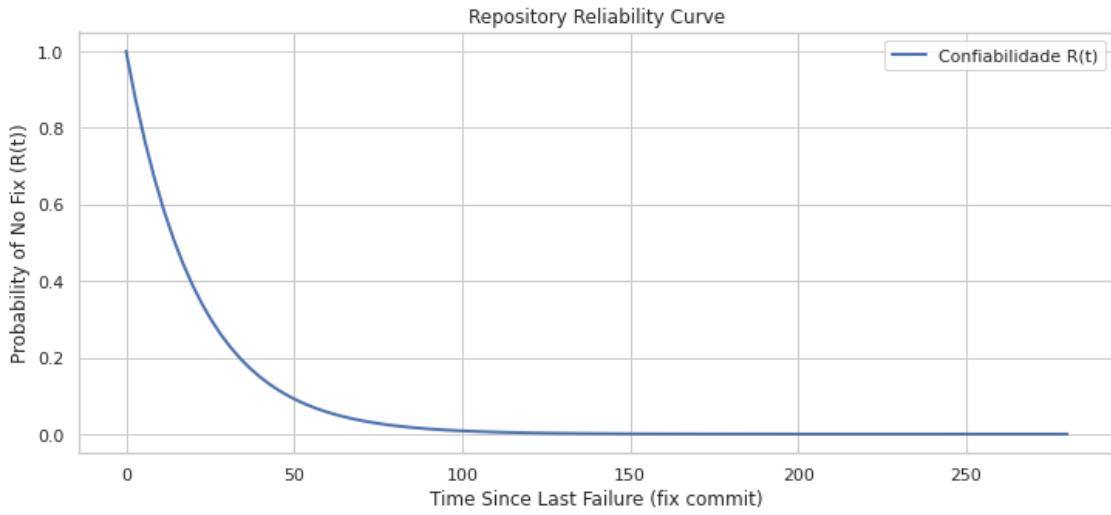
[407 rows x 5 columns]

== zuul ==

The histogram of Time Between Failures (TBF) zuul







```

Confiabilidade R(1) = 0.9534
Confiabilidade R(5) = 0.7877
Confiabilidade R(10) = 0.6205
Confiabilidade R(50) = 0.0919
Confiabilidade R(100) = 0.0085

```

filepath

```

0 zuul-netty-sample/src/main/java/com/netflix/zuul/StartServer3.java
1 zuul-core/src/main/java/com/netflix/zuul/netty/filter/ZuulFilterChainRunner.java
2 zuul-core/src/main/java/com/netflix/zuul/netty/filter/ZuulEndPointRunner.java
3 zuul-core/src/main/java/com/netflix/zuul/ZuulRunner.java
4 zuul-servlet-api/src/main/java/com/netflix/zuul/context/ServletResponseMessageWriter.java
...
78 zuul-core/src/main/java/com/netflix/zuul/filters/FilterRegistry.java
79 zuul-core/src/main/java/com/netflix/zuul/filters/ZuulFilter.java
80 zuul-core/src/main/java/com/netflix/zuul/FilterFactory.java
81 zuul-core/src/main/java/com/netflix/zuul/filters/BaseSyncFilter.java
82 zuul-core/src/main/java/com/netflix/zuul/stats/StatsManager.java

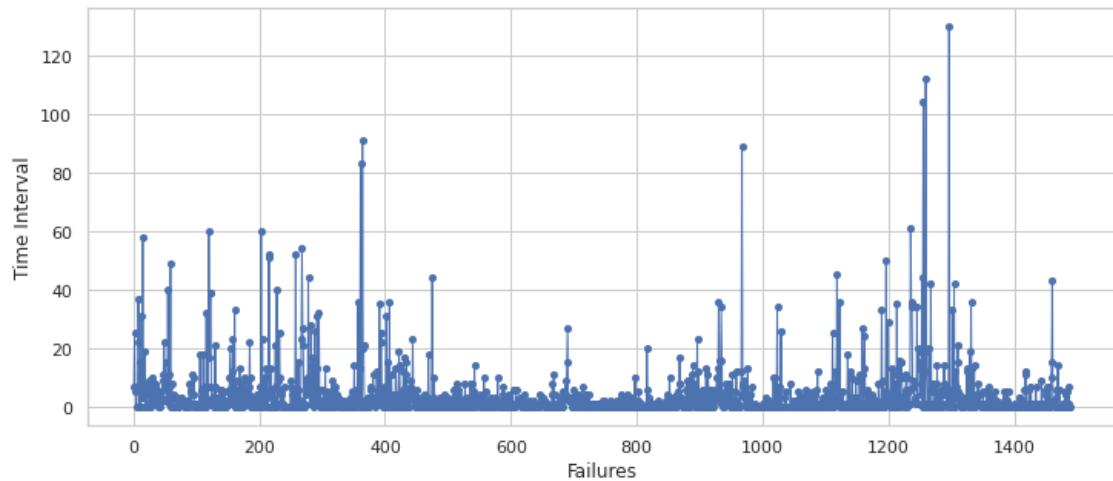
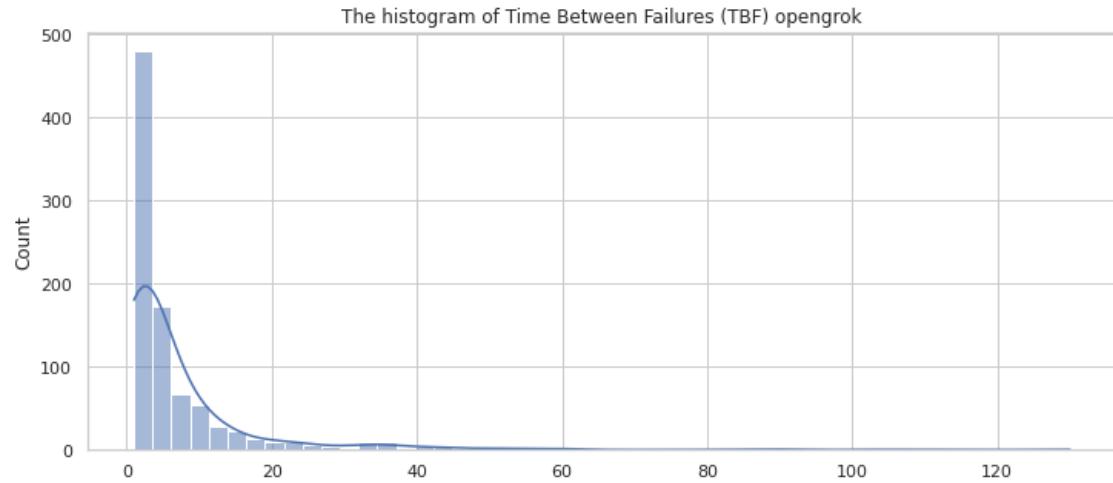
```

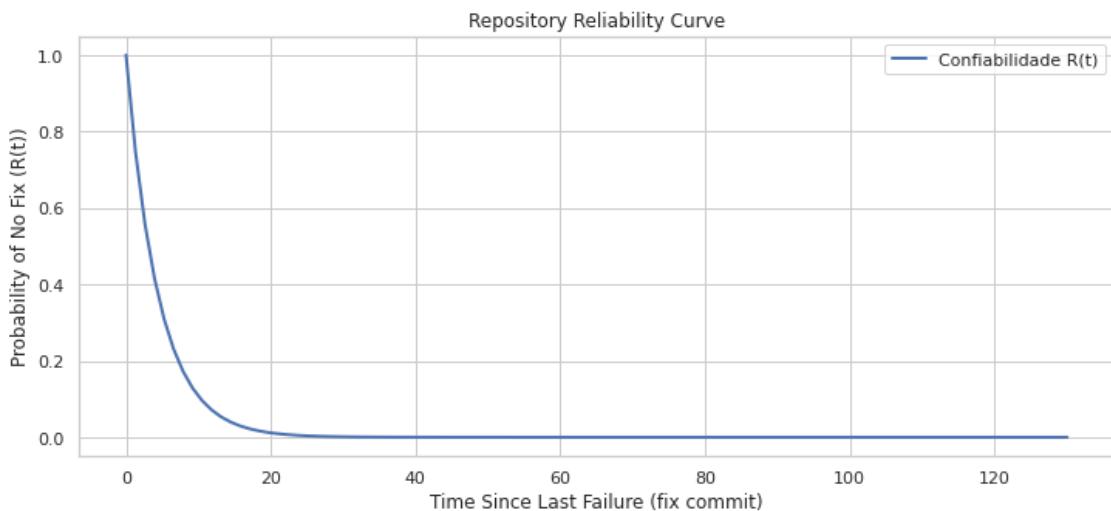
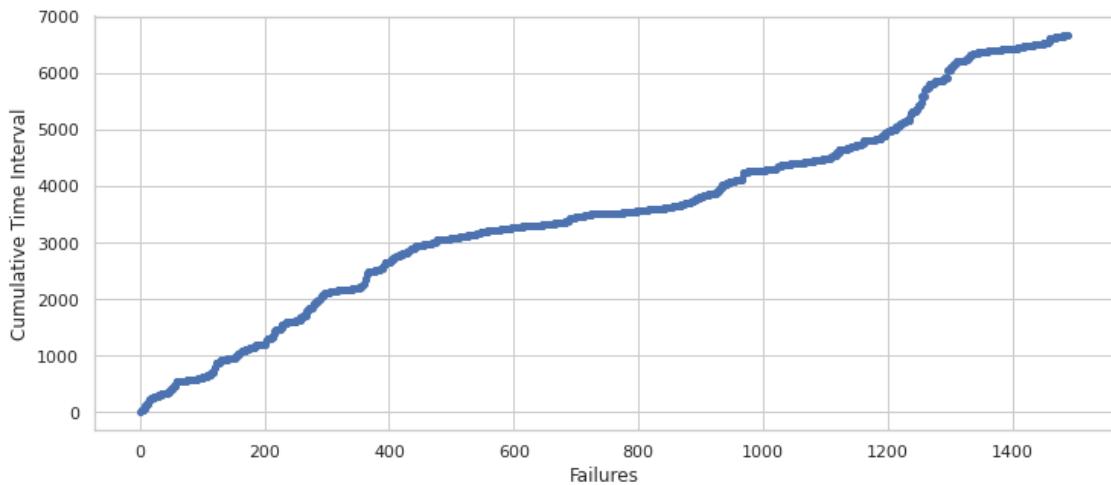
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 2.0 | 0.500000 | 0.606531 |
| 1 | 2 | 3.0 | 0.333333 | 0.716531 |
| 2 | 2 | 3.0 | 0.333333 | 0.716531 |
| 3 | 2 | 3.0 | 0.333333 | 0.716531 |
| 4 | 2 | 3.0 | 0.333333 | 0.716531 |
| ... | ... | ... | ... | ... |
| 78 | 2 | 1763.0 | 0.000567 | 0.999433 |
| 79 | 2 | 1763.0 | 0.000567 | 0.999433 |
| 80 | 2 | 1763.0 | 0.000567 | 0.999433 |
| 81 | 2 | 1806.0 | 0.000554 | 0.999446 |

82 2 2918.0 0.000343 0.999657

[83 rows x 5 columns]

== opengrok ==





Confiabilidade $R(1) = 0.8000$

Confiabilidade $R(5) = 0.3278$

Confiabilidade $R(10) = 0.1074$

Confiabilidade $R(50) = 0.0000$

Confiabilidade $R(100) = 0.0000$

```
filepath \
0  egrok/src/org/opensolaris/opengrok/egrok/model/HitContainer.java
1  egrok/src/org/opensolaris/opengrok/egrok/ui/ResultsDialog.java
2  src/org/opensolaris/opengrok/analysis/Scopes.java
3  plugins/src/opengrok/auth/plugin/decoders/MellonHeaderDecoder.java
4  plugins/LdapPlugin/src/opengrok/auth/plugin/configuration/Configuration.java
..
505 src/org/opensolaris/opengrok/management/Constants.java
```

```

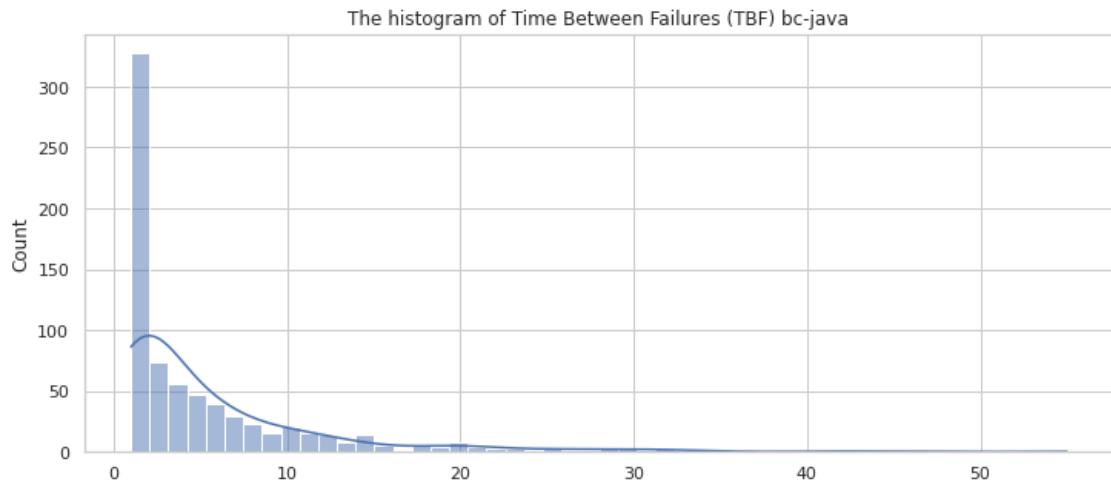
506 src/org/opensolaris/opengrok/index/IndexChangedListener.java
507 src/org/opensolaris/opengrok/history/MonotoneHistoryParser.java
508 src/org/opensolaris/opengrok/management/JMXConfiguration.java
509 src/org/opensolaris/opengrok/search/Summary.java

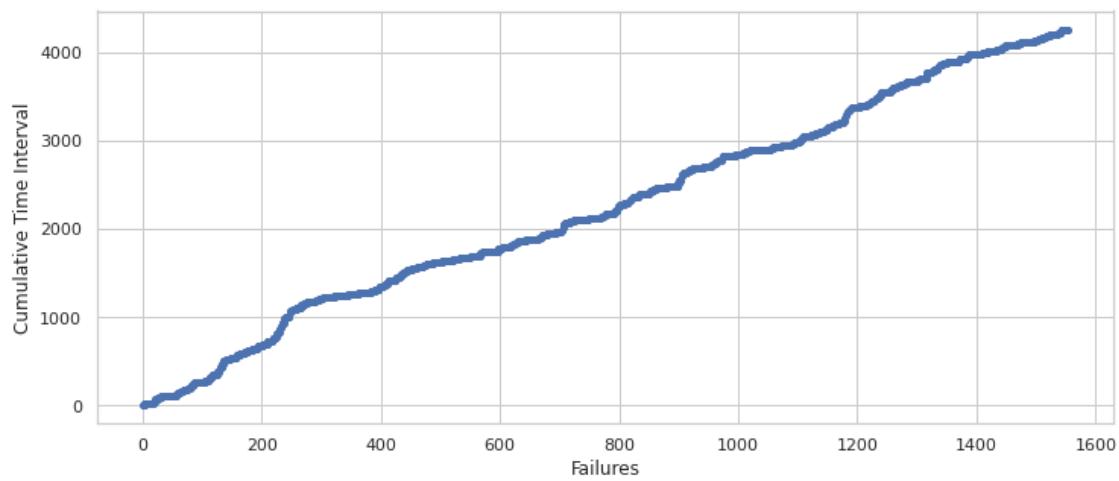
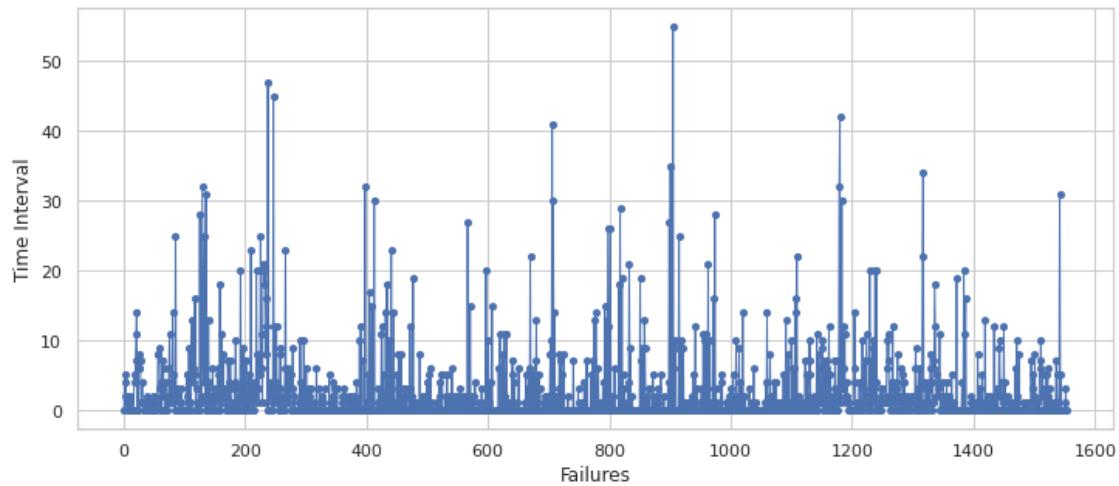
```

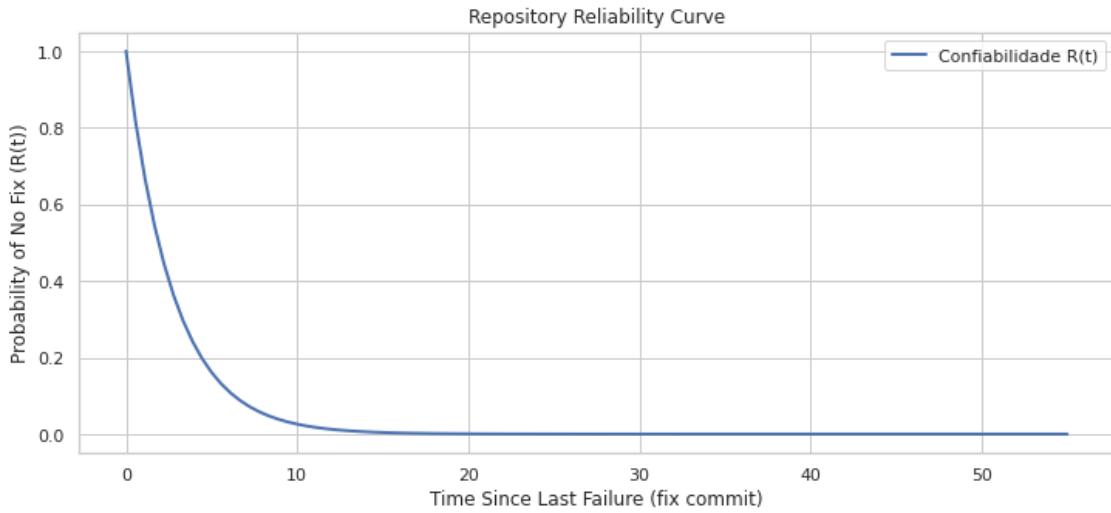
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 3 | 0.5 | 2.000000 | 0.135335 |
| 2 | 3 | 0.5 | 2.000000 | 0.135335 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 505 | 2 | 2394.0 | 0.000418 | 0.999582 |
| 506 | 2 | 2556.0 | 0.000391 | 0.999609 |
| 507 | 2 | 2660.0 | 0.000376 | 0.999624 |
| 508 | 2 | 3002.0 | 0.000333 | 0.999667 |
| 509 | 2 | 4237.0 | 0.000236 | 0.999764 |

[510 rows x 5 columns]

== bc-java ==







```

Confiabilidade R(1) = 0.6941
Confiabilidade R(5) = 0.1612
Confiabilidade R(10) = 0.0260
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

0   core/src/main/java/org/bouncycastle/pqc/crypto/qtesla/QTESLA.java
1   pkix/src/test/java/org/bouncycastle/mime/test/TestSMIMEEnvelope.java
2   core/src/main/java/org/bouncycastle/pqc/crypto/gemss/Rem_GF2n.java
3   core/src/main/java/org/bouncycastle/asn1/BERTaggedObject.java
4   core/src/main/java/org/bouncycastle/crypto/digests/Blake2sDigest.java
...
497  pg/src/main/java/org/bouncycastle/openpgp/operator/jcajce/JcePBEKeyEncryptionMethodGenerator.java
498  pg/src/main/java/org/bouncycastle/openpgp/operator/PGPKeyEncryptionMethodGenerator.java
499  core/src/main/java/org/bouncycastle/math/ec/tools/DiscoverEndomorphisms.java
500  pg/src/main/java/org/bouncycastle/openpgp/operator/bc/BcImplProvider.java
501  core/src/test/java/org/bouncycastle/i18n/test/LocalizedMessageTest.java

```

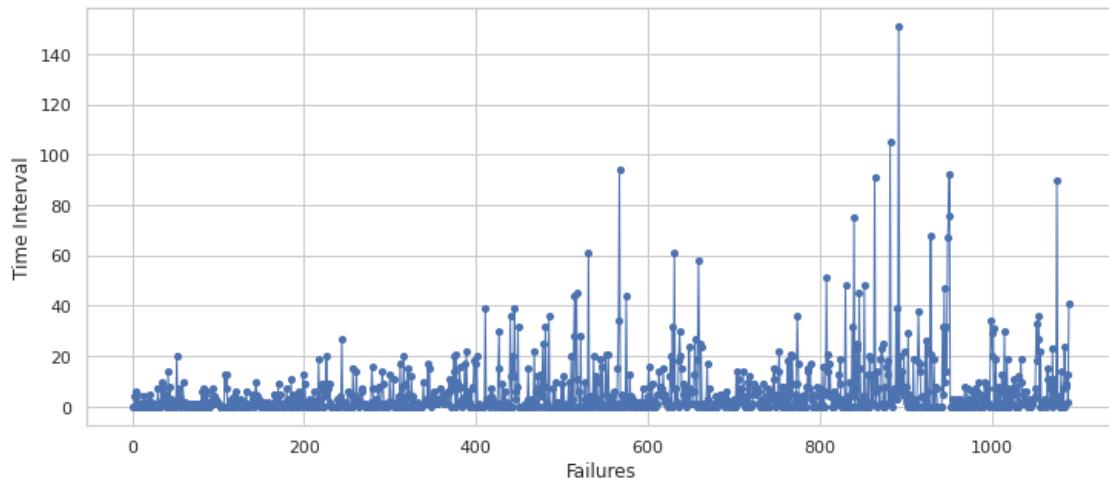
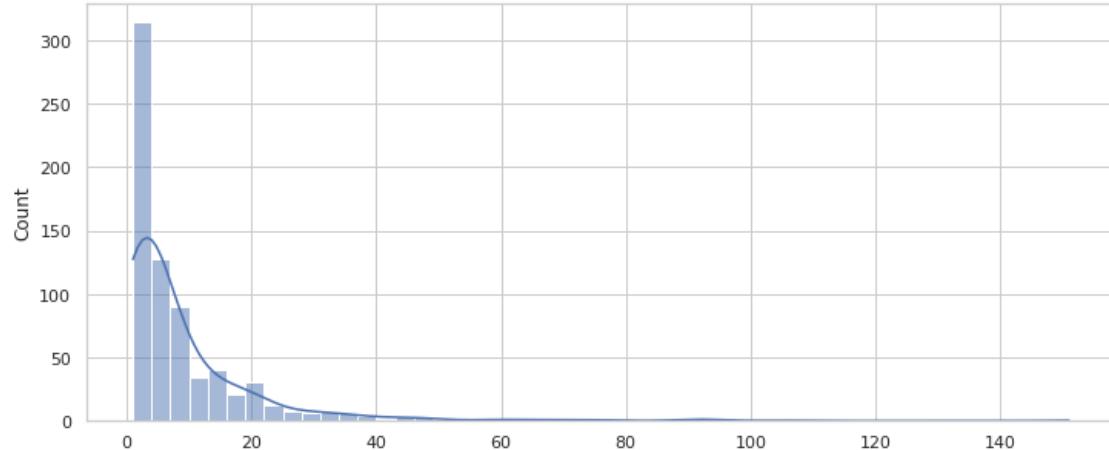
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|-------------|----------------|----------|
| 0 | 10 | 0.111111 | 9.000000 | 0.000123 |
| 1 | 6 | 0.200000 | 5.000000 | 0.006738 |
| 2 | 6 | 0.200000 | 5.000000 | 0.006738 |
| 3 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 4 | 4 | 0.333333 | 3.000000 | 0.049787 |
| ... | ... | ... | ... | ... |
| 497 | 2 | 3593.000000 | 0.000278 | 0.999722 |
| 498 | 2 | 3595.000000 | 0.000278 | 0.999722 |
| 499 | 2 | 3615.000000 | 0.000277 | 0.999723 |
| 500 | 2 | 3797.000000 | 0.000263 | 0.999737 |

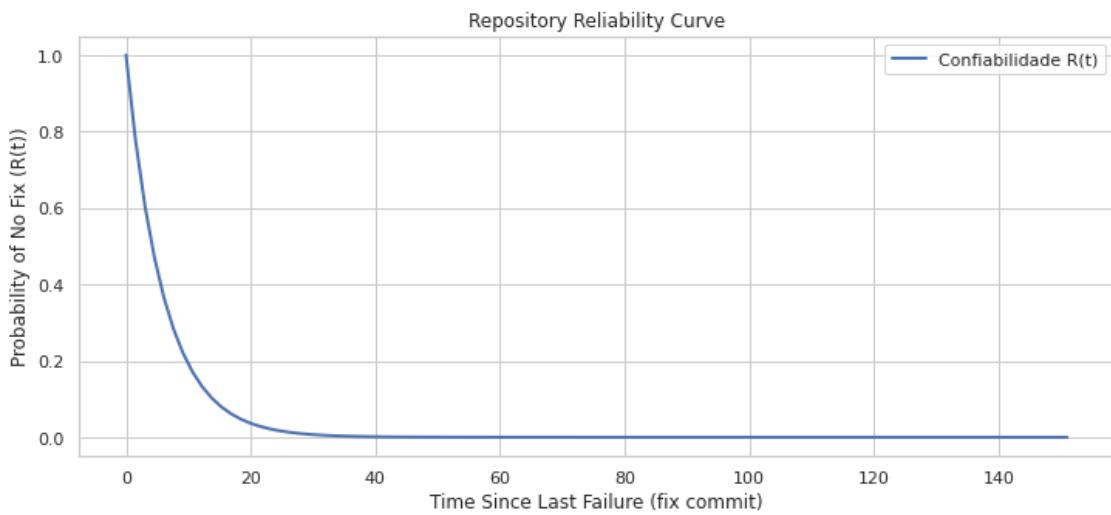
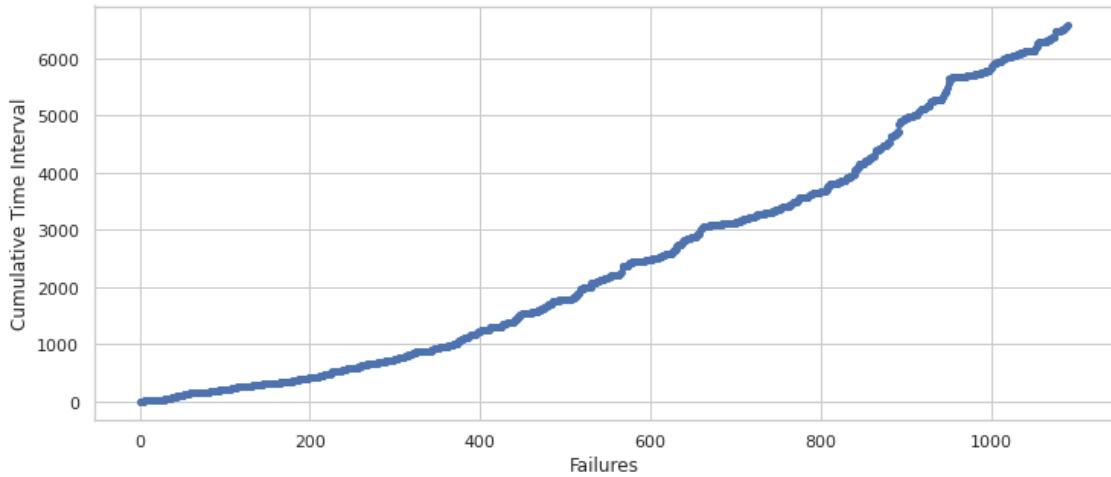
```
501 2          3892.000000 0.000257          0.999743
```

```
[502 rows x 5 columns]
```

```
== cayenne ==
```

The histogram of Time Between Failures (TBF) cayenne





Confiabilidade $R(1) = 0.8474$

Confiabilidade $R(5) = 0.4371$

Confiabilidade $R(10) = 0.1910$

Confiabilidade $R(50) = 0.0003$

Confiabilidade $R(100) = 0.0000$

```

0   framework/cayenne-jdk1.5-unpublished/src/test/java/org/apache/cayenne/access/NestedDataC
1   framework/cayenne-jdk1.4-unpublished/src/main/java/org/apache/cayenne/CayenneContext.java
2   framework/cayenne-jdk1.5-unpublished/src/main/java/org/apache/cayenne/access/ObjectTreeRe
3   framework/cayenne-jdk1.5-unpublished/src/test/java/org/apache/cayenne/access/NestedDataC
4   cayenne-server/src/test/java/org/apache/cayenne/dba/JdbcPkGeneratorTest.java
...
1171 tutorials/tutorial-rop-client/src/main/java/org/apache/cayenne/tutorial/persistent/client
...
```

```

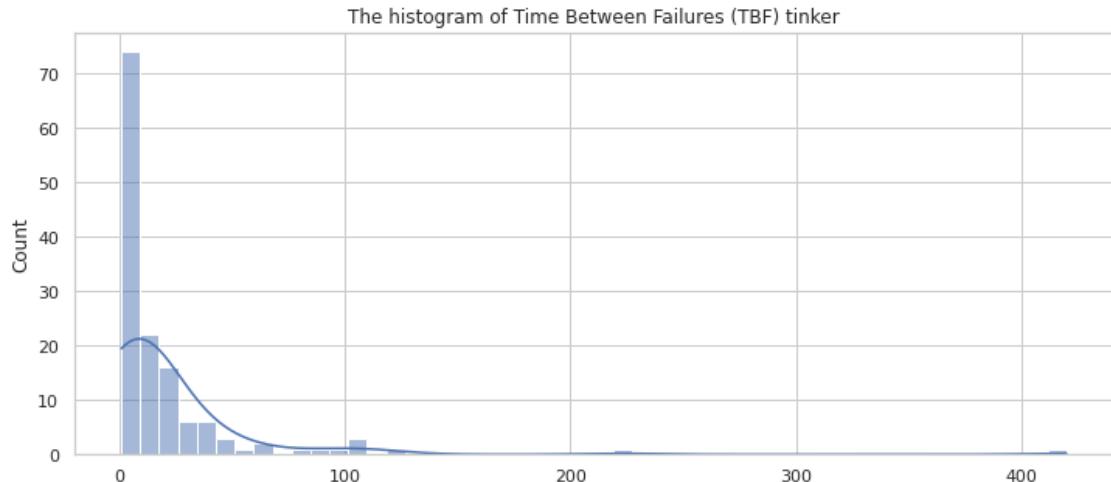
1172 tutorials/tutorial-rop-server/src/main/java/org/apache/cayenne/tutorial/persistent/client
1173 tutorials/tutorial-rop-client/src/main/java/org/apache/cayenne/tutorial/persistent/client
1174 tutorials/tutorial/src/main/java/org/apache/cayenne/tutorial/persistent/Painting.java
1175 tutorials/tutorial-rop-server/src/main/java/org/apache/cayenne/tutorial/persistent/Galler

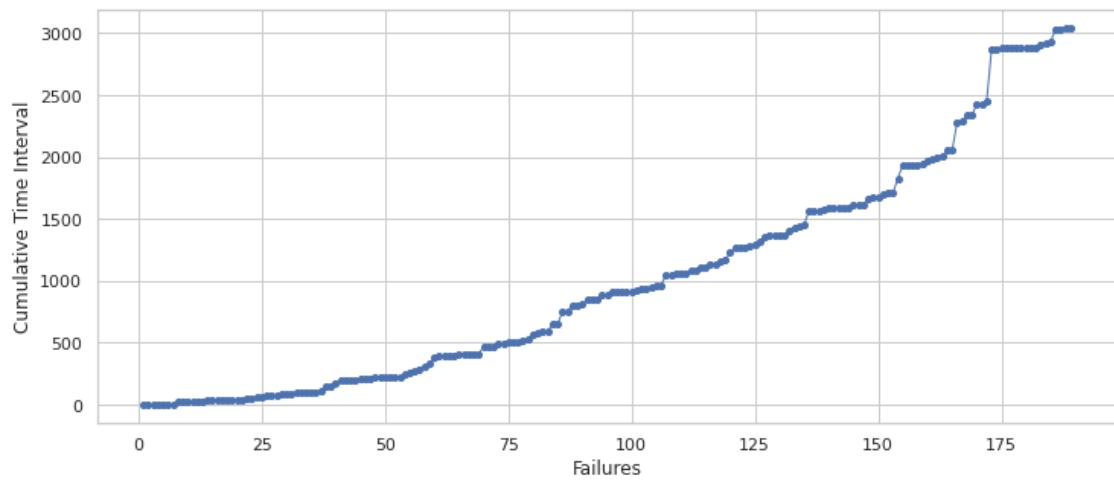
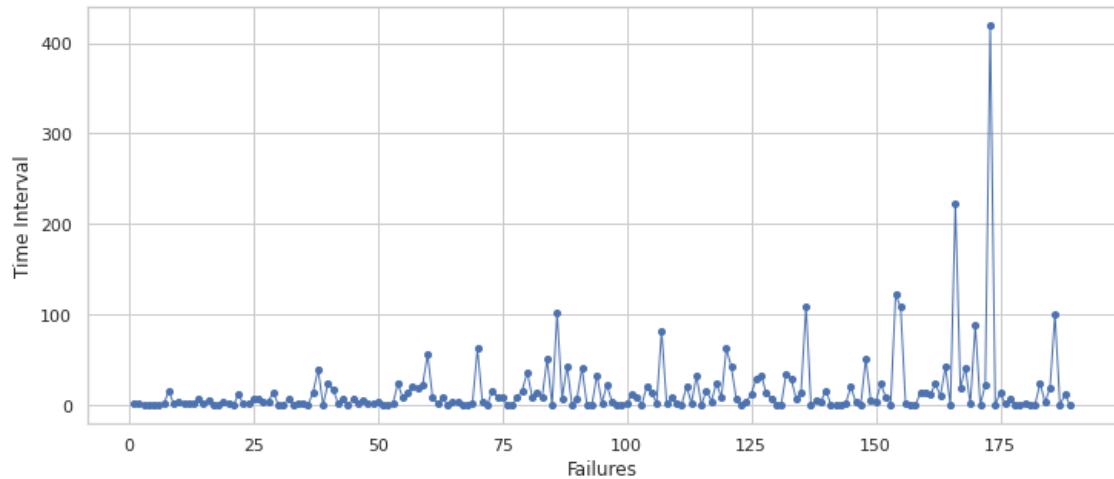
      n_commits      MTBF  lambda_failure      R_t
0         3           0.5     2.000000  0.135335
1         2           1.0     1.000000  0.367879
2         2           1.0     1.000000  0.367879
3         2           1.0     1.000000  0.367879
4         2           1.0     1.000000  0.367879
...
1171    2          3411.0   0.000293  0.999707
1172    2          3411.0   0.000293  0.999707
1173    2          3411.0   0.000293  0.999707
1174    2          3411.0   0.000293  0.999707
1175    2          3411.0   0.000293  0.999707

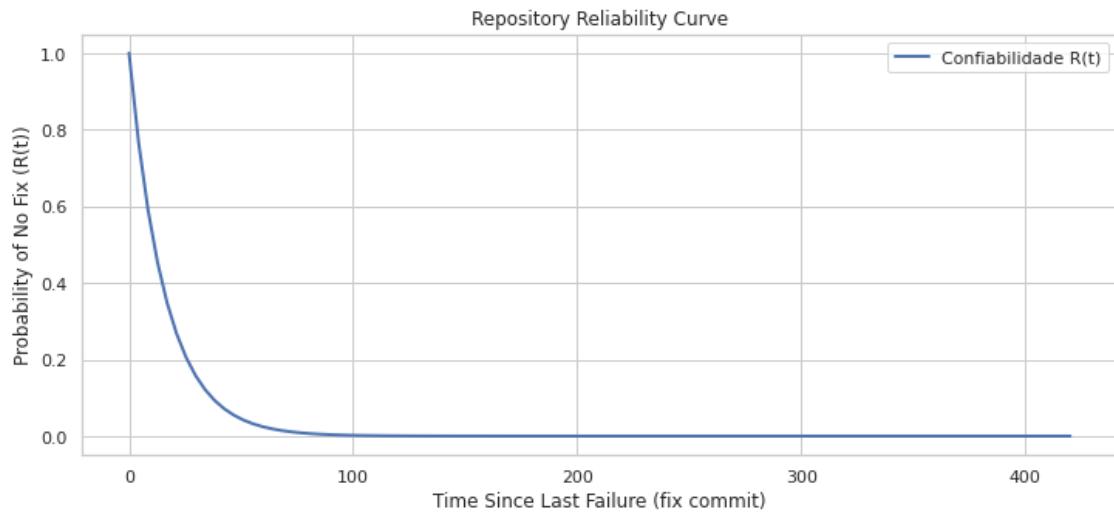
```

[1176 rows x 5 columns]

== tinker ==







```

Confiabilidade R(1) = 0.9398
Confiabilidade R(5) = 0.7330
Confiabilidade R(10) = 0.5372
Confiabilidade R(50) = 0.0448
Confiabilidade R(100) = 0.0020

```

```

0  tinker-android/tinker-android-loader/src/main/java/com/tencent/tinker/loader/TinkerResource
1  tinker-build/tinker-patch-lib/src/main/java/com/tencent/tinker/build/builder/PatchBuilder.
2  tinker-android/tinker-android-lib/src/main/java/com/tencent/tinker/lib/patch/BasePatchInte
3  tinker-android/tinker-android-loader/src/main/java/com/tencent/tinker/loader/shareutil/Acti
4  tinker-android/tinker-android-loader/src/main/java/com/tencent/tinker/loader/shareutil/Inst
..
61  tinker-build/tinker-patch-cli/src/main/java/com/tencent/tinker/patch/CliMain.java
62  tinker-android/tinker-android-lib/src/main/java/com/tencent/tinker/lib/util/TinkerServiceIn
63  tinker-build/tinker-patch-lib/src/main/java/com/tencent/tinker/build/info/PatchInfoGen.java
64  tinker-android/tinker-android-lib/src/main/java/com/tencent/tinker/lib/service/PatchResult
65  tinker-android/tinker-android-lib/src/main/java/com/tencent/tinker/lib/tinker/TinkerInstall

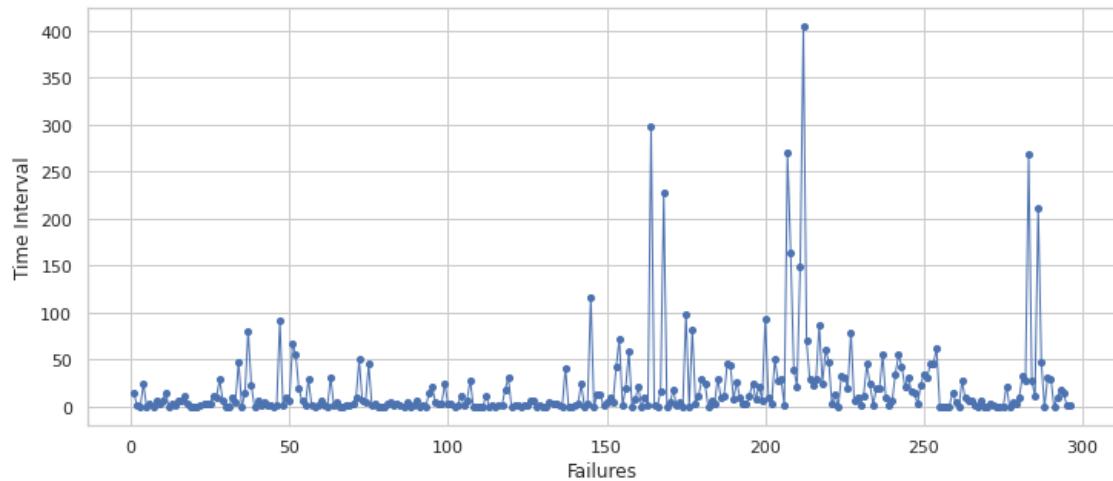
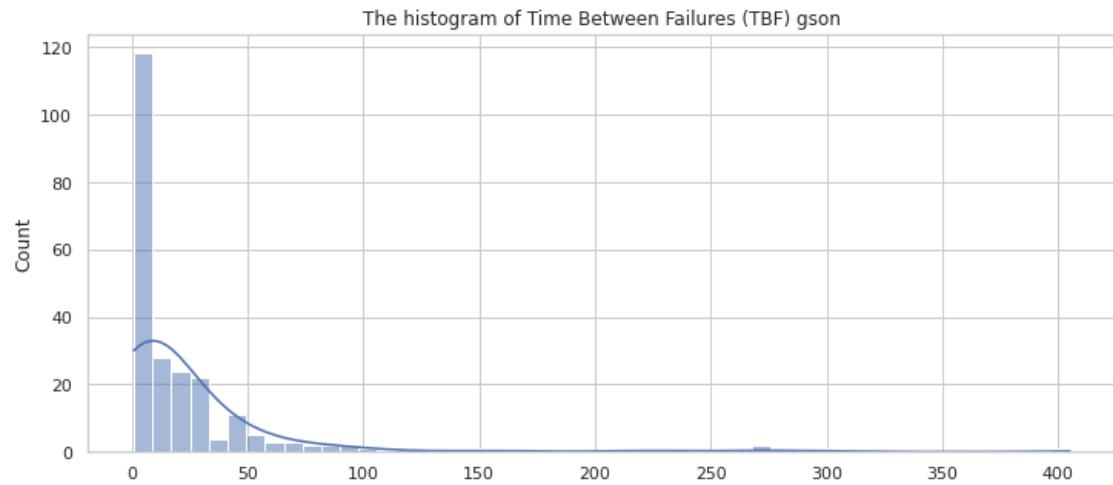
```

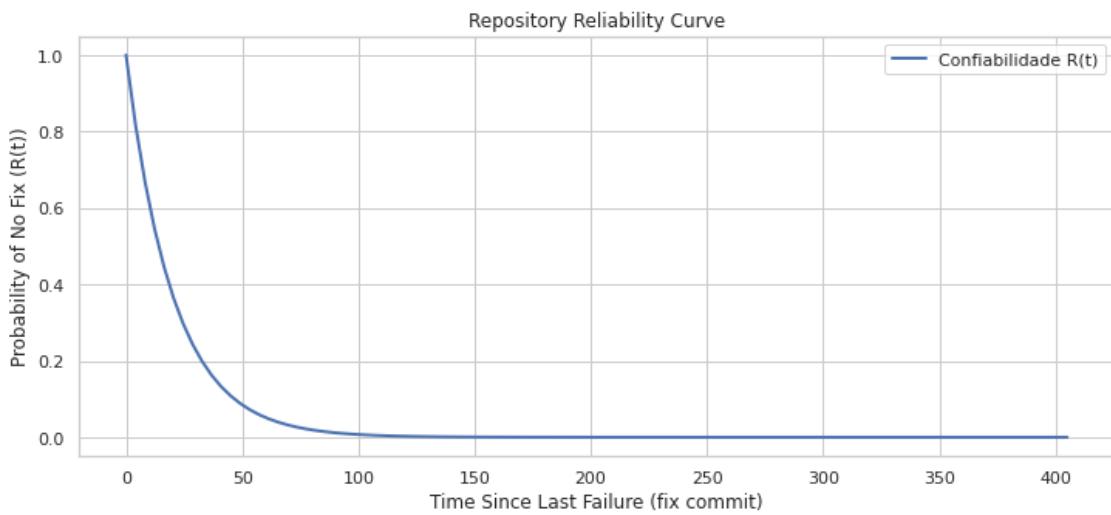
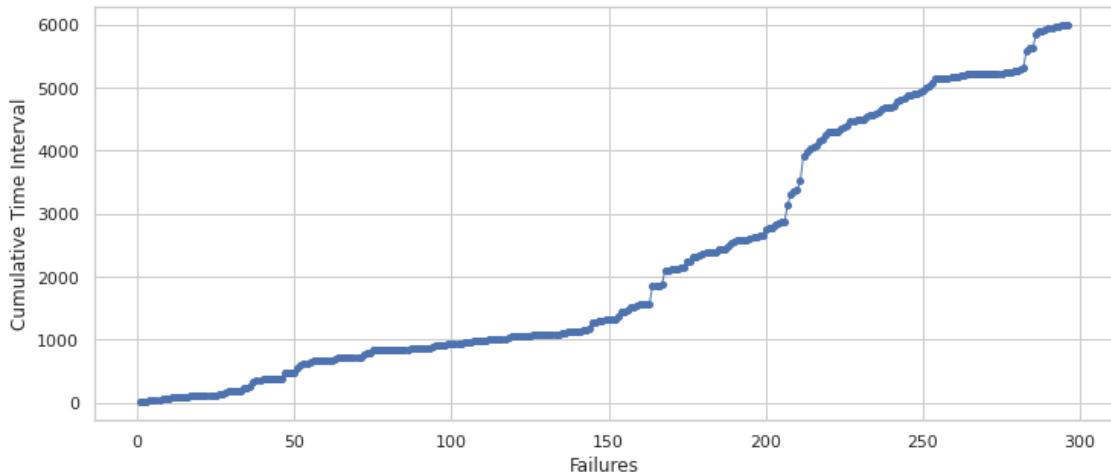
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 3 | 4.5 | 0.222222 | 0.800737 |
| 3 | 2 | 7.0 | 0.142857 | 0.866878 |
| 4 | 2 | 7.0 | 0.142857 | 0.866878 |
| ... | ... | ... | ... | ... |
| 61 | 2 | 1178.0 | 0.000849 | 0.999151 |
| 62 | 2 | 1184.0 | 0.000845 | 0.999156 |
| 63 | 2 | 2158.0 | 0.000463 | 0.999537 |
| 64 | 2 | 2174.0 | 0.000460 | 0.999540 |

```
65 2          2174.0  0.000460      0.999540
```

```
[66 rows x 5 columns]
```

```
== gson ==
```





```

Confiabilidade R(1) = 0.9518
Confiabilidade R(5) = 0.7813
Confiabilidade R(10) = 0.6104
Confiabilidade R(50) = 0.0848
Confiabilidade R(100) = 0.0072
  
```

```

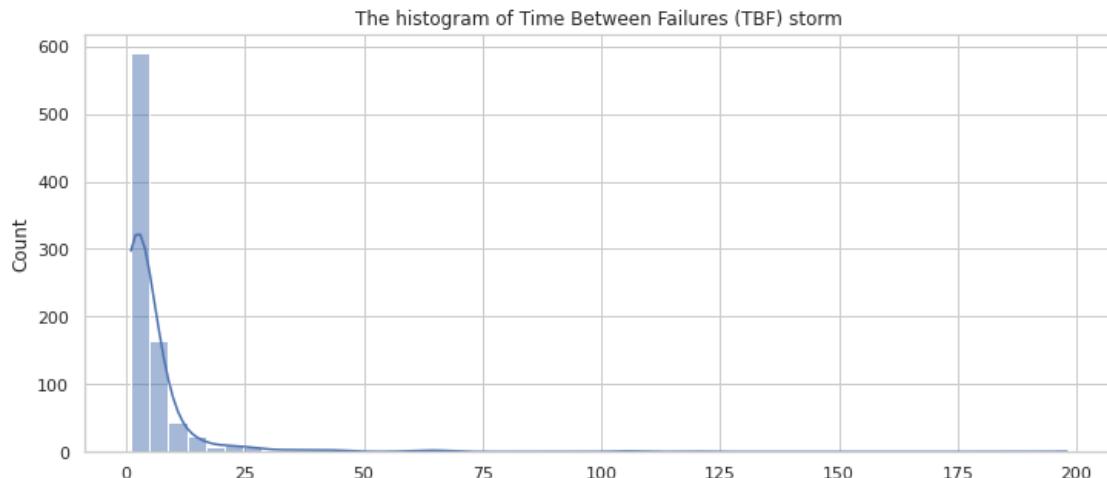
filepath \
0   extras/src/main/java/com/google/gson/graph/GraphTypeAdapterFactory.java
1   gson/src/test/java/com/google/gson/internal/LinkedHashMapTest.java
2   gson/src/main/java/com/google/gson/ReflectingFieldNavigator.java
3   gson/src/main/java/com/google/gson/JsonParserImplConstants.java
4   gson/src/main/java/com/google/gson/JsonParserImpl.java
..
168  gson/src/test/java/com/google/gson/InnerClassExclusionStrategyTest.java
  
```

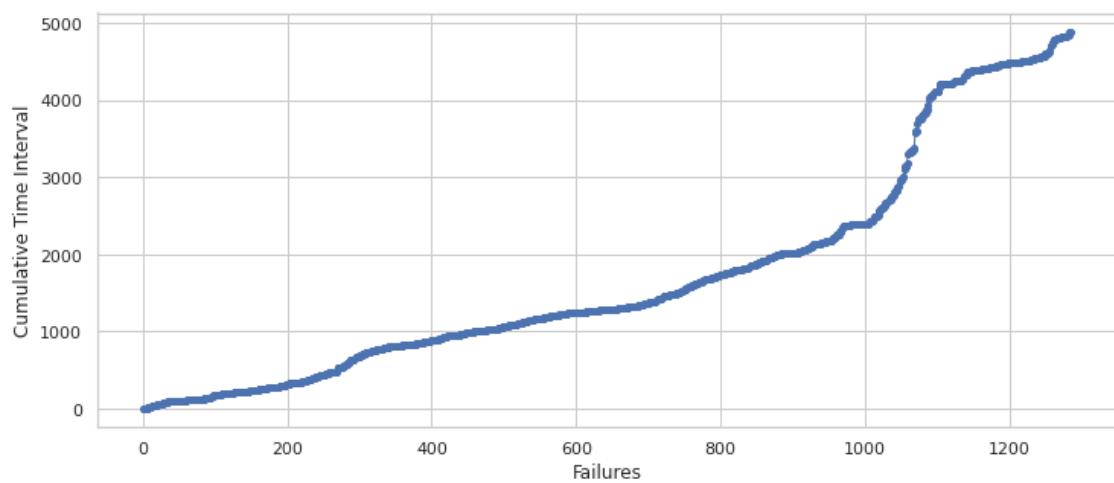
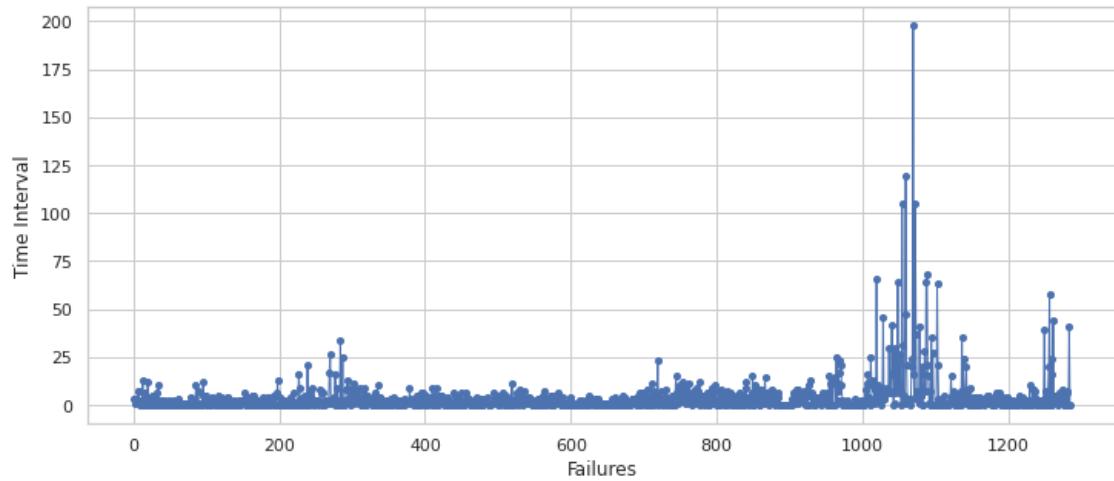
```
169  gson/src/main/java/com/google/gson/internal/JsonReaderInternalAccess.java  
170  gson/src/test/java/com/google/gson/functional/TypeAdapterPrecedenceTest.java  
171  gson/src/test/java/com/google/gson/PrimitiveTypeAdapter.java  
172  gson/src/test/java/com/google/gson/functional/PrintFormattingTest.java
```

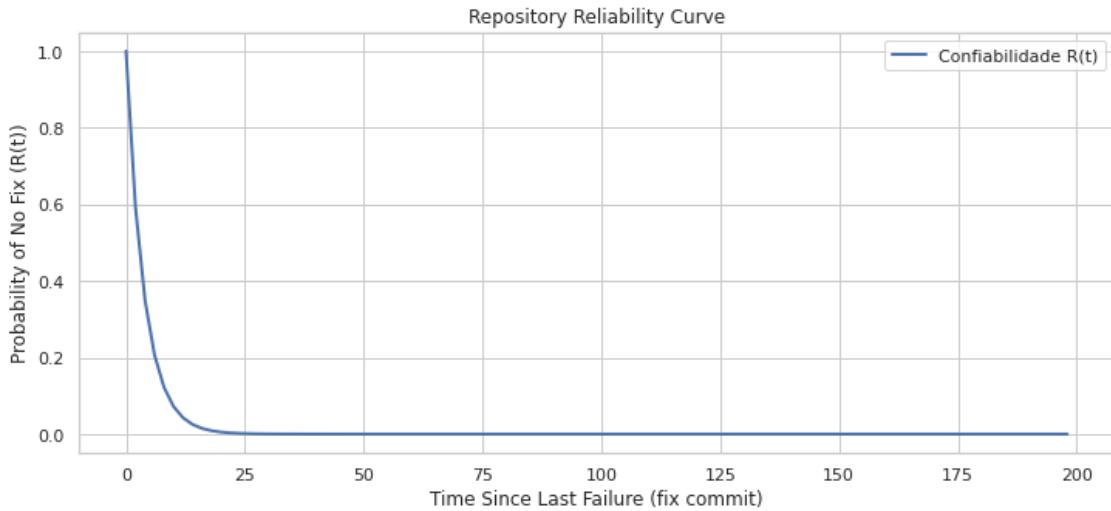
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 2.0 | 0.500000 | 0.606531 |
| 1 | 3 | 5.5 | 0.181818 | 0.833753 |
| 2 | 3 | 5.5 | 0.181818 | 0.833753 |
| 3 | 2 | 12.0 | 0.083333 | 0.920044 |
| 4 | 2 | 12.0 | 0.083333 | 0.920044 |
| .. | .. | ... | ... | ... |
| 168 | 2 | 4347.0 | 0.000230 | 0.999770 |
| 169 | 2 | 4427.0 | 0.000226 | 0.999774 |
| 170 | 2 | 4430.0 | 0.000226 | 0.999774 |
| 171 | 2 | 4677.0 | 0.000214 | 0.999786 |
| 172 | 2 | 4894.0 | 0.000204 | 0.999796 |

[173 rows x 5 columns]

== storm ==







```

Confiabilidade R(1) = 0.7687
Confiabilidade R(5) = 0.2685
Confiabilidade R(10) = 0.0721
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

0      storm-core/test/jvm/backtype/storm/utils/XMLEscapeOutputStream.java
1      src/jvm/backtype/storm/drpc/DRPCInvocationsClient.java
2      storm-server/src/main/java/org/apache/storm/scheduler/resource/strategies/scheduling/ISt...
3      external/storm-hdfs/src/main/java/org/apache/storm/hdfs/common/security/AutoHDFS.java
4      external/storm-kafka/src/test/storm/kafka/KafkaTestBroker.java
...
1103    examples/storm-hive-examples/src/main/java/org/apache/storm/hive/bolt/HiveTopology.java
1104    storm-server/src/test/java/org/apache/storm/scheduler/resource/TestUtilsForResourceAware...
1105    storm-server/src/main/java/org/apache/storm/metricstore/rocksdb/StringMetadataCache.java
1106    storm-server/src/main/java/org/apache/storm/metricstore/rocksdb/RocksDbStore.java
1107    external/storm-kafka-client/src/test/java/org/apache/storm/kafka/spout/trident/KafkaTride...

```

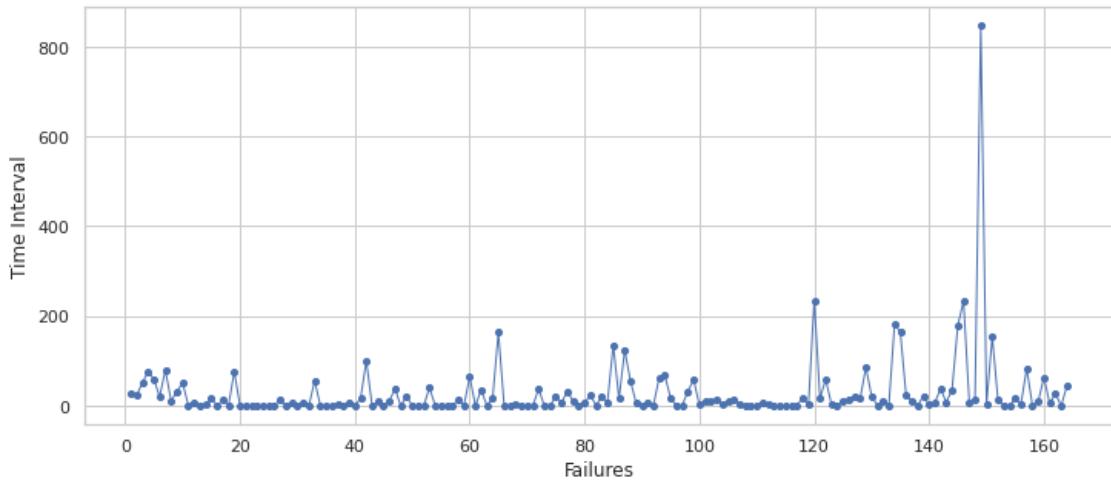
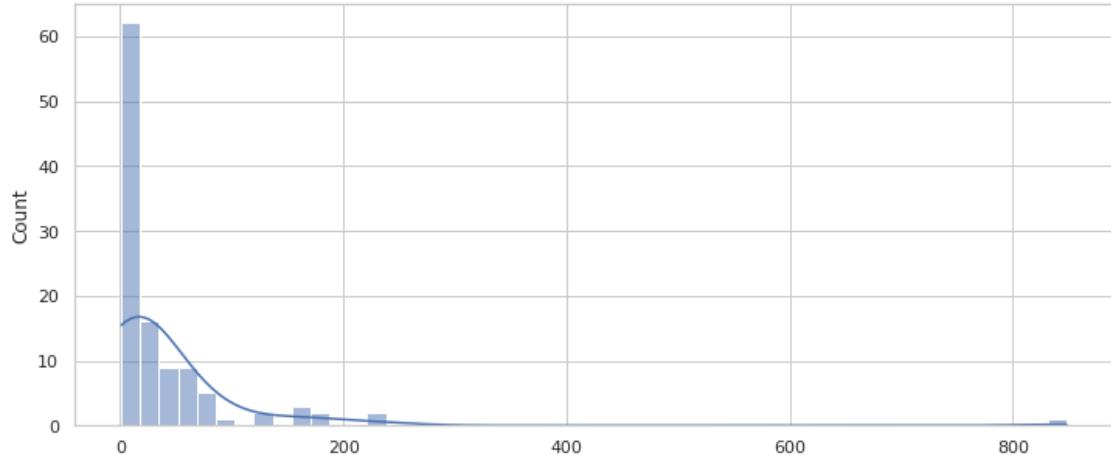
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 1103 | 2 | 1580.0 | 0.000633 | 0.999367 |
| 1104 | 3 | 1596.0 | 0.000627 | 0.999374 |
| 1105 | 2 | 1627.0 | 0.000615 | 0.999386 |
| 1106 | 2 | 1627.0 | 0.000615 | 0.999386 |

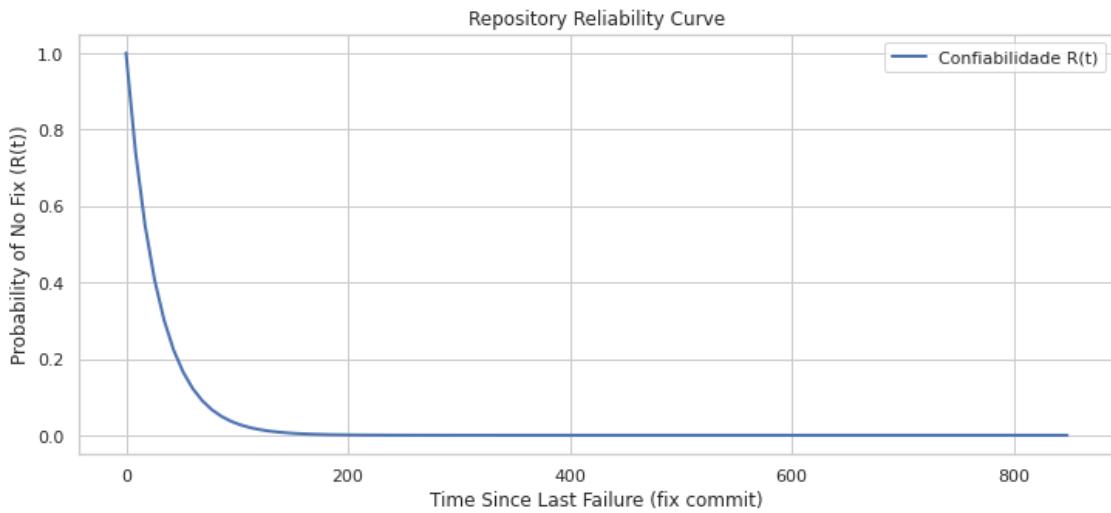
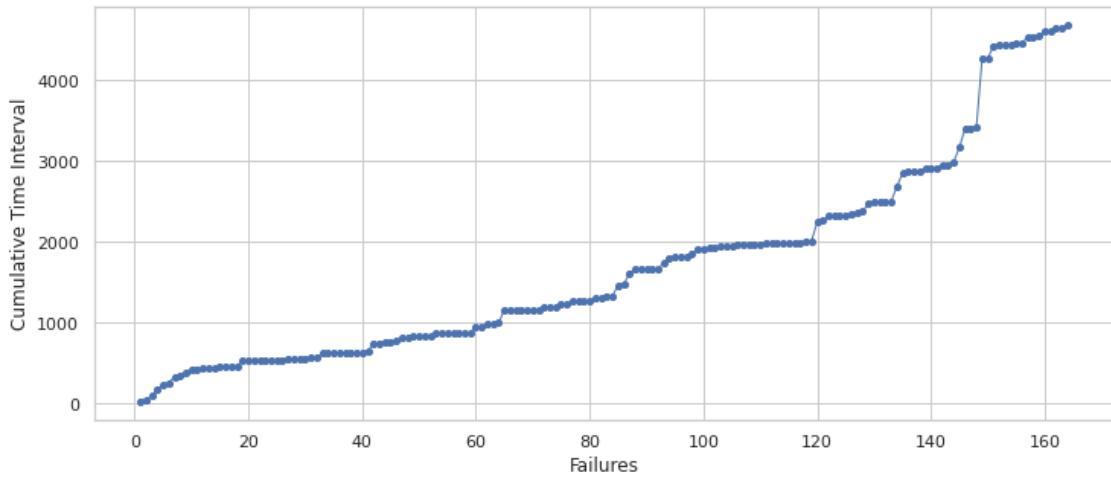
```
1107 2      2574.0  0.000389      0.999612
```

```
[1108 rows x 5 columns]
```

```
== gora ==
```

The histogram of Time Between Failures (TBF) gora





```

Confiabilidade R(1) = 0.9656
Confiabilidade R(5) = 0.8396
Confiabilidade R(10) = 0.7049
Confiabilidade R(50) = 0.1740
Confiabilidade R(100) = 0.0303

```

```

filepath
0 gora-jcache/src/test/java/org/apache/gora/jcache/GoraHazelcastTestDriver.java
1 gora-tutorial/src/main/java/org/apache/gora/tutorial/log/DistributedLogManager.java
2 gora-jcache/src/main/java/org/apache/gora/jcache/store/JCacheCacheLoader.java
3 gora-jcache/src/main/java/org/apache/gora/jcache/store/JCacheCacheEntryListener.java
4 gora-jcache/src/main/java/org/apache/gora/jcache/store/JCacheCacheWriter.java
...
63 gora-dynamodb/src/main/java/org/apache/gora/dynamodb/store/DynamoDBStore.java

```

```

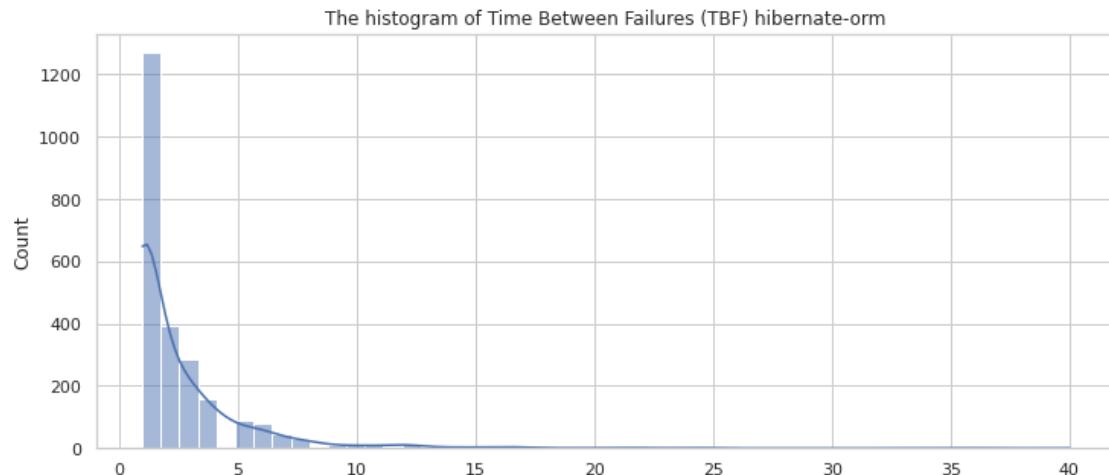
64 gora-hbase/src/main/java/org/apache/gora/hbase/store/HBaseTableConnection.java
65 gora-mongodb/src/test/java/org/apache/gora/mongodb/mapreduce/TestMongoStoreWordCount.java
66 gora-mongodb/src/main/java/org/apache/gora/mongodb/query/MongoDBResult.java
67 gora-core/src/test/java/org/apache/gora/mock/store/MockDataStore.java

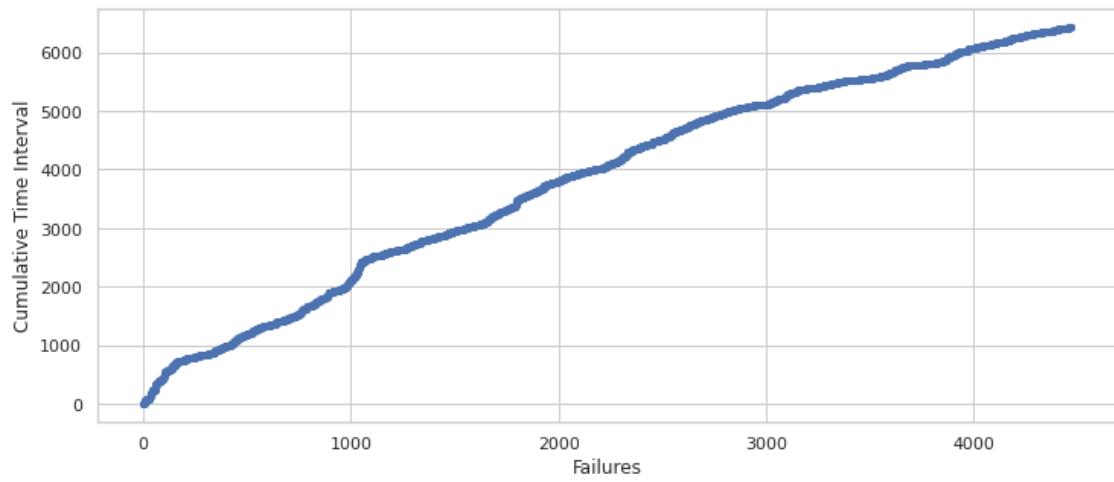
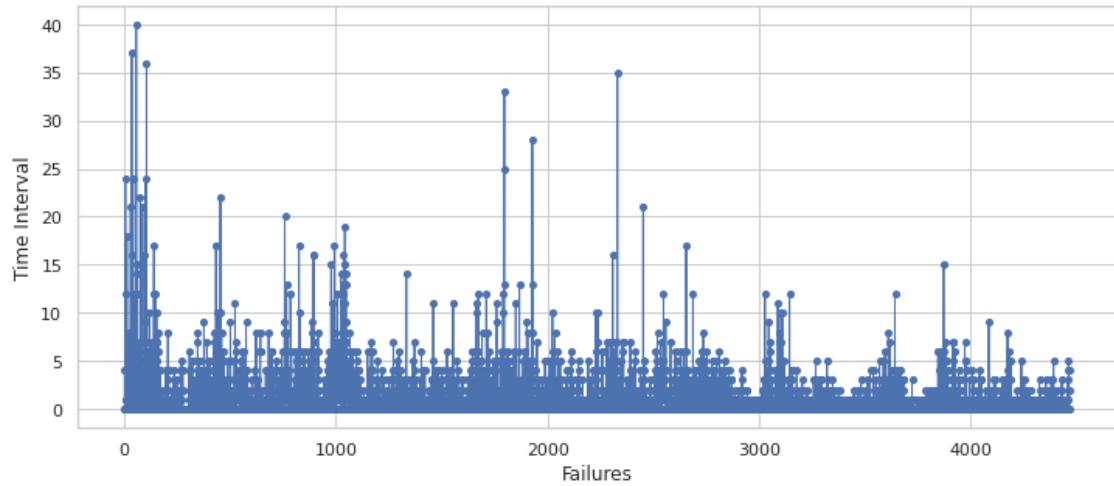
```

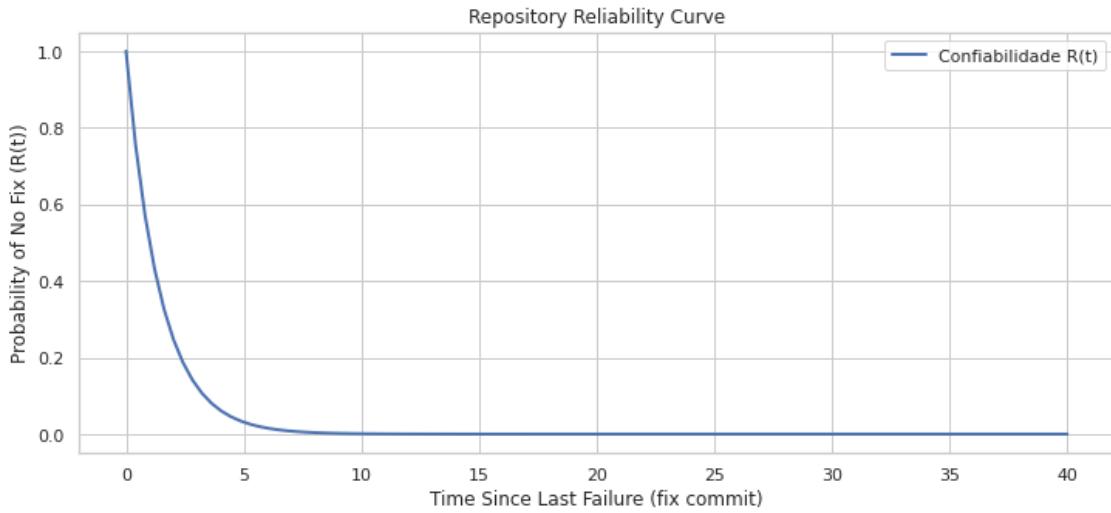
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 3 | 2.0 | 0.500000 | 0.606531 |
| 1 | 5 | 3.5 | 0.285714 | 0.751477 |
| 2 | 2 | 4.0 | 0.250000 | 0.778801 |
| 3 | 2 | 4.0 | 0.250000 | 0.778801 |
| 4 | 2 | 4.0 | 0.250000 | 0.778801 |
| ... | ... | ... | ... | ... |
| 63 | 3 | 1061.5 | 0.000942 | 0.999058 |
| 64 | 3 | 1232.0 | 0.000812 | 0.999189 |
| 65 | 2 | 1335.0 | 0.000749 | 0.999251 |
| 66 | 2 | 1439.0 | 0.000695 | 0.999305 |
| 67 | 2 | 2693.0 | 0.000371 | 0.999629 |

[68 rows x 5 columns]

== hibernate-orm ==







Confiabilidade $R(1) = 0.5000$

Confiabilidade $R(5) = 0.0312$

Confiabilidade $R(10) = 0.0010$

Confiabilidade $R(50) = 0.0000$

Confiabilidade $R(100) = 0.0000$

```

0      tooling/hibernate-gradle-plugin/src/test/java/org/hibernate/orm/tooling/gradle/Hibernate
1      tooling/hibernate-gradle-plugin/src/main/java/org/hibernate/orm/tooling/gradle/enhance/E
2      hibernate-core/src/main/java/org/hibernate/type/descriptor/java/CharacterJavaType.java
3      hibernate-core/src/main/java/org/hibernate/boot/jaxb/hbm/spi/SubEntityInfo.java
4      hibernate-core/src/test/java/org/hibernate/orm/test/boot/models/hbm/propertyref/Composit...
...
4885    hibernate-core/src/main/java/org/hibernate/SessionEventListener.java
4886    hibernate-core/src/main/java/org/hibernate/CallbackException.java
4887    hibernate-core/src/main/java/org/hibernate/resource/transaction/backend/jta/internal/syn...
4888    hibernate-core/src/main/java/org/hibernate/property/access/spi/GetterFieldImpl.java
4889    hibernate-core/src/main/java/org/hibernate/service/spi/ServiceException.java

```

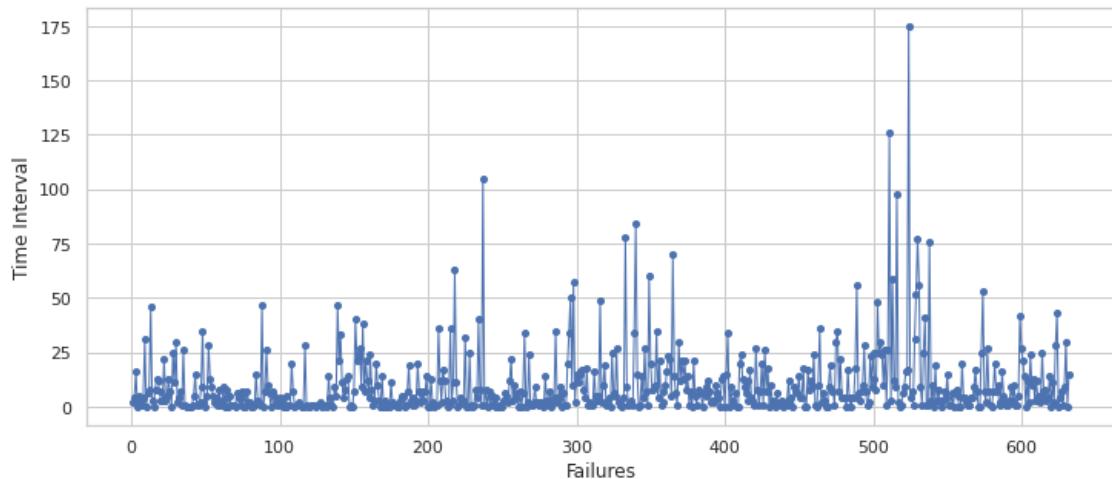
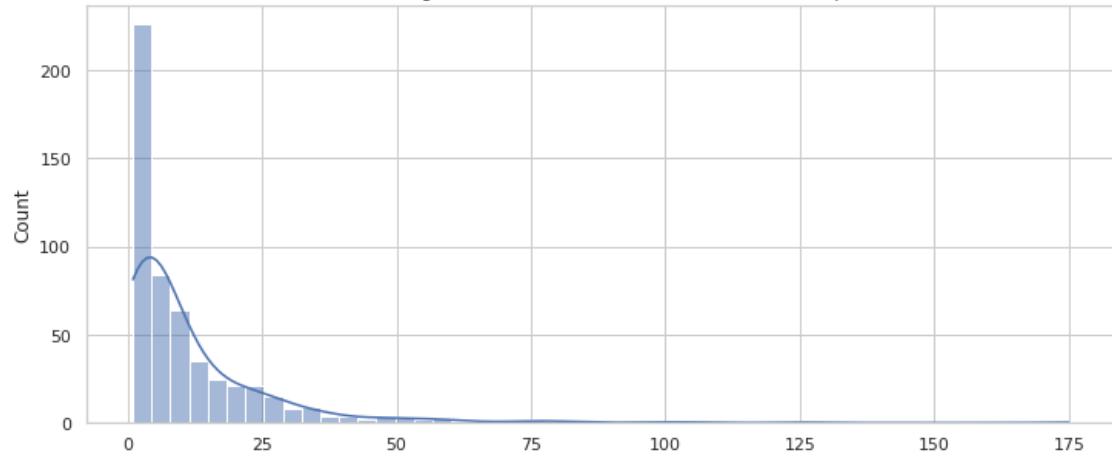
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|-------------|----------------|----------|
| 0 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 1 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 2 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 3 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 4 | 3 | 0.500000 | 2.000000 | 0.135335 |
| ... | ... | ... | ... | ... |
| 4885 | 2 | 3487.000000 | 0.000287 | 0.999713 |
| 4886 | 2 | 3495.000000 | 0.000286 | 0.999714 |
| 4887 | 2 | 3498.000000 | 0.000286 | 0.999714 |
| 4888 | 2 | 3533.000000 | 0.000283 | 0.999717 |

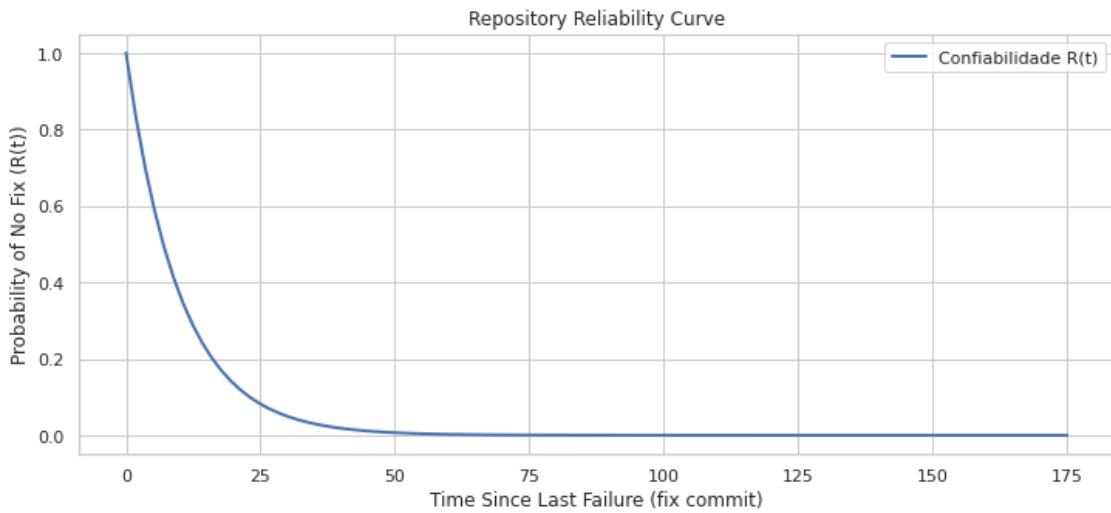
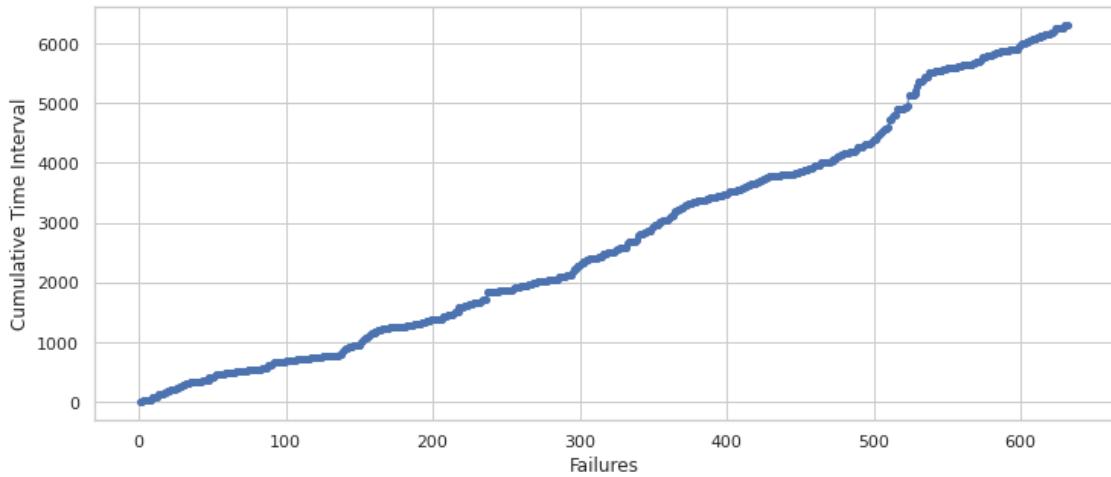
```
4889 2 3540.000000 0.000282 0.999718
```

```
[4890 rows x 5 columns]
```

```
== zookeeper ==
```

The histogram of Time Between Failures (TBF) zookeeper





```

Confiabilidade R(1) = 0.9047
Confiabilidade R(5) = 0.6061
Confiabilidade R(10) = 0.3673
Confiabilidade R(50) = 0.0067
Confiabilidade R(100) = 0.0000

```

```

filepath
0   src/java/test/org/apache/zookeeper/test/DBSizeTest.java
1   zookeeper-server/src/main/java/org/apache/zookeeper/server/ExitCode.java
2   src/java/test/org/apache/zookeeper/server/quorum/FuzzySnapshotRelatedTest.java
3   src/contrib/bookkeeper/src/java/org/apache/bookkeeper/client/LedgerRecoveryMonitor.java
4   src/contrib/bookkeeper/src/java/org/apache/bookkeeper/client/BKException.java
...
259  src/recipes/lock/test/org/apache/zookeeper/recipes/lock/ZNodeNameTest.java

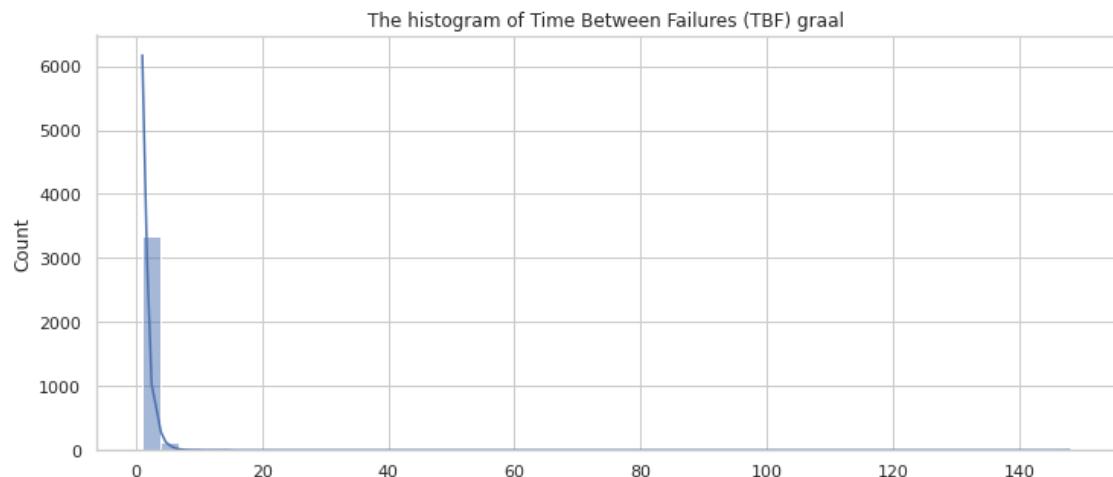
```

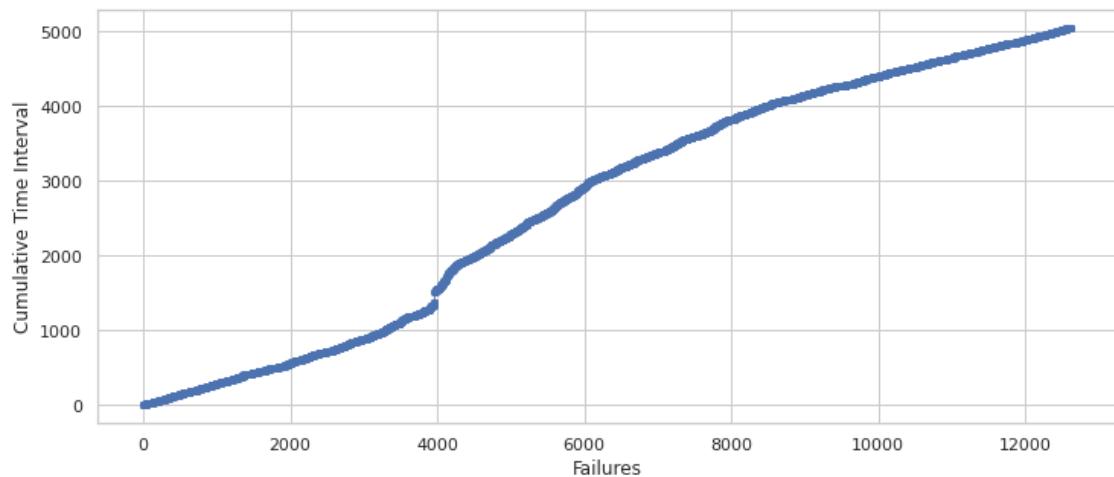
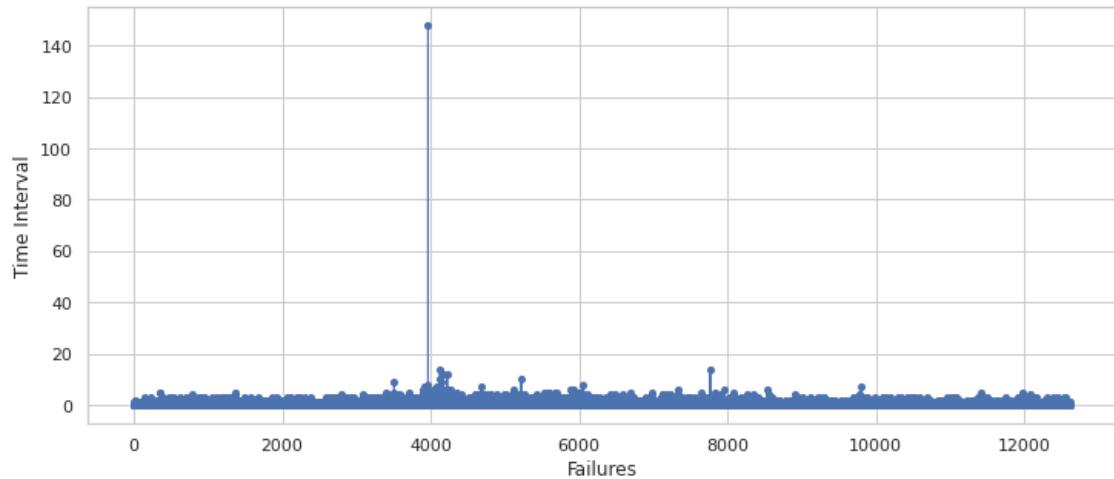
```
260 src/java/main/org/apache/zookeeper/Watcher.java
261 src/java/test/org/apache/zookeeper/test/SledgeHammer.java
262 src/java/main/org/apache/zookeeper/server/quorum/LeaderBean.java
263 src/java/main/org/apache/zookeeper/server/ServerCnxn.java
```

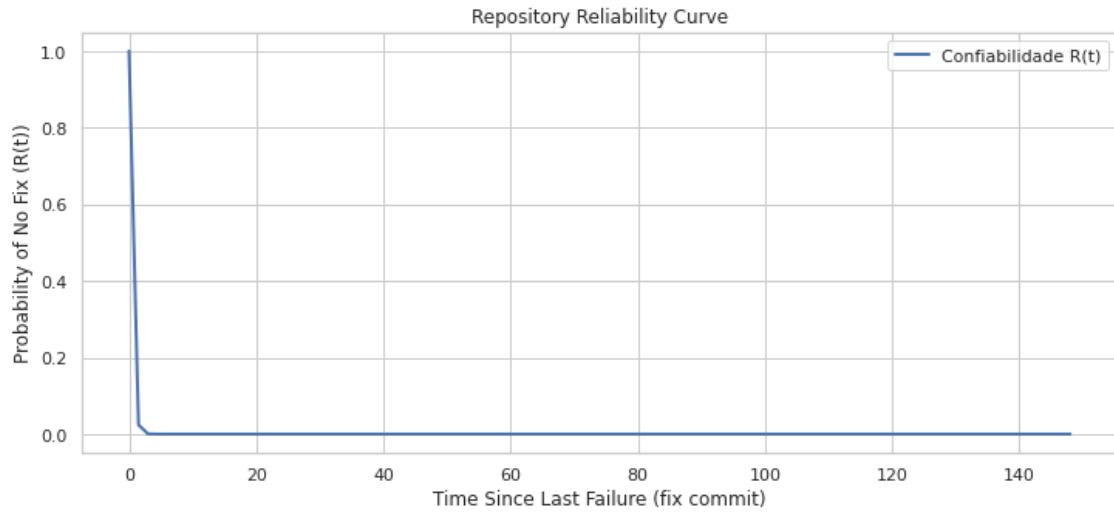
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 4.0 | 0.250000 | 0.778801 |
| 2 | 3 | 4.5 | 0.222222 | 0.800737 |
| 3 | 5 | 21.0 | 0.047619 | 0.953497 |
| 4 | 2 | 22.0 | 0.045455 | 0.955563 |
| .. | .. | ... | ... | ... |
| 259 | 2 | 2742.0 | 0.000365 | 0.999635 |
| 260 | 2 | 2814.0 | 0.000355 | 0.999645 |
| 261 | 2 | 2906.0 | 0.000344 | 0.999656 |
| 262 | 2 | 3126.0 | 0.000320 | 0.999680 |
| 263 | 2 | 3289.0 | 0.000304 | 0.999696 |

[264 rows x 5 columns]

== graal ==







```

Confiabilidade R(1) = 0.0824
Confiabilidade R(5) = 0.0000
Confiabilidade R(10) = 0.0000
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

0      projects/com.oracle.truffle.llvm.asm.amd64/src/com/oracle/truffle/llvm/asm/amd64/Parser.java
1      truffle/com.oracle.truffle.api.debug.test/src/com/oracle/truffle/api/debug/test/TestLang.java
2      substratevm/src/com.oracle.svm.test/src/hello/Target_hello_Hello_DefaultGreeter.java
3      substratevm/src/com.oracle.svm.core/src/com/oracle/svm/core/jdk/DigestAuthenticationFeature.java
4      substratevm/src/com.oracle.svm.jfr/src/com/oracle/svm/jfr/traceid/JfrTraceIdMap.java
...
4910     ...
4910     truffle/src/com.oracle.truffle.sl.test/src/com/oracle/truffle/sl/test/SLTestRunner.java
4911     substratevm/src/com.oracle.svm.core/src/com/oracle/svm/core/jdk/proxy/DynamicProxyRegistration.java
4912     truffle/src/com.oracle.truffle.api.dsl.test/src/com/oracle/truffle/api/dsl/test/AssumptionCheck.java
4913     regex/src/com.oracle.truffle.regex/src/com/oracle/truffle/regex/tregex/TRegexCompiler.java
4914     substratevm/src/com.oracle.svm.core/src/com/oracle/svm/core/LibCHelper.java

```

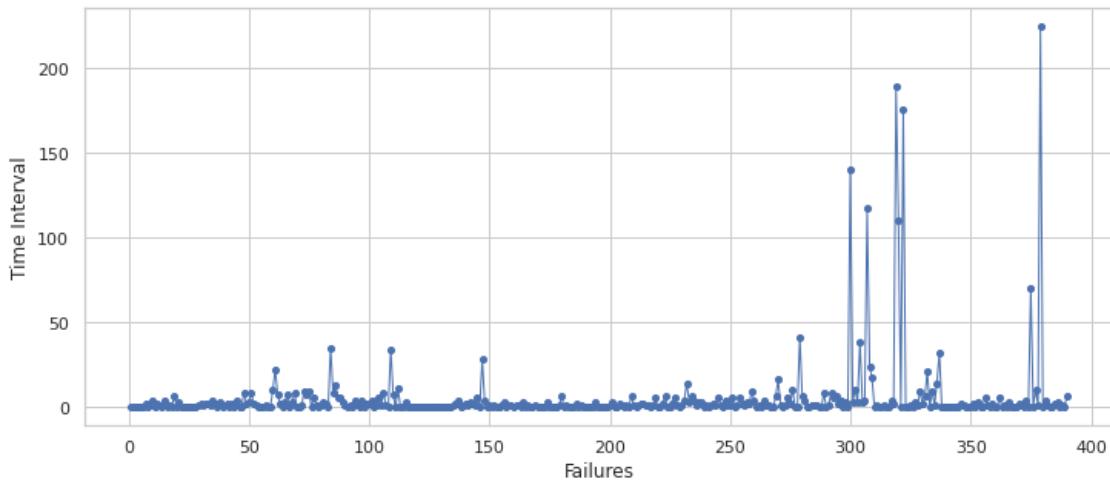
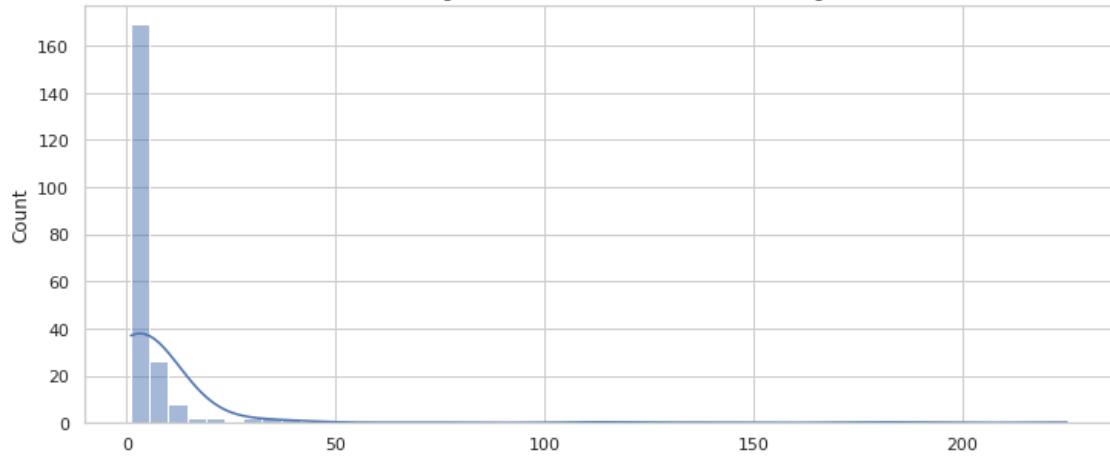
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|-------------|----------------|----------|
| 0 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 1 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 2 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 3 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 4 | 3 | 0.500000 | 2.000000 | 0.135335 |
| ... | ... | ... | ... | ... |
| 4910 | 2 | 1967.000000 | 0.000508 | 0.999492 |
| 4911 | 2 | 2078.000000 | 0.000481 | 0.999519 |
| 4912 | 2 | 2143.000000 | 0.000467 | 0.999533 |
| 4913 | 2 | 2167.000000 | 0.000461 | 0.999539 |

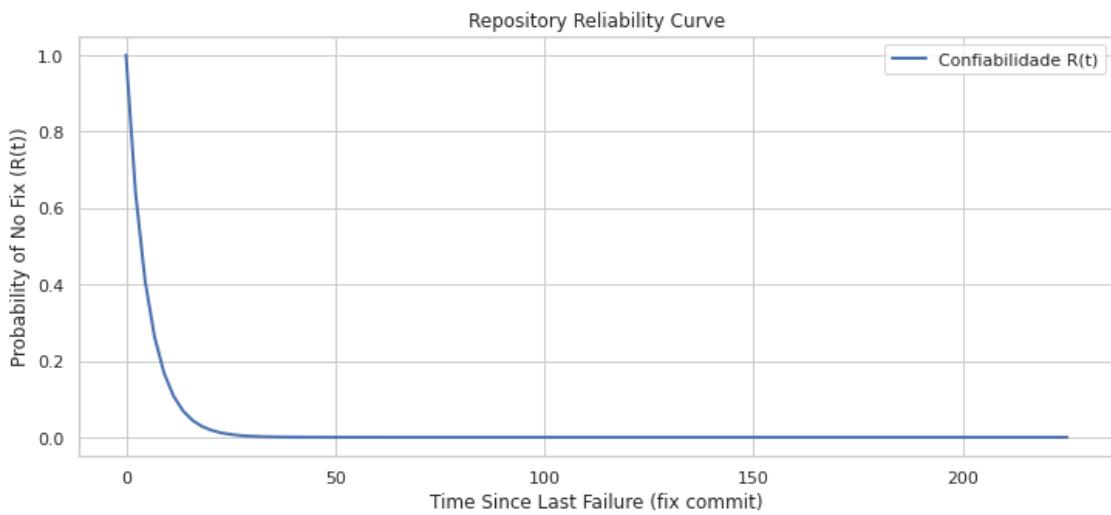
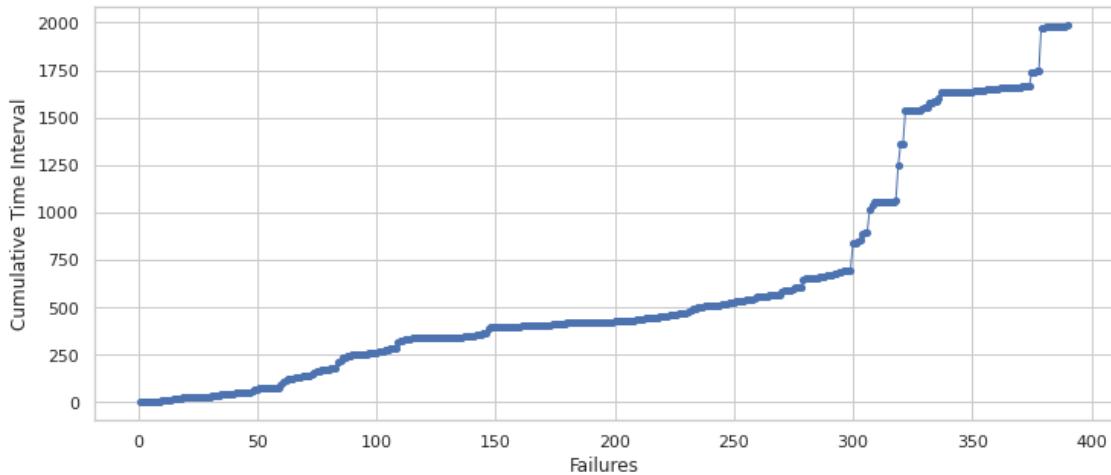
4914 2 2568.000000 0.000389 0.999611

[4915 rows x 5 columns]

== angel ==

The histogram of Time Between Failures (TBF) angel





Confiabilidade $R(1) = 0.8219$

Confiabilidade $R(5) = 0.3752$

Confiabilidade $R(10) = 0.1407$

Confiabilidade $R(50) = 0.0001$

Confiabilidade $R(100) = 0.0000$

```

0 angel-ps/core/src/main/java/com/tencent/angel/ps/storage/vector/ServerLongIntRow.java
1 angel-ps/core/src/main/java/com/tencent/angel/ps/server/data/WorkerPool.java
2 angel-ps/core/src/main/java/com/tencent/angel/ps/storage/vector/ServerLongLongRow.java
3 angel-ps/core/src/test/java/com/tencent/angel/ml/matrix/psf/get/enhance/indexed/IndexGetPi
4 angel-ps/mllib/src/test/java/com/tencent/angel/ml/lr/SgdLRTest2.java
...
143 angel-ps/core/src/main/java/com/tencent/angel/master/deploy/yarn/YarnContainerAllocator.java

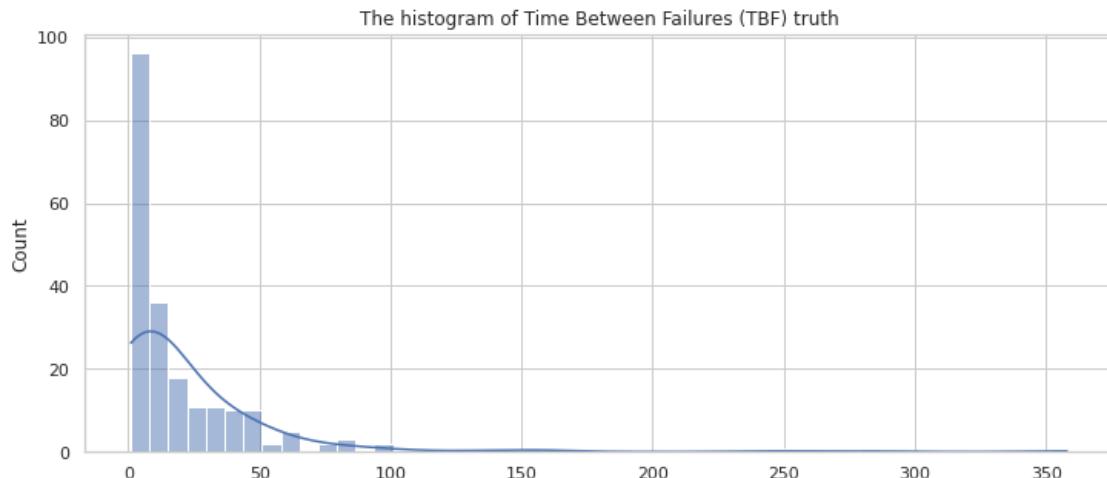
```

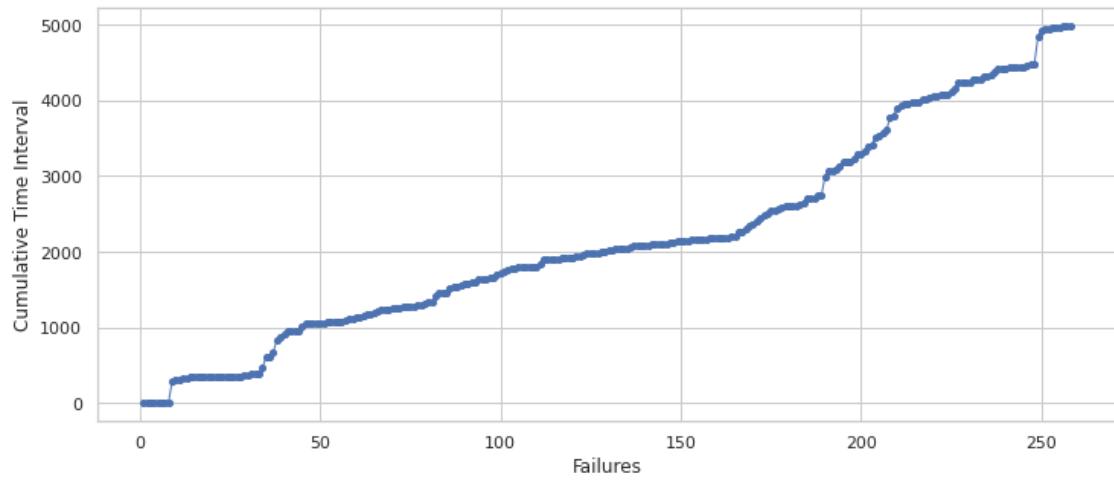
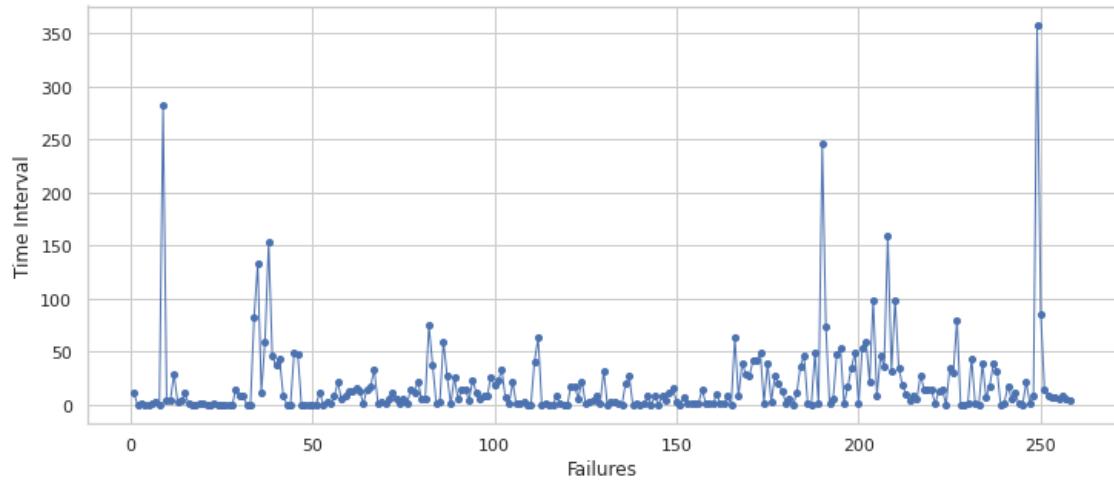
```
144 angel-ps/core/src/main/java/com/tencent/angel/psagent/matrix/oplog/cache/RowUpdateSplitUt
145 angel-ps/core/src/main/java/com/tencent/angel/ps/ParameterServer.java
146 angel-ps/core/src/main/java/com/tencent/angel/ps/storage/vector/ServerRow.java
147 angel-ps/core/src/main/java/com/tencent/angel/worker/Worker.java
```

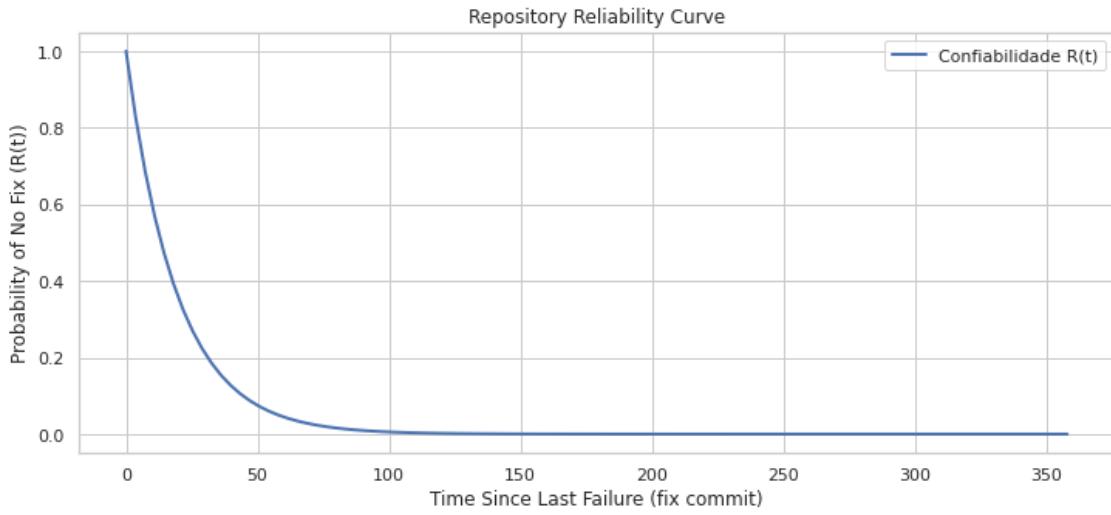
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|-------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 3 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 5.0 | 0.200000 | 0.818731 |
| 4 | 2 | 5.0 | 0.200000 | 0.818731 |
| .. | .. | ... | ... | ... |
| 143 | 2 | 427.0 | 0.002342 | 0.997661 |
| 144 | 2 | 436.0 | 0.002294 | 0.997709 |
| 145 | 3 | 498.0 | 0.002008 | 0.997994 |
| 146 | 3 | 501.0 | 0.001996 | 0.998006 |
| 147 | 2 | 684.0 | 0.001462 | 0.998539 |

[148 rows x 5 columns]

== truth ==







```

Confiabilidade R(1) = 0.9495
Confiabilidade R(5) = 0.7719
Confiabilidade R(10) = 0.5958
Confiabilidade R(50) = 0.0751
Confiabilidade R(100) = 0.0056

```

```

filepath
0   src/main/java/org/junit/contrib/truth/subjects/StringSubject.java
1   src/test/java/org/junit/contrib/truth/StringTest.java
2   src/main/java/org/junit/contrib/truth/codegen/IteratingWrapperClassBuilder.java
3   core/src/test/java/com/google/common/truth/DoubleTest.java
4   core/src/test/java/com/google/common/truth/ComparisonFailureWithFieldsTest.java
..
...
119  extensions/proto/src/main/java/com/google/common/truth/extensions/proto/FieldScopeImpl.java
120  extensions/proto/src/main/java/com/google/common/truth/extensions/proto/DiffResult.java
121  core/src/main/java/com/google/common/truth/TruthFailureSubject.java
122  extensions/java8/src/test/java/com/google/common/truth/StreamSubjectTest.java
123  core/src/main/java/com/google/common/truth/MultisetSubject.java

```

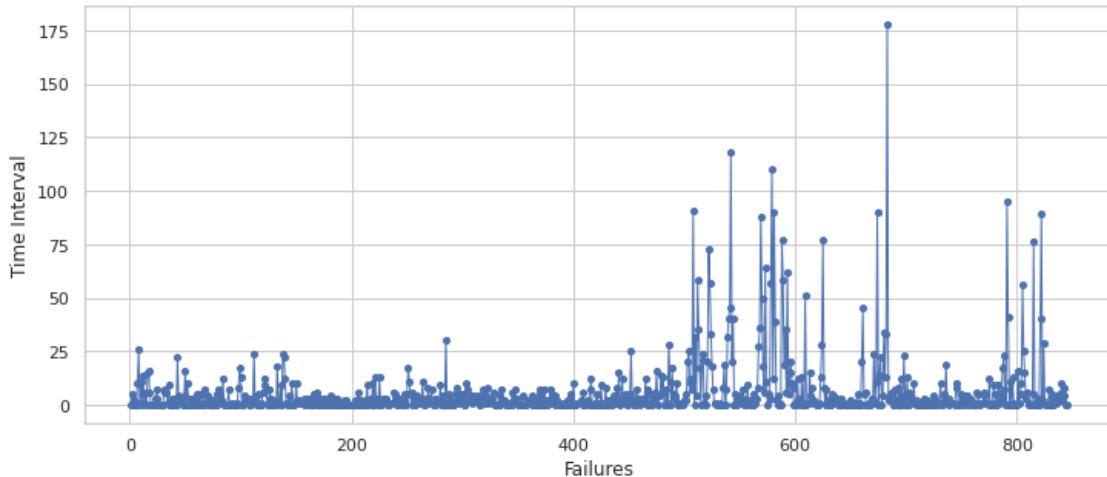
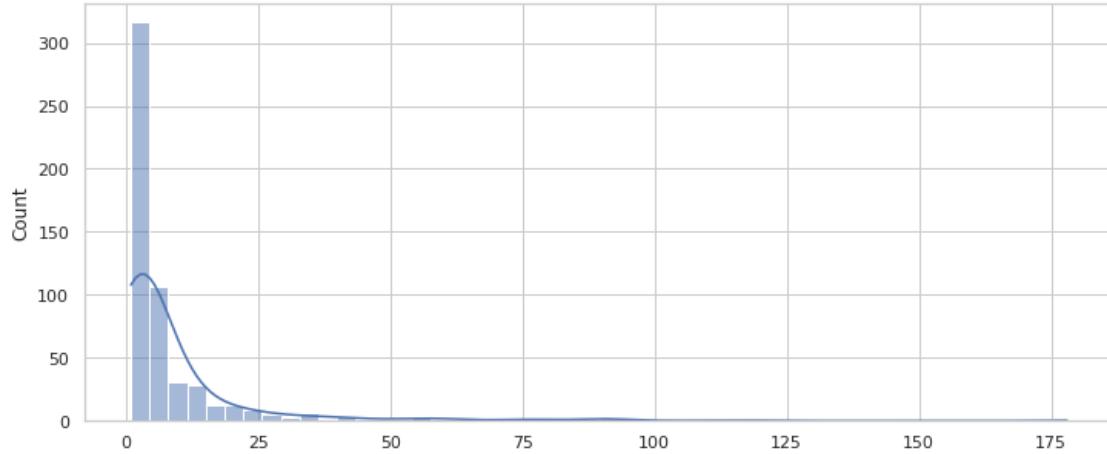
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 119 | 2 | 1356.0 | 0.000737 | 0.999263 |
| 120 | 2 | 1517.0 | 0.000659 | 0.999341 |
| 121 | 2 | 1698.0 | 0.000589 | 0.999411 |
| 122 | 2 | 2105.0 | 0.000475 | 0.999525 |

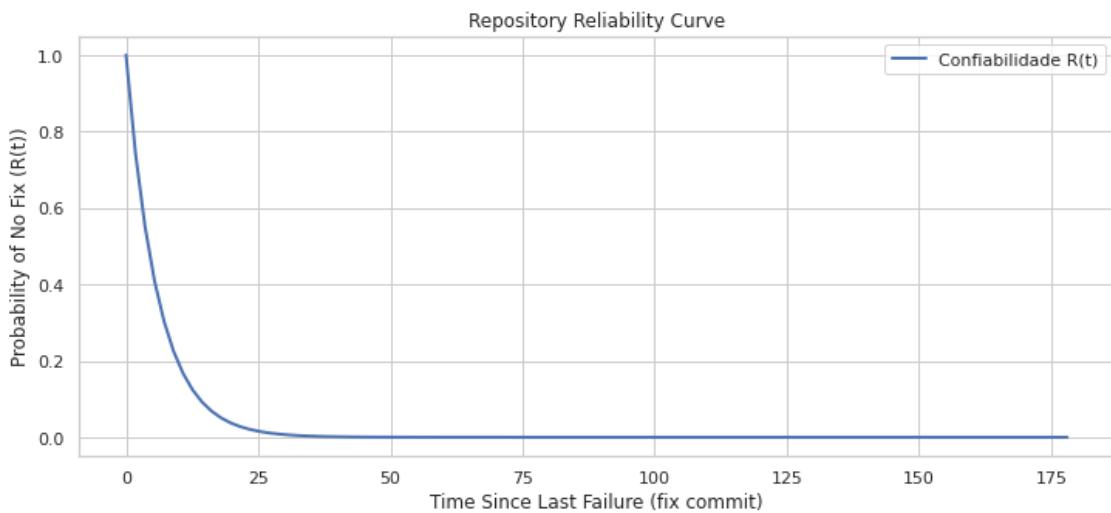
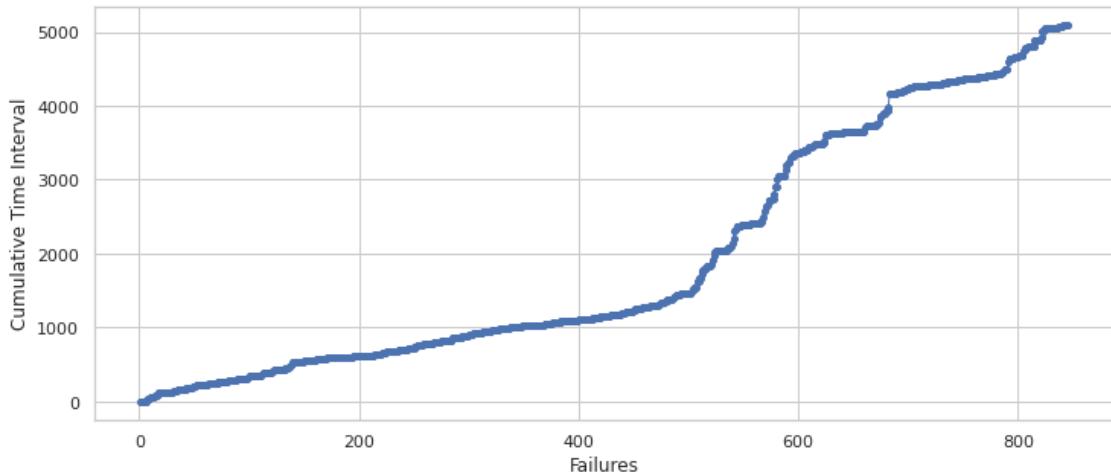
```
123 2 3193.0 0.000313 0.999687
```

```
[124 rows x 5 columns]
```

```
== bitcoinj ==
```

The histogram of Time Between Failures (TBF) bitcoinj





```

Confiabilidade R(1) = 0.8472
Confiabilidade R(5) = 0.4364
Confiabilidade R(10) = 0.1905
Confiabilidade R(50) = 0.0003
Confiabilidade R(100) = 0.0000

```

```

filepath \
0   core/src/main/java/org/bitcoinj/core/Bech32.java
1   core/src/main/java/org/bitcoinj/core/AddressFormatException.java
2   core/src/main/java/org/bitcoinj/core/Base58.java
3   core/src/test/java/org/bitcoinj/core/Bech32Test.java
4   core/src/test/java/org/bitcoinj/core/Base58Test.java
...
260  core/src/main/java/org/bitcoinj/params/UnitTestParams.java

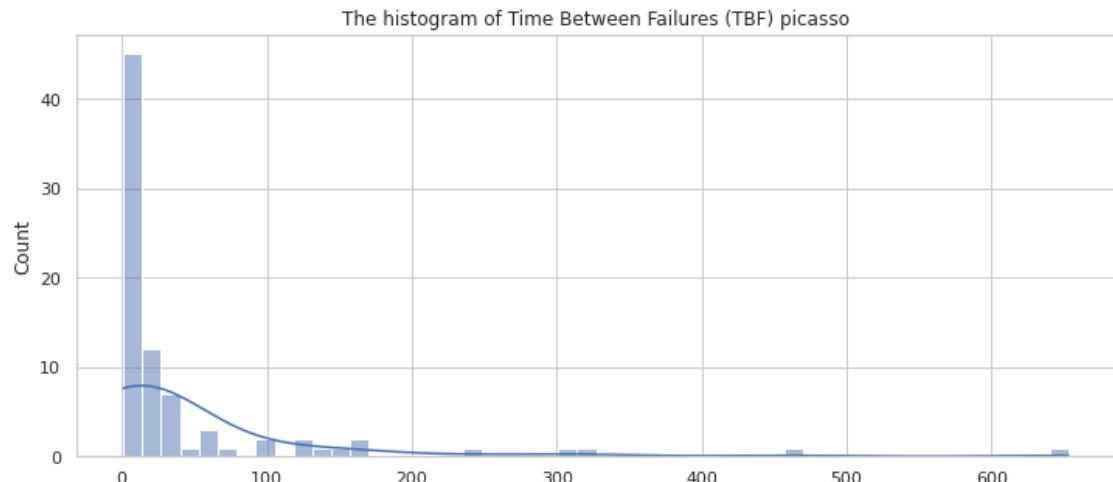
```

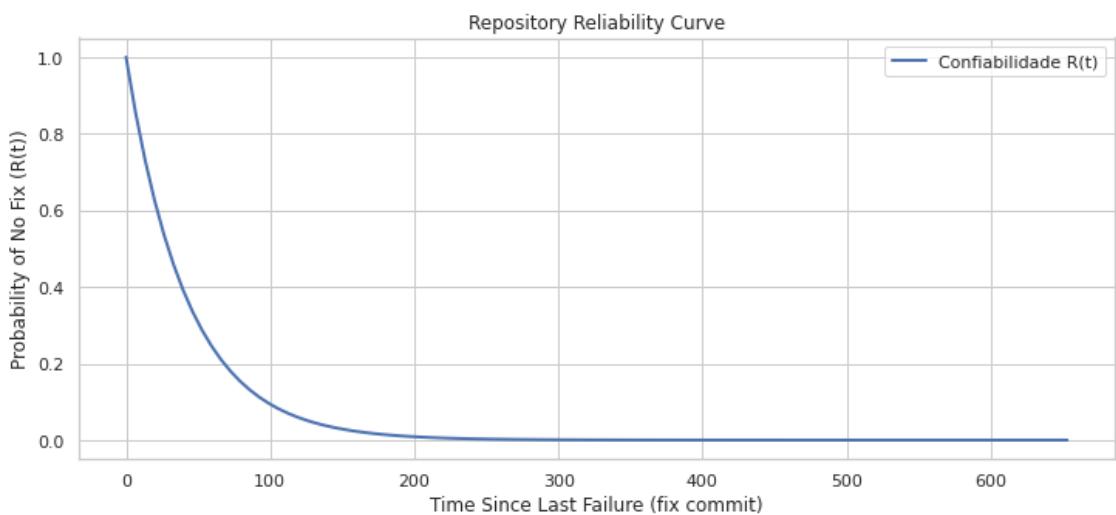
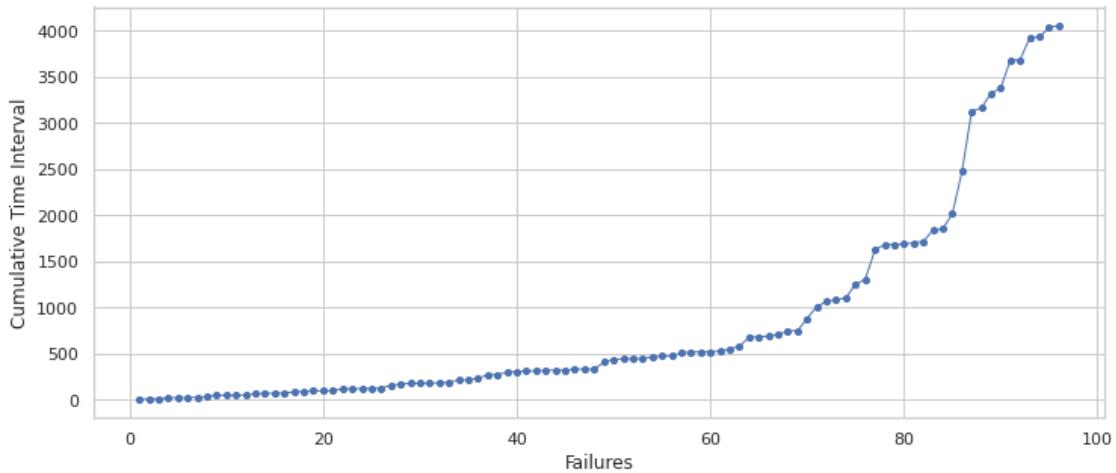
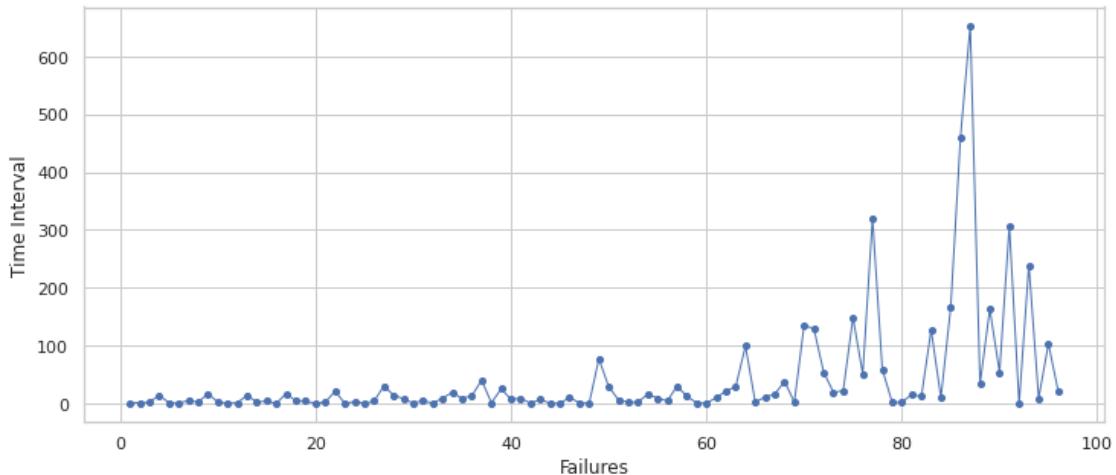
```
261 core/src/test/java/org/bitcoinj/wallet/BasicKeyChainTest.java
262 core/src/test/java/org/bitcoinj/core/TxConfidenceTableTest.java
263 core/src/main/java/org/bitcoinj/core/Coin.java
264 core/src/main/java/org/bitcoinj/net/BlockingClientManager.java
```

| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|-------------|----------------|----------|
| 0 | 5 | 0.250000 | 4.000000 | 0.018316 |
| 1 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 2 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 3 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 4 | 3 | 0.500000 | 2.000000 | 0.135335 |
| .. | .. | ... | ... | ... |
| 260 | 2 | 2618.000000 | 0.000382 | 0.999618 |
| 261 | 2 | 2655.000000 | 0.000377 | 0.999623 |
| 262 | 2 | 2672.000000 | 0.000374 | 0.999626 |
| 263 | 2 | 2733.000000 | 0.000366 | 0.999634 |
| 264 | 2 | 3004.000000 | 0.000333 | 0.999667 |

[265 rows x 5 columns]

== picasso ==





```

Confiabilidade R(1) = 0.9766
Confiabilidade R(5) = 0.8884
Confiabilidade R(10) = 0.7893
Confiabilidade R(50) = 0.3063
Confiabilidade R(100) = 0.0938

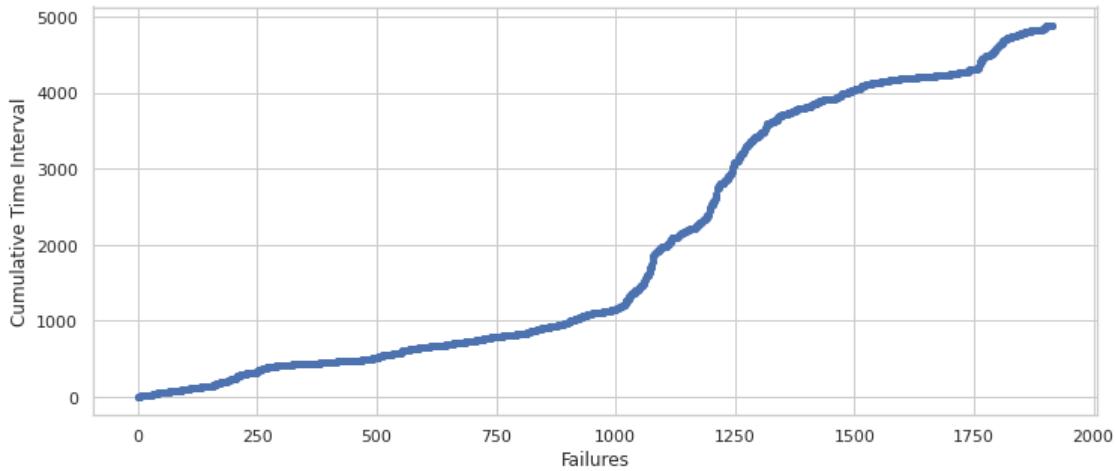
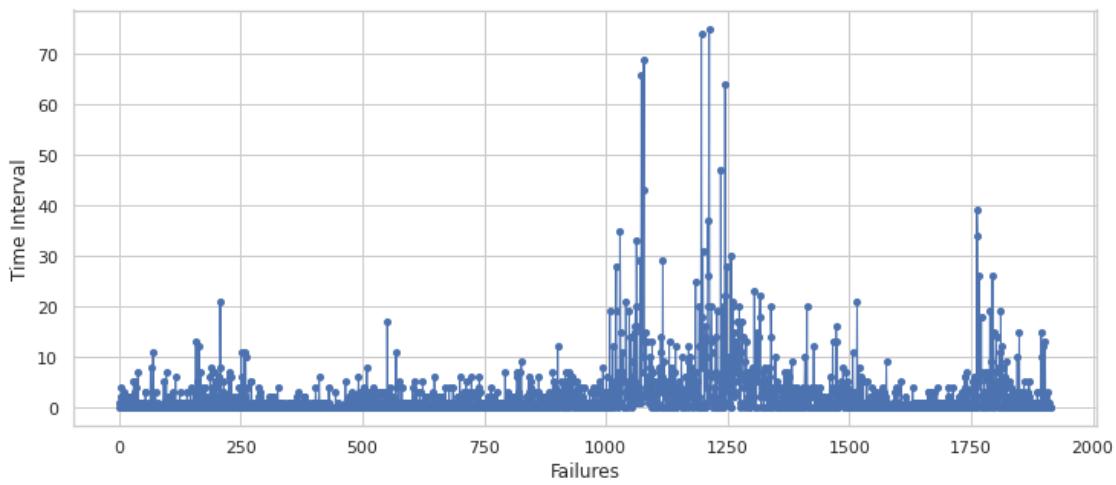
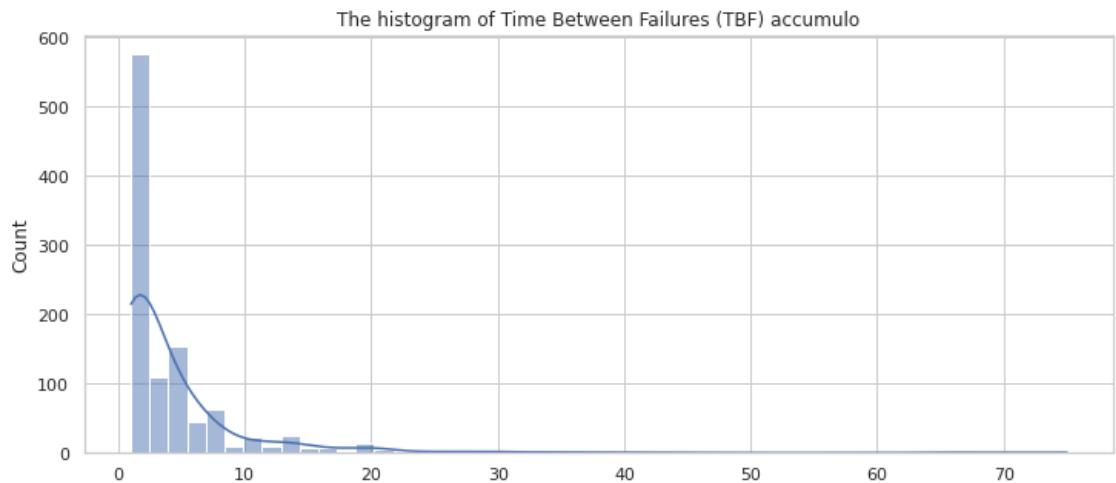
filepath \
0  picasso/src/test/java/com/squareup/picasso3/PicassoTest.java
1  picasso/src/test/java/com/squareup/picasso3/RequestCreatorTest.java
2  picasso/src/main/java/com/squareup/picasso/RequestBuilder.java
3  picasso/src/test/java/com/squareup/picasso/RequestBuilderTest.java
4  picasso/src/main/java/com/squareup/picasso/Downloader.java
..
35 picasso/src/test/java/com/squareup/picasso/OkHttpDownloaderTest.java
36 picasso/src/main/java/com/squareup/picasso3/Picasso.java
37 picasso/src/main/java/com/squareup/picasso/ImageViewAction.java
38 picasso/src/main/java/com/squareup/picasso/LruCache.java
39 picasso/src/test/java/com/squareup/picasso/LruCacheTest.java

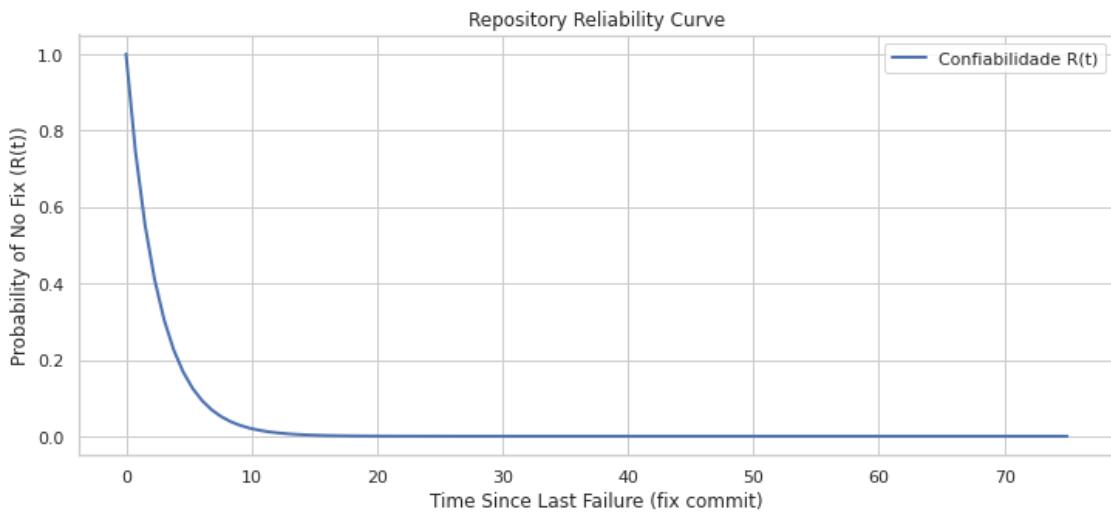
      n_commits      MTBF  lambda_failure      R_t
0    2        2.000000    0.500000    0.606531
1    2        2.000000    0.500000    0.606531
2    2       21.000000   0.047619    0.953497
3    2       21.000000   0.047619    0.953497
4    2       47.000000   0.021277    0.978948
...
35   2      353.000000   0.002833    0.997171
36   4      482.333333   0.002073    0.997929
37   2      528.000000   0.001894    0.998108
38   2      581.000000   0.001721    0.998280
39   2      581.000000   0.001721    0.998280

[40 rows x 5 columns]

== accumulo ==

```





Confiabilidade $R(1) = 0.6761$

Confiabilidade $R(5) = 0.1413$

Confiabilidade $R(10) = 0.0200$

Confiabilidade $R(50) = 0.0000$

Confiabilidade $R(100) = 0.0000$

```

0      server/monitor/src/main/java/org/apache/accumulo/monitor/servlets/ReplicationServlet.java
1      core/src/main/java/org/apache/accumulo/core/spi/common/ContextClassLoaderFactory.java
2      src/examples/wikisearch/ingest/src/main/java/org/apache/accumulo/examples/wikisearch/ingest
3      core/src/main/java/org/apache/accumulo/core/classloader/DefaultContextClassLoaderFactory
4      src/examples/wikisearch/ingest/src/main/java/org/apache/accumulo/examples/wikisearch/ingest
...
1621    core/src/test/java/org/apache/accumulo/core/iterators/user/LargeRowFilterTest.java
1622    test/src/test/java/org/apache/accumulo/test/iterator/RegExTest.java
1623    core/src/main/java/org/apache/accumulo/core/data/Condition.java
1624    server/base/src/main/java/org/apache/accumulo/server/util/ZooZap.java
1625    core/src/main/java/org/apache/accumulo/core/iterators/user/RowFilter.java

```

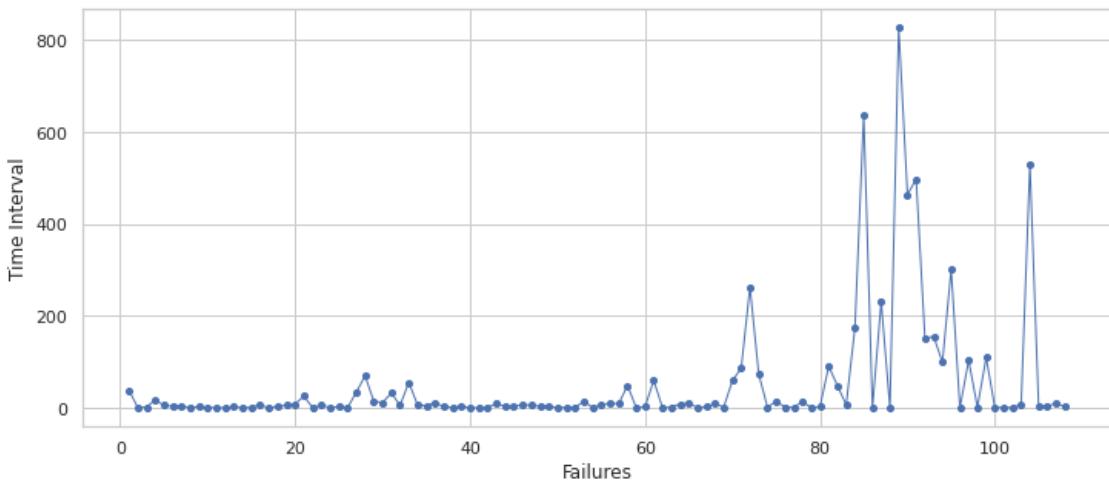
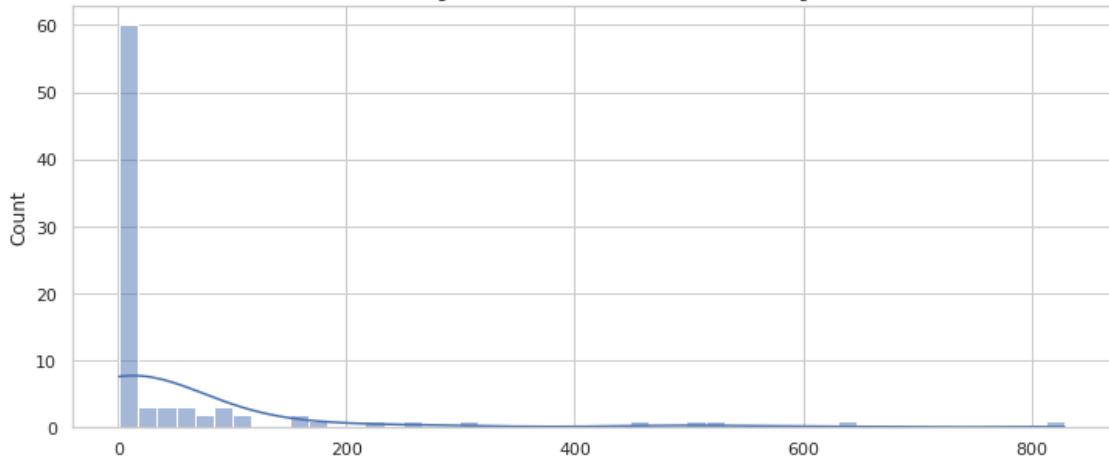
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|---------|----------------|----------|
| 0 | 5 | 0.25 | 4.000000 | 0.018316 |
| 1 | 3 | 0.50 | 2.000000 | 0.135335 |
| 2 | 3 | 0.50 | 2.000000 | 0.135335 |
| 3 | 3 | 0.50 | 2.000000 | 0.135335 |
| 4 | 2 | 1.00 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 1621 | 2 | 3170.00 | 0.000315 | 0.999685 |
| 1622 | 2 | 3170.00 | 0.000315 | 0.999685 |

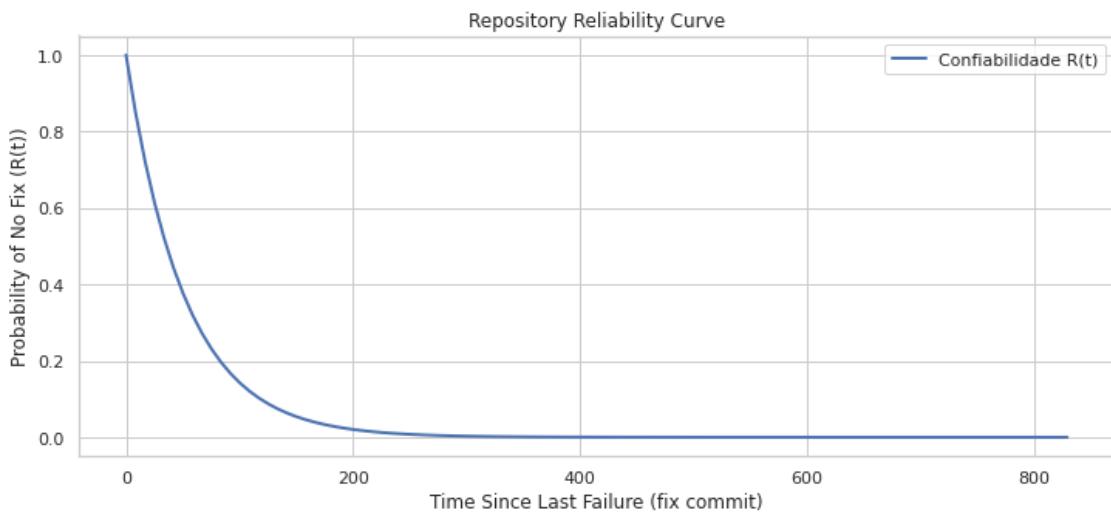
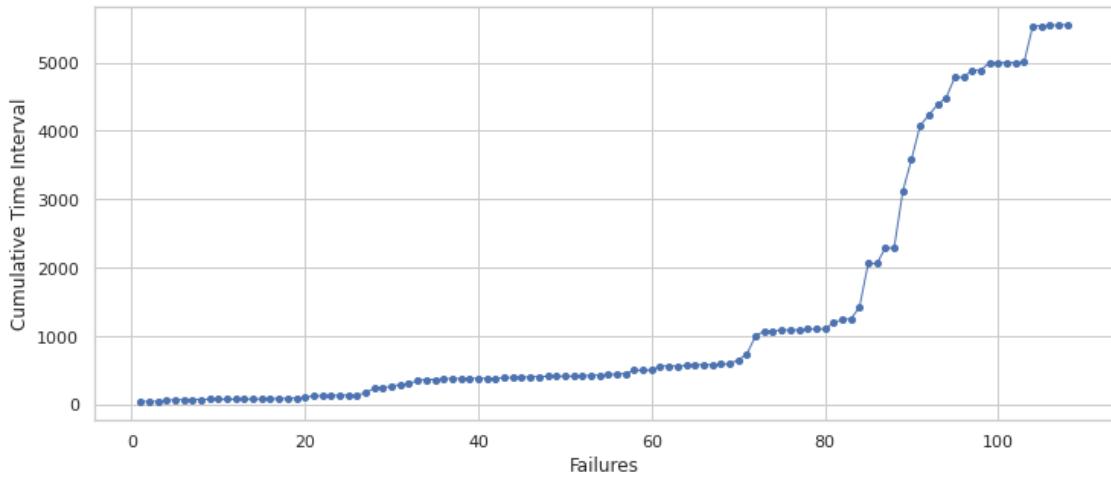
| | | | | |
|------|---|---------|----------|----------|
| 1623 | 2 | 3785.00 | 0.000264 | 0.999736 |
| 1624 | 2 | 3904.00 | 0.000256 | 0.999744 |
| 1625 | 2 | 3977.00 | 0.000251 | 0.999749 |

[1626 rows x 5 columns]

== cplib ==

The histogram of Time Between Failures (TBF) cplib





```

Confiabilidade R(1) = 0.9807
Confiabilidade R(5) = 0.9073
Confiabilidade R(10) = 0.8232
Confiabilidade R(50) = 0.3781
Confiabilidade R(100) = 0.1430
  
```

| | filepath | n_commits | \ |
|----|--|-----------|---|
| 0 | cglib/src/main/java/net/sf/cglib/core/ClassEmitter.java | 2 | |
| 1 | cglib/src/test/java/net/sf/cglib/proxysample/ProxySample.java | 2 | |
| 2 | src/proxy/net/sf/cglib/transform/AddStaticInitTransformer.java | 2 | |
| 3 | src/proxy/net/sf/cglib/Delegator.java | 2 | |
| 4 | src/proxy/net/sf/cglib/KeyFactory.java | 2 | |
| .. | ... | .. | |
| 37 | src/proxy/net/sf/cglib/proxy/MethodInterceptorGenerator.java | 3 | |

```

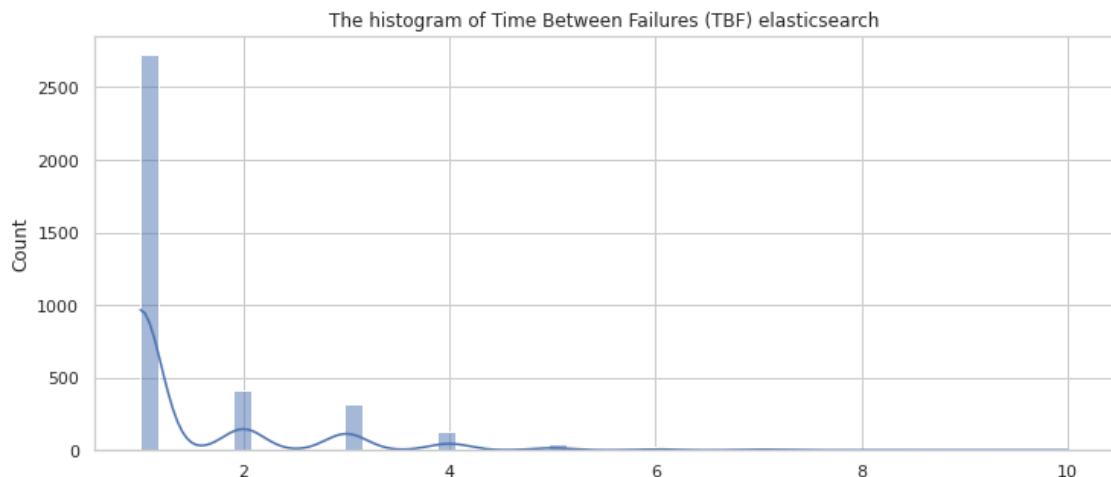
38  src/proxy/net/sf/cglib/core/ReflectUtils.java           2
39  src/proxy/net/sf/cglib/core/DebuggingClassWriter.java   3
40  src/proxy/net/sf/cglib/transform/AbstractTransformTask.java 2
41  src/proxy/net/sf/cglib/reflect/FastMethod.java         2

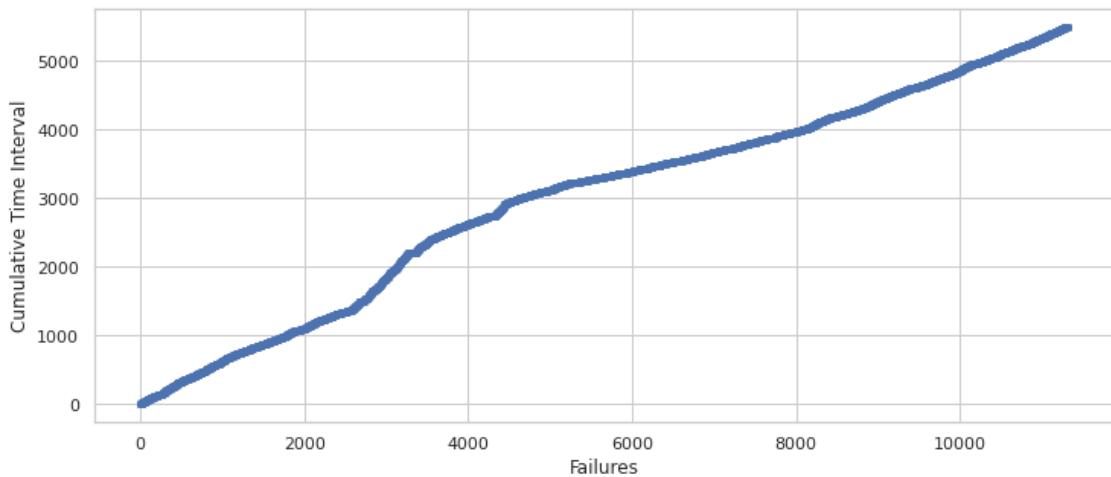
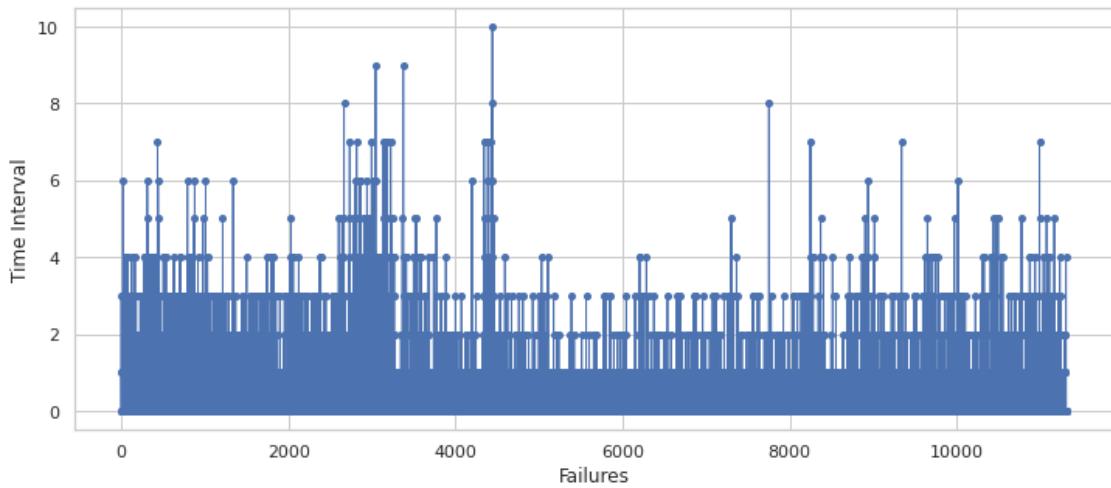
```

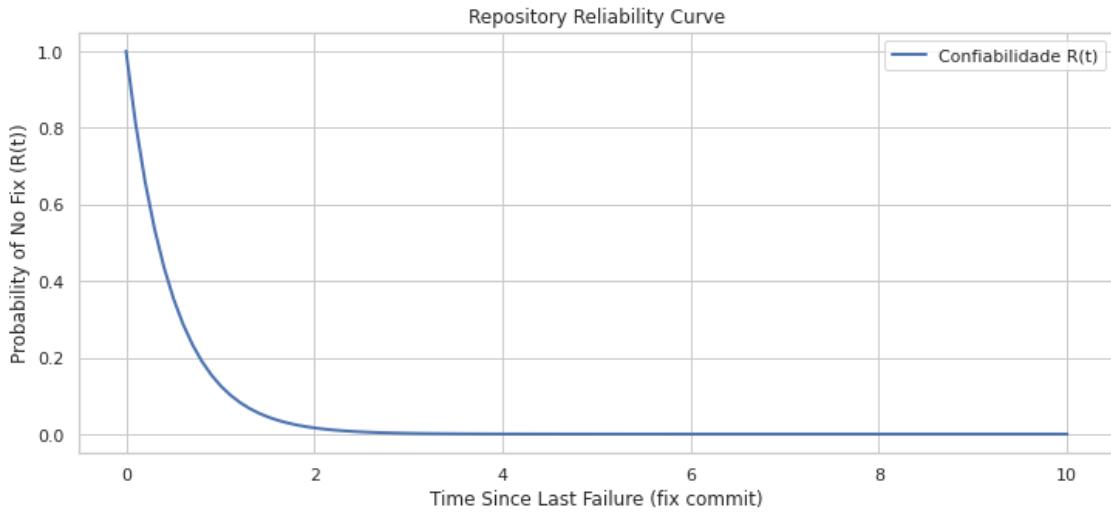
| | MTBF | lambda_failure | R_t |
|----|--------|----------------|----------|
| 0 | 1.0 | 1.000000 | 0.367879 |
| 1 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2.0 | 0.500000 | 0.606531 |
| 3 | 3.0 | 0.333333 | 0.716531 |
| 4 | 4.0 | 0.250000 | 0.778801 |
| .. | ... | ... | ... |
| 37 | 1315.0 | 0.000760 | 0.999240 |
| 38 | 1739.0 | 0.000575 | 0.999425 |
| 39 | 1851.0 | 0.000540 | 0.999460 |
| 40 | 1897.0 | 0.000527 | 0.999473 |
| 41 | 3682.0 | 0.000272 | 0.999728 |

[42 rows x 5 columns]

== elasticsearch ==







```

Confiabilidade R(1) = 0.1275
Confiabilidade R(5) = 0.0000
Confiabilidade R(10) = 0.0000
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

0      src/test/java/org/elasticsearch/NamingConventionTests.java
1      src/test/java/org/elasticsearch/discovery/DiscoveryWithServiceDisruptionsTests.java
2      src/test/java/org/elasticsearch/plugins/SitePluginTests.java
3      src/test/java/org/elasticsearch/common/logging/log4j/LoggingConfigurationTests.java
4      src/test/java/org/elasticsearch/cluster/routing/RoutingBackwardCompatibilityUponUpgradeTests.java
...
6900  modules/lang-painless/src/test/java/org/elasticsearch/painless/NeedsScoreTests.java
6901  modules/transport-netty4/src/main/java/org/elasticsearch/http/netty4/Netty4HttpChannel.java
6902  modules/lang-painless/src/test/java/org/elasticsearch/painless/AugmentationTests.java
6903  modules/lang-painless/src/test/java/org/elasticsearch/painless/DefBootstrapTests.java
6904  test/framework/src/main/java/org/elasticsearch/test/tasks/MockTaskManager.java

```

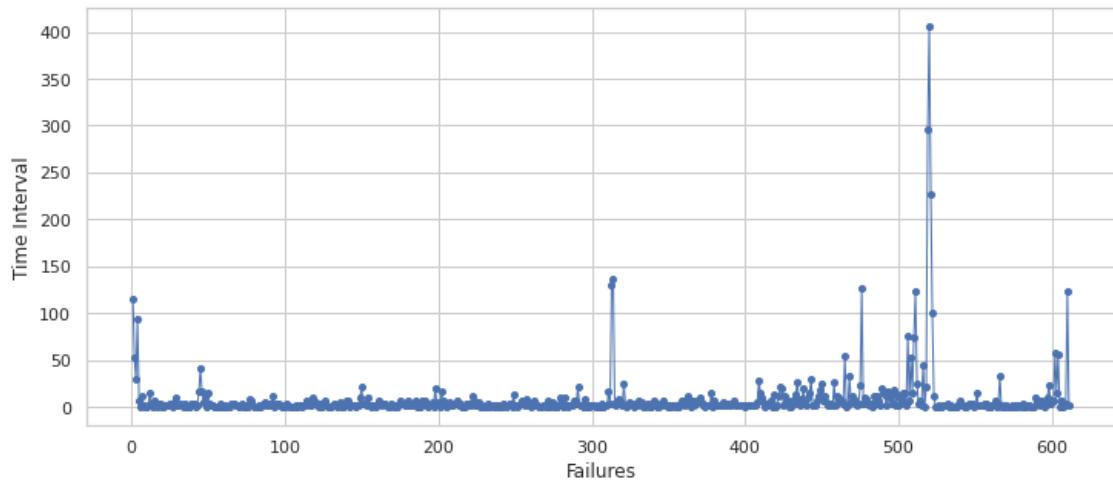
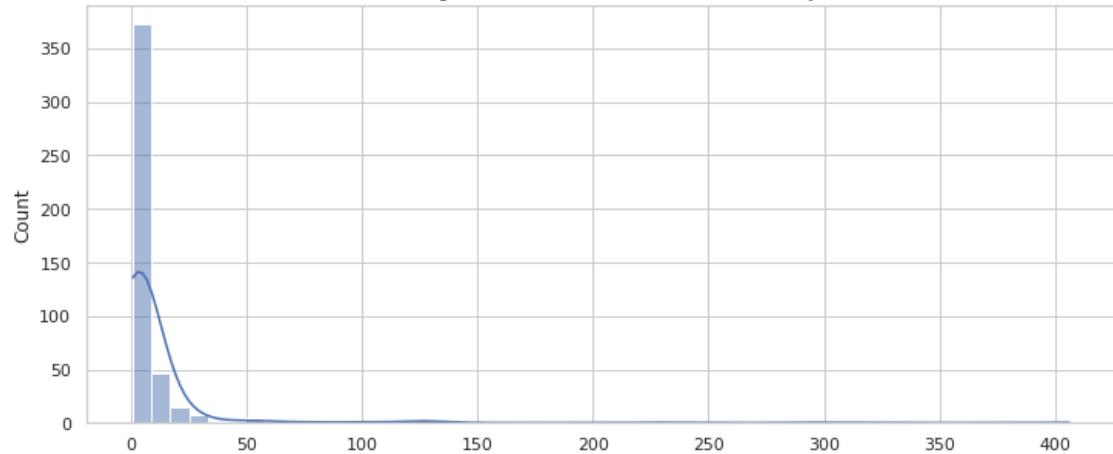
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|-------------|----------------|----------|
| 0 | 5 | 0.250000 | 4.000000 | 0.018316 |
| 1 | 5 | 0.250000 | 4.000000 | 0.018316 |
| 2 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 3 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 4 | 4 | 0.333333 | 3.000000 | 0.049787 |
| ... | ... | ... | ... | ... |
| 6900 | 2 | 2500.000000 | 0.000400 | 0.999600 |
| 6901 | 2 | 2542.000000 | 0.000393 | 0.999607 |
| 6902 | 2 | 2583.000000 | 0.000387 | 0.999613 |
| 6903 | 2 | 2840.000000 | 0.000352 | 0.999648 |

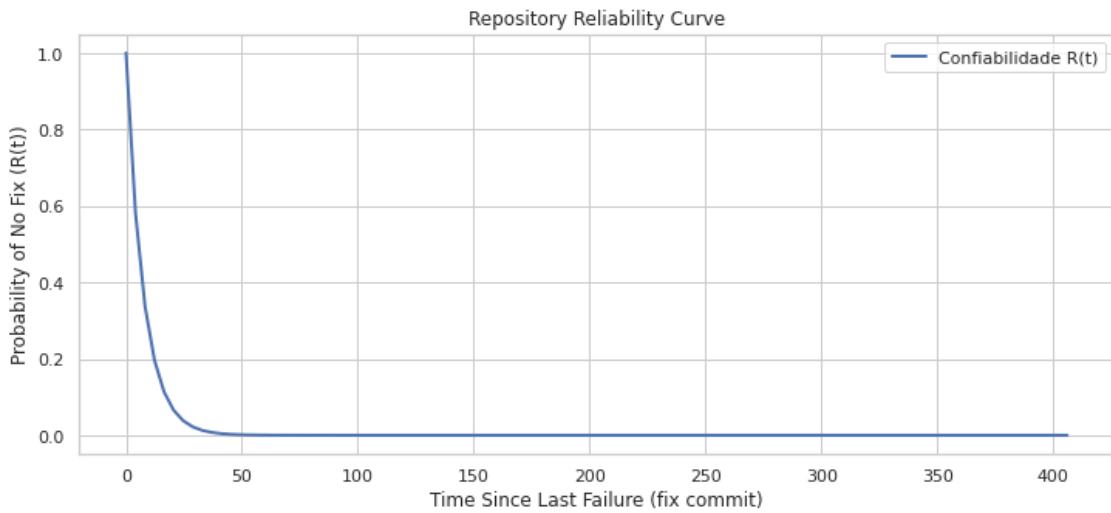
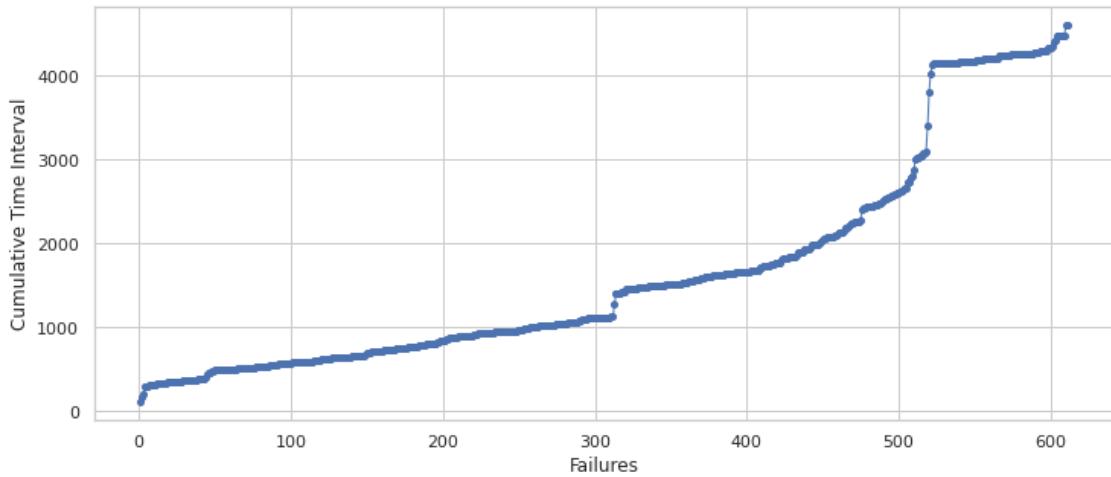
6904 2 3017.000000 0.000331 0.999669

[6905 rows x 5 columns]

== RxJava ==

The histogram of Time Between Failures (TBF) RxJava





```

Confiabilidade R(1) = 0.8758
Confiabilidade R(5) = 0.5153
Confiabilidade R(10) = 0.2655
Confiabilidade R(50) = 0.0013
Confiabilidade R(100) = 0.0000

```

```

filep
0   src/test/java/rx/subscriptions/CompositeSubscriptionTest.java
1   rxjava-core/src/test/java/rx/subscriptions/SerialSubscriptionTests.java
2   src/main/java/io/reactivex/internal/operators/PublisherGenerate.java
3   src/test/java/io/reactivex/internal/operators/OperatorMergeTest.java
4   rxjava-core/src/main/java/rx/operators/OperatorSingle.java
...
538  src/test/java/io/reactivex/internal/operators/single/SingleMiscTest.java

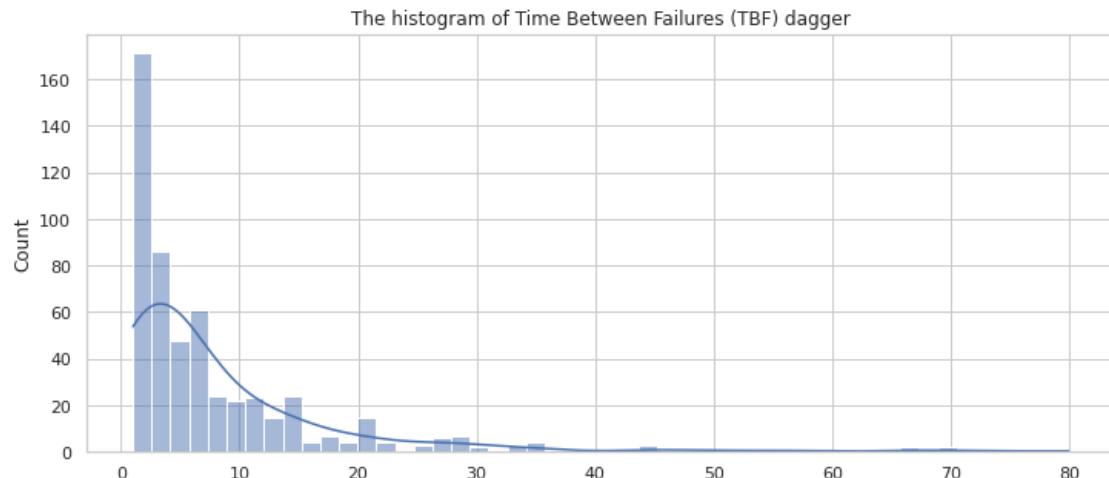
```

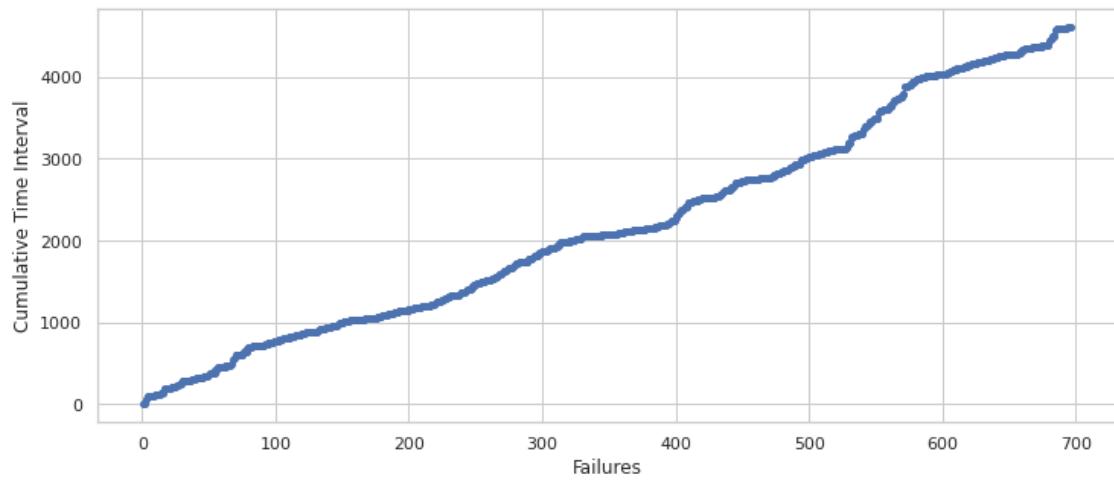
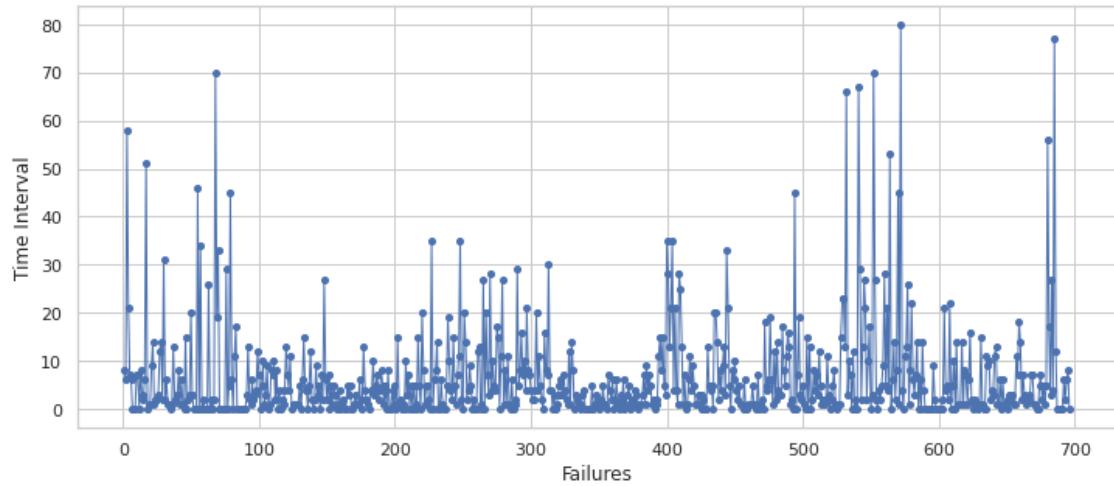
```
539 src/main/java/io/reactivex/rxjava3/internal/operators/observable/ObservableSwitchMap.java  
540 src/main/java/io/reactivex/rxjava3/internal/schedulers/SchedulerWhen.java  
541 src/main/java/io/reactivex/rxjava3/core/Scheduler.java  
542 src/main/java/io/reactivex/rxjava3/internal/operators/flowable/BlockingFlowableIterable.java
```

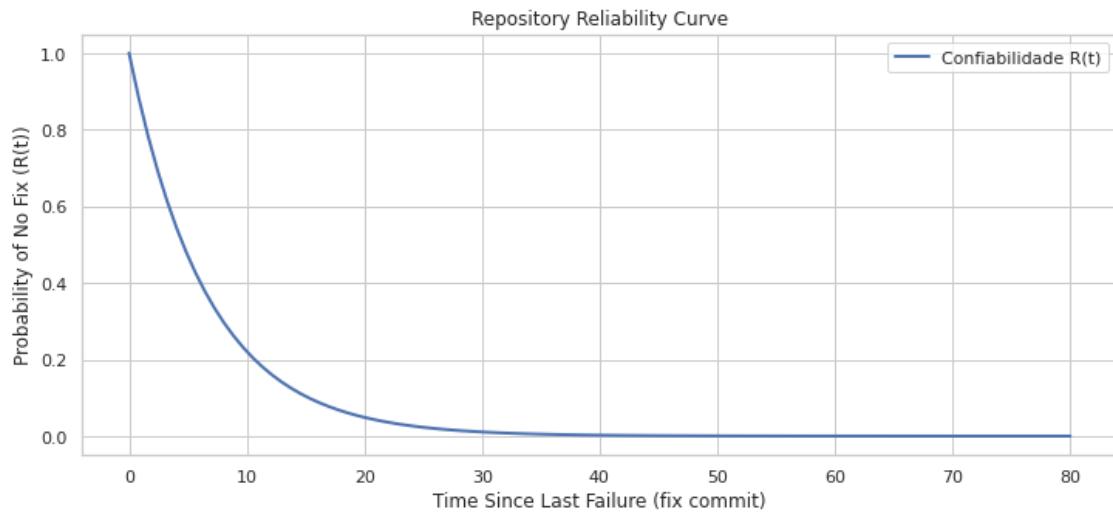
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 538 | 2 | 1034.0 | 0.000967 | 0.999033 |
| 539 | 2 | 1294.0 | 0.000773 | 0.999228 |
| 540 | 2 | 1644.0 | 0.000608 | 0.999392 |
| 541 | 2 | 1812.0 | 0.000552 | 0.999448 |
| 542 | 2 | 1919.0 | 0.000521 | 0.999479 |

[543 rows x 5 columns]

== dagger ==







```

Confiabilidade R(1) = 0.8600
Confiabilidade R(5) = 0.4704
Confiabilidade R(10) = 0.2213
Confiabilidade R(50) = 0.0005
Confiabilidade R(100) = 0.0000

```

filep

```

0   java/dagger/internal/codegen/ComponentDescriptorFactory.java
1   compiler/src/main/java/dagger/internal/codegen/TypeUtils.java
2   compiler/src/it/functional-tests/src/main/java/test/subcomponent/hiding/ParentComponent.java
3   compiler/src/it/functional-tests/src/main/java/test/subcomponent/hiding/ChildComponent.java
4   compiler/src/it/functional-tests/src/main/java/test/subcomponent/hiding/a/CommonName.java
...
525  java/dagger/internal/codegen/bindinggraphvalidation/BindingGraphValidationModule.java
526  javatests/dagger/functional/membersinject/MembersWithInstanceNameTest.java
527  java/dagger/internal/codegen/binding/DependencyRequestFormatter.java
528  javatests/dagger/android/processor/AndroidMapKeyValidatorTest.java
529  java/dagger/android/processor/AndroidProcessor.java

```

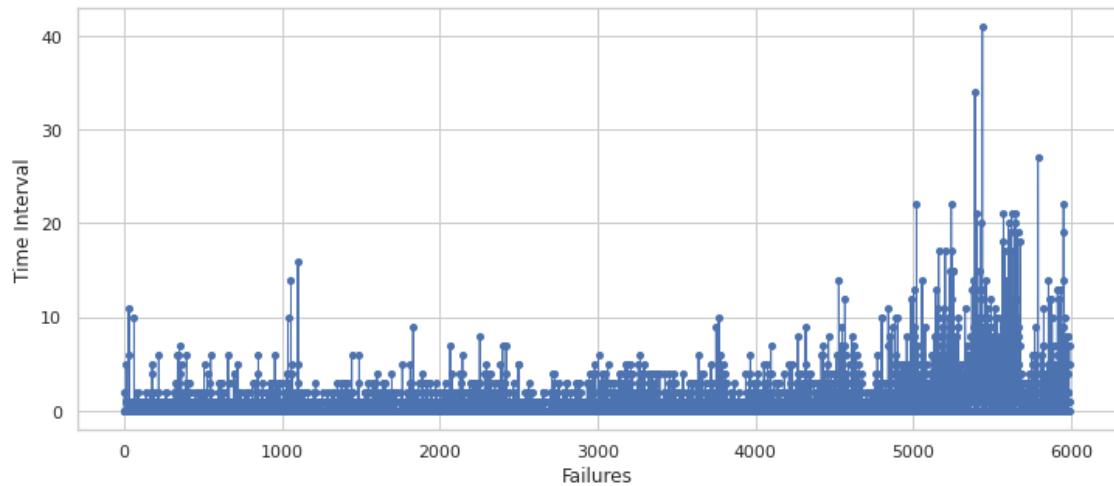
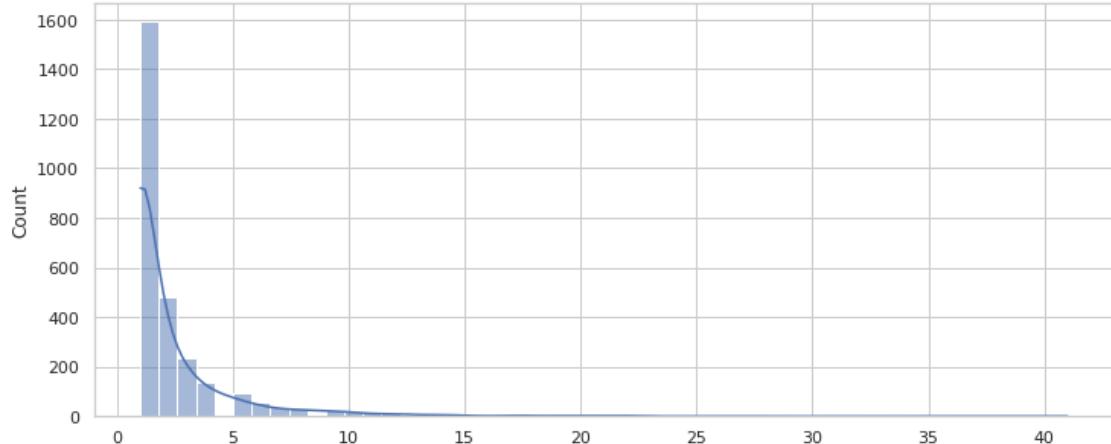
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 3 | 1.5 | 0.666667 | 0.513417 |
| 2 | 2 | 2.0 | 0.500000 | 0.606531 |
| 3 | 2 | 2.0 | 0.500000 | 0.606531 |
| 4 | 2 | 2.0 | 0.500000 | 0.606531 |
| ... | ... | ... | ... | ... |
| 525 | 2 | 1218.0 | 0.000821 | 0.999179 |
| 526 | 2 | 1313.0 | 0.000762 | 0.999239 |
| 527 | 2 | 1625.0 | 0.000615 | 0.999385 |
| 528 | 2 | 1845.0 | 0.000542 | 0.999458 |

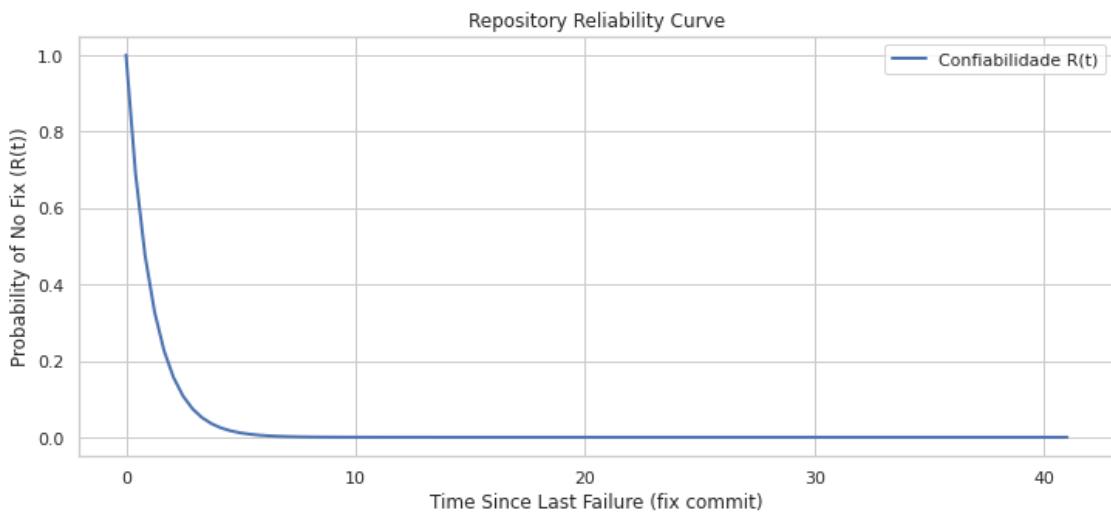
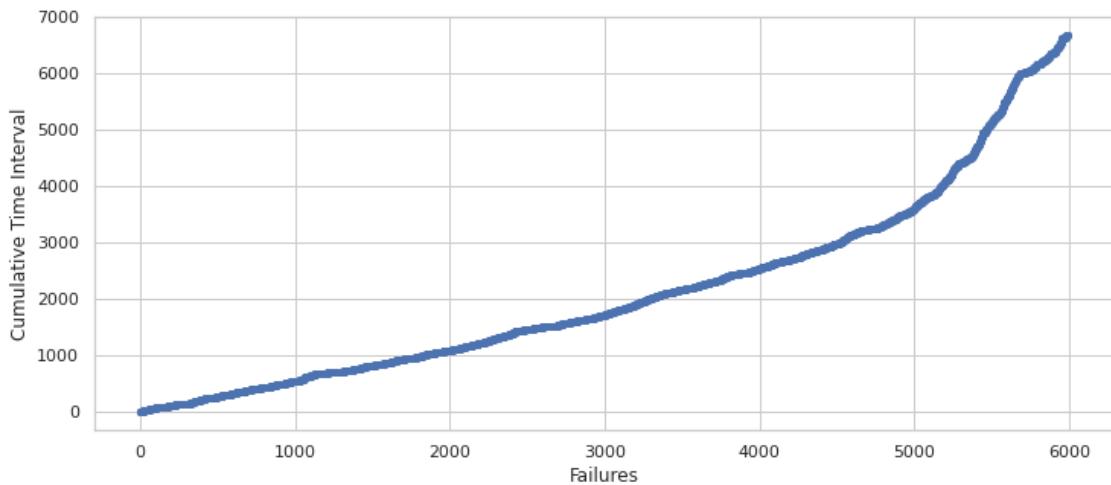
529 2 2017.0 0.000496 0.999504

[530 rows x 5 columns]

== jenkins ==

The histogram of Time Between Failures (TBF) jenkins





```

Confiabilidade R(1) = 0.4080
Confiabilidade R(5) = 0.0113
Confiabilidade R(10) = 0.0001
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

filepath \
0   core/src/main/java/jenkins/security/admin/AdminWhitelistRule.java
1   core/src/main/java/hudson/util/jna/InitializationErrorInvocationHandler.java
2   maven-plugin/src/main/java/hudson/maven/Maven31ProcessFactory.java
3   core/src/test/java/hudson/FilePathSEC904Test.java
4   test/src/main/java/com/gargoylesoftware/htmlunit/WebClientUtil.java
..
818  core/src/main/java/hudson/util/AWTProblem.java

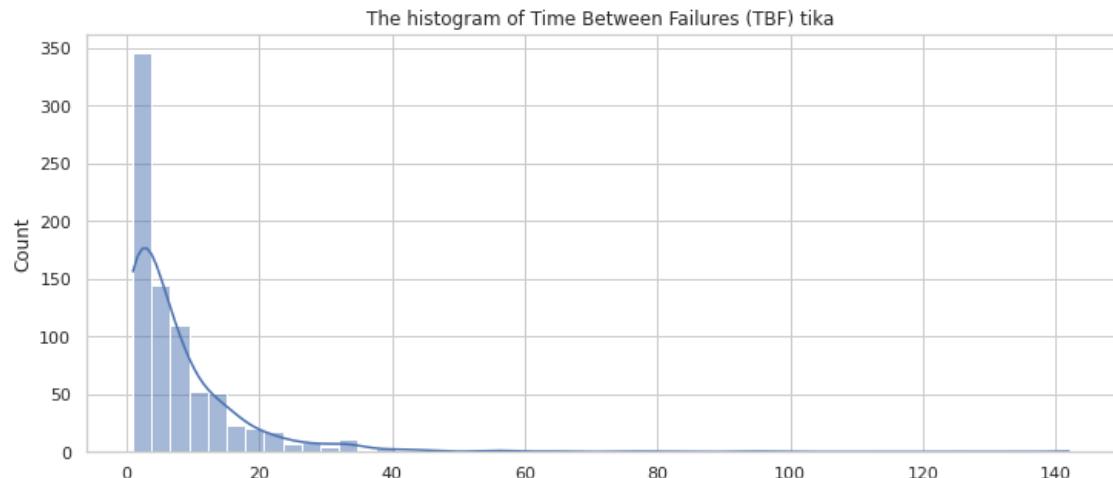
```

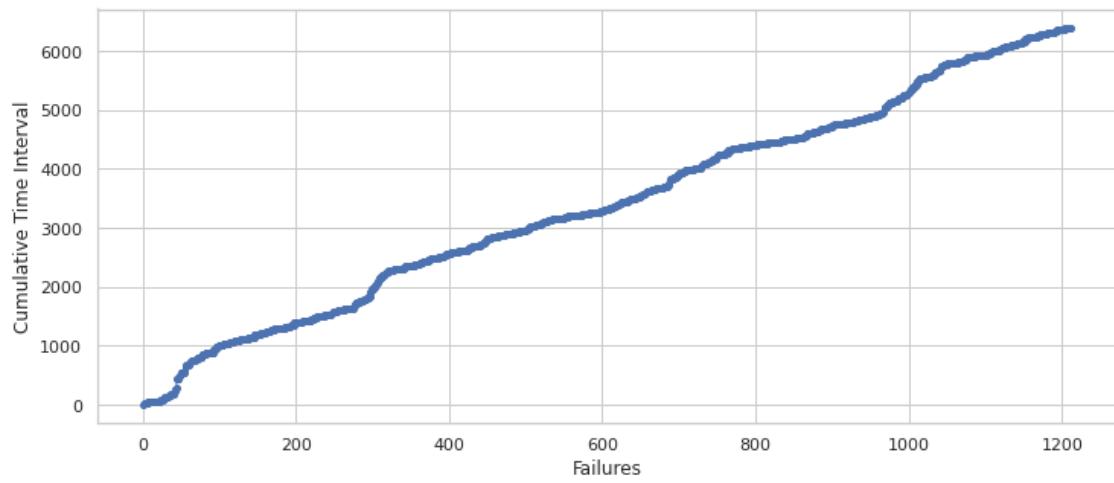
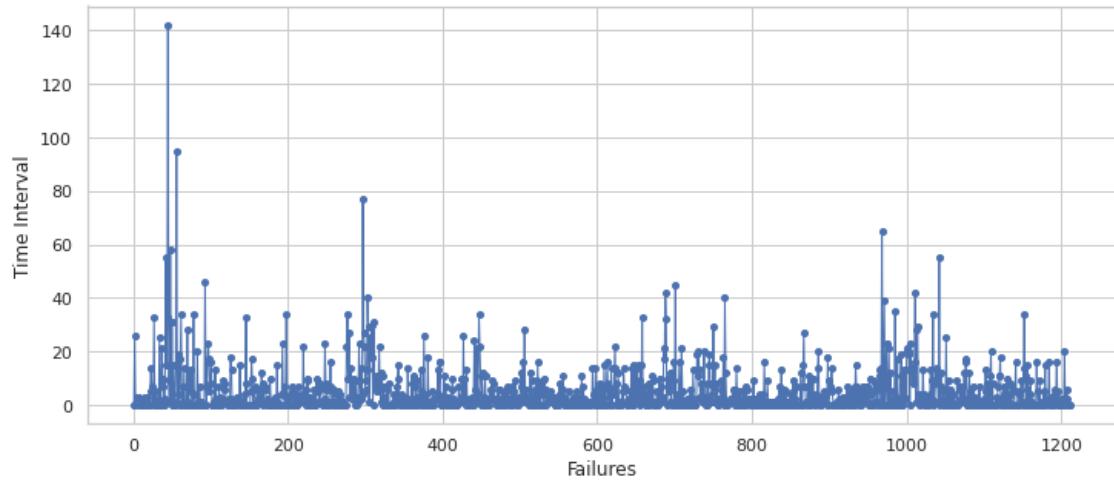
```
819 test/src/test/java/hudson/model/RunTest.java  
820 core/src/main/java/hudson/tasks/BuildWrapper.java  
821 test/src/test/java/hudson/bugs/DateConversionTest.java  
822 test/src/test/java/hudson/model/ComputerSetTest.java
```

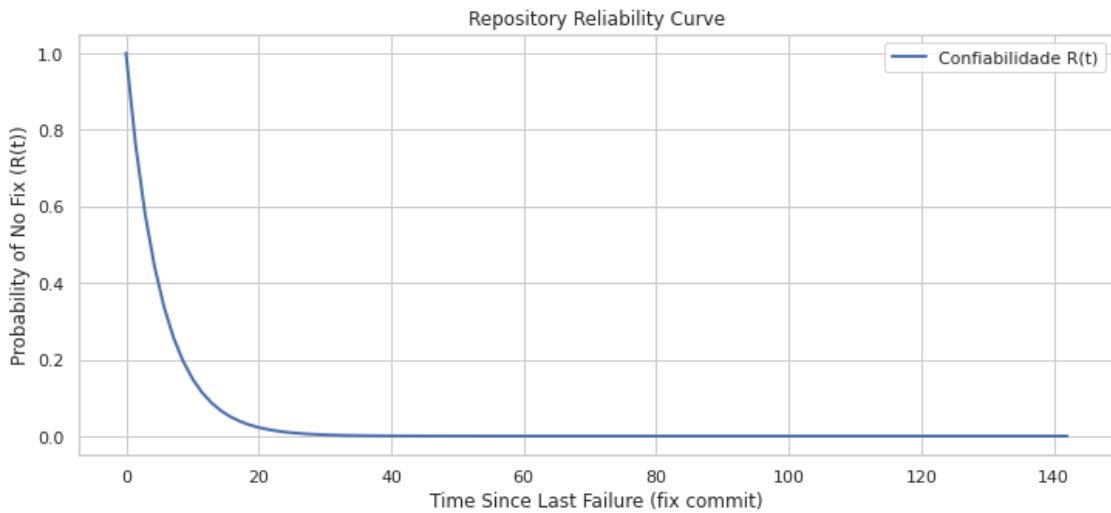
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|-------------|----------------|----------|
| 0 | 4 | 0.666667 | 1.500000 | 0.223130 |
| 1 | 2 | 1.000000 | 1.000000 | 0.367879 |
| 2 | 2 | 1.000000 | 1.000000 | 0.367879 |
| 3 | 2 | 1.000000 | 1.000000 | 0.367879 |
| 4 | 2 | 1.000000 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 818 | 2 | 4519.000000 | 0.000221 | 0.999779 |
| 819 | 2 | 4584.000000 | 0.000218 | 0.999782 |
| 820 | 2 | 4863.000000 | 0.000206 | 0.999794 |
| 821 | 2 | 5232.000000 | 0.000191 | 0.999809 |
| 822 | 2 | 5288.000000 | 0.000189 | 0.999811 |

[823 rows x 5 columns]

== tika ==







```

Confiabilidade R(1) = 0.8274
Confiabilidade R(5) = 0.3879
Confiabilidade R(10) = 0.1504
Confiabilidade R(50) = 0.0001
Confiabilidade R(100) = 0.0000

```

```

0   tika-parsers/tika-parsers-standard/tika-parsers-standard-modules/tika-parser-microsoft-mod
1   tika-parsers/src/test/java/org/apache/tika/parser/gdal/TestGDALParser.java
2   tika-parsers/tika-parsers-advanced/tika-parser-nlp-module/src/main/java/org/apache/tika/pa
3   tika-parsers/tika-parsers-classic/tika-parsers-classic-modules/tika-parser-microsoft-modul
4   tika-parsers/src/main/java/org/apache/tika/parser/journal/GrobidParser.java
...   ...
785  tika-core/src/main/java/org/apache/tika/exception/EncryptedDocumentException.java
786  tika-example/src/test/java/org/apache/tika/example/ContentHandlerExampleTest.java
787  tika-core/src/test/java/org/apache/tika/sax/SecureContentHandlerTest.java
788  tika-core/src/test/java/org/apache/tika/mime/PatternsTest.java
789  tika-core/src/test/java/org/apache/tika/detect/TypeDetectorTest.java

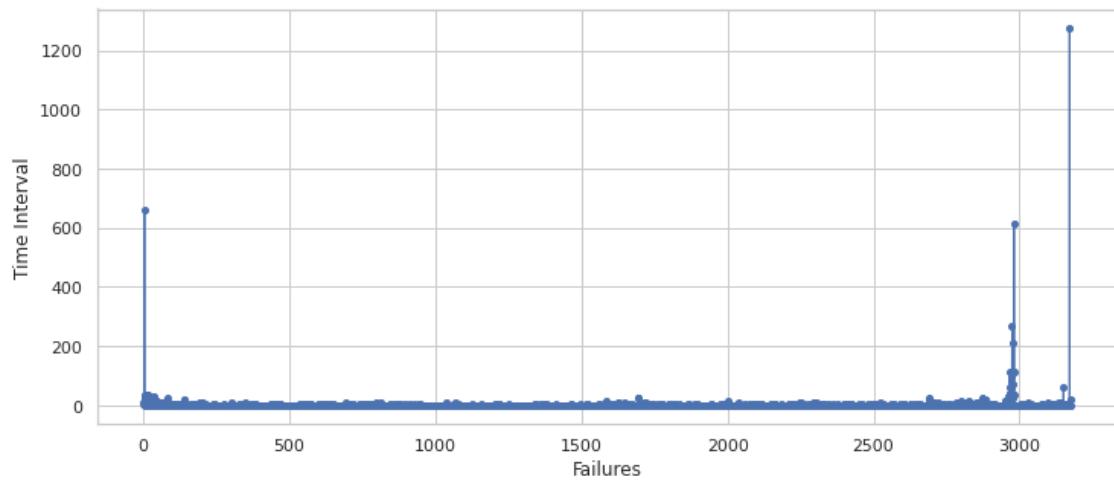
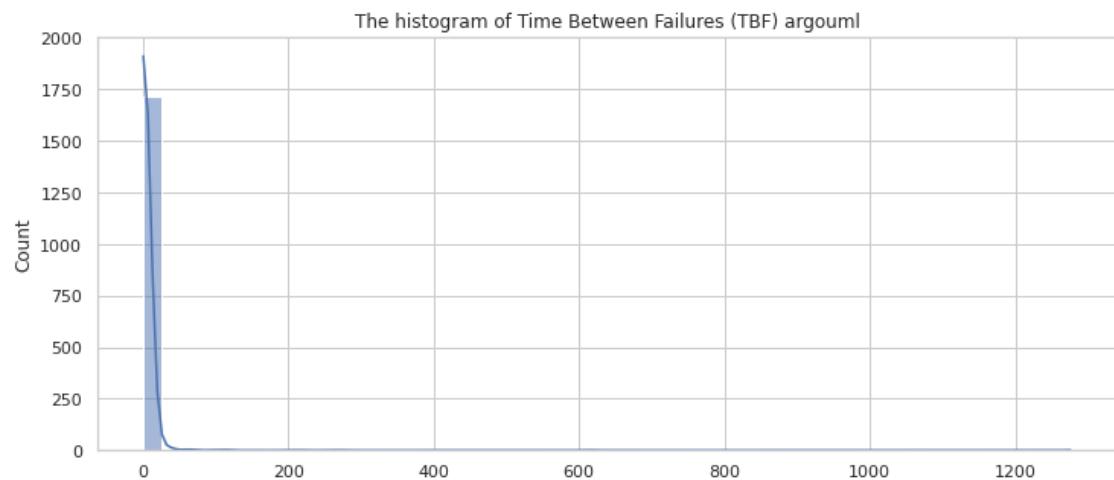
```

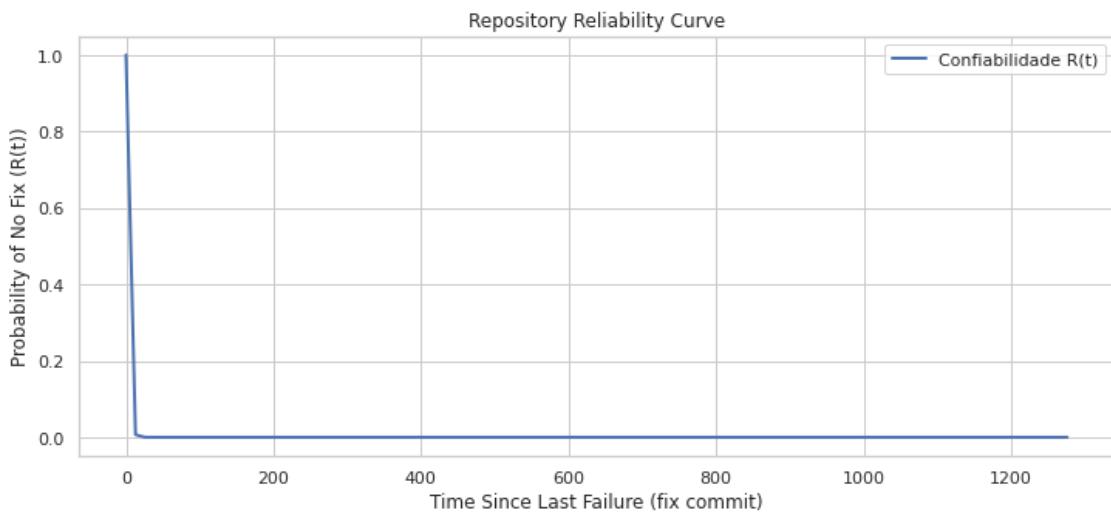
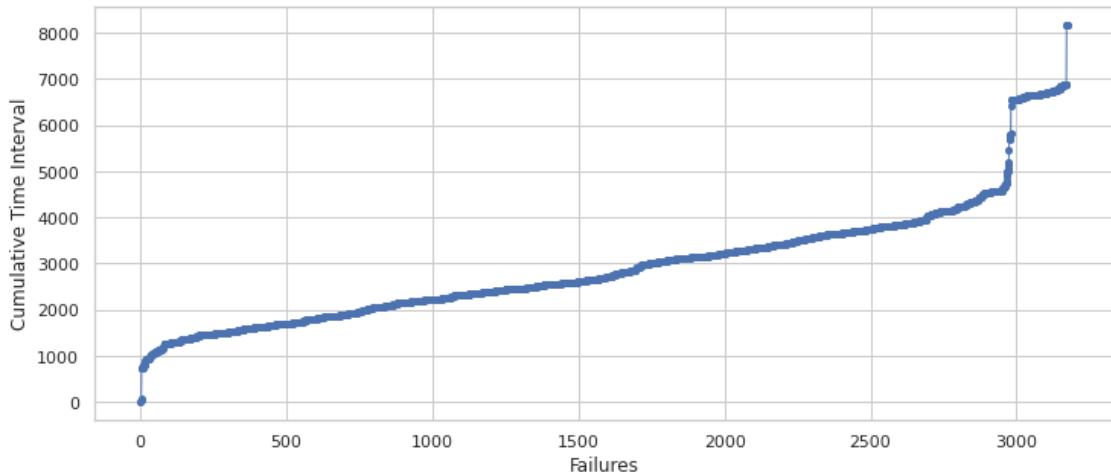
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 3 | 0.5 | 2.000000 | 0.135335 |
| 2 | 3 | 0.5 | 2.000000 | 0.135335 |
| 3 | 3 | 0.5 | 2.000000 | 0.135335 |
| 4 | 3 | 0.5 | 2.000000 | 0.135335 |
| ... | ... | ... | ... | ... |
| 785 | 2 | 3464.0 | 0.000289 | 0.999711 |
| 786 | 2 | 3571.0 | 0.000280 | 0.999720 |
| 787 | 2 | 3590.0 | 0.000279 | 0.999721 |
| 788 | 2 | 3590.0 | 0.000279 | 0.999721 |

789 2 4265.0 0.000234 0.999766

[790 rows x 5 columns]

== argouml ==





Confiabilidade $R(1) = 0.6783$

Confiabilidade $R(5) = 0.1436$

Confiabilidade $R(10) = 0.0206$

Confiabilidade $R(50) = 0.0000$

Confiabilidade $R(100) = 0.0000$

```

0      src/argouml-core-umlpropertypanels/src/org/argouml/core/propertypanels/ui/UMLExpandableRe...
1      src_new/org/argouml/uml/ui/foundation/core/UMLOperationConcurrencyRadioButtonPanel.java
2      tests/org/argouml/model/TestUseCasesHelper.java
3      tests/org/argouml/model/uml/behavioralelements/commonbehavior/TestCommonBehaviorFactory.j...
4      src_new/org/argouml/gef/RoutingStrategy.java
...
1429   src/argouml-app/tests/org/argouml/persistence/TestZargoFilePersister.java

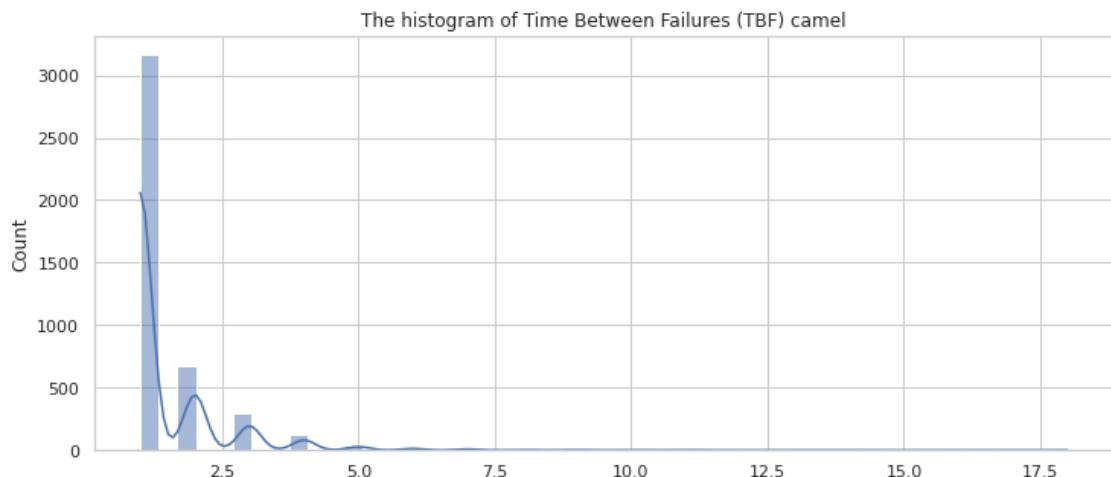
```

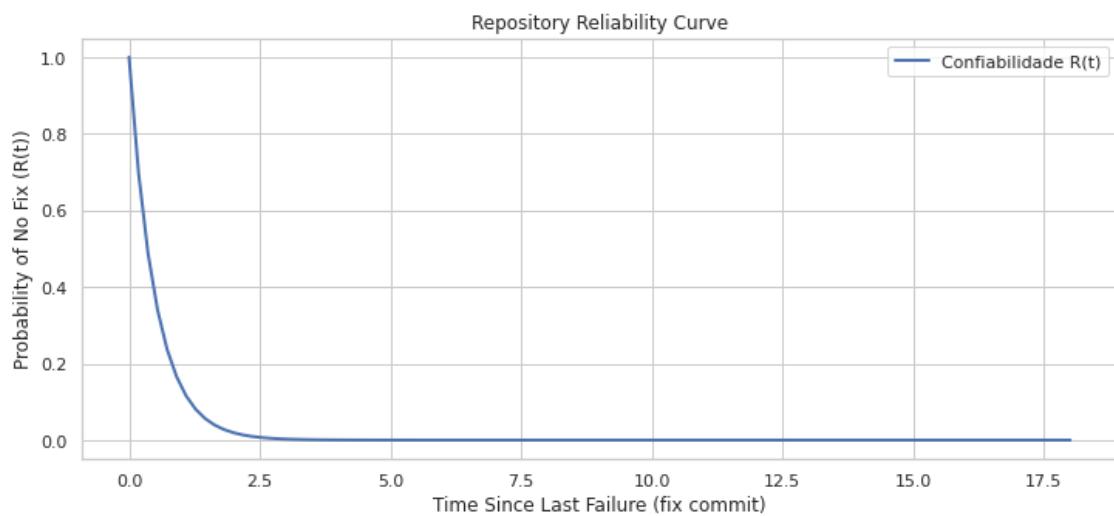
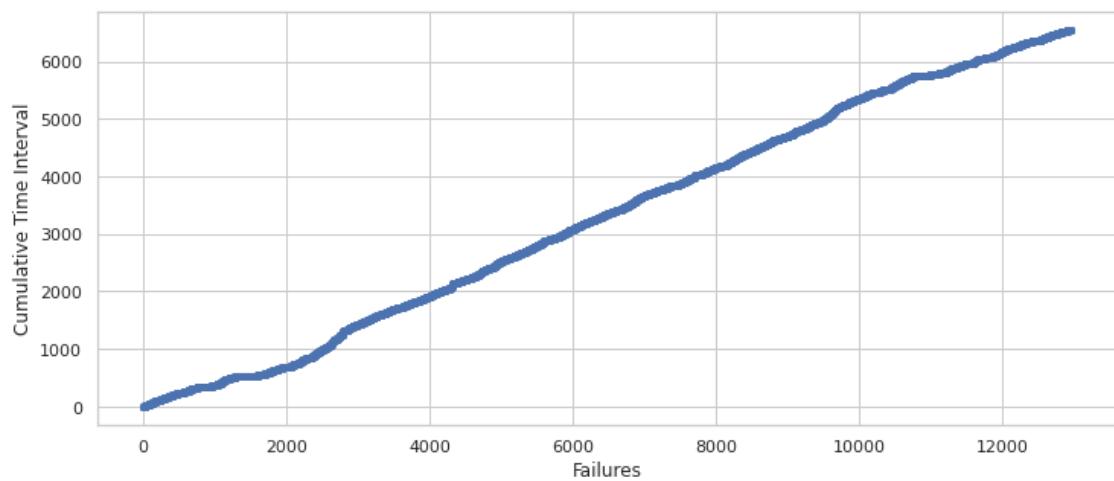
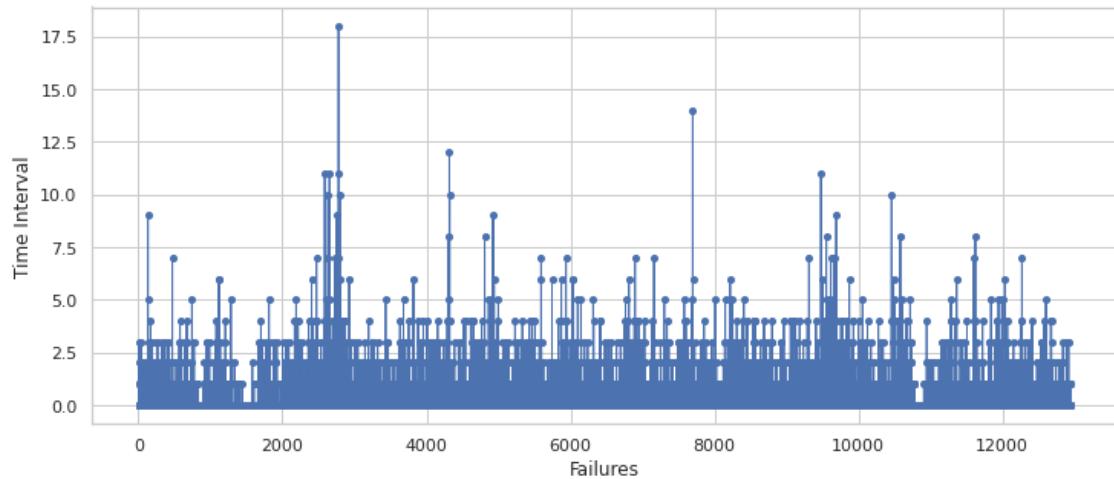
```
1430 src/argouml-app/src/org/argouml/moduleloader/ModuleLoader2.java  
1431 src/argouml-core-model-mdr/tests/org/argouml/model/mdr/TestReadCompressedFilesAndHref.ja  
1432 src/argouml-core-diagrams-sequence2/tests/org/argouml/persistence/TestDiagramUpdateAtLoad.  
1433 src/argouml-core-model-mdr/tests/org/argouml/model/mdr/TestMDRModelImplementationCreate..
```

| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 1429 | 3 | 2140.5 | 0.000467 | 0.999533 |
| 1430 | 3 | 2194.0 | 0.000456 | 0.999544 |
| 1431 | 2 | 3628.0 | 0.000276 | 0.999724 |
| 1432 | 2 | 3886.0 | 0.000257 | 0.999743 |
| 1433 | 2 | 4213.0 | 0.000237 | 0.999763 |

[1434 rows x 5 columns]

== camel ==





```

Confiabilidade R(1) = 0.1385
Confiabilidade R(5) = 0.0001
Confiabilidade R(10) = 0.0000
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

0      components/camel-swagger-java/src/main/java/org/apache/camel/swagger/RestSwaggerApiDecla...
1      components/camel-aws/camel-aws2-translate/src/main/java/org/apache/camel/component/aws2/...
2      components/camel-hystrix/src/main/java/org/apache/camel/component/hystrix/HystrixProcess...
3      camel-core/src/main/java/org/apache/camel/spi/EndpointRegistry.java
4      components/camel-ftp/src/main/java/org/apache/camel/component/file/remote/FtpClientActiv...
...
8853     components/camel-jms/src/test/java/org/apache/camel/component/jms/ConsumeJmsObjectMessage...
8854     components/camel-ftp/src/main/java/org/apache/camel/component/file/remote/RemoteFileComp...
8855     components/camel-rss/src/main/java/org/apache/camel/component/rss/UpdatedDateFilter.java
8856     components/camel-atom/src/main/java/org/apache/camel/component/feed/EntryFilter.java
8857     components/camel-rss/src/main/java/org/apache/camel/component/rss/RssPollingConsumer.java

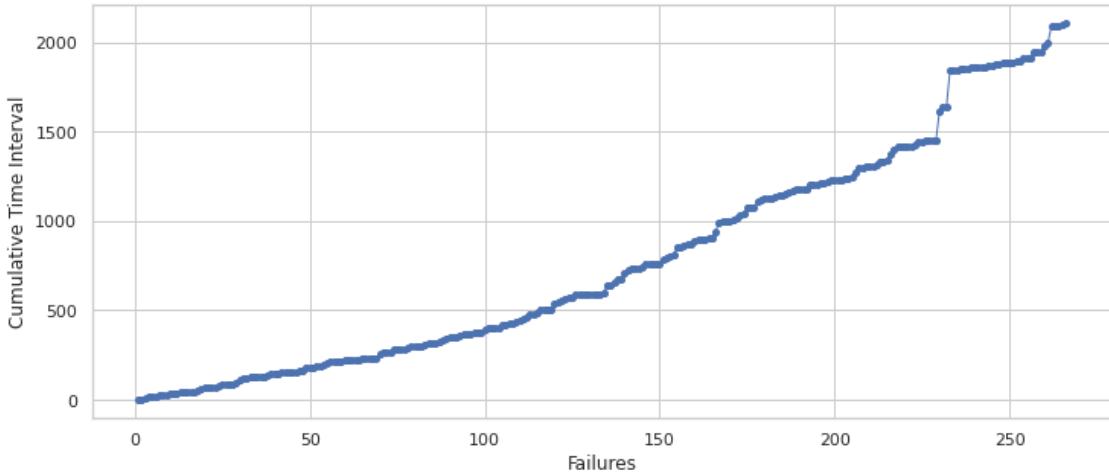
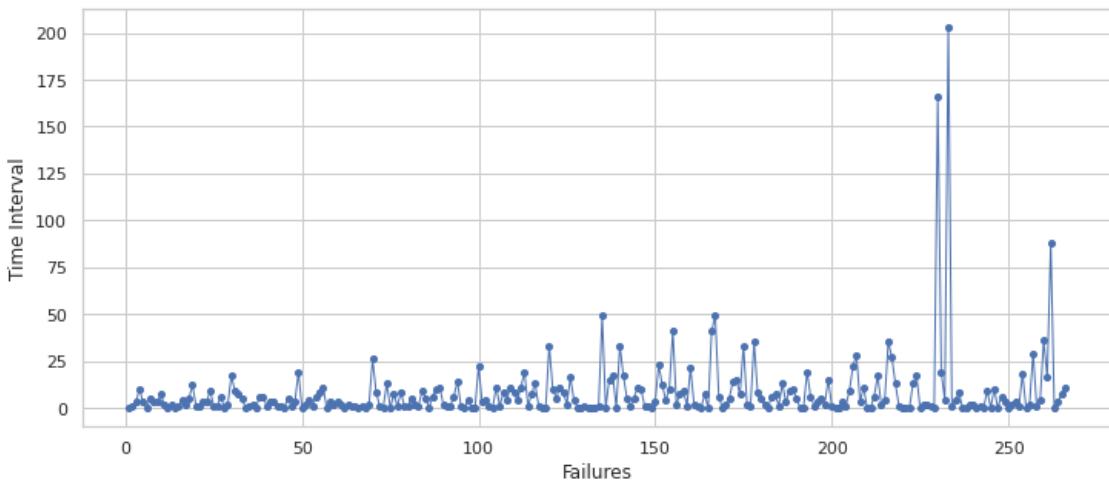
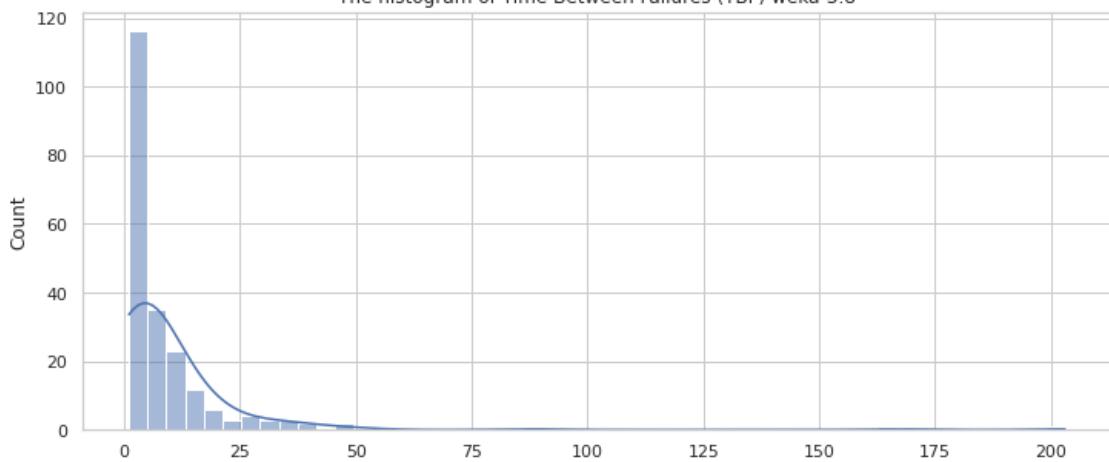
```

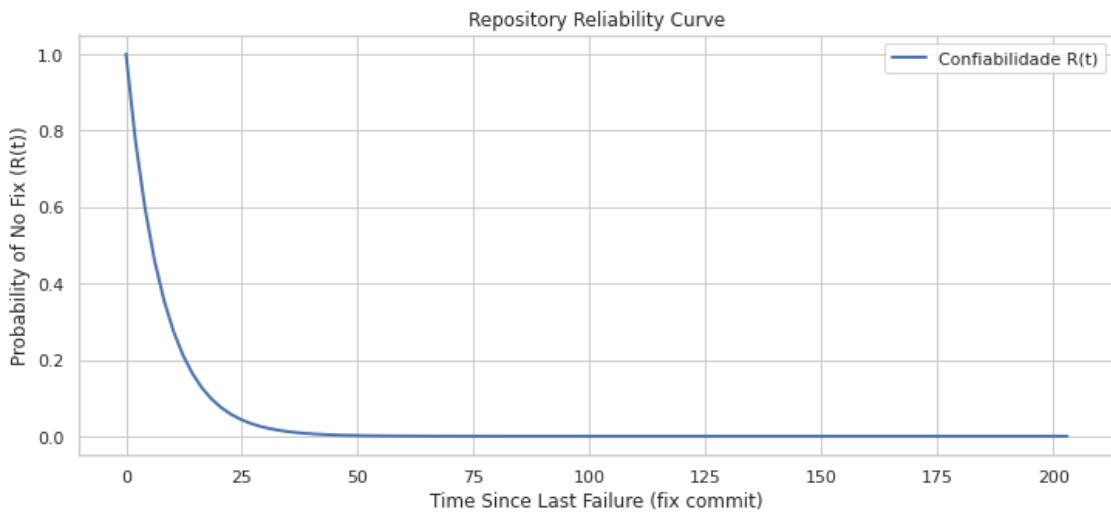
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|-------------|----------------|----------|
| 0 | 6 | 0.200000 | 5.000000 | 0.006738 |
| 1 | 21 | 0.200000 | 5.000000 | 0.006738 |
| 2 | 5 | 0.250000 | 4.000000 | 0.018316 |
| 3 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 4 | 4 | 0.333333 | 3.000000 | 0.049787 |
| ... | ... | ... | ... | ... |
| 8853 | 2 | 5099.000000 | 0.000196 | 0.999804 |
| 8854 | 2 | 5329.000000 | 0.000188 | 0.999812 |
| 8855 | 2 | 5335.000000 | 0.000187 | 0.999813 |
| 8856 | 2 | 5335.000000 | 0.000187 | 0.999813 |
| 8857 | 2 | 5341.000000 | 0.000187 | 0.999813 |

[8858 rows x 5 columns]

== weka-3.8 ==

The histogram of Time Between Failures (TBF) weka-3.8





```

Confiabilidade R(1) = 0.8815
Confiabilidade R(5) = 0.5321
Confiabilidade R(10) = 0.2831
Confiabilidade R(50) = 0.0018
Confiabilidade R(100) = 0.0000

```

```

0 packages/internal/WekaExcel/src/main/java/weka/core/converter/ExcelSaver.java
1 weka/src/main/java/weka/classifiers/meta/LogitBoost.java
2 weka/src/main/java/weka/gui/knowledgeflow/steps/SaverStepEditorDialog.java
3 weka/src/main/java/weka/datagenerators/clusterers/SubspaceClusterDefinition.java
4 weka/src/main/java/weka/datagenerators/clusterers/SubspaceCluster.java
...
89 weka/src/main/java/weka/knowledgeflow/steps/SerializedModelSaver.java
90 weka/src/main/java/weka/core/converter/ConverterResources.java
91 packages/internal/timeseriesForecasting/src/main/java/weka/classifiers/timeseries/eval/TSE
92 weka/src/main/java/weka/knowledgeflow/steps/DataGenerator.java
93 weka/src/main/java/weka/filters/MultiFilter.java

```

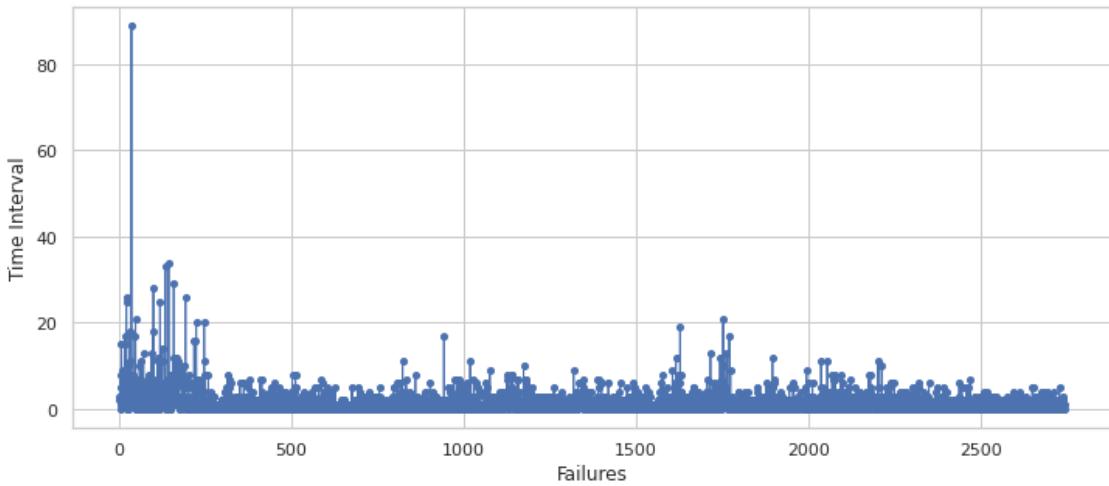
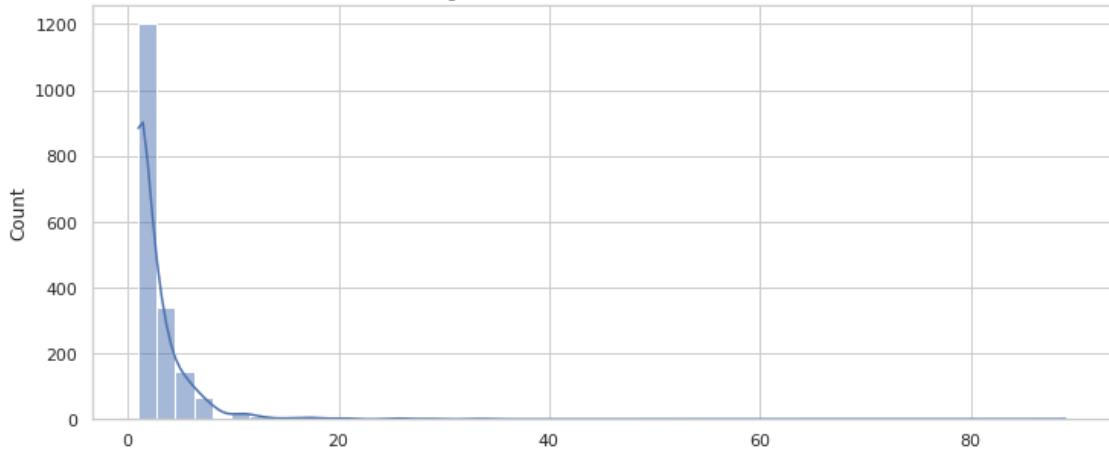
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 3.0 | 0.333333 | 0.716531 |
| 4 | 2 | 3.0 | 0.333333 | 0.716531 |
| ... | ... | ... | ... | ... |
| 89 | 2 | 1070.0 | 0.000935 | 0.999066 |
| 90 | 2 | 1089.0 | 0.000918 | 0.999082 |

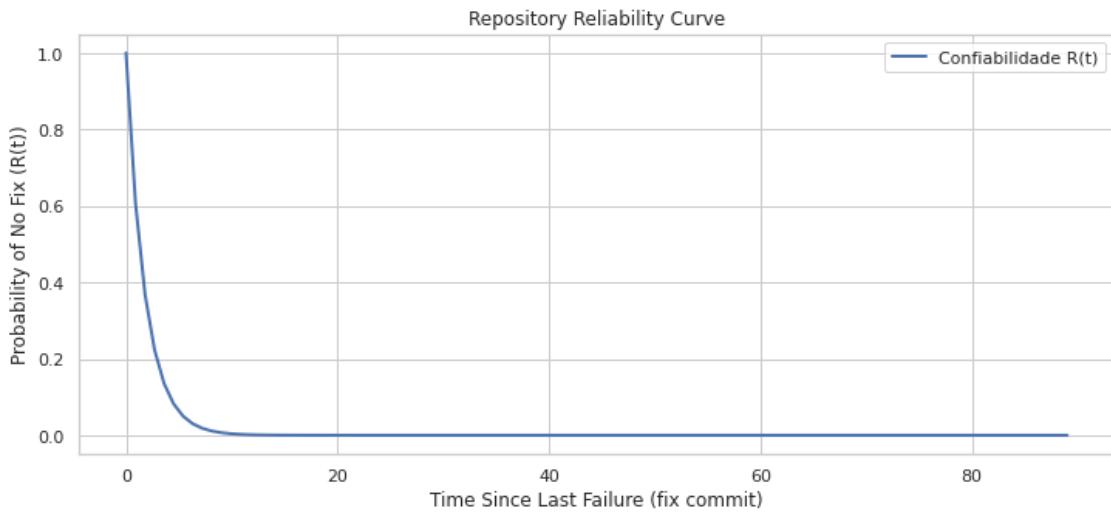
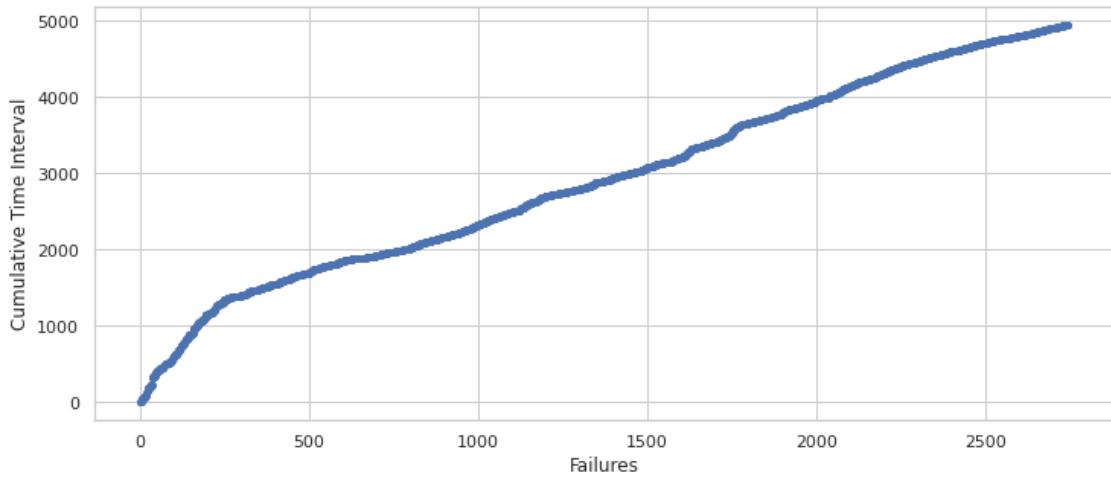
```
91 2      1149.0  0.000870    0.999130
92 2      1206.0  0.000829    0.999171
93 2      1292.0  0.000774    0.999226
```

[94 rows x 5 columns]

== kafka ==

The histogram of Time Between Failures (TBF) kafka





```

Confiabilidade R(1) = 0.5739
Confiabilidade R(5) = 0.0623
Confiabilidade R(10) = 0.0039
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

0   clients/src/main/java/org/apache/kafka/common/serialization/ByteBufferSerializer.java
1   streams/src/main/java/org/apache/kafkastreams/state/internals/ChangeLoggingListValueBytes
2   connect/mirror/src/test/java/org/apache/kafka/connect/mirror/integration/MirrorConnectors
3   streams/src/main/java/org/apache/kafkastreams/state/internals/KeyValueStore.java
4   core/src/main/scala/kafka/tools/KafkaMigrationTool.java
...
965  connect/runtime/src/test/java/org/apache/kafka/connect/storage/KafkaOffsetBackingStoreTest

```

```

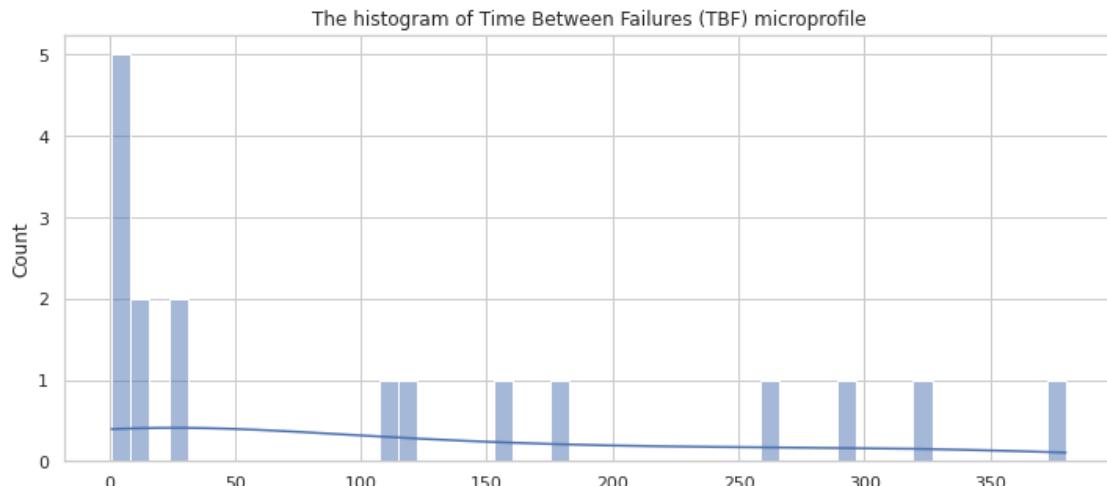
966 clients/src/main/java/org/apache/kafka/clients/InFlightRequests.java
967 streams/src/main/java/org/apache/kafkastreams/state/ReadOnlyKeyValueStore.java
968 clients/src/main/java/org/apache/kafka/common/security/authenticator/LoginManager.java
969 connect/runtime/src/test/java/org/apache/kafka/connect/util/KafkaBasedLogTest.java

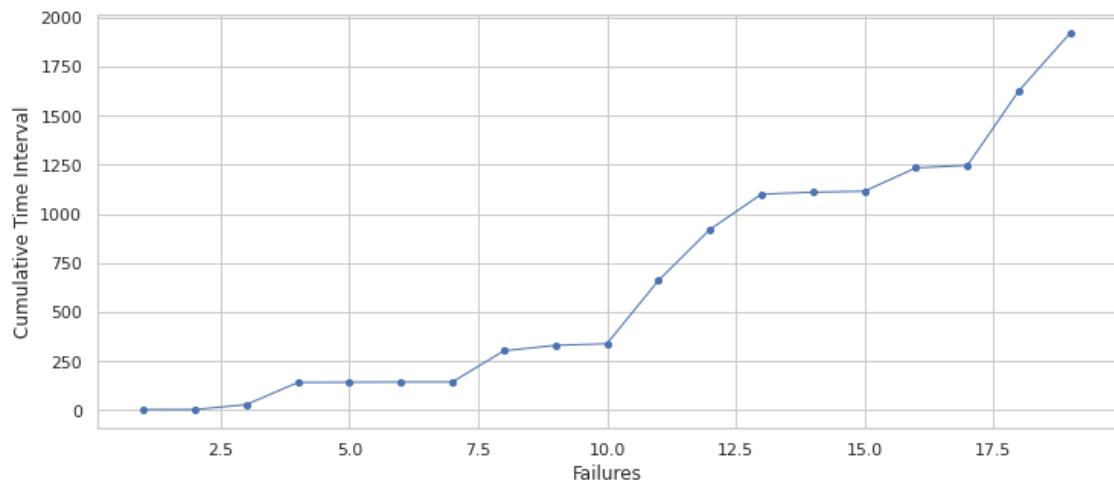
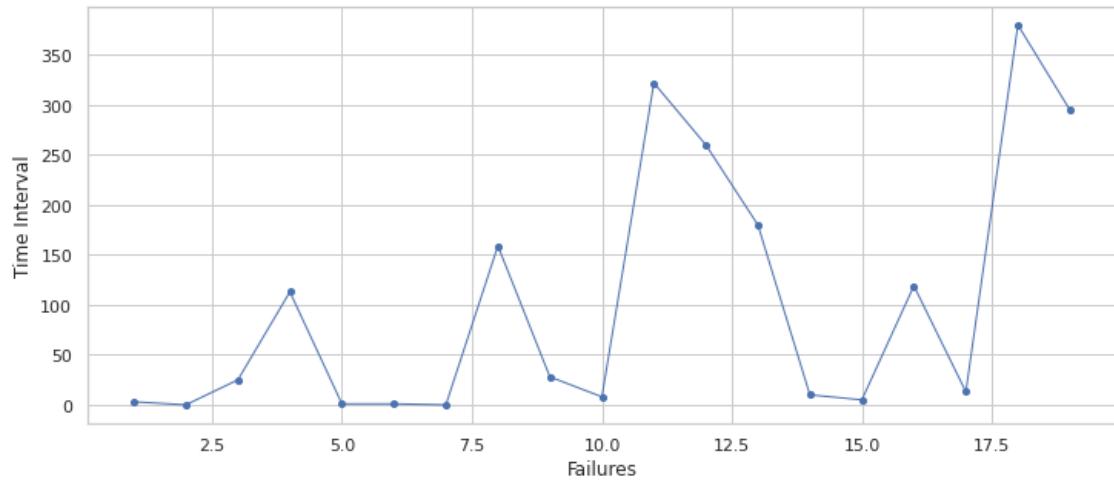
```

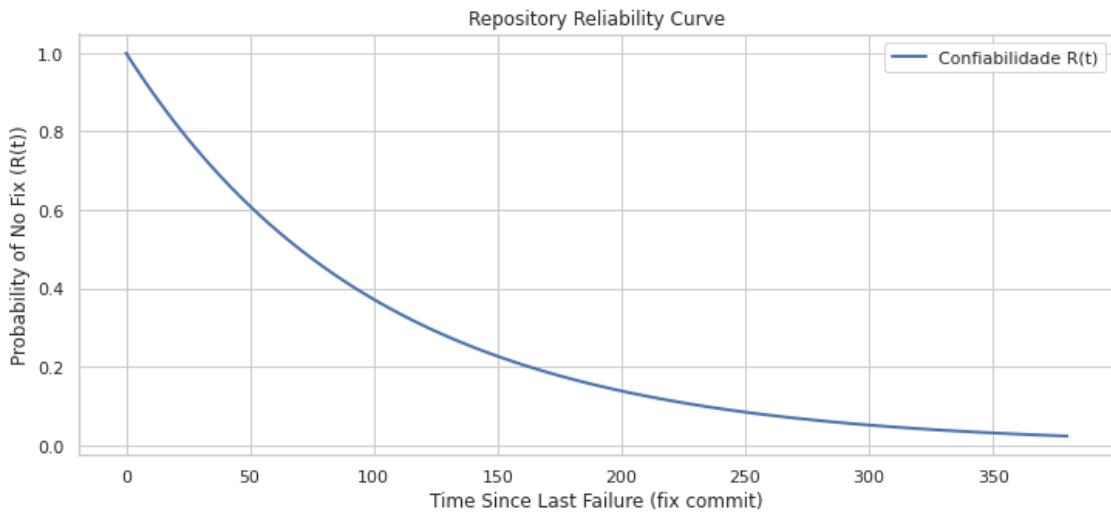
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 3 | 1.0 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 965 | 2 | 2638.0 | 0.000379 | 0.999621 |
| 966 | 2 | 2645.0 | 0.000378 | 0.999622 |
| 967 | 2 | 2733.0 | 0.000366 | 0.999634 |
| 968 | 2 | 2764.0 | 0.000362 | 0.999638 |
| 969 | 2 | 2780.0 | 0.000360 | 0.999640 |

[970 rows x 5 columns]

== microprofile ==







```

Confiabilidade R(1) = 0.9902
Confiabilidade R(5) = 0.9518
Confiabilidade R(10) = 0.9059
Confiabilidade R(50) = 0.6100
Confiabilidade R(100) = 0.3721

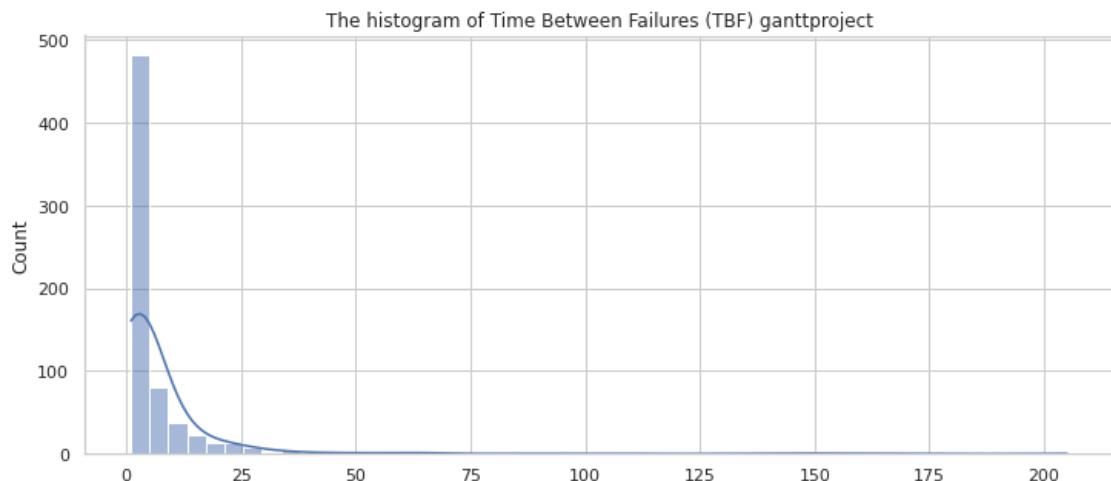
```

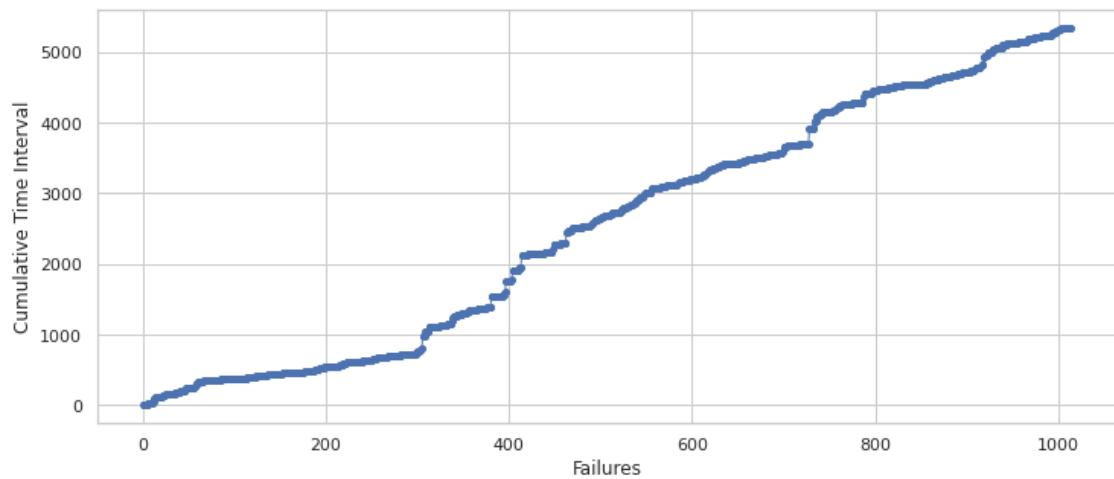
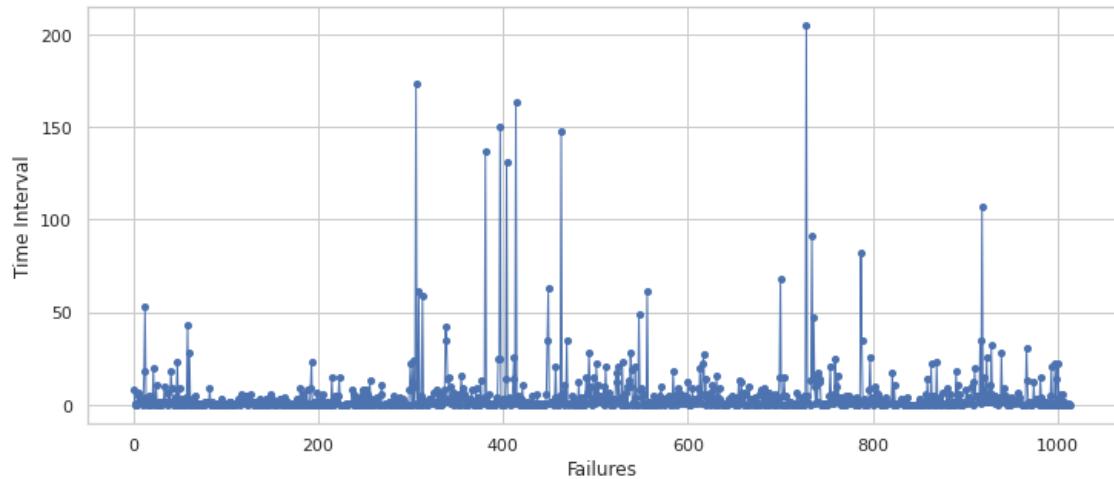
```

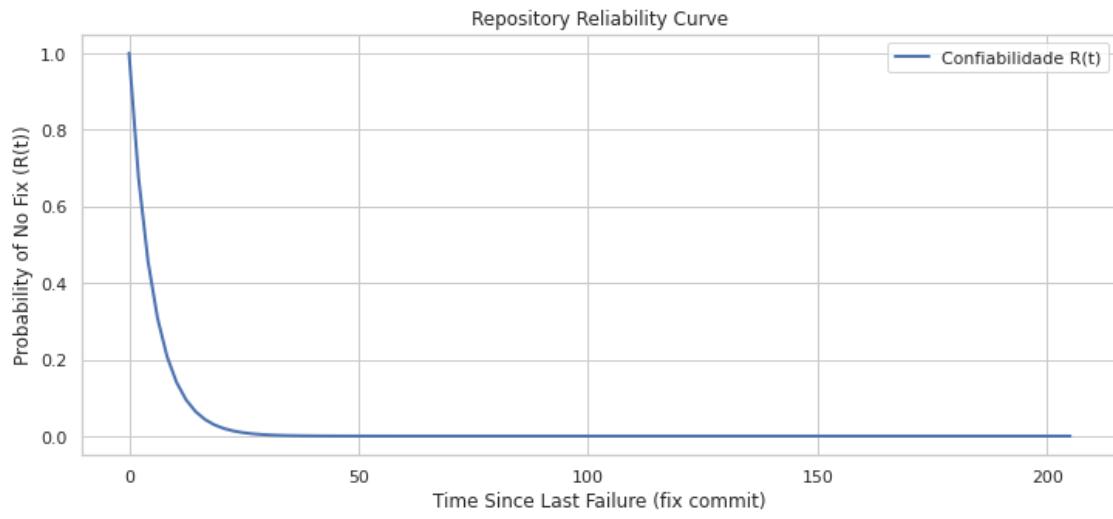
Empty DataFrame
Columns: [filepath, n_commits, MTBF, lambda_failure, R_t]
Index: []

```

```
== ganttproject ==
```







Confiabilidade R(1) = 0.8273

Confiabilidade R(5) = 0.3875

Confiabilidade R(10) = 0.1501

Confiabilidade R(50) = 0.0001

Confiabilidade R(100) = 0.0000

```

0      ganttproject/src/com/google/common/base/Function.java
1      ganttproject/src/com/google/common/base/Suppliers.java
2      ganttproject/src/javax/annotation/Nullable.java
3      ganttproject/src/com/google/common/annotations/VisibleForTesting.java
4      ganttproject/src/com/google/common/base/Supplier.java
...
1029   ganttproject-tester/test/net/sourceforge/ganttproject/chart/TaskRendererImplTest.java
1030   ganttproject/src/main/java/biz/ganttproject/impex/csv/GanttCSVExport.java
1031   ganttproject-tester/test/biz/ganttproject/core/calendar/WeekendCalendarImplTest.java
1032   ganttproject-tester/test/net/sourceforge/ganttproject/customProperty/CustomPropertyImport
1033   ganttproject-tester/test/biz/ganttproject/impex/msproject2/CustomPropertyMappingTest.java

```

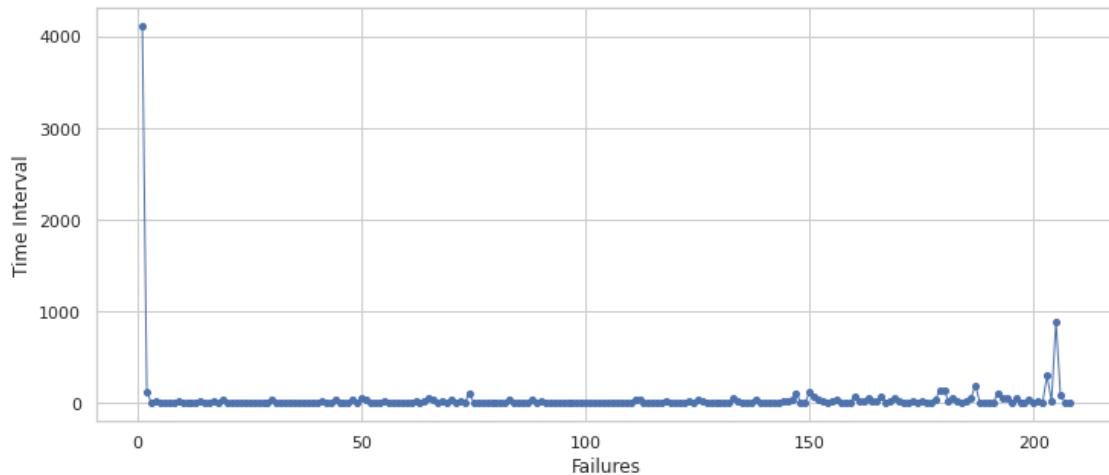
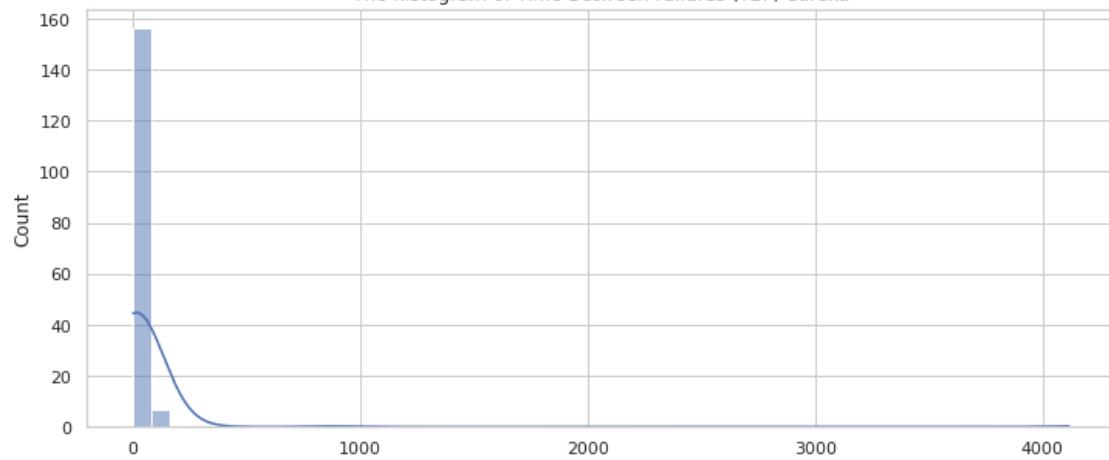
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|-------------|----------------|----------|
| 0 | 2 | 1.000000 | 1.000000 | 0.367879 |
| 1 | 2 | 1.000000 | 1.000000 | 0.367879 |
| 2 | 2 | 1.000000 | 1.000000 | 0.367879 |
| 3 | 2 | 1.000000 | 1.000000 | 0.367879 |
| 4 | 2 | 1.000000 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 1029 | 4 | 1186.666667 | 0.000843 | 0.999158 |
| 1030 | 2 | 1270.000000 | 0.000787 | 0.999213 |
| 1031 | 3 | 1404.000000 | 0.000712 | 0.999288 |
| 1032 | 4 | 1474.666667 | 0.000678 | 0.999322 |

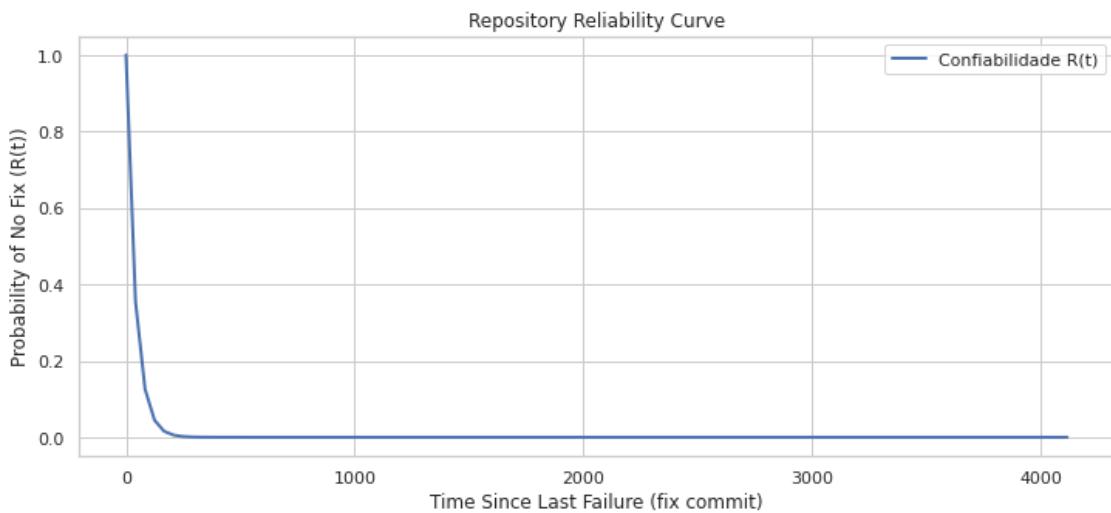
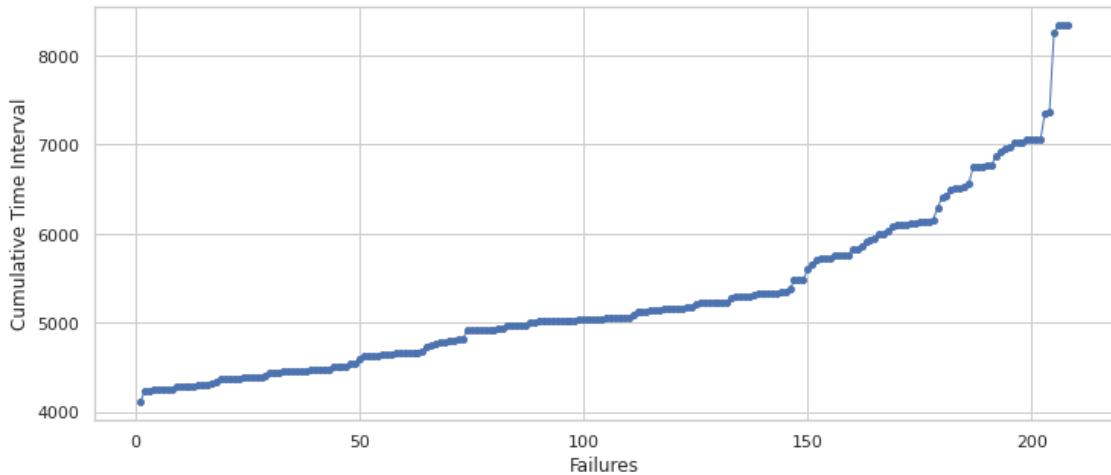
```
1033 2           2695.000000  0.000371          0.999629
```

```
[1034 rows x 5 columns]
```

```
-- eureka ==
```

The histogram of Time Between Failures (TBF) eureka





```

Confiabilidade R(1) = 0.9754
Confiabilidade R(5) = 0.8828
Confiabilidade R(10) = 0.7794
Confiabilidade R(50) = 0.2875
Confiabilidade R(100) = 0.0827

```

```

0 eureka-client/src/test/java/com/netflix/discovery/DiscoveryClientHealthTest.java
1 eureka-client/src/main/java/com/netflix/discovery/providers/DefaultEurekaClientConfigProvid...
2 eureka-core/src/main/java/com/netflix/eureka/cluster/ReplicationTaskProcessor.java
3 eureka-client/src/test/java/com/netflix/discovery/provider/DiscoveryJerseyProviderTest.java
4 eureka-client/src/main/java/com/netflix/discovery/converters/jackson/builder/ApplicationsJa...
..
79 eureka-client/src/main/java/com/netflix/appinfo/AbstractInstanceConfig.java

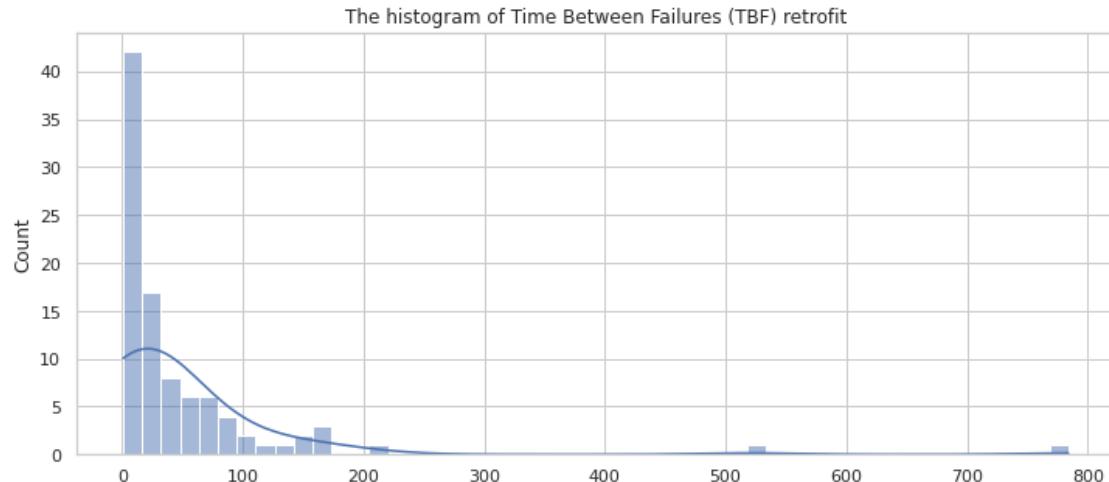
```

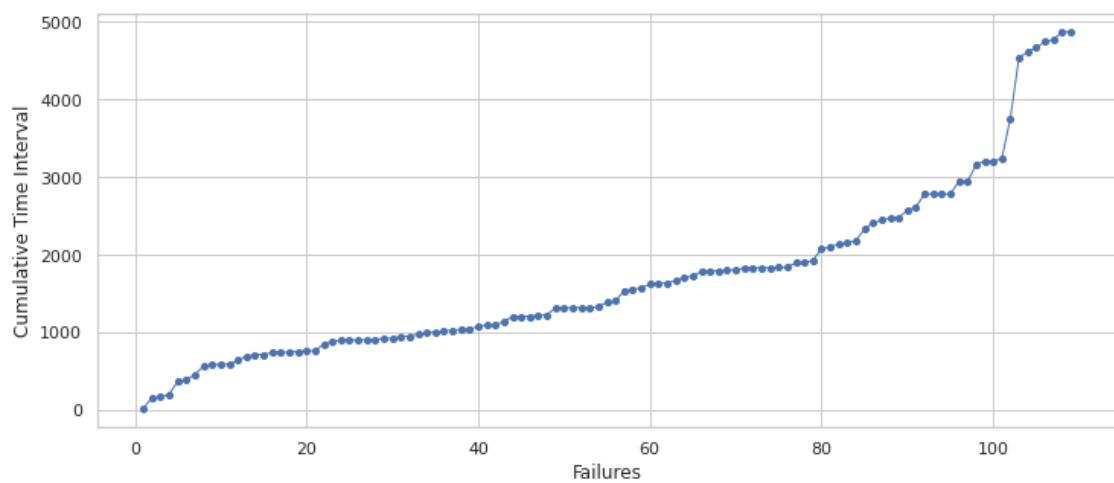
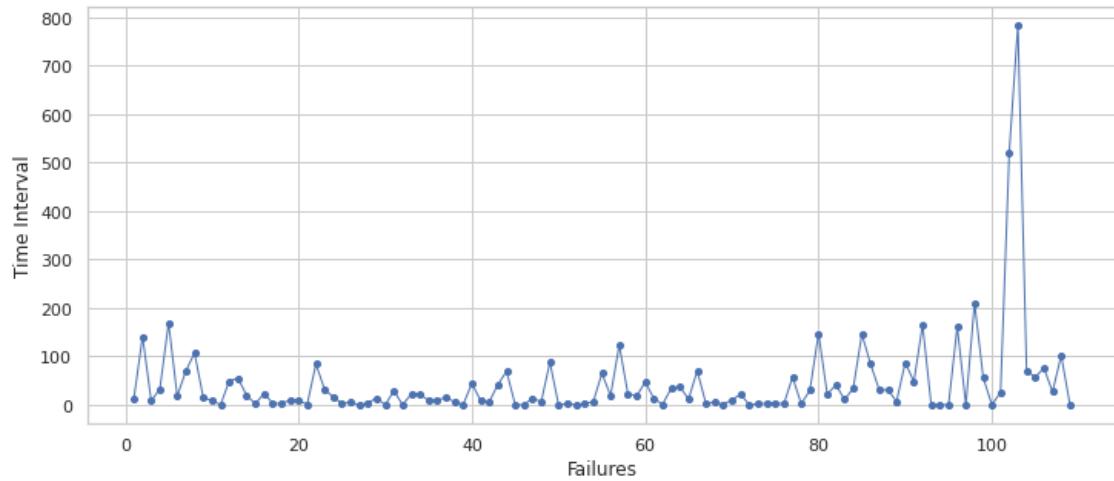
```
80 eureka-client/src/main/java/com/netflix/appinfo/PropertyBasedInstanceConfigConstants.java  
81 eureka-core/src/main/java/com/netflix/eureka/util/batcher/AcceptorExecutor.java  
82 eureka-client/src/main/java/com/netflix/discovery/shared/transport/jersey/AbstractJerseyEur  
83 eureka-client/src/main/java/com/netflix/discovery/converter/Converters.java
```

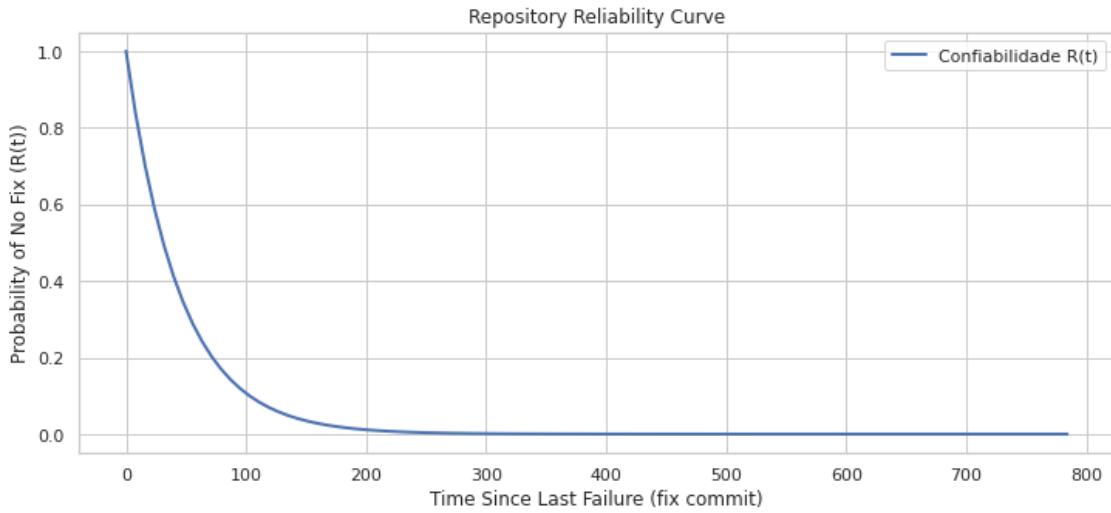
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 2.0 | 0.500000 | 0.606531 |
| 3 | 2 | 3.0 | 0.333333 | 0.716531 |
| 4 | 2 | 3.0 | 0.333333 | 0.716531 |
| ... | ... | ... | ... | ... |
| 79 | 2 | 1245.0 | 0.000803 | 0.999197 |
| 80 | 2 | 1245.0 | 0.000803 | 0.999197 |
| 81 | 2 | 1748.0 | 0.000572 | 0.999428 |
| 82 | 2 | 2046.0 | 0.000489 | 0.999511 |
| 83 | 2 | 2261.0 | 0.000442 | 0.999558 |

[84 rows x 5 columns]

== retrofit ==







```

Confiabilidade R(1) = 0.9779
Confiabilidade R(5) = 0.8941
Confiabilidade R(10) = 0.7994
Confiabilidade R(50) = 0.3264
Confiabilidade R(100) = 0.1066

```

```

filepath \
0 retrofit-adapters/rxjava/src/main/java/retrofit2/adapter/rxjava/ResultOnSubscribe.java
1 retrofit-adapters/rxjava/src/main/java/retrofit2/adapter/rxjava/BodyOnSubscribe.java
2 retrofit-adapters/rxjava/src/main/java/retrofit2/adapter/rxjava/CallOnSubscribe.java
3 http/src/main/java/retrofit/http/RestAdapter.java
4 http/src/main/java/retrofit/http/HttpProfiler.java
...
51 retrofit/src/main/java/retrofit2/Platform.java
52 retrofit/java-test/src/test/java/retrofit2/RetrofitTest.java
53 retrofit/src/test/java/retrofit2/RetrofitTest.java
54 samples/src/main/java/com/example/retrofit/DeserializeErrorBody.java
55 retrofit/src/main/java/retrofit2/Utils.java

```

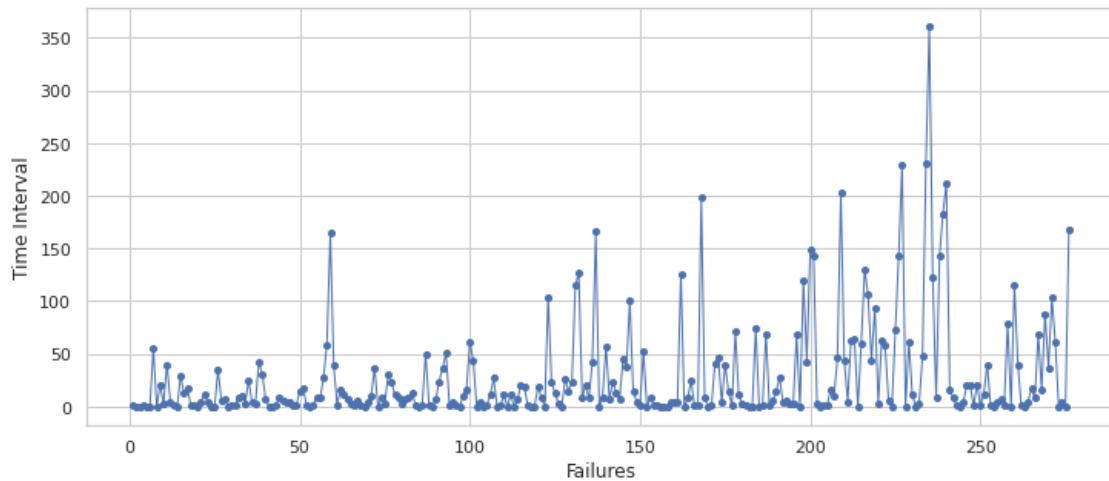
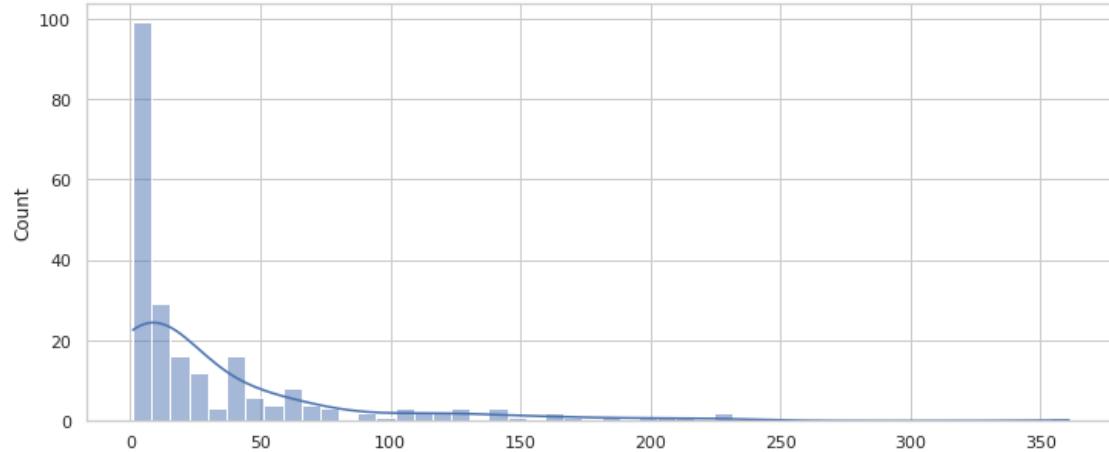
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 2.0 | 0.500000 | 0.606531 |
| 1 | 2 | 2.0 | 0.500000 | 0.606531 |
| 2 | 2 | 2.0 | 0.500000 | 0.606531 |
| 3 | 3 | 4.5 | 0.222222 | 0.800737 |
| 4 | 3 | 4.5 | 0.222222 | 0.800737 |
| ... | ... | ... | ... | ... |
| 51 | 3 | 742.0 | 0.001348 | 0.998653 |
| 52 | 2 | 912.0 | 0.001096 | 0.998904 |
| 53 | 2 | 1484.0 | 0.000674 | 0.999326 |
| 54 | 2 | 1644.0 | 0.000608 | 0.999392 |

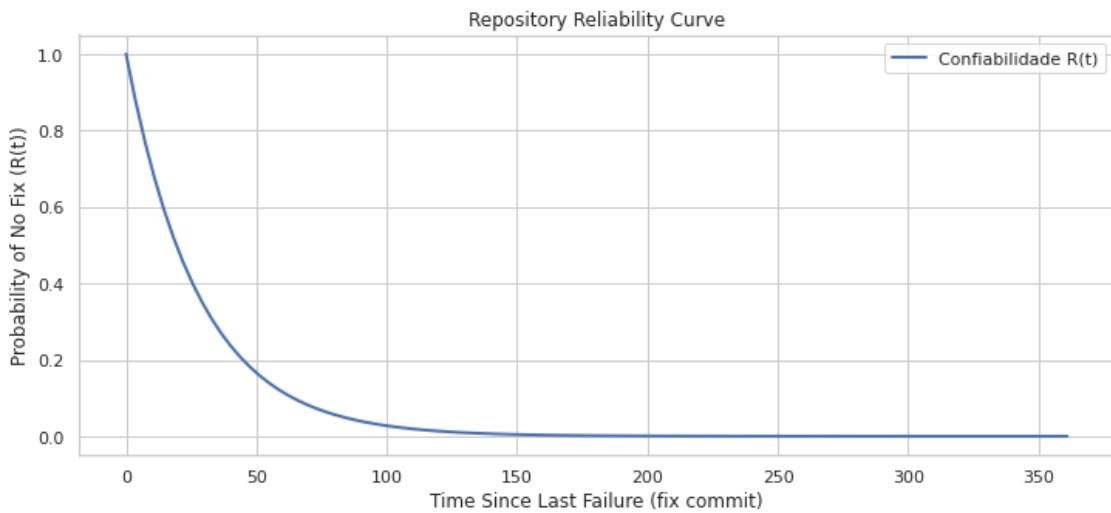
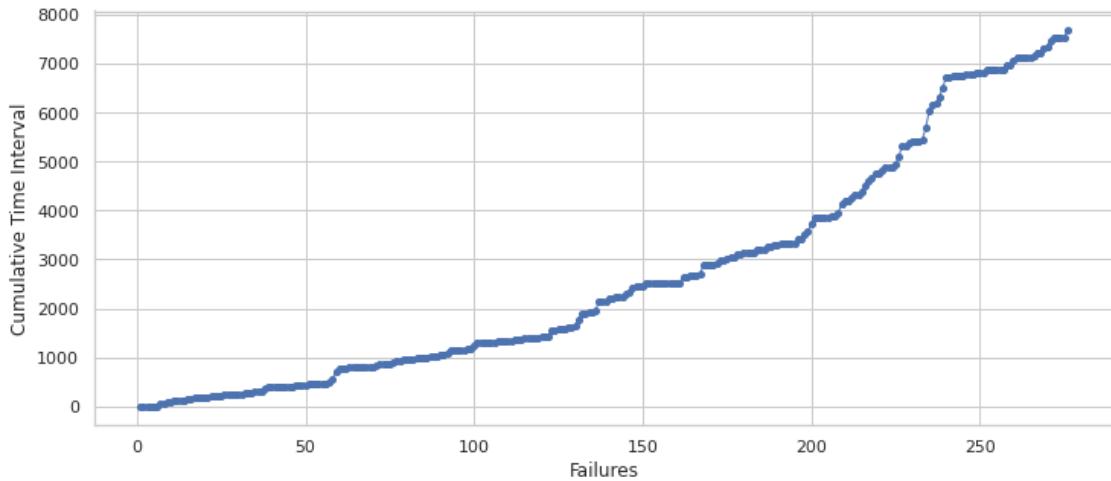
```
55 2          2063.0  0.000485      0.999515
```

```
[56 rows x 5 columns]
```

```
== xstream ==
```

The histogram of Time Between Failures (TBF) xstream





Confiabilidade $R(1) = 0.9647$

Confiabilidade $R(5) = 0.8356$

Confiabilidade $R(10) = 0.6982$

Confiabilidade $R(50) = 0.1660$

Confiabilidade $R(100) = 0.0275$

0

xstream/src/test/com/thoughtworks/xstream/io/binary/BinaryStreamTest.java

1

xstream/src/java/com/thoughtworks/xstream/converters/composite/ObjectWithFieldsConverter.java

2

xstream/src/java/com/thoughtworks/xstream/core/UnmarshallingContextAdaptor.java

3

xstream/src/test/com/thoughtworks/xstream/converters/extended/JavaMethodConverterTest.java

4

xstream/src/java/com/thoughtworks/xstream/xml/XMLReader.java

..

...

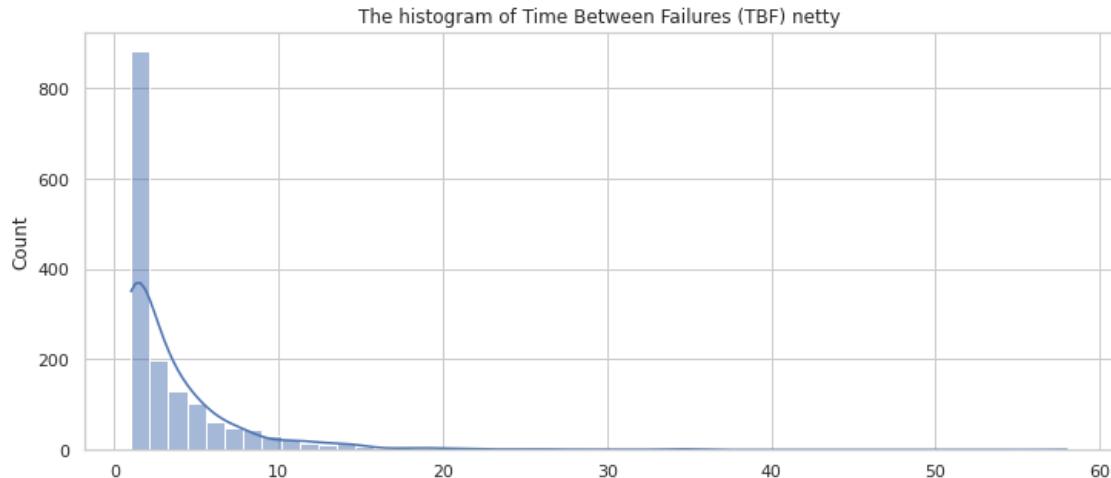
138 xstream/src/java/com/thoughtworks/xstream/core/util/FastField.java

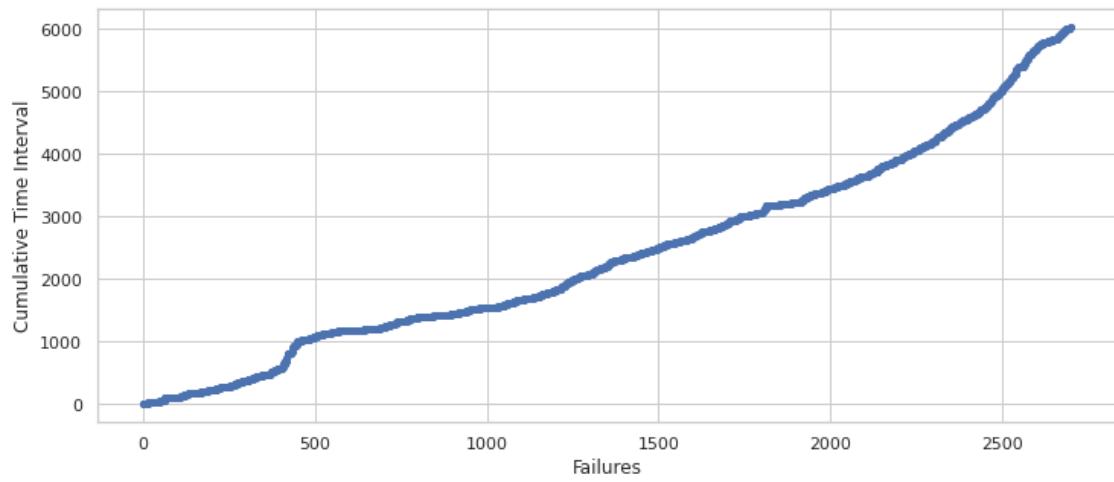
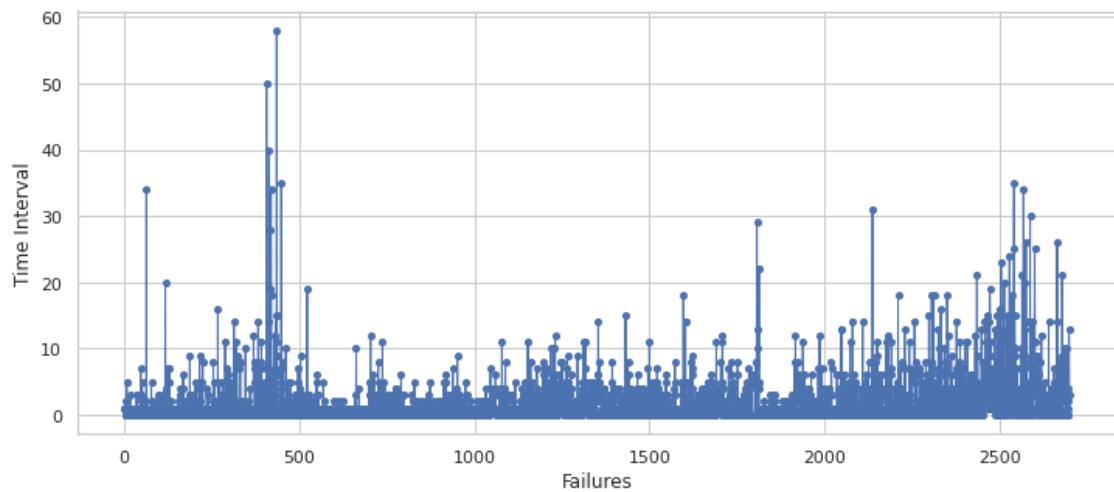
```
139 xstream/src/java/com/thoughtworks/xstream/converters/collections/CharArrayConverter.java  
140 xstream/src/java/com/thoughtworks/xstream/converters/collections/BitSetConverter.java  
141 xstream/src/java/com/thoughtworks/xstream/converters/extended/EncodedByteArrayConverter.java  
142 xstream/src/test/com/thoughtworks/acceptance/MultipleObjectsInOneStreamTest.java
```

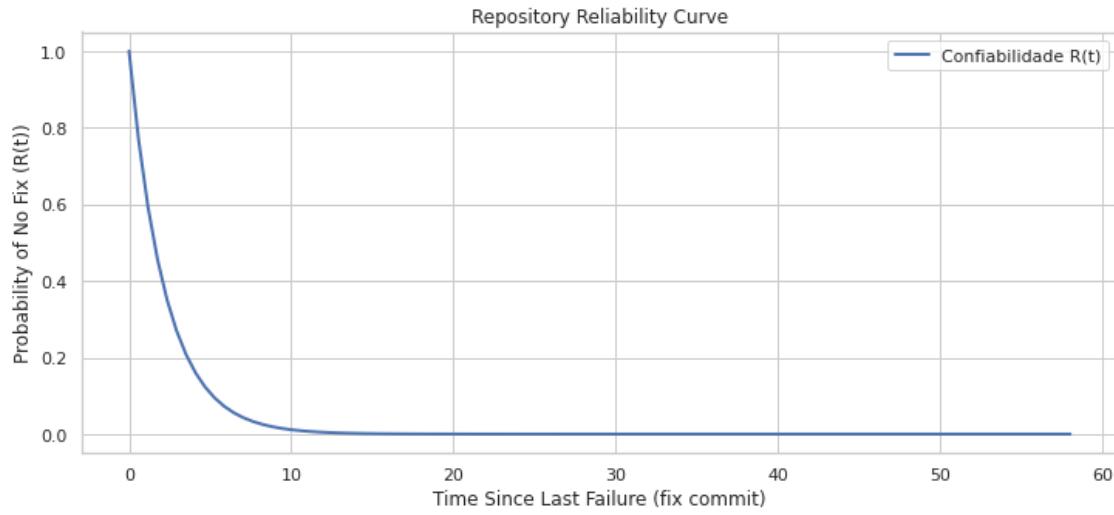
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 2.0 | 0.500000 | 0.606531 |
| .. | .. | ... | ... | ... |
| 138 | 2 | 5196.0 | 0.000192 | 0.999808 |
| 139 | 2 | 5204.0 | 0.000192 | 0.999808 |
| 140 | 2 | 5204.0 | 0.000192 | 0.999808 |
| 141 | 2 | 5204.0 | 0.000192 | 0.999808 |
| 142 | 2 | 5642.0 | 0.000177 | 0.999823 |

[143 rows x 5 columns]

== netty ==







```

Confiabilidade R(1) = 0.6395
Confiabilidade R(5) = 0.1070
Confiabilidade R(10) = 0.0114
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

filepath \ 
0     codec-http/src/main/java/io/netty/handler/codec/http/HttpPostRequestDecoder.java
1     src/test/java/org/jboss/netty/buffer/LittleEndianCompositeChannelBufferTest.java
2     example/src/main/java/io/netty/example/http/websocketx/autobahn/package-info.java
3     testsuite/src/test/java/io/netty/testsuite/transport/socket/SocketBufReleaseTest.java
4     src/main/java/org/jboss/netty/handler/region/FileRegionEncoder.java
...
1156   transport/src/main/java/io/netty/channel/WriteBufferWaterMark.java
1157   transport/src/main/java/io/netty/channel/socket/InternetProtocolFamily.java
1158   common/src/main/java/io/netty/util/internal/ThreadLocalRandom.java
1159   transport/src/main/java/io/netty/channel/AdaptiveRecvByteBufAllocator.java
1160   example/src/main/java/io/netty/example/proxy/HexDumpProxyBackendHandler.java

```

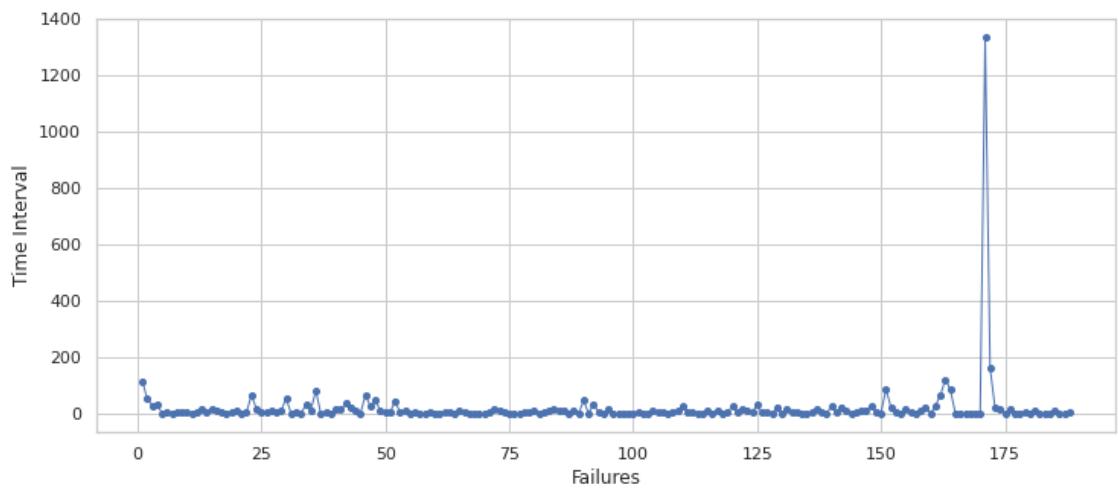
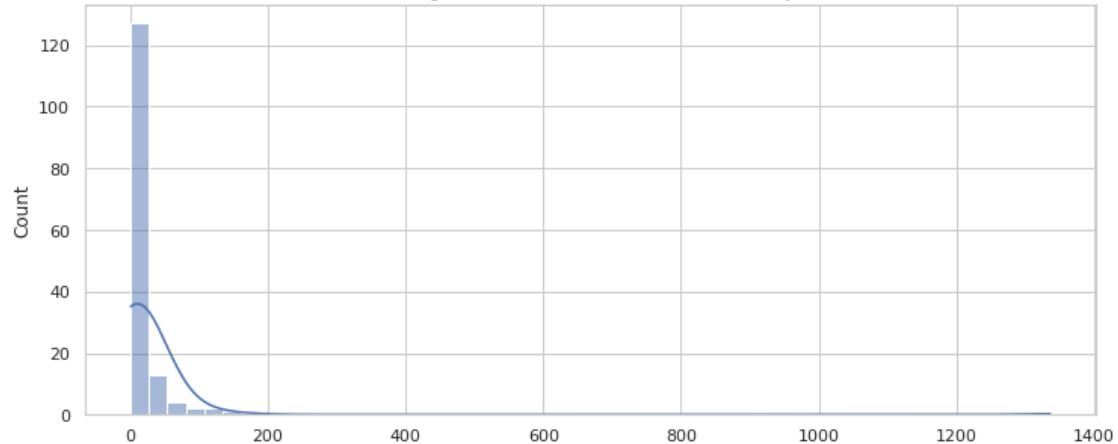
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|--------|----------------|----------|
| 0 | 6 | 0.4 | 2.500000 | 0.082085 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 1156 | 2 | 2912.0 | 0.000343 | 0.999657 |
| 1157 | 2 | 3033.0 | 0.000330 | 0.999670 |
| 1158 | 2 | 3732.0 | 0.000268 | 0.999732 |
| 1159 | 2 | 3908.0 | 0.000256 | 0.999744 |

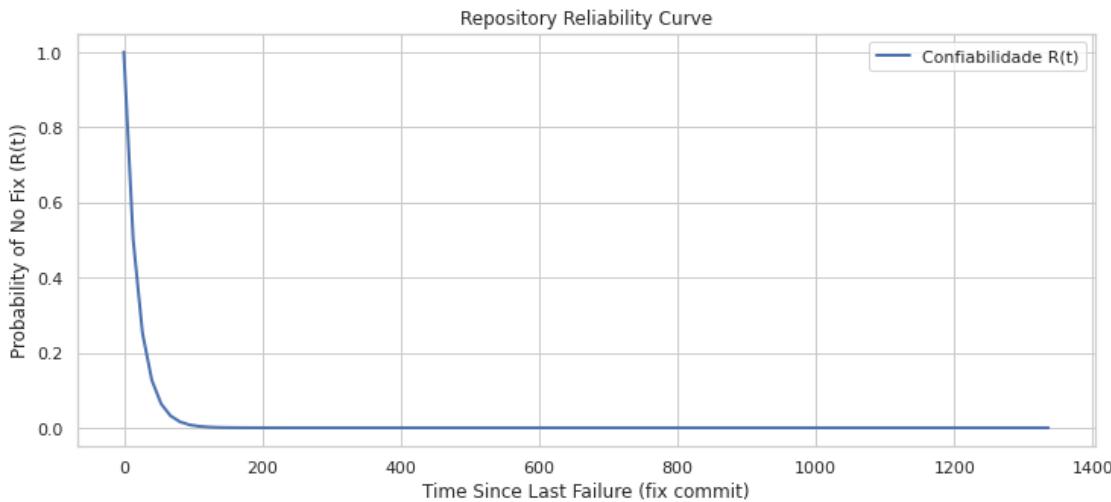
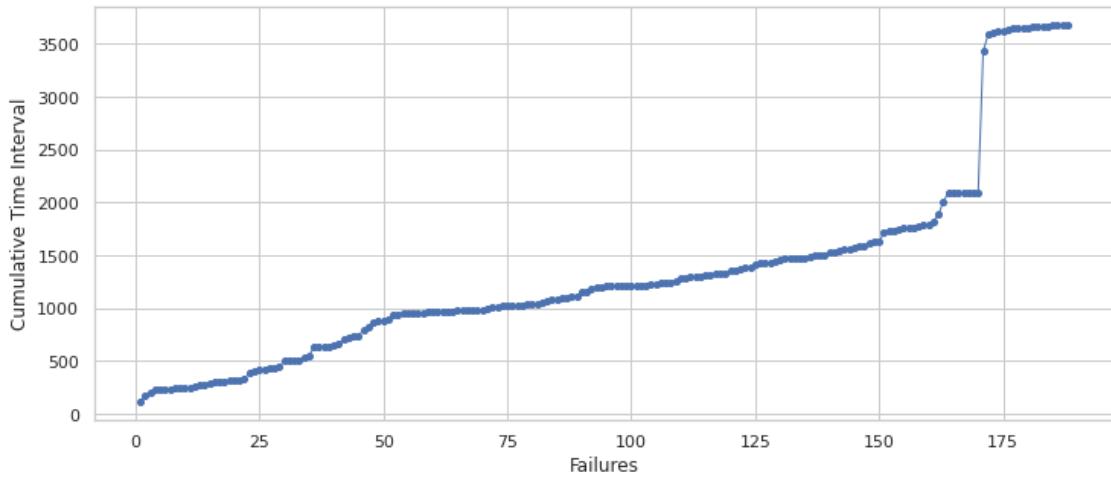
1160 2 3998.0 0.000250 0.999750

[1161 rows x 5 columns]

== Hystrix ==

The histogram of Time Between Failures (TBF) Hystrix





Confiabilidade $R(1) = 0.9502$

Confiabilidade $R(5) = 0.7747$

Confiabilidade $R(10) = 0.6001$

Confiabilidade $R(50) = 0.0779$

Confiabilidade $R(100) = 0.0061$

```

0  hystrix-core/src/test/java/com/netflix/hystrix/HystrixCommandTestWithCustomConcurrencyStrategy.java
1  hystrix-contrib/hystrix-yammer-metrics-publisher/src/main/java/com/netflix/hystrix/contrib/yammer/YammerMetricsPublisher.java
2  hystrix-core/src/test/java/com/netflix/hystrix/HystrixCommandPropertiesTest.java
3  hystrix-core/src/main/java/com/netflix/hystrix/HystrixCommandProperties.java
4  hystrix-contrib/hystrix-rx-netty-metrics-stream/src/main/java/com/netflix/hystrix/contrib/rx/HystrixRxNettyMetricsStream.java
..
68  hystrix-core/src/main/java/com/netflix/hystrix/HystrixRequestCache.java

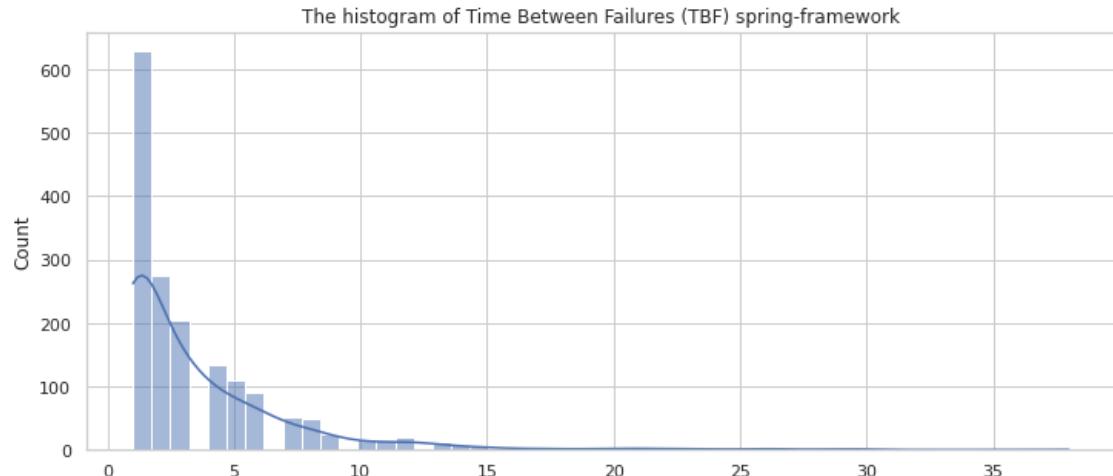
```

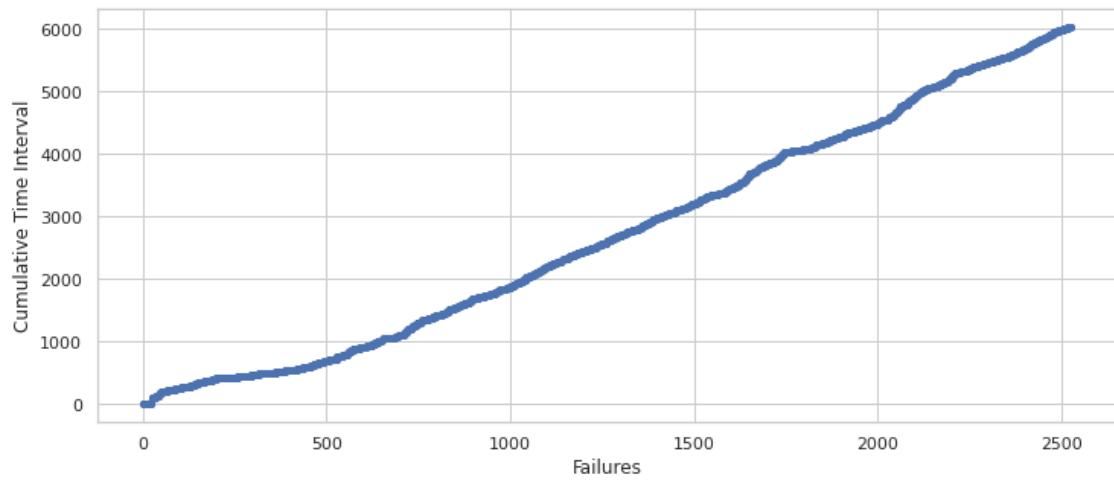
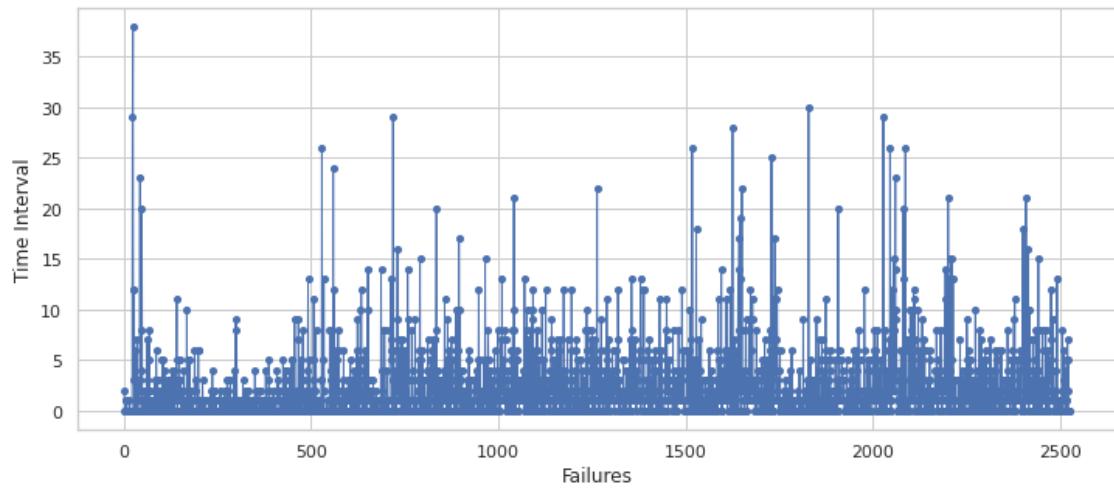
```
69 hystrix-contrib/hystrix-javanica/src/main/java/com/netflix/hystrix/contrib/javanica/except
70 hystrix-core/src/main/java/com/netflix/hystrix/HystrixRequestLog.java
71 hystrix-core/src/main/java/com/netflix/hystrix/HystrixCircuitBreaker.java
72 hystrix-core/src/main/java/com/netflix/hystrix/HystrixObservableCommand.java
```

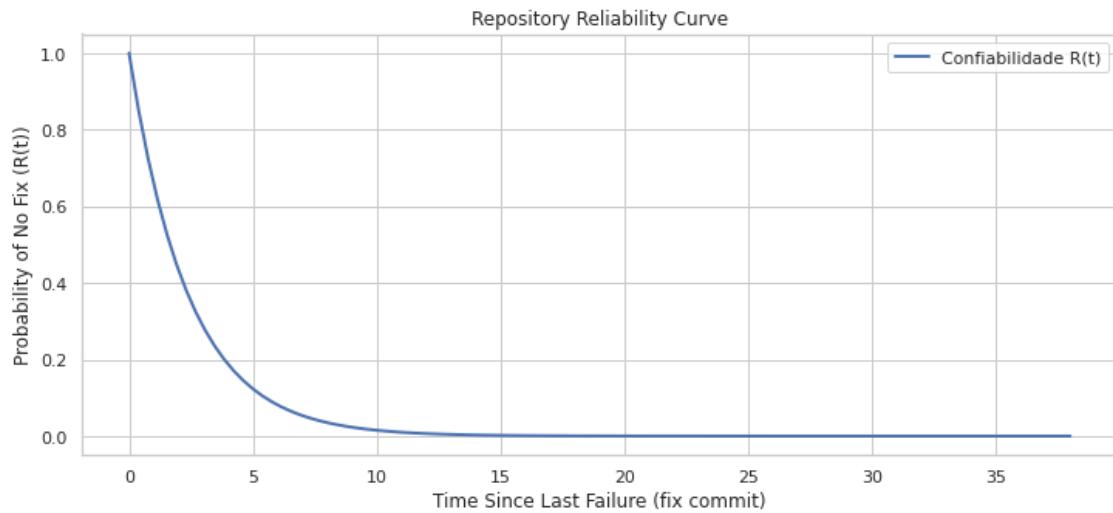
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|-------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 2.0 | 0.500000 | 0.606531 |
| 2 | 2 | 2.0 | 0.500000 | 0.606531 |
| 3 | 2 | 2.0 | 0.500000 | 0.606531 |
| 4 | 2 | 2.0 | 0.500000 | 0.606531 |
| ... | ... | ... | ... | ... |
| 68 | 3 | 597.5 | 0.001674 | 0.998328 |
| 69 | 2 | 718.0 | 0.001393 | 0.998608 |
| 70 | 2 | 799.0 | 0.001252 | 0.998749 |
| 71 | 3 | 837.0 | 0.001195 | 0.998806 |
| 72 | 2 | 856.0 | 0.001168 | 0.998832 |

[73 rows x 5 columns]

== spring-framework ==







```

Confiabilidade R(1) = 0.6581
Confiabilidade R(5) = 0.1234
Confiabilidade R(10) = 0.0152
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

0      org.springframework.web.servlet/src/test/java/org/springframework/web/servlet/mvc/annotation/MethodHandlerExceptionResolverTests.java
1      org.springframework.expression/src/main/java/org/springframework/expression/spel/SpelMessageFormatParserTests.java
2      spring-expression/src/test/java/org/springframework/expression/spel/ParsingTests.java
3      org.springframework.web.servlet/src/test/java/org/springframework/web/util/NestedServletHttpRequestTests.java
4      spring-test/src/main/java/org/springframework/test/context/support/TestPropertySourceUtil.java
...
1364     spring-beans/src/main/java/org/springframework/beans/factory/support/GenericTypeAwareAnnotationProcessorTests.java
1365     spring-expression/src/main/java/org/springframework/expression/spel/ast/PropertyOrFieldReaderTests.java
1366     spring-context/src/main/java/org/springframework/scheduling/concurrent/ThreadPoolExecutorTests.java
1367     spring-jms/src/main/java/org/springframework/jms/listener/AbstractJmsListeningContainerTests.java
1368     spring-messaging/src/main/java/org/springframework/messaging/simple/UserDestinationMessageTests.java

```

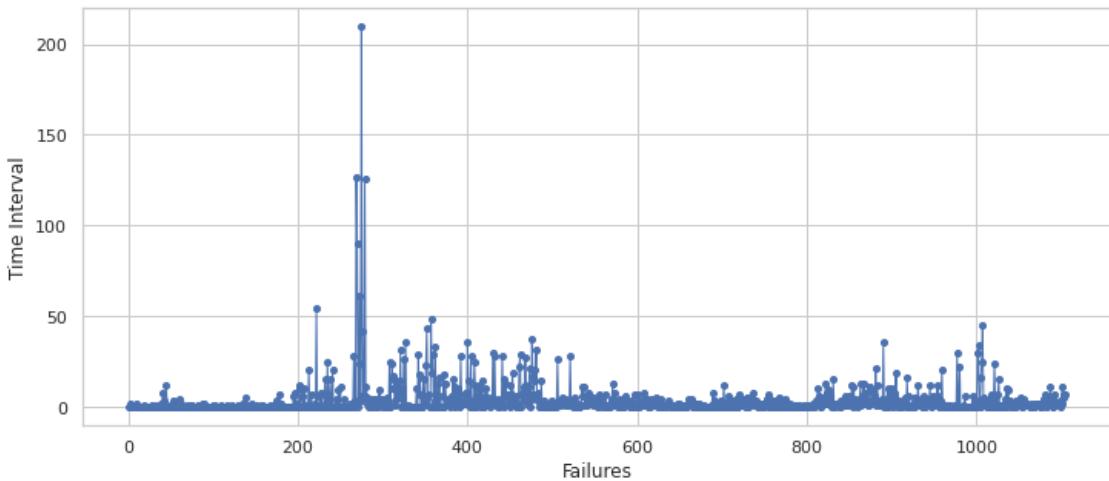
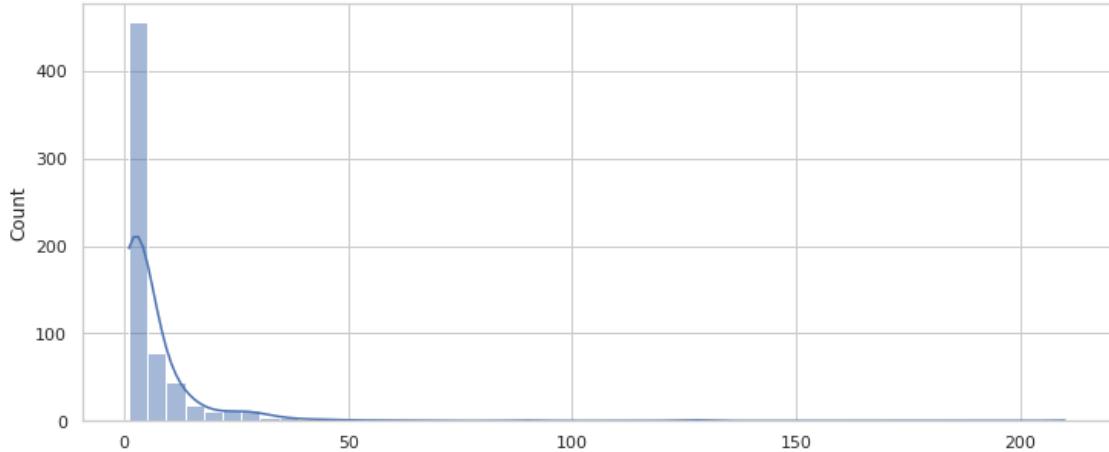
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|-------------|----------------|----------|
| 0 | 8 | 0.285714 | 3.500000 | 0.030197 |
| 1 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 2 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 3 | 2 | 1.000000 | 1.000000 | 0.367879 |
| 4 | 2 | 1.000000 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 1364 | 2 | 3719.000000 | 0.000269 | 0.999731 |
| 1365 | 2 | 3801.000000 | 0.000263 | 0.999737 |
| 1366 | 2 | 3814.000000 | 0.000262 | 0.999738 |
| 1367 | 2 | 3828.000000 | 0.000261 | 0.999739 |

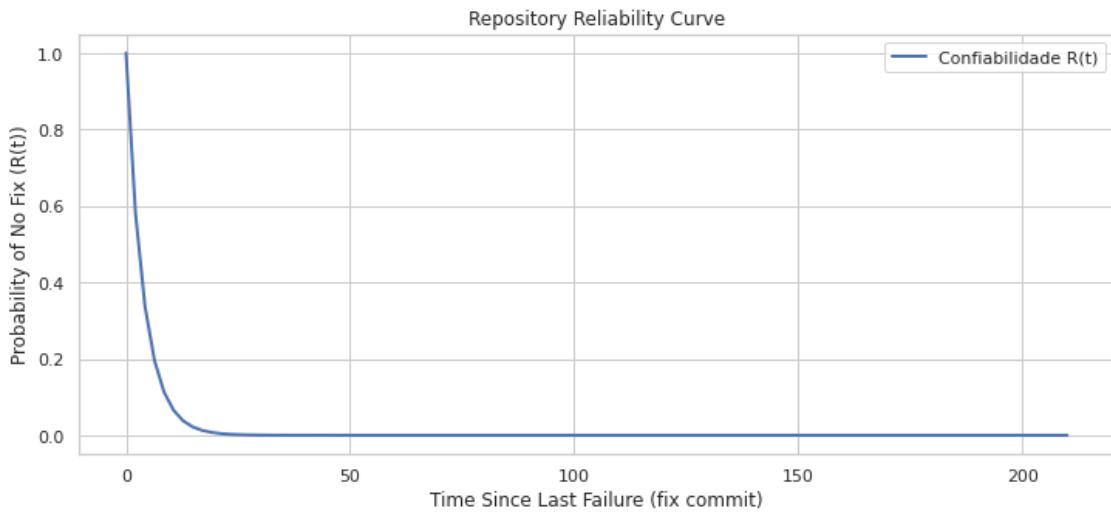
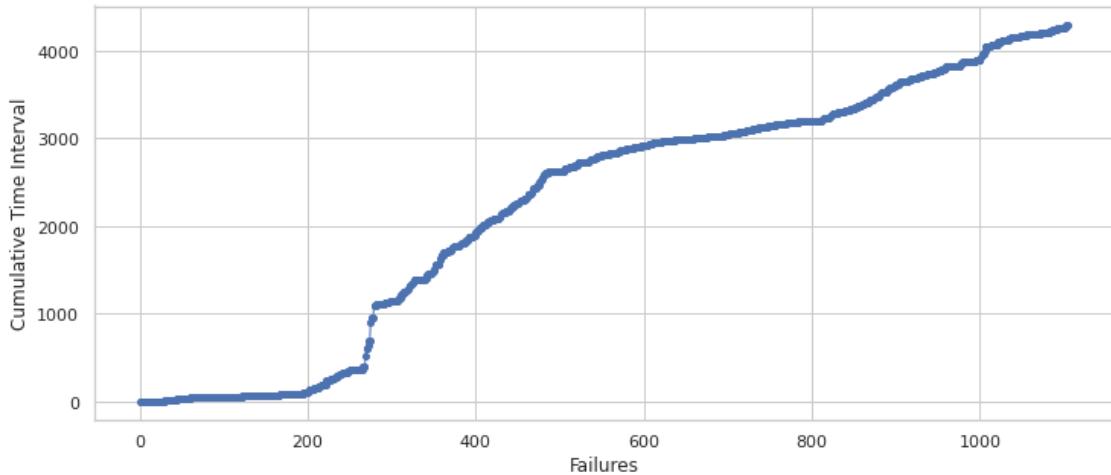
```
1368 2 3932.000000 0.000254 0.999746
```

```
[1369 rows x 5 columns]
```

```
-- rocketmq ==
```

The histogram of Time Between Failures (TBF) rocketmq





Confiabilidade $R(1) = 0.7735$

Confiabilidade $R(5) = 0.2768$

Confiabilidade $R(10) = 0.0766$

Confiabilidade $R(50) = 0.0000$

Confiabilidade $R(100) = 0.0000$

```

0   rocketmq-tools/src/main/java/com/alibaba/rocketmq/tools/command/topic/TopicRouteSubCommand
1   rocketmq-common/src/main/java/com/alibaba/rocketmq/common/message/Message.java
2   rocketmq-broker/src/main/java/com/alibaba/rocketmq/broker/offset/ConsumerOffsetManager.java
3   rocketmq-client/src/main/java/com/alibaba/rocketmq/client/log/ClientLogger.java
4   rocketmq-common/src/main/java/com/alibaba/rocketmq/common/protocol/MQProtos.java
...
517  client/src/main/java/org/apache/rocketmq/client/latency/MQFaultStrategy.java

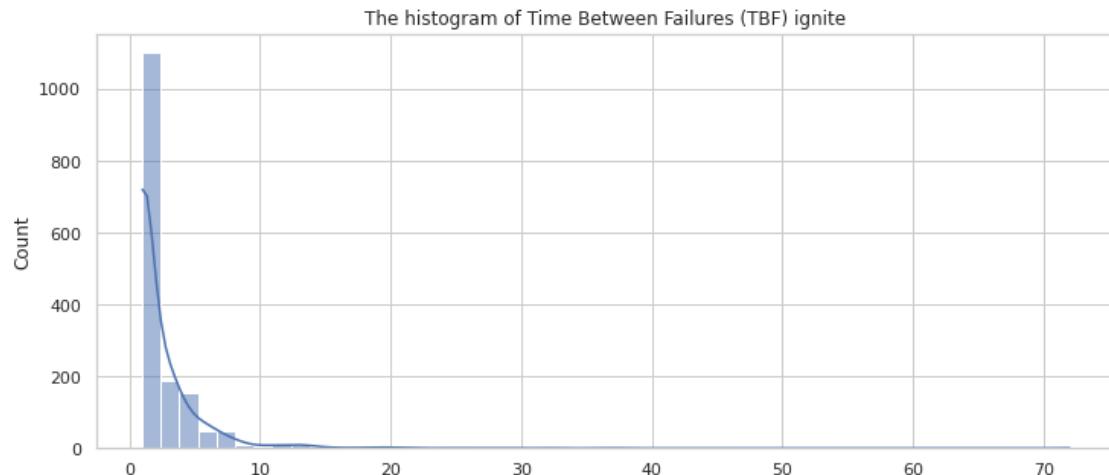
```

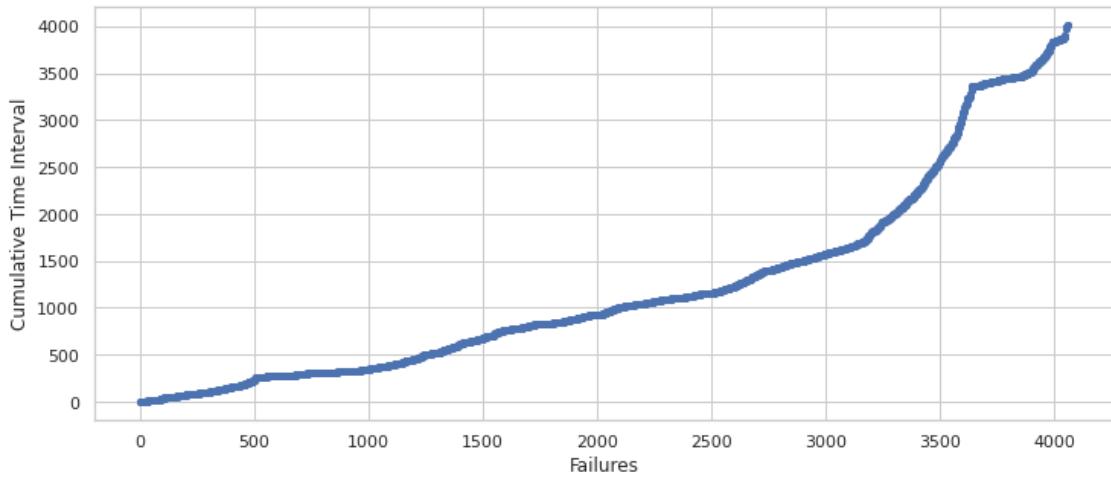
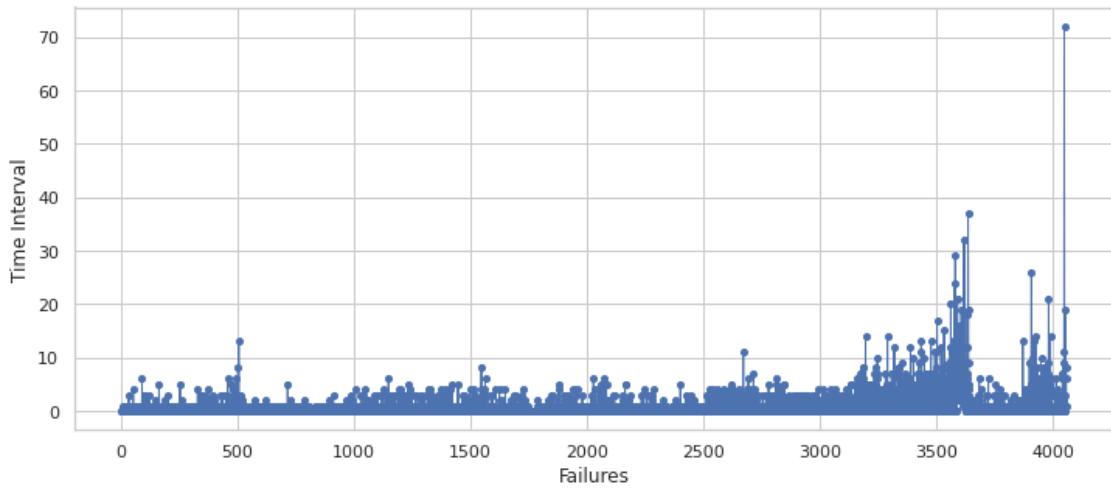
```
518 client/src/main/java/org/apache/rocketmq/client/consumer/rebalance/AllocateMessageQueueAv
519 broker/src/main/java/org/apache/rocketmq/broker/filter/CommitLogDispatcherCalcBitMap.java
520 example/src/main/java/org/apache/rocketmq/example/transaction/TransactionProducer.java
521 store/src/main/java/org/apache/rocketmq/store/DispatchRequest.java
```

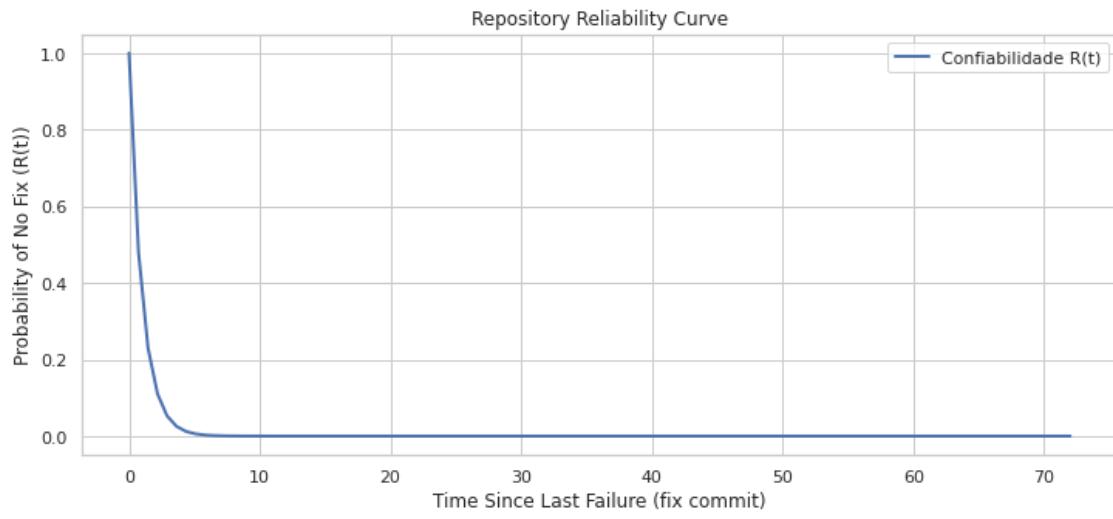
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|-------------|----------------|----------|
| 0 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 1 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 2 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 3 | 8 | 0.571429 | 1.750000 | 0.173774 |
| 4 | 4 | 0.666667 | 1.500000 | 0.223130 |
| .. | .. | ... | ... | ... |
| 517 | 2 | 1720.000000 | 0.000581 | 0.999419 |
| 518 | 2 | 1720.000000 | 0.000581 | 0.999419 |
| 519 | 2 | 1720.000000 | 0.000581 | 0.999419 |
| 520 | 2 | 1929.000000 | 0.000518 | 0.999482 |
| 521 | 2 | 2179.000000 | 0.000459 | 0.999541 |

[522 rows x 5 columns]

== ignite ==







Confiabilidade $R(1) = 0.3640$

Confiabilidade $R(5) = 0.0064$

Confiabilidade $R(10) = 0.0000$

Confiabilidade $R(50) = 0.0000$

Confiabilidade $R(100) = 0.0000$

```

0      modules/core/src/main/java/org/gridgain/grid/kernal/visor/cmd/tasks/VisorCollectLicenseTa
1      modules/core/src/main/java/org/gridgain/grid/kernal/visor/cmd/tasks/VisorAckTask.java
2      modules/core/src/main/java/org/apache/ignite/internal/processors/cache/GridCacheValueByte
3      modules/core/src/main/java/org/gridgain/grid/kernal/visor/cmd/tasks/VisorCollectEventsTa
4      modules/core/src/main/java/org/apache/ignite/internal/processors/dataload/GridDataLoadRes
...
3151  modules/core/src/test/java/org/apache/ignite/internal/GridTaskFutureImplStopGridSelfTest
3152  modules/core/src/test/java/org/apache/ignite/session/GridSessionCancelSiblingsFromJobSel
3153  modules/core/src/test/java/org/apache/ignite/session/GridSessionCancelSiblingsFromFuture
3154  modules/core/src/main/java/org/apache/ignite/internal/GridDiagnostic.java
3155  modules/core/src/main/java/org/apache/ignite/marshaller/jdk/JdkMarshallerObjectInputStream

```

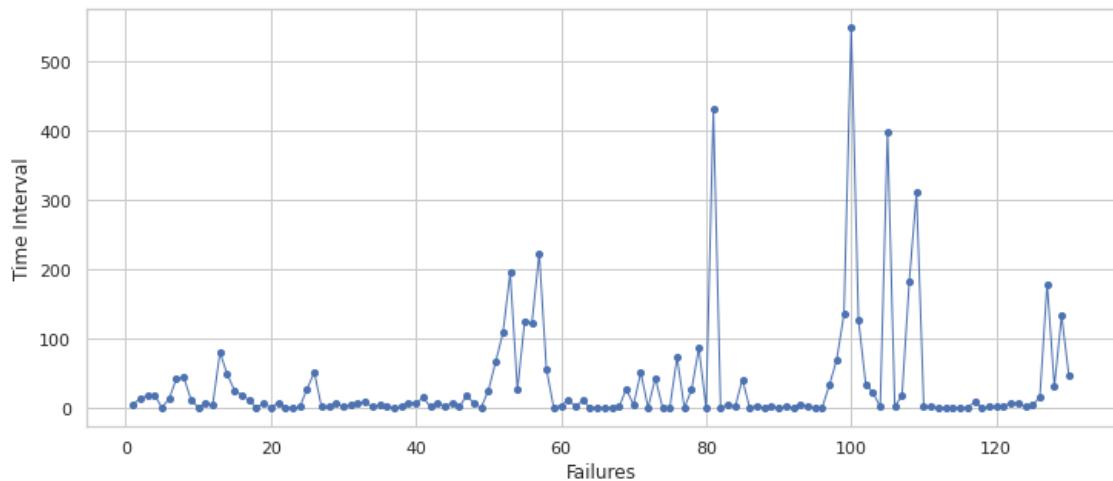
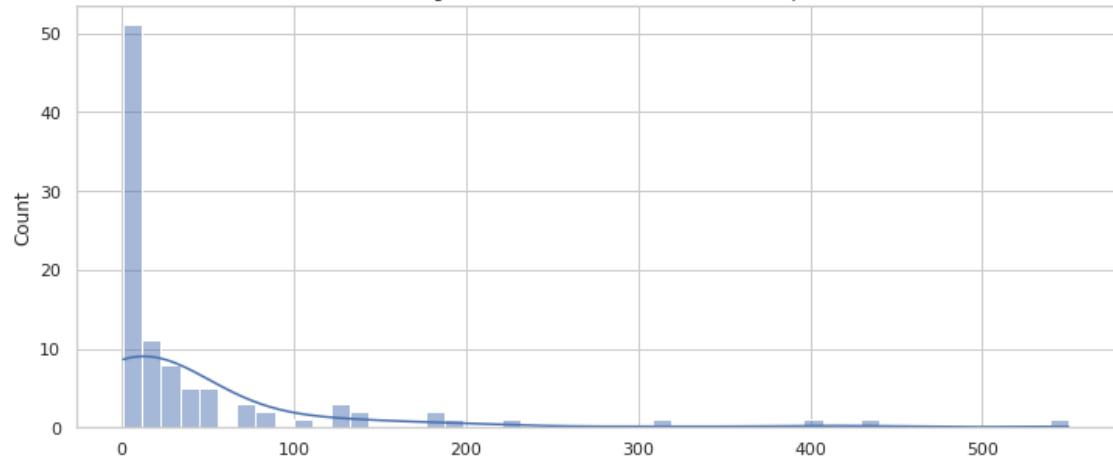
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|-------------|----------------|----------|
| 0 | 8 | 0.142857 | 7.000000 | 0.000912 |
| 1 | 7 | 0.166667 | 6.000000 | 0.002479 |
| 2 | 6 | 0.200000 | 5.000000 | 0.006738 |
| 3 | 6 | 0.200000 | 5.000000 | 0.006738 |
| 4 | 6 | 0.200000 | 5.000000 | 0.006738 |
| ... | ... | ... | ... | ... |
| 3151 | 2 | 2655.000000 | 0.000377 | 0.999623 |
| 3152 | 2 | 2655.000000 | 0.000377 | 0.999623 |
| 3153 | 2 | 2655.000000 | 0.000377 | 0.999623 |
| 3154 | 2 | 2866.000000 | 0.000349 | 0.999651 |

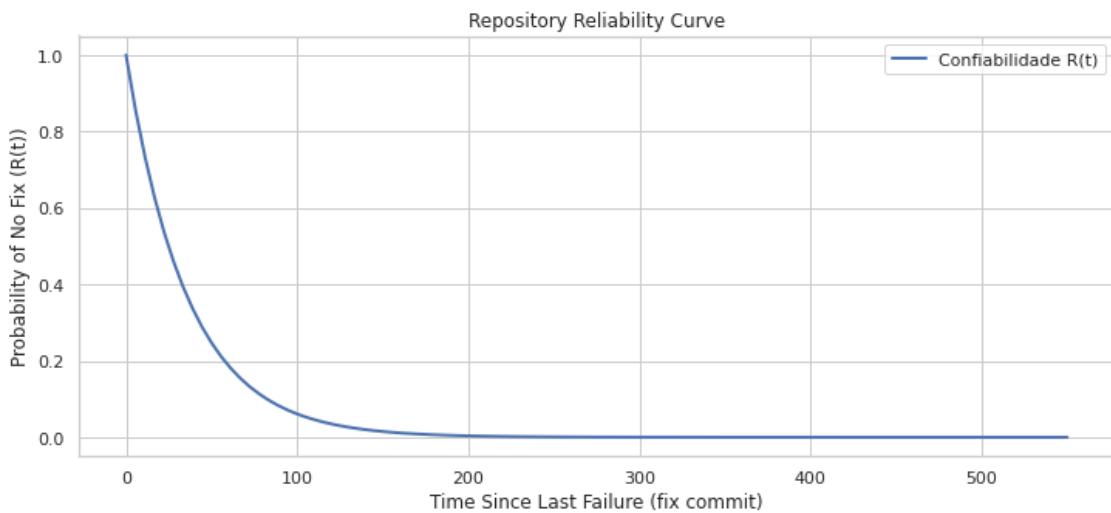
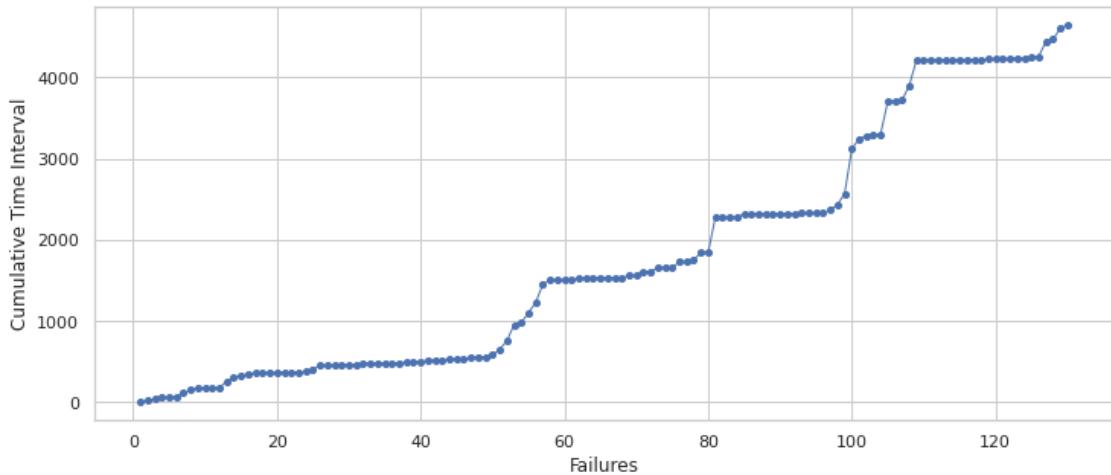
3155 2 3418.000000 0.000293 0.999707

[3156 rows x 5 columns]

== quartz ==

The histogram of Time Between Failures (TBF) quartz





Confiabilidade $R(1) = 0.9724$
 Confiabilidade $R(5) = 0.8695$
 Confiabilidade $R(10) = 0.7560$
 Confiabilidade $R(50) = 0.2469$
 Confiabilidade $R(100) = 0.0610$

filepath

```

0  quartz/src/main/java/org/quartz/core/JobRunShell.java
1  quartz/src/main/java/org/quartz/CronExpression.java
2  quartz/src/main/java/org/quartz/SchedulerException.java
3  quartz/src/main/java/org/quartz/core/QuartzScheduler.java
4  system-tests/src/test/java/org/terracotta/quartz/tests/ClientBase.java
...
63  quartz-jboss/src/main/java/org/quartz/ee/jmx/jboss/QuartzServiceMBean.java

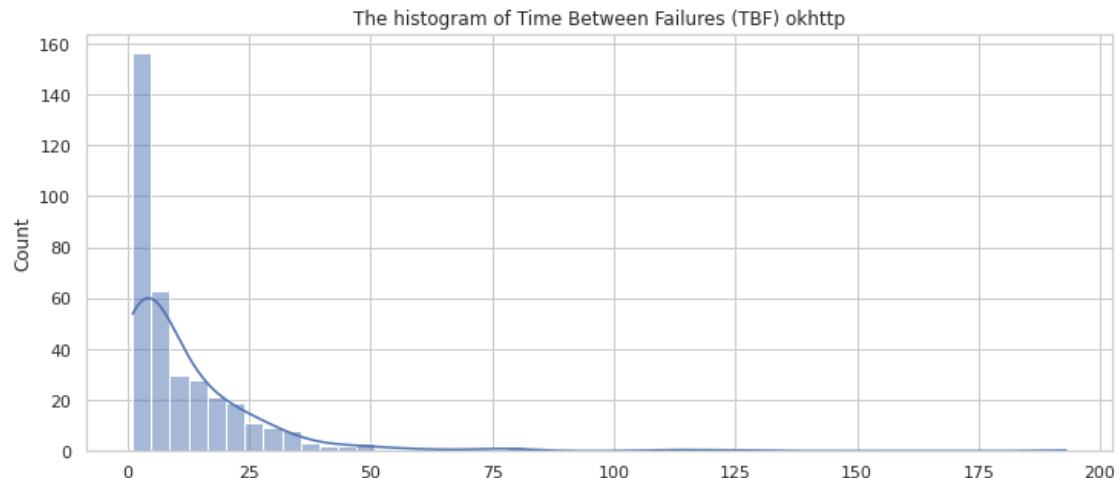
```

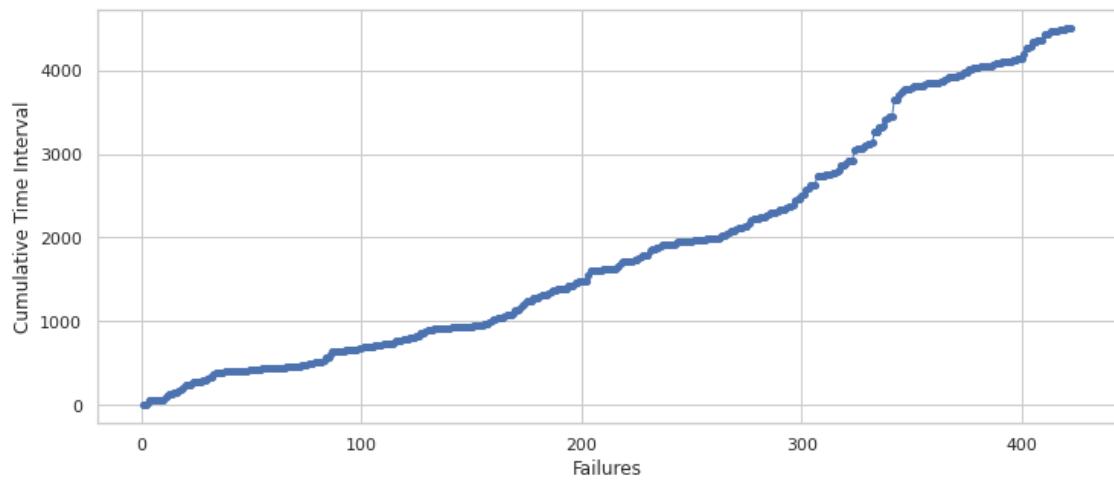
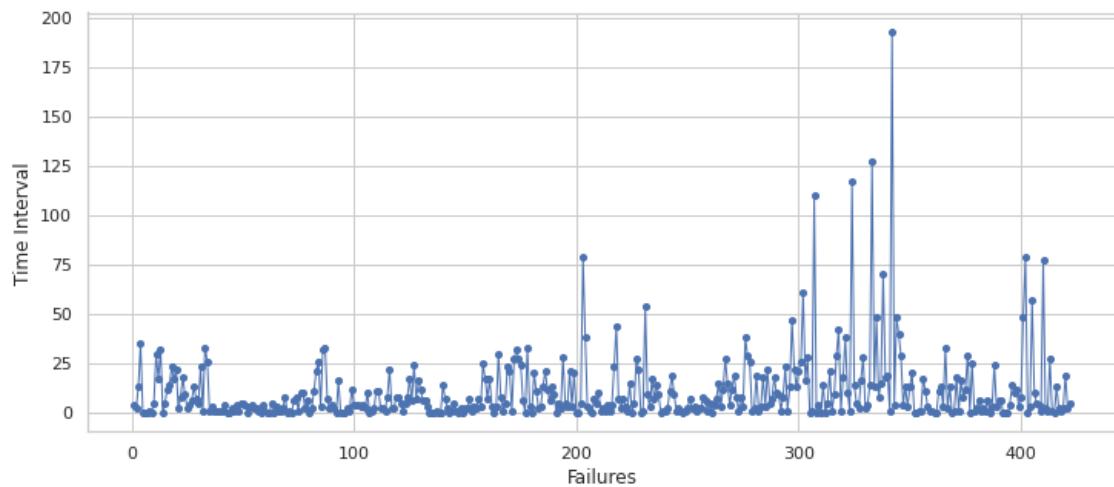
```
64 quartz-plugins/src/main/java/org/quartz/plugins/history/LoggingJobHistoryPlugin.java  
65 quartz-plugins/src/main/java/org/quartz/plugins/management/ShutdownHookPlugin.java  
66 quartz-plugins/src/main/java/org/quartz/plugins/history/LoggingTriggerHistoryPlugin.java  
67 quartz-jboss/src/main/java/org/quartz/ee/jboss/QuartzService.java
```

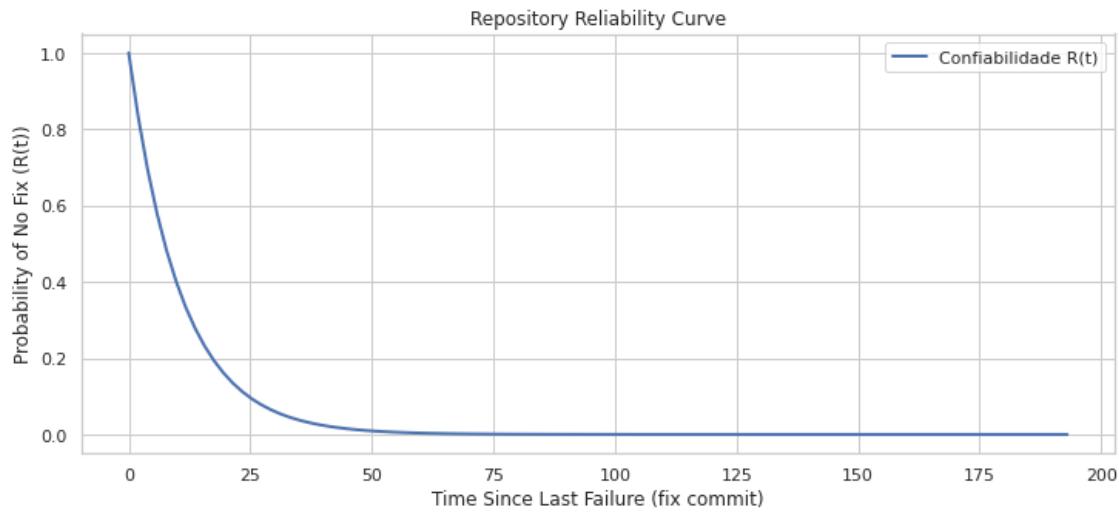
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|-------------|----------------|----------|
| 0 | 3 | 1.000000 | 1.000000 | 0.367879 |
| 1 | 2 | 2.000000 | 0.500000 | 0.606531 |
| 2 | 3 | 2.500000 | 0.400000 | 0.670320 |
| 3 | 4 | 3.333333 | 0.300000 | 0.740818 |
| 4 | 3 | 17.500000 | 0.057143 | 0.944459 |
| ... | ... | ... | ... | ... |
| 63 | 2 | 4064.000000 | 0.000246 | 0.999754 |
| 64 | 2 | 4064.000000 | 0.000246 | 0.999754 |
| 65 | 2 | 4064.000000 | 0.000246 | 0.999754 |
| 66 | 2 | 4064.000000 | 0.000246 | 0.999754 |
| 67 | 2 | 4064.000000 | 0.000246 | 0.999754 |

[68 rows x 5 columns]

== okhttp ==







```

Confiabilidade R(1) = 0.9106
Confiabilidade R(5) = 0.6261
Confiabilidade R(10) = 0.3920
Confiabilidade R(50) = 0.0093
Confiabilidade R(100) = 0.0001

```

```

file
0   src/main/java/libcore/net/http/HttpEngine.java
1   okhttp-tests/src/test/java/com/squareup/okhttp/AsyncApiTest.java
2   src/main/java/libcore/net/http/HttpConnection.java
3   okhttp/src/main/java/okhttp3/internal/http/Http1xStream.java
4   okhttp/src/main/java/com/squareup/okhttp/Callback.java
...
204  okhttp-tls/src/test/java/okhttp3/tls/HeldCertificateTest.java
205  okhttp/src/main/java/okhttp3/Request.java
206  okhttp/src/main/java/okhttp3/internal/http2/Hpack.java
207  okhttp/src/main/java/okhttp3/ConnectionSpec.java
208  samples/unixdomainsockets/src/main/java/okhttp3/unixdomainsockets/UnixDomainSocketFactory

```

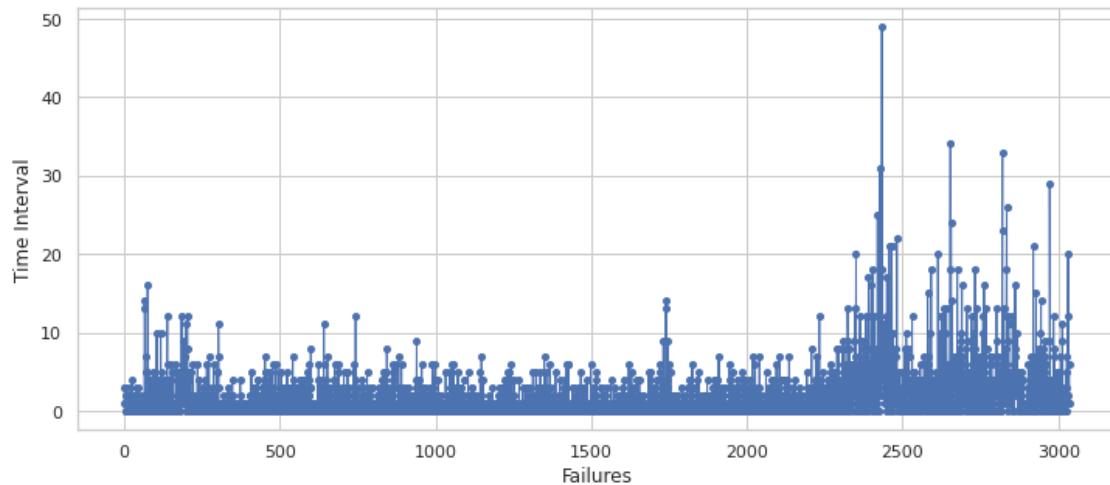
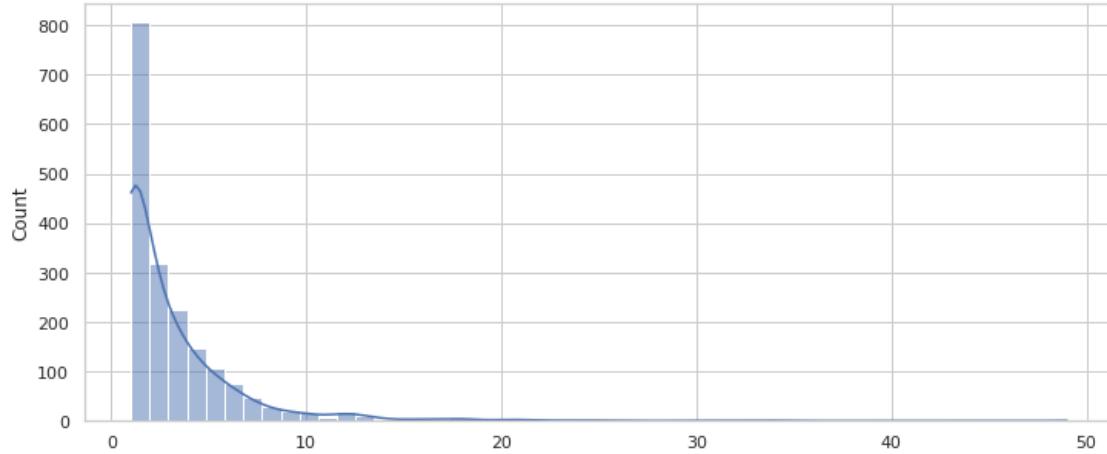
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|-------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 2.0 | 0.500000 | 0.606531 |
| 4 | 2 | 2.0 | 0.500000 | 0.606531 |
| .. | .. | ... | ... | ... |
| 204 | 2 | 688.0 | 0.001453 | 0.998548 |
| 205 | 2 | 855.0 | 0.001170 | 0.998831 |
| 206 | 2 | 905.0 | 0.001105 | 0.998896 |
| 207 | 2 | 959.0 | 0.001043 | 0.998958 |

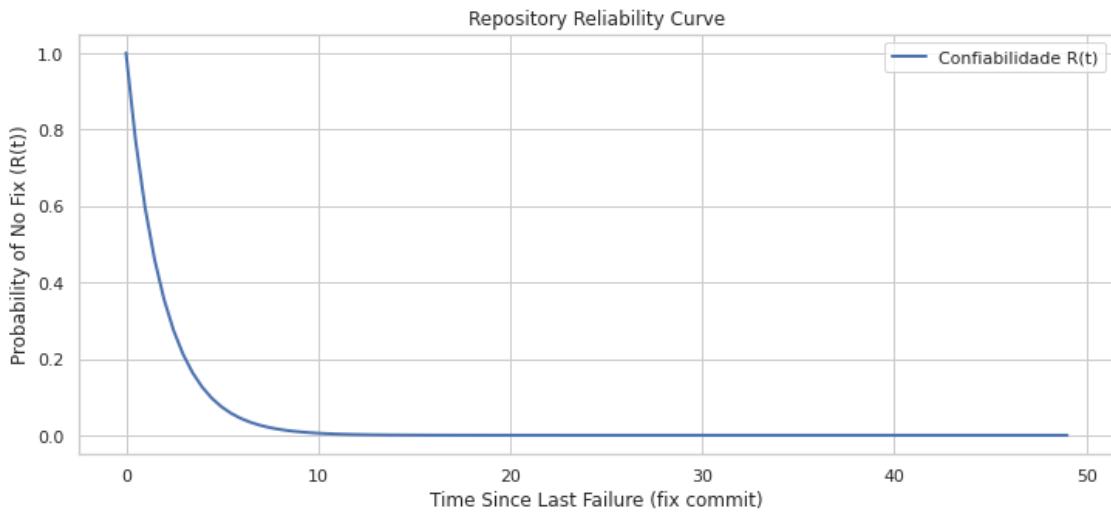
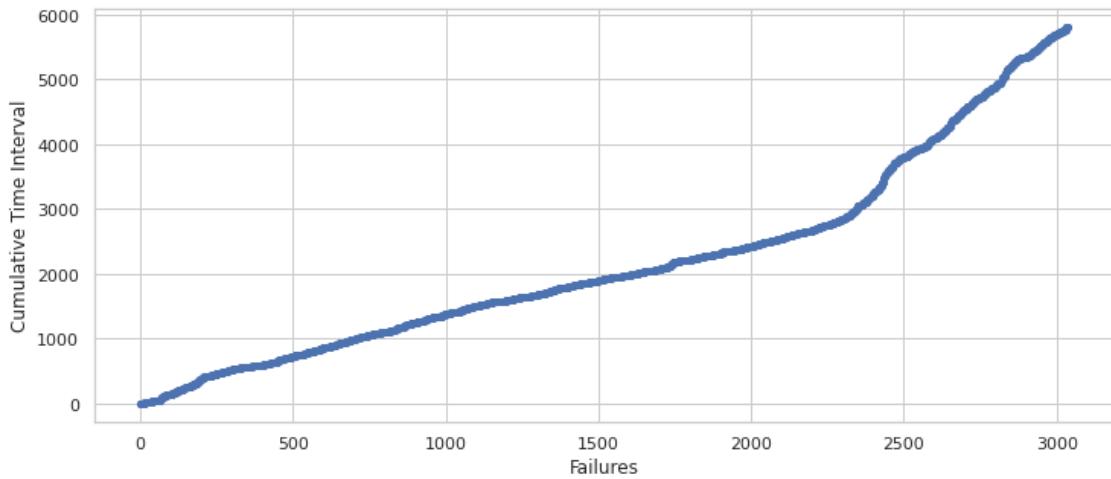
208 2 1992.0 0.000502 0.999498

[209 rows x 5 columns]

== cassandra ==

The histogram of Time Between Failures (TBF) cassandra





```

Confiabilidade R(1) = 0.5931
Confiabilidade R(5) = 0.0734
Confiabilidade R(10) = 0.0054
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000
  
```

```

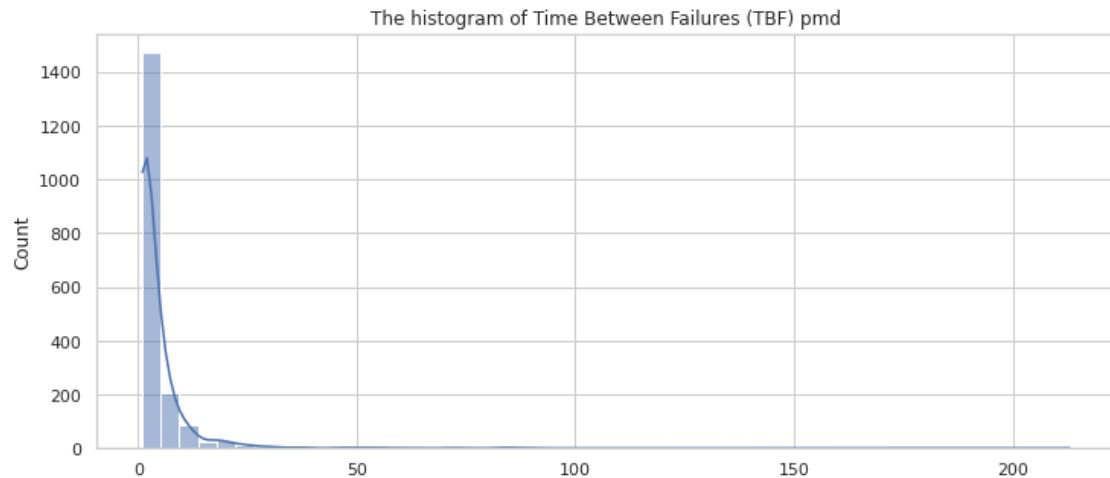
filepath \
0   test/distributed/org/apache/cassandra/distributed/test/ReadFailureTest.java
1   src/java/org/apache/cassandra/service/reads/AbstractReadExecutor.java
2   src/java/org/apache/cassandra/service/reads/DigestResolver.java
3   test/unit/org/apache/cassandra/cql3/validation/entities/UFScriptTest.java
4   src/java/org/apache/cassandra/locator/DatacenterShardStrategy.java
...
1173  src/java/org/apache/cassandra/metrics/CassandraMetricsRegistry.java
  
```

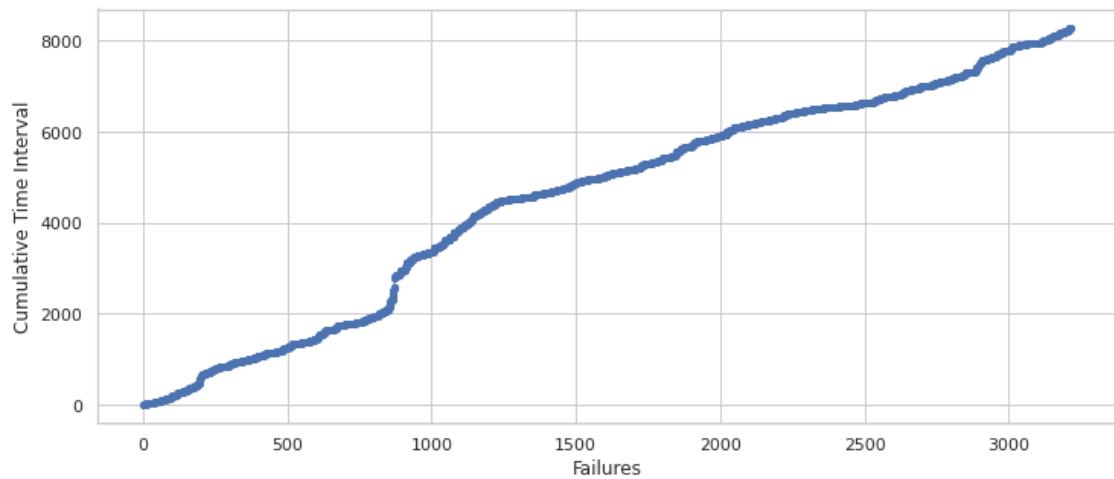
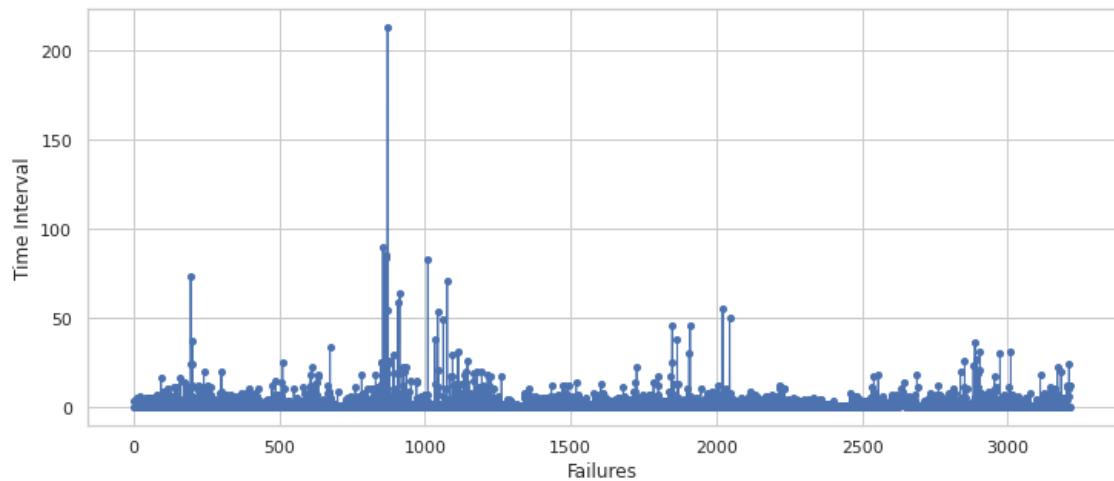
```
1174 src/java/org/apache/cassandra/cache/InstrumentingCache.java  
1175 src/java/org/apache/cassandra/cache/SerializingCache.java  
1176 src/java/org/apache/cassandra/utils/concurrent/WaitQueue.java  
1177 test/unit/org/apache/cassandra/service/StorageServiceTest.java
```

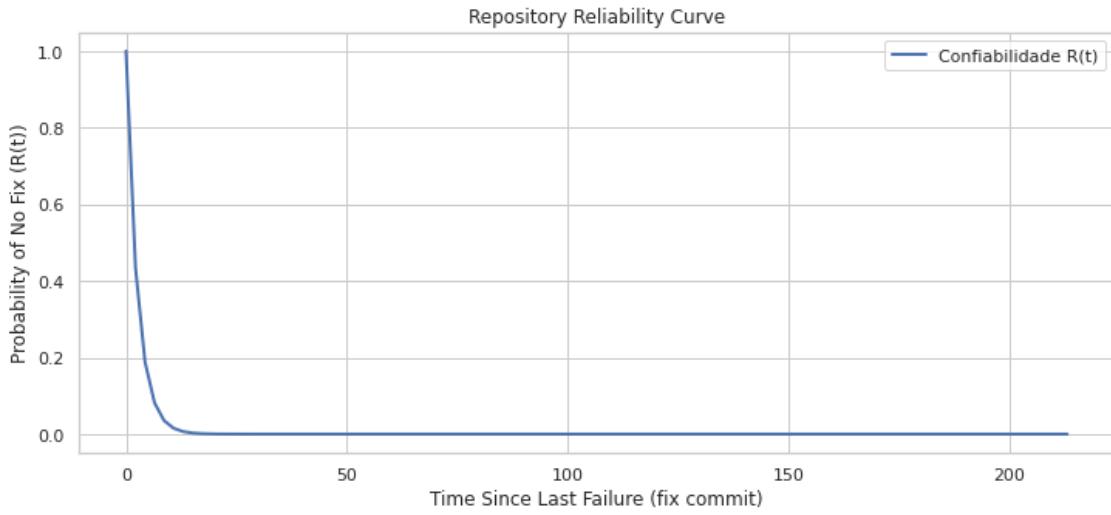
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 3 | 0.5 | 2.000000 | 0.135335 |
| 2 | 3 | 0.5 | 2.000000 | 0.135335 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| ... | .. | ... | ... | ... |
| 1173 | 2 | 3298.0 | 0.000303 | 0.999697 |
| 1174 | 2 | 3421.0 | 0.000292 | 0.999708 |
| 1175 | 2 | 3761.0 | 0.000266 | 0.999734 |
| 1176 | 2 | 3953.0 | 0.000253 | 0.999747 |
| 1177 | 2 | 4775.0 | 0.000209 | 0.999791 |

[1178 rows x 5 columns]

== pmd ==







```

Confiabilidade R(1) = 0.6782
Confiabilidade R(5) = 0.1435
Confiabilidade R(10) = 0.0206
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

0      pmd-visualforce/src/main/java/net/sourceforge/pmd/lang/vf/TokenMgrError.java
1      pmd-java/src/test/java/net/sourceforge/pmd/lang/java/ast/ASTAnnotationTest.java
2      pmd-java/src/test/java/net/sourceforge/pmd/lang/java/ast/ASTInitializerTest.java
3      pmd-java/src/test/java/net/sourceforge/pmd/lang/java/ast/ASTThrowStatementTest.java
4      pmd-java/src/test/java/net/sourceforge/pmd/lang/java/ast/ASTFormalParameterTest.java
...
1957    pmd-apex/src/main/java/net/sourceforge/pmd/lang/apex/rule/codestyle/ClassNameConvention
1958    pmd-apex/src/main/java/net/sourceforge/pmd/lang/apex/ast/ApexQualifiedName.java
1959    pmd-core/src/main/java/net/sourceforge/pmd/lang/rule/RuleReference.java
1960    pmd-core/src/test/java/net/sourceforge/pmd/cpd/CSVRendererTest.java
1961    pmd-core/src/test/java/net/sourceforge/pmd/RuleSetWriterTest.java
...

```

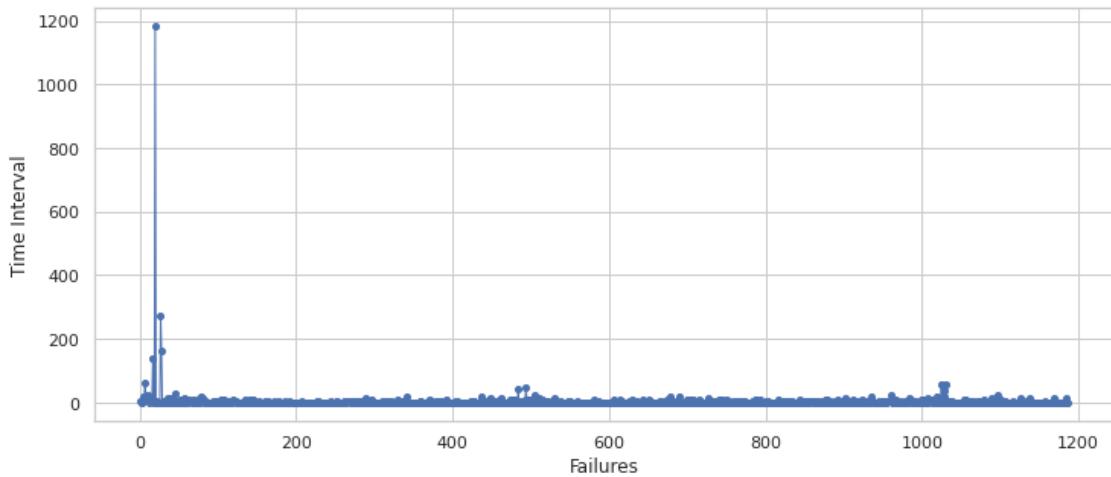
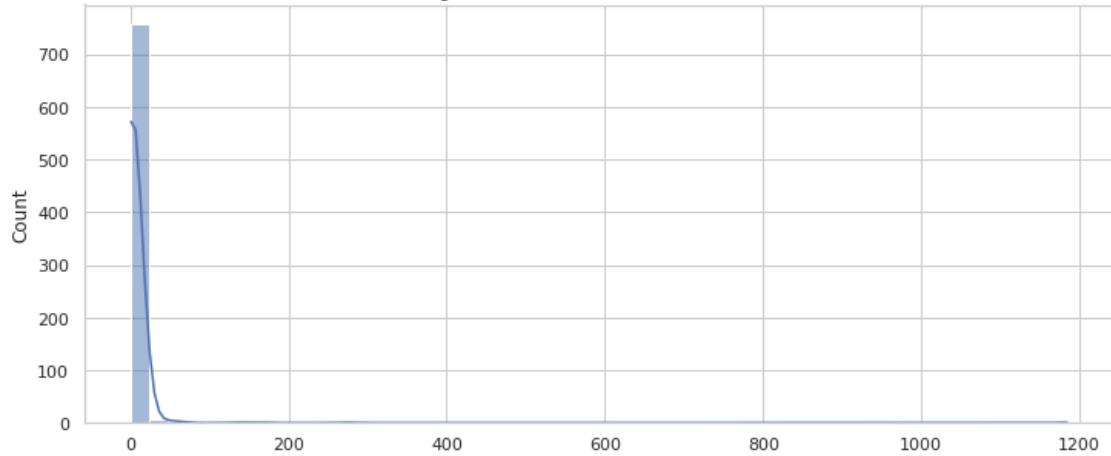
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|-------------|----------------|----------|
| 0 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 1 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 2 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 3 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 4 | 3 | 0.500000 | 2.000000 | 0.135335 |
| ... | ... | ... | ... | ... |
| 1957 | 2 | 2205.000000 | 0.000454 | 0.999547 |
| 1958 | 2 | 2275.000000 | 0.000440 | 0.999561 |
| 1959 | 2 | 2478.000000 | 0.000404 | 0.999597 |
| 1960 | 2 | 2746.000000 | 0.000364 | 0.999636 |

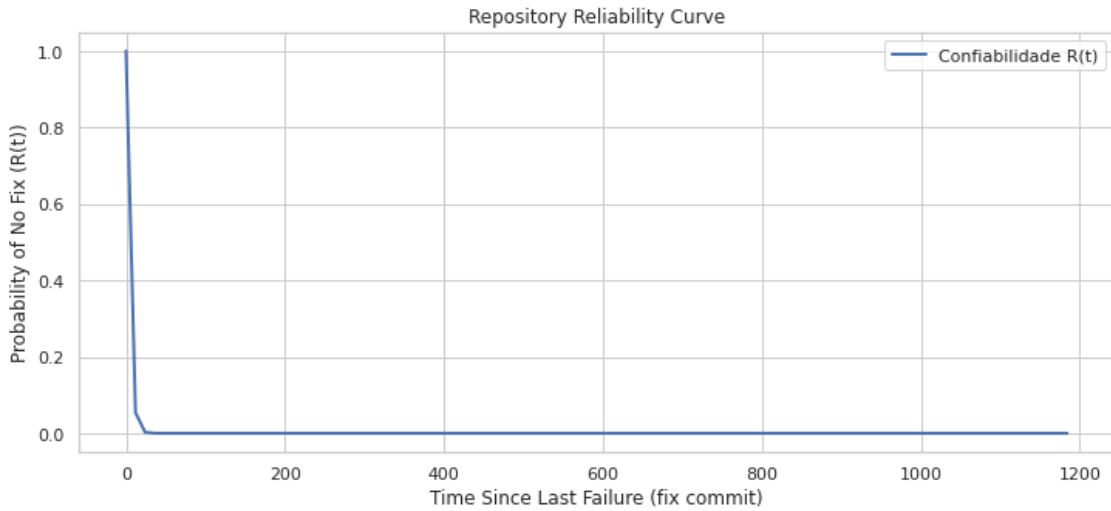
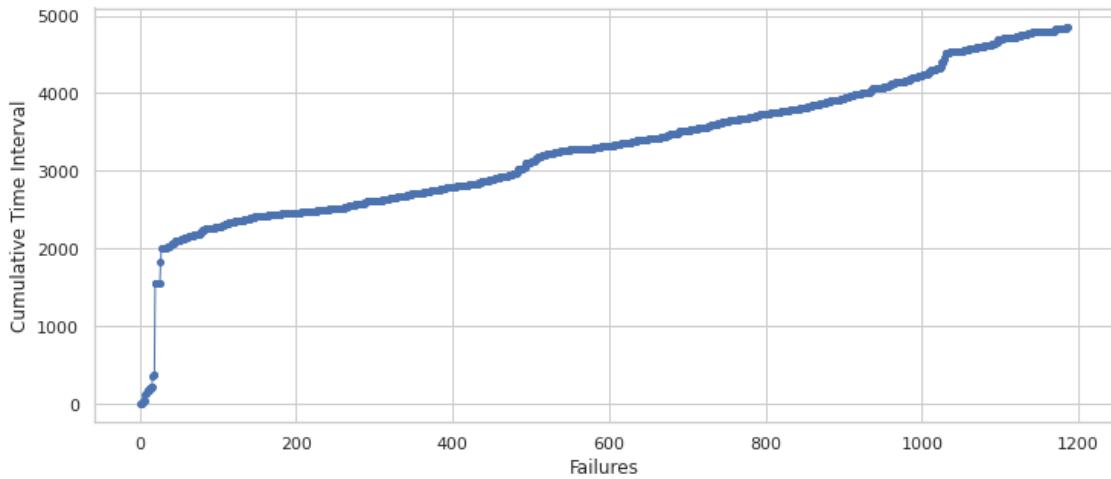
1961 2 2908.000000 0.000344 0.999656

[1962 rows x 5 columns]

== dubbo ==

The histogram of Time Between Failures (TBF) dubbo





Confiabilidade $R(1) = 0.7833$

Confiabilidade $R(5) = 0.2950$

Confiabilidade $R(10) = 0.0870$

Confiabilidade $R(50) = 0.0000$

Confiabilidade $R(100) = 0.0000$

```

0  dubbo-config/dubbo-config-spring/src/main/java/org/apache/dubbo/config/spring/ReferenceBe
1  dubbo-metadata-report/dubbo-metadata-report-api/src/test/java/org/apache/dubbo/metadata/i
2  dubbo-rpc/dubbo-rpc-triple/src/main/java/org/apache/dubbo/rpc/protocol/tri/TripleClientRe
3  dubbo-plugin/dubbo-triple-servlet/src/main/java/org/apache/dubbo/rpc/protocol/tri/servlet,
4  dubbo-common/src/main/java/org/apache/dubbo/rpc/model/StubMethodDescriptor.java
...
714  dubbo-filter/dubbo-filter-cache/src/main/java/org/apache/dubbo/cache/support/expiring/Exp

```

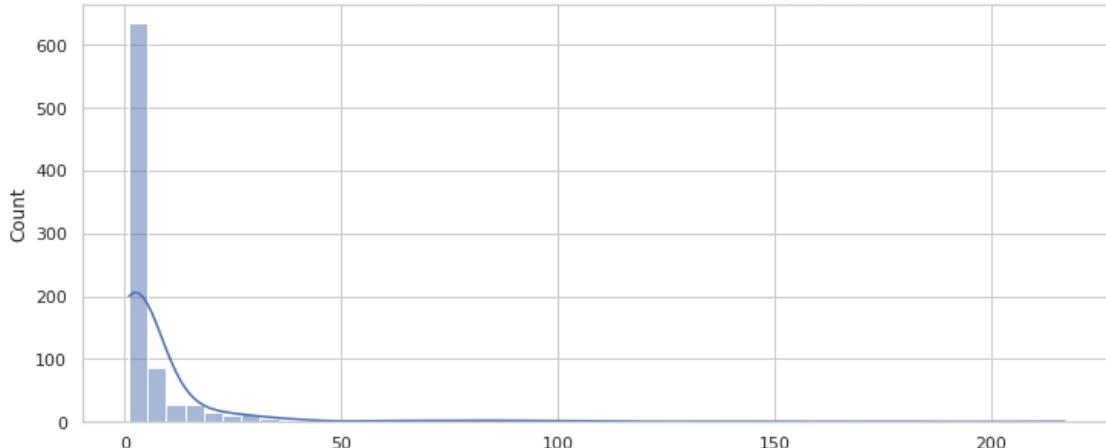
```
715 dubbo-monitor/dubbo-monitor-api/src/main/java/org/apache/dubbo/monitor/support/AbstractMon
716 dubbo-config/dubbo-config-spring/src/main/java/org/apache/dubbo/config/spring/util/Property
717 dubbo-rpc/dubbo-rpc-api/src/main/java/com/alibaba/dubbo/rpc/protocol/AbstractInvoker.java
718 dubbo-config/dubbo-config-api/src/main/java/com/alibaba/dubbo/config/ReferenceConfig.java
```

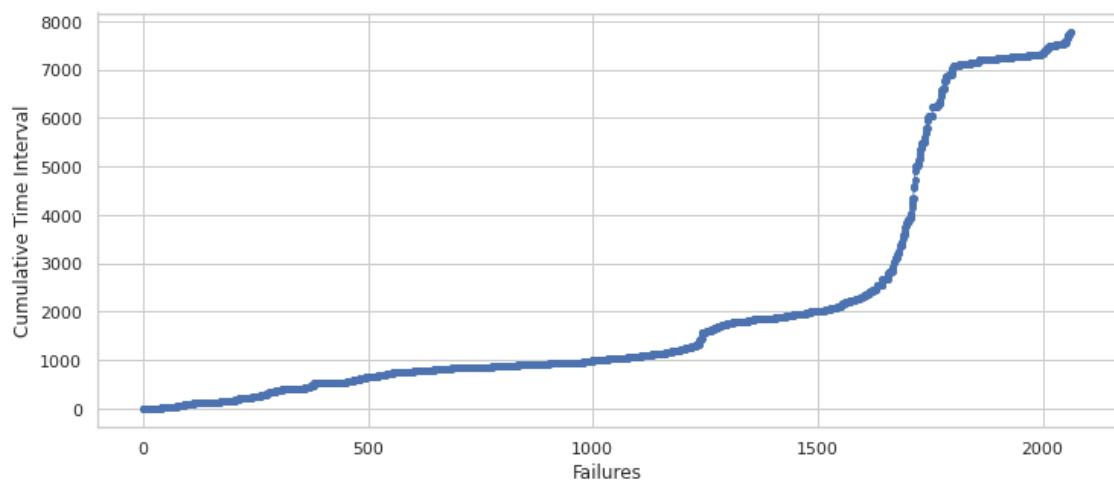
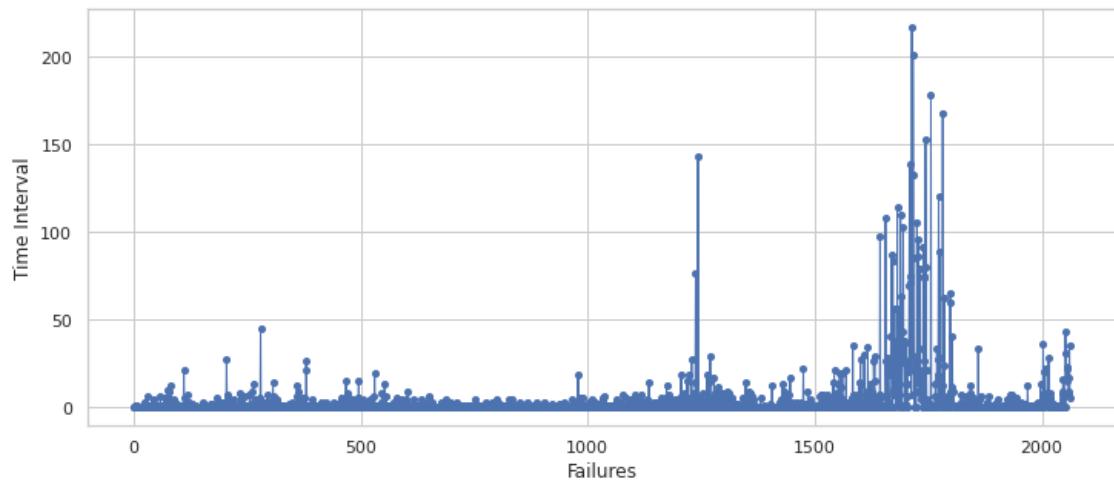
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 714 | 2 | 1813.0 | 0.000552 | 0.999449 |
| 715 | 2 | 1837.0 | 0.000544 | 0.999456 |
| 716 | 2 | 1933.0 | 0.000517 | 0.999483 |
| 717 | 2 | 2234.0 | 0.000448 | 0.999552 |
| 718 | 2 | 2240.0 | 0.000446 | 0.999554 |

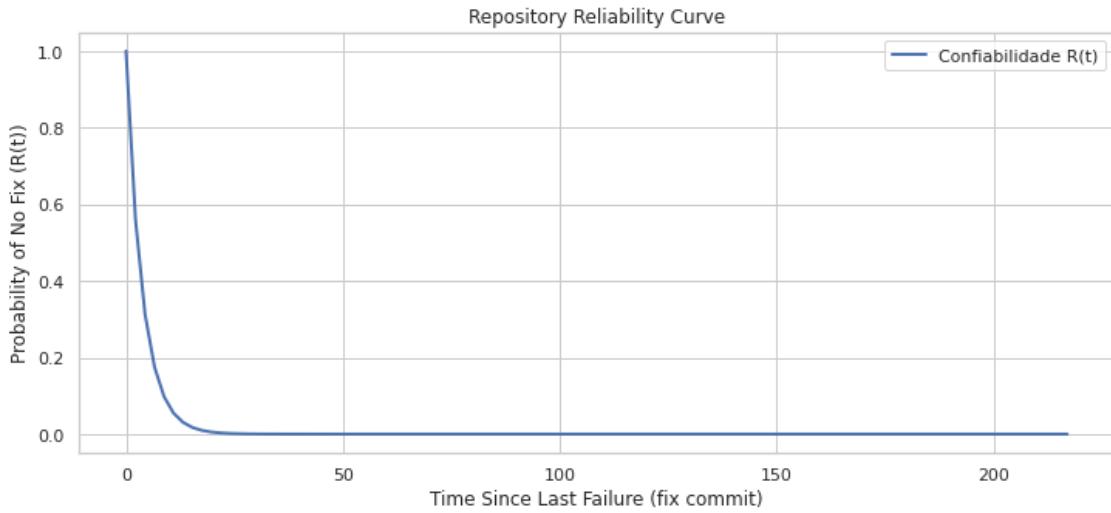
[719 rows x 5 columns]

```
== org.aspectj ==
```

The histogram of Time Between Failures (TBF) org.aspectj







```

Confiabilidade R(1) = 0.7672
Confiabilidade R(5) = 0.2657
Confiabilidade R(10) = 0.0706
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

filepath \
0 tests/java5/reflection/ReflectOnAspectJDeclareParents.java
1 tests/src/org/aspectj/systemtest/ajc150/PerTypeWithinTests.java
2 build/testsrc/org/aspectj/internal/build/BuildModuleTest.java
3 util/testsrc/org/aspectj/util/LangUtilTest.java
4 tests/cflow/CounterTest01.java
...
810 tests/java5/ataspectj/ataspectj/AroundInlineMungerTestAspects.java
811 org.aspectj.ajdt.core/src/org/aspectj/ajdt/internal/compiler/ast/AstUtil.java
812 bcel-builder/src/org/aspectj/apache/bcel/classfile/StackMapEntry.java
813 bcel-builder/src/org/aspectj/apache/bcel/generic/Type.java
814 testing/src/org/aspectj/internal/tools/ant/taskdefs/Ajctest.java

```

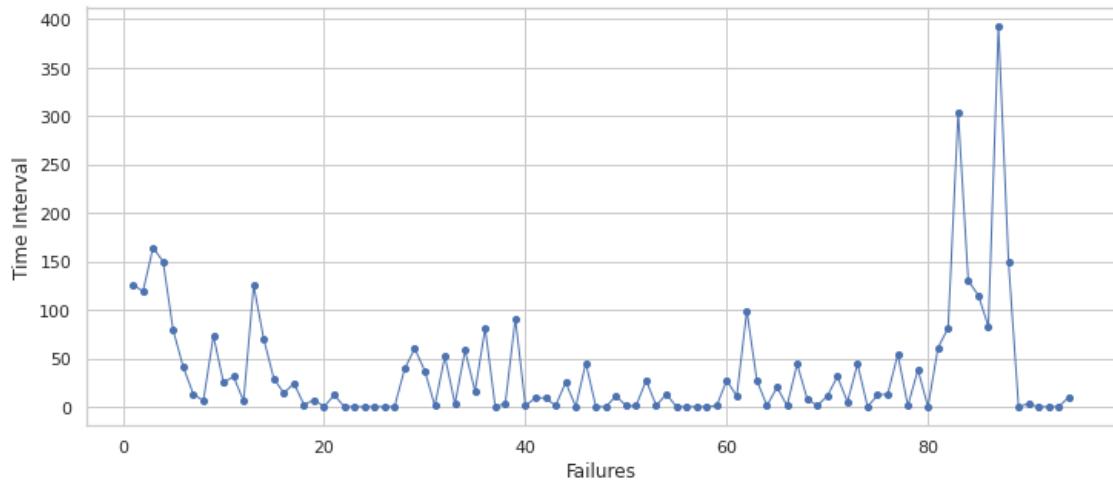
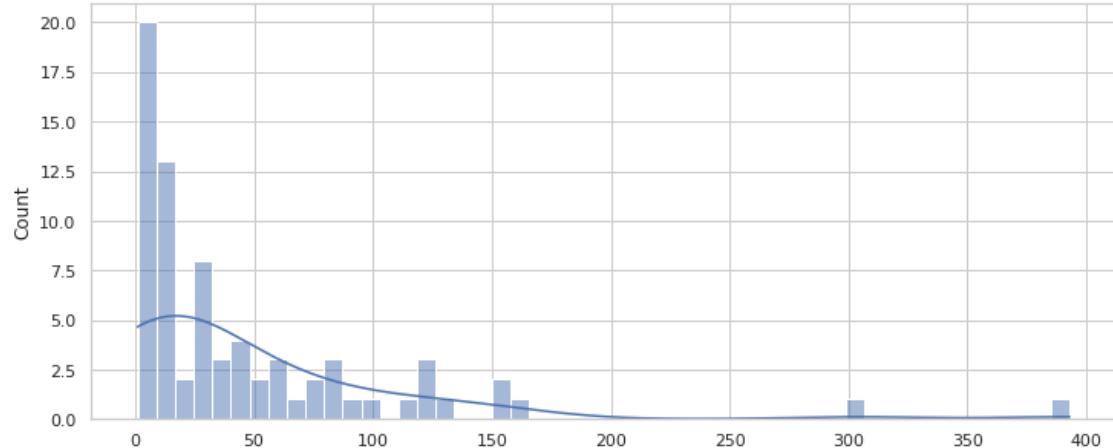
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 810 | 3 | 3327.0 | 0.000301 | 0.999699 |
| 811 | 2 | 3536.0 | 0.000283 | 0.999717 |
| 812 | 2 | 3837.0 | 0.000261 | 0.999739 |
| 813 | 2 | 4846.0 | 0.000206 | 0.999794 |

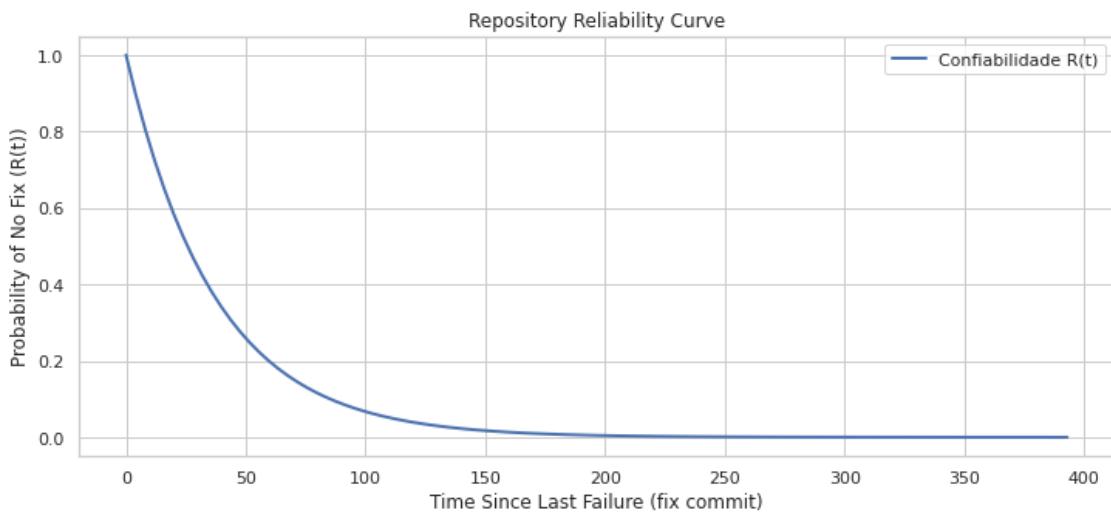
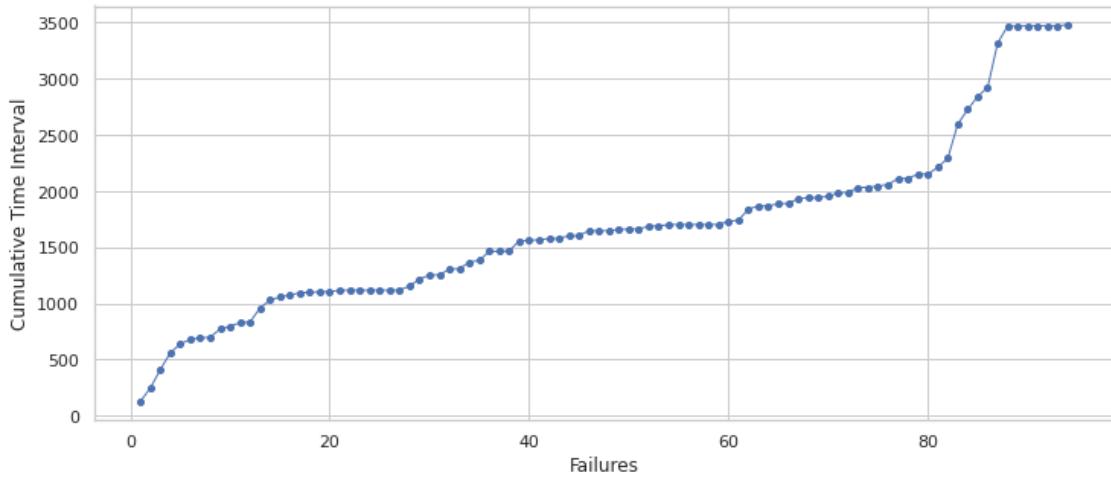
814 2 5092.0 0.000196 0.999804

[815 rows x 5 columns]

== spark ==

The histogram of Time Between Failures (TBF) spark





Confiabilidade $R(1) = 0.9734$
 Confiabilidade $R(5) = 0.8737$
 Confiabilidade $R(10) = 0.7633$
 Confiabilidade $R(50) = 0.2591$
 Confiabilidade $R(100) = 0.0671$

ff

```

0  src/main/java/spark/CustomErrorPages.java
1  src/main/java/spark/staticfiles/StaticFiles.java
2  src/main/java/spark/webserver/SparkServerImpl.java
3  src/main/java/spark/utils/IOUtils.java
4  src/main/java/spark/route/SimpleRouteMatcher.java
...
27 src/main/java/spark/embeddedserver/jetty/websocket/WebSocketServletContextHandlerFactory.java

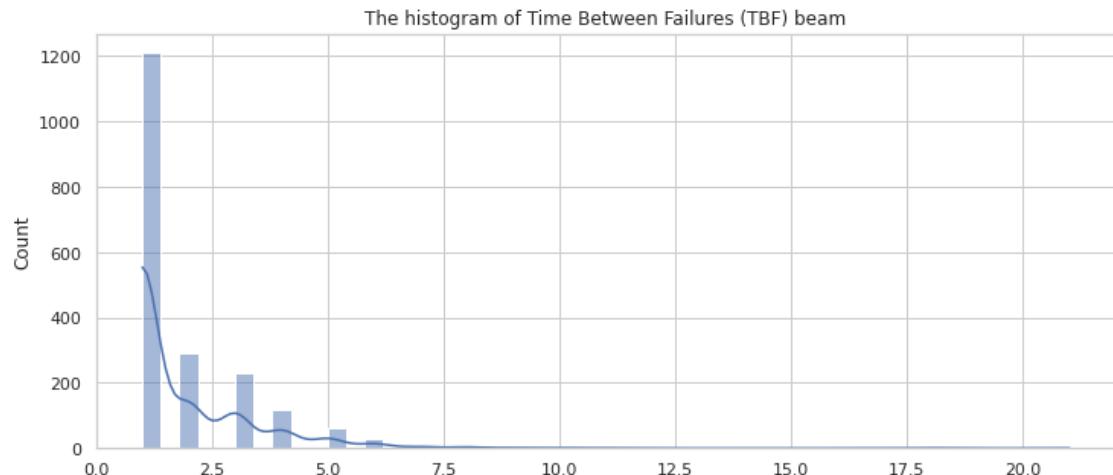
```

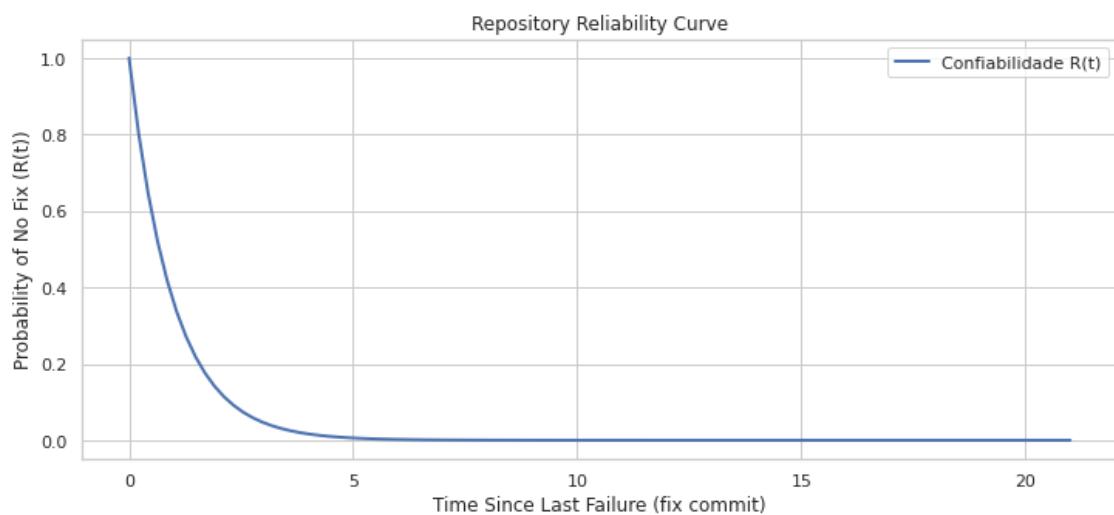
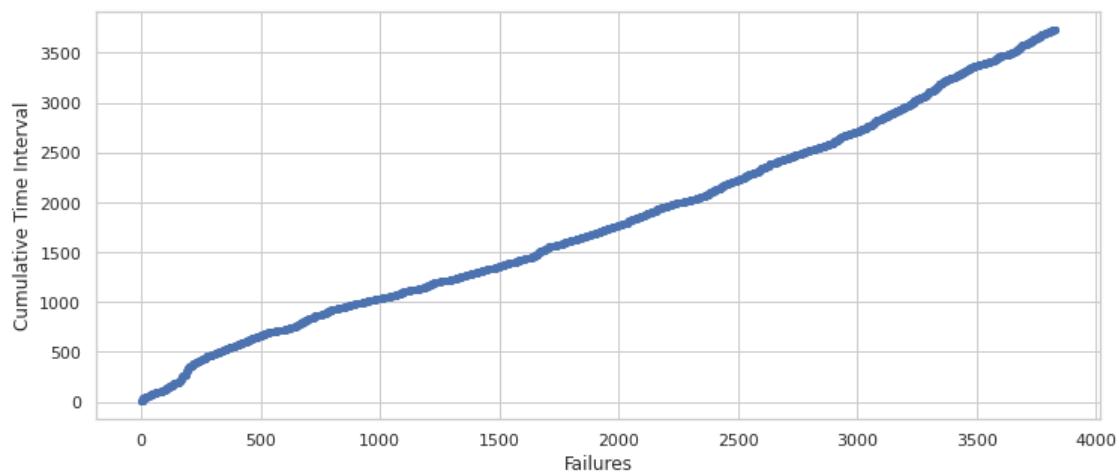
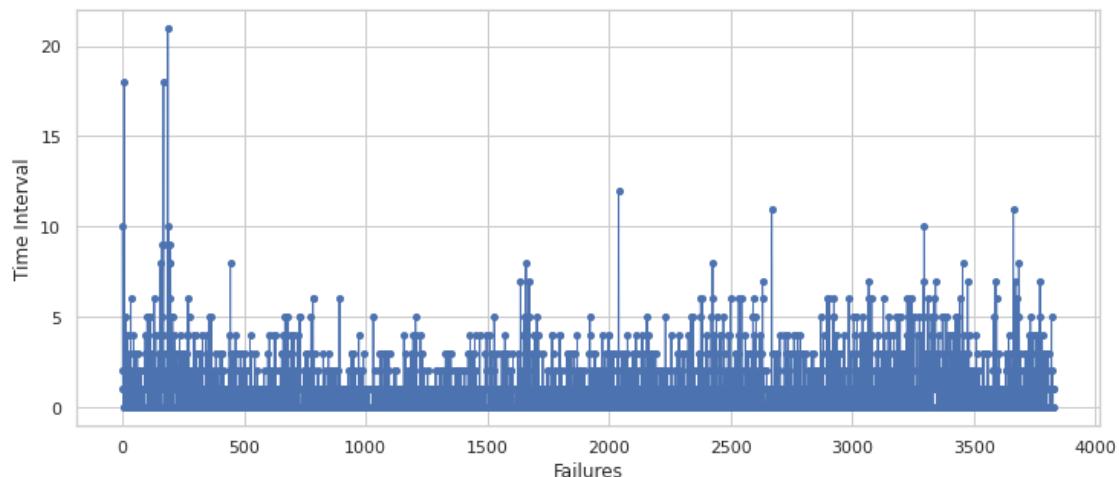
```
28 src/test/java/spark/embeddedserver/jetty/websocket/WebSocketServletContextHandlerFactoryTest
29 src/test/java/spark/RequestTest.java
30 src/main/java/spark/embeddedserver/EmbeddedServer.java
31 src/main/java/spark/embeddedserver/jetty/EmbeddedJettyServer.java
```

| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 3 | 6.0 | 0.166667 | 0.846482 |
| 1 | 3 | 13.0 | 0.076923 | 0.925961 |
| 2 | 2 | 19.0 | 0.052632 | 0.948729 |
| 3 | 2 | 19.0 | 0.052632 | 0.948729 |
| 4 | 2 | 19.0 | 0.052632 | 0.948729 |
| ... | ... | ... | ... | ... |
| 27 | 2 | 1426.0 | 0.000701 | 0.999299 |
| 28 | 2 | 1426.0 | 0.000701 | 0.999299 |
| 29 | 3 | 1459.0 | 0.000685 | 0.999315 |
| 30 | 2 | 1641.0 | 0.000609 | 0.999391 |
| 31 | 2 | 1641.0 | 0.000609 | 0.999391 |

[32 rows x 5 columns]

== beam ==





```

Confiabilidade R(1) = 0.3587
Confiabilidade R(5) = 0.0059
Confiabilidade R(10) = 0.0000
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

0    runners/direct-java/src/test/java/org/apache/beam/runners/direct/ExecutorServiceParallel
1    sdks/java/harness/src/main/java/org/apache/beam/fn/harness/stream/DataStreams.java
2    runners/google-cloud-dataflow-java/worker/src/test/java/org/apache/beam/runners/dataflow,
3    sdks/java/extensions/euphoria/euphoria-operator-testkit/src/main/java/cz/seznam/euphoria,
4    sdks/java/io/google-cloud-platform/src/main/java/org/apache/beam/sdk/io/gcp/pubsublite/in
...
1816   sdks/java/core/src/main/java/org/apache/beam/sdk/transforms/Max.java
1817   runners/core-construction-java/src/main/java/org/apache/beam/runners/core/construction/g
1818   runners/google-cloud-dataflow-java/src/main/java/org/apache/beam/runners/dataflow/options
1819   runners/spark/src/test/java/org/apache/beam/runners/spark/SparkRunnerDebuggerTest.java
1820   runners/java-fn-execution/src/main/java/org/apache/beam/runners/fnexecution/environment/ri

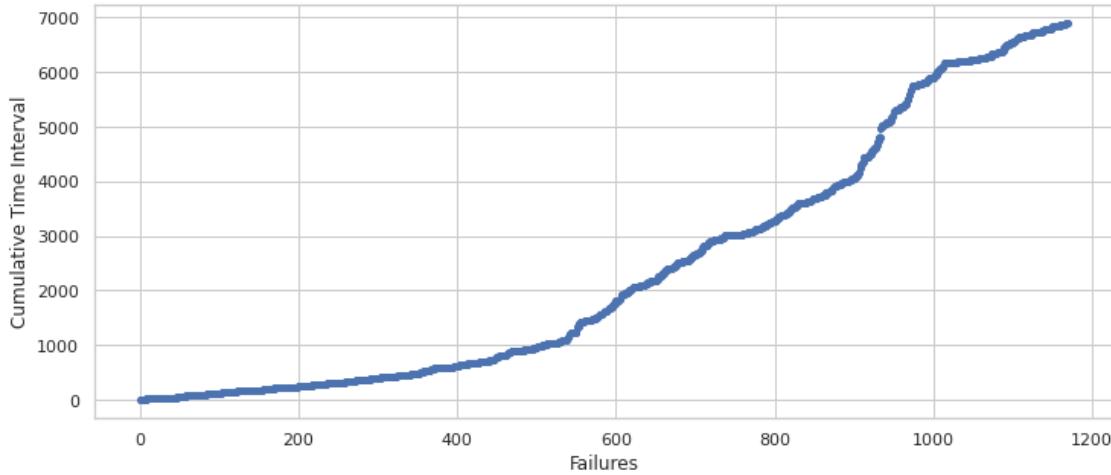
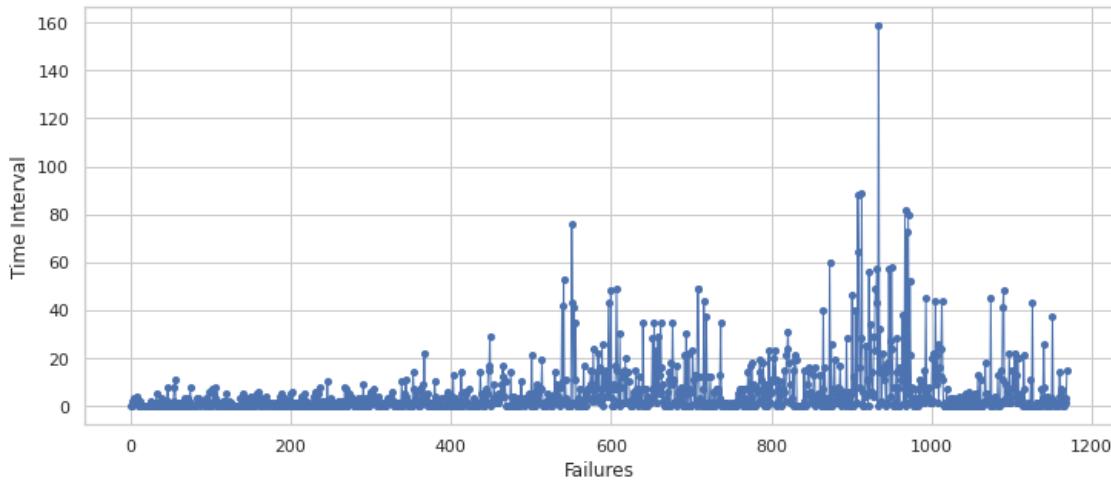
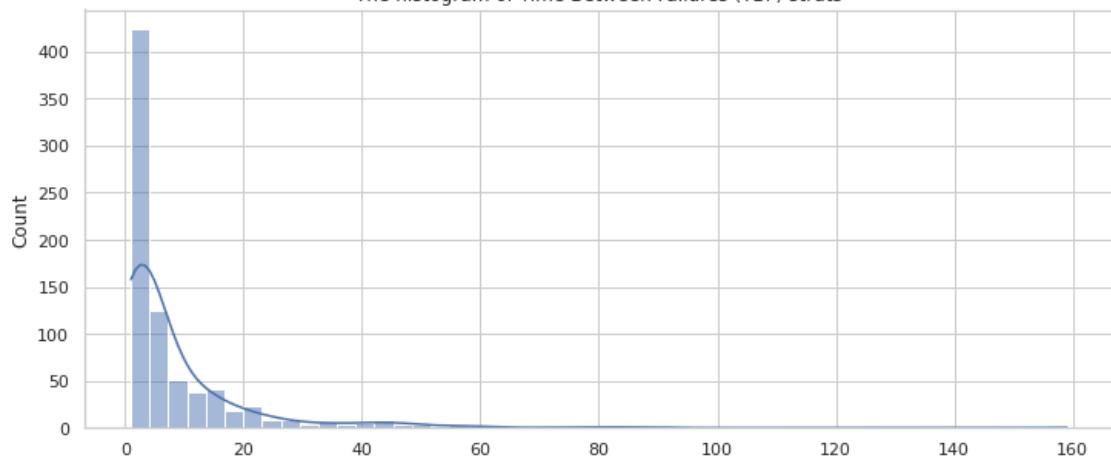
      n_commits      MTBF  lambda_failure        R_t
0      3            0.5    2.000000    0.135335
1      2            1.0    1.000000    0.367879
2      2            1.0    1.000000    0.367879
3      2            1.0    1.000000    0.367879
4      2            1.0    1.000000    0.367879
...
1816   ...
1817   ...
1818   ...
1819   ...
1820   ...

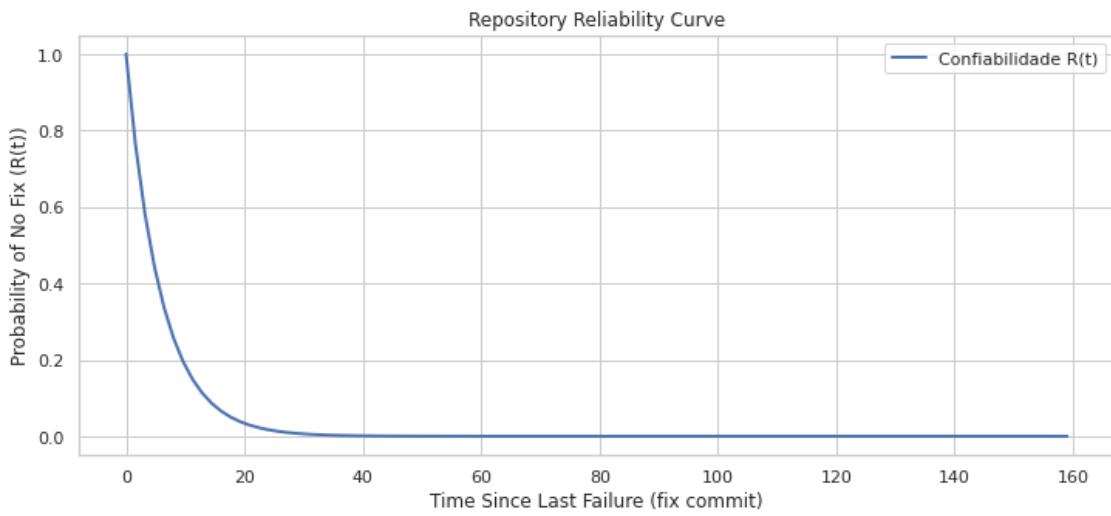
[1821 rows x 5 columns]

== struts ==

```

The histogram of Time Between Failures (TBF) struts





```

Confiabilidade R(1) = 0.8442
Confiabilidade R(5) = 0.4289
Confiabilidade R(10) = 0.1839
Confiabilidade R(50) = 0.0002
Confiabilidade R(100) = 0.0000

```

```

0      src/test/org/apache/struts/action2/views/jsp/ui/TooltipTest.java
1      xwork-core/src/test/java/com/opensymphony/xwork2/util/fs/DefaultFileManagerFactoryTest.java
2      src/test/org/apache/struts/action2/config/ConfigurationTest.java
3      src/test/org/apache/struts/action2/components/ComponentTest.java
4      xwork-core/src/main/java/com/opensymphony/xwork2/util/fs/DefaultFileManagerFactory.java
...
1046   plugins/portlet/src/main/java/org/apache/struts2/portlet/interceptor/PortletPrincipalPro...
1047   plugins/sitegraph/src/main/java/org/apache/struts2/sitegraph/model/IndentWriter.java
1048   core/src/main/java/org/apache/struts2/views/annotations/StrutsTagAttribute.java
1049   core/src/main/java/org/apache/struts2/views/annotations/StrutsTag.java
1050   plugins/javatemplates/src/test/java/org/apache/struts2/views/java/simple/AnchorTest.java

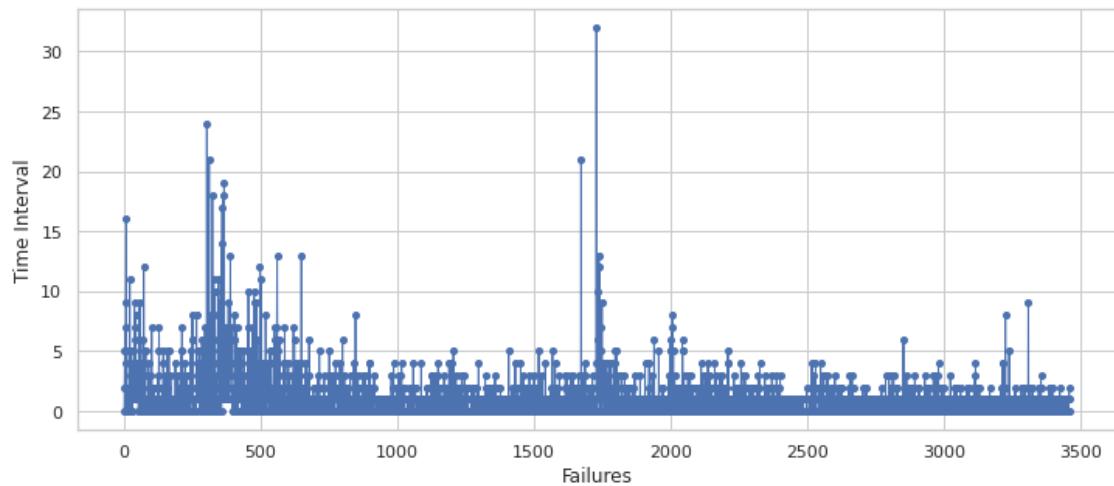
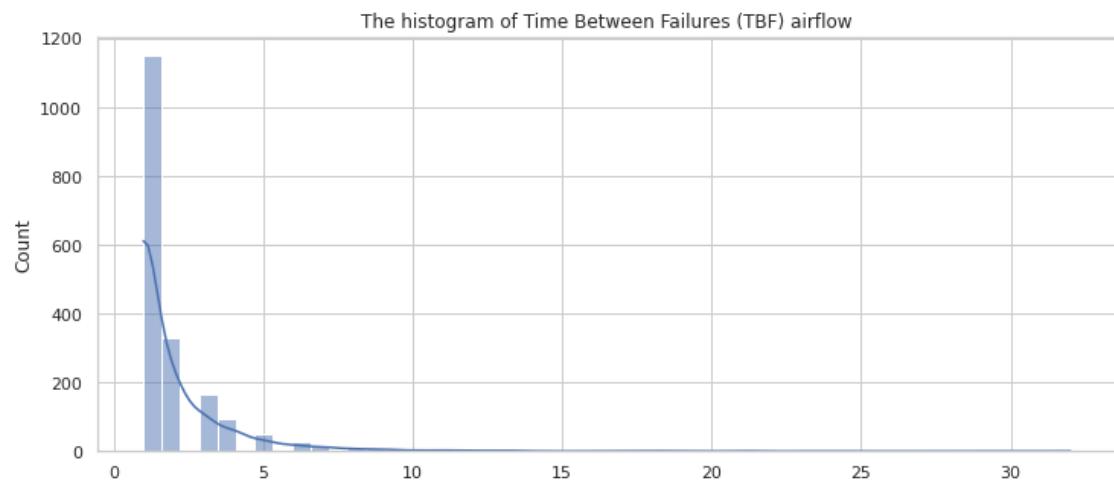
```

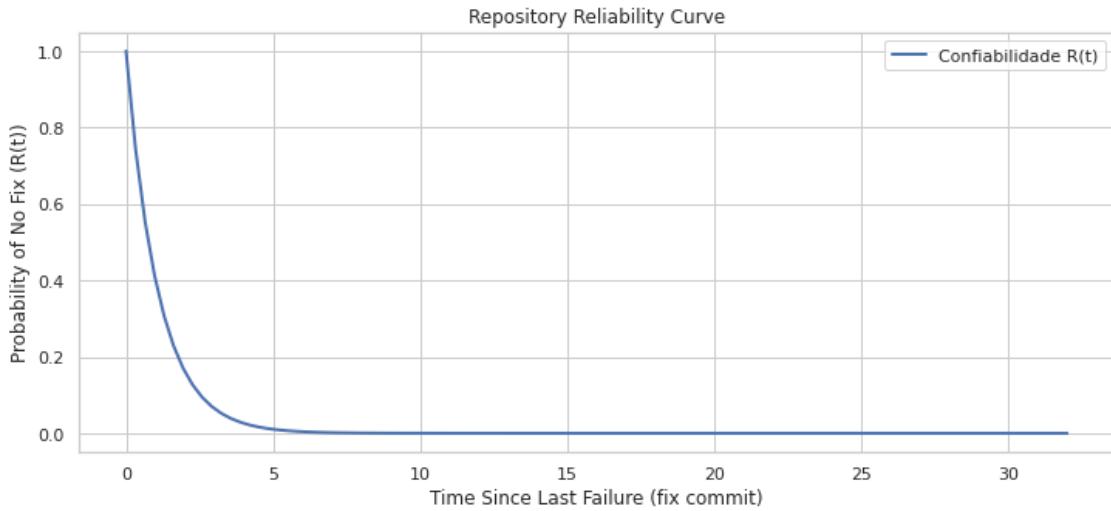
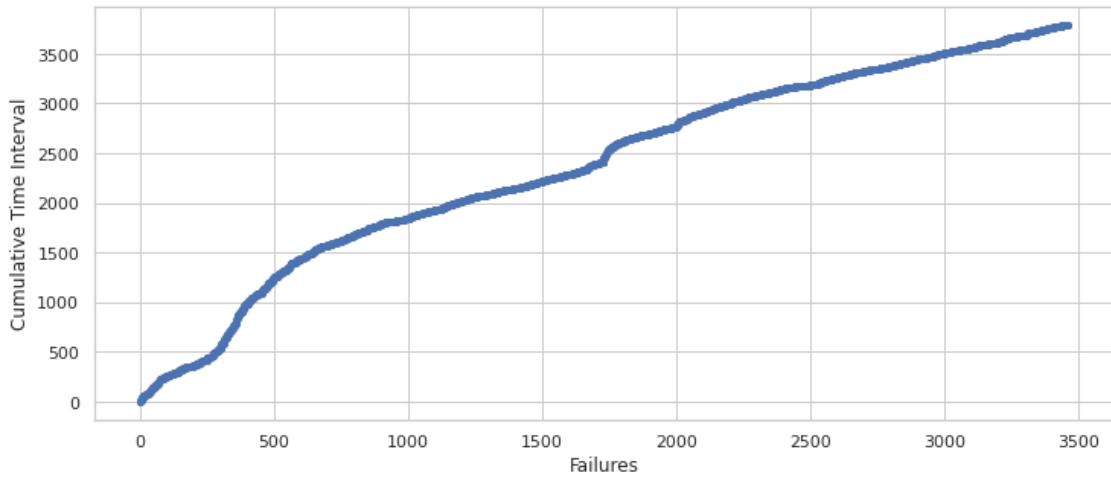
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 1046 | 2 | 3464.0 | 0.000289 | 0.999711 |
| 1047 | 2 | 3464.0 | 0.000289 | 0.999711 |

| | | | | |
|------|---|--------|----------|----------|
| 1048 | 2 | 3928.0 | 0.000255 | 0.999745 |
| 1049 | 2 | 3928.0 | 0.000255 | 0.999745 |
| 1050 | 2 | 4640.0 | 0.000216 | 0.999785 |

[1051 rows x 5 columns]

== airflow ==





```

Confiabilidade R(1) = 0.4017
Confiabilidade R(5) = 0.0105
Confiabilidade R(10) = 0.0001
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

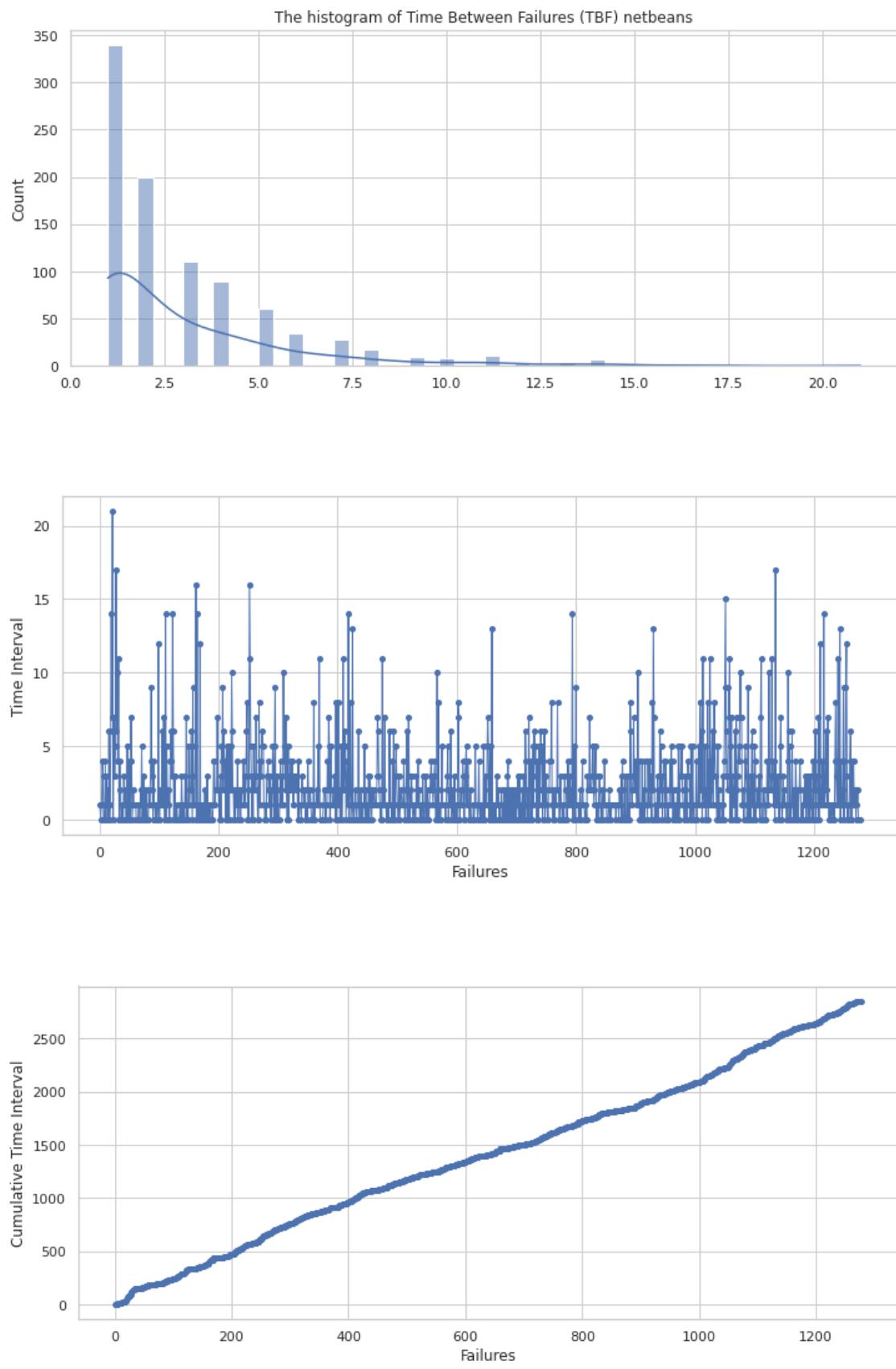
```

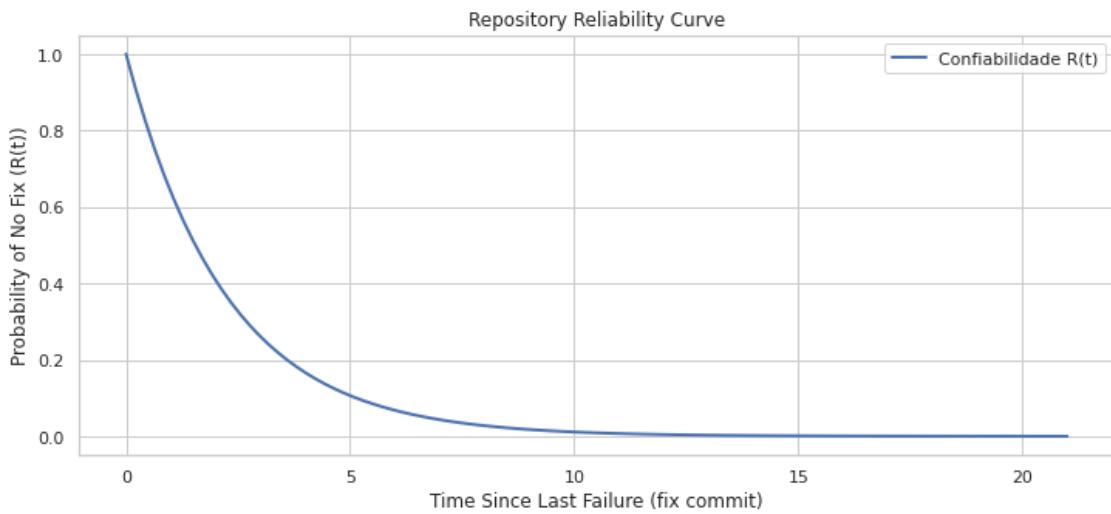
```

Empty DataFrame
Columns: [filepath, n_commits, MTBF, lambda_failure, R_t]
Index: []

```

```
== netbeans ==
```





```

Confiabilidade R(1) = 0.6389
Confiabilidade R(5) = 0.1064
Confiabilidade R(10) = 0.0113
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

0 ide/xml.schema.model/src/org/netbeans/modules/xml/schema/model/impl/RefCacheSupport.java
1 php.code.analysis/src/org/netbeans/modules/php/analysis/ui/options/AnalysisOptionsPanel.ja
2 php.editor/src/org/netbeans/modules/php/editor/parser/astnodes/Identifier.java
3 php.code.analysis/src/org/netbeans/modules/php/analysis/ui/analyizer/CodingStandardsFixerC
4 php.code.analysis/src/org/netbeans/modules/php/analysis/CodingStandardsFixerAnalyzerImpl.ja
..
587 ide/editor.lib/src/org/netbeans/editor/PopupManager.java
588 platform/netbinox/src/org/netbeans/modules/netbinox/NetbinoxFactory.java
589 java/java.source.base/src/org/netbeans/modules/java/source/usages/BinaryAnalyser.java
590 php/php.editor/src/org/netbeans/modules/php/editor/verification/PHP73UnhandledError.java
591 php/php.editor/src/org/netbeans/modules/php/editor/completion/CompletionContextFinder.java

```

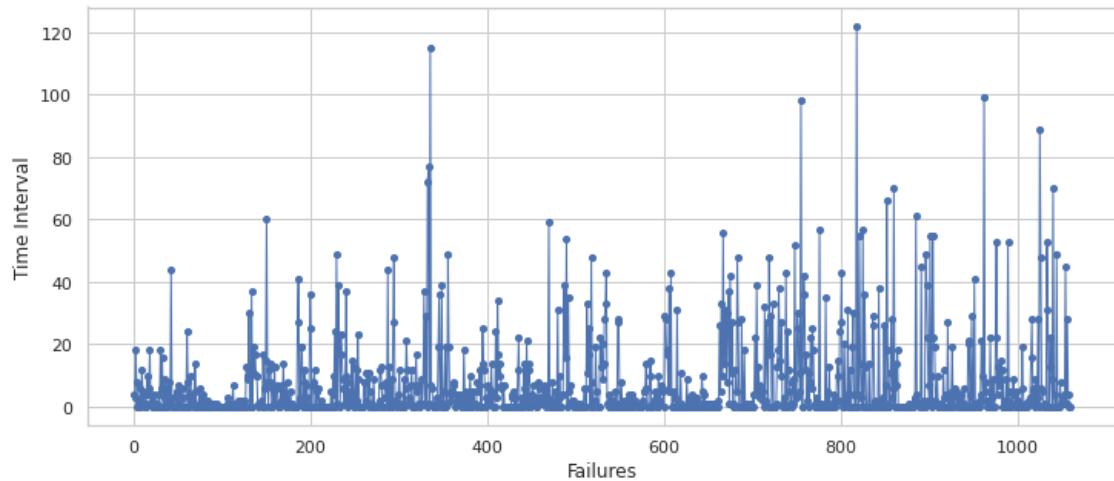
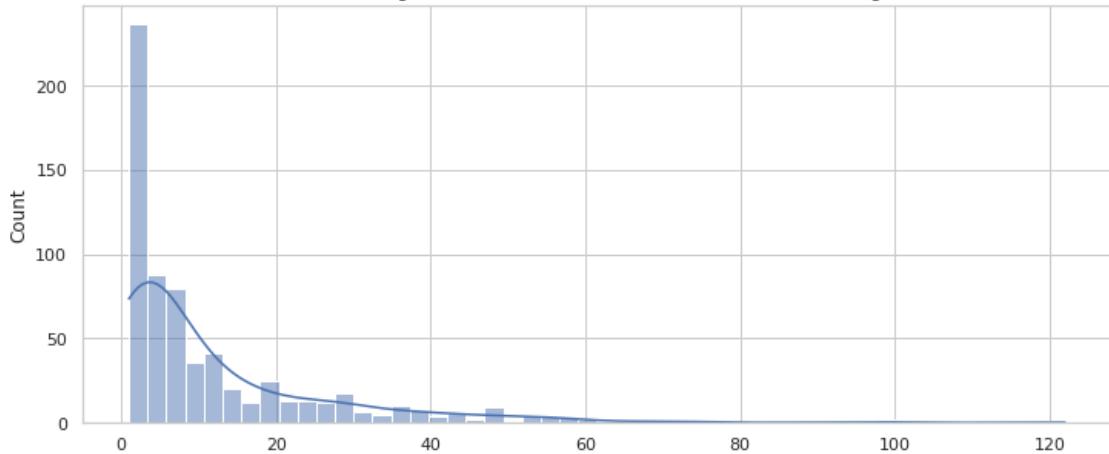
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 587 | 2 | 1621.0 | 0.000617 | 0.999383 |
| 588 | 2 | 1806.0 | 0.000554 | 0.999446 |

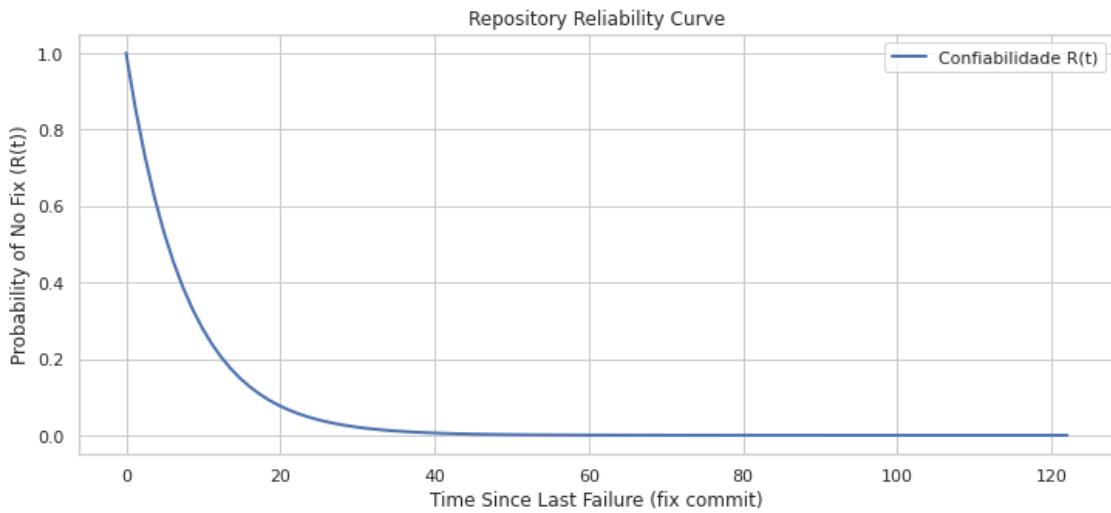
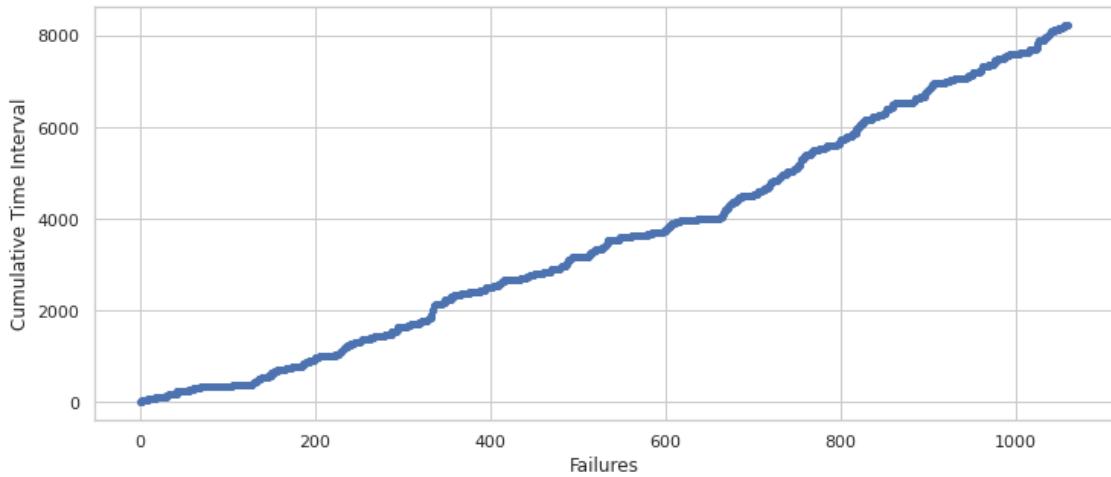
| | | | | |
|-----|---|--------|----------|----------|
| 589 | 2 | 1876.0 | 0.000533 | 0.999467 |
| 590 | 2 | 1907.0 | 0.000524 | 0.999476 |
| 591 | 2 | 1917.0 | 0.000522 | 0.999478 |

[592 rows x 5 columns]

== commons-lang ==

The histogram of Time Between Failures (TBF) commons-lang





```

Confiabilidade R(1) = 0.8793
Confiabilidade R(5) = 0.5256
Confiabilidade R(10) = 0.2762
Confiabilidade R(50) = 0.0016
Confiabilidade R(100) = 0.0000
  
```

```

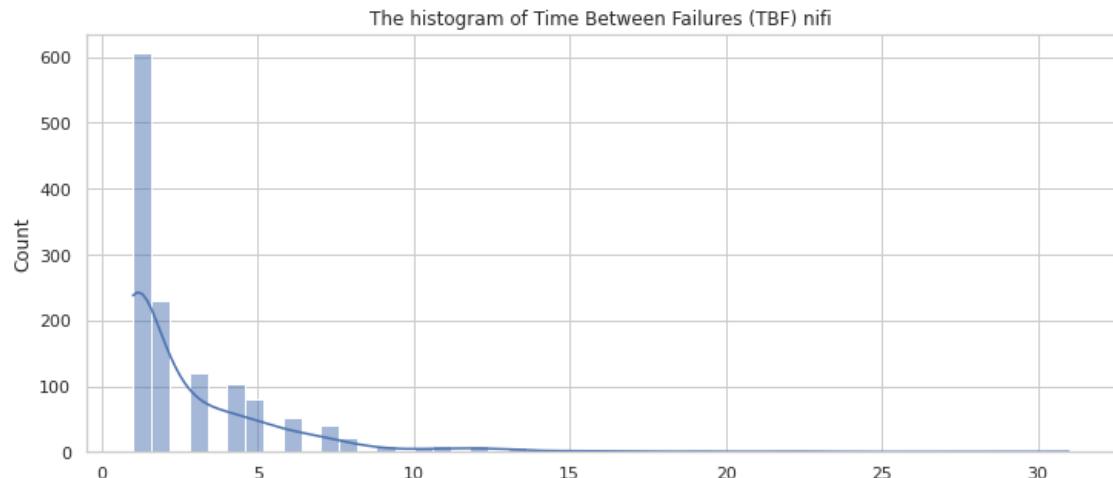
filepath \
0   src/java/org/apache/commons/lang3/Range.java
1   src/java/org/apache/commons/lang3/time/FastDateFormat.java
2   src/test/org/apache/commons/lang/builder/NoFieldNamesToStringStyleTest.java
3   src/java/org/apache/commons/lang/text/translate/UnicodeUnescaper.java
4   src/test/org/apache/commons/lang/builder/SimpleToStringStyleTest.java
...
350  src/test/java/org/apache/commons/lang3/StringUtilsIsTest.java
  
```

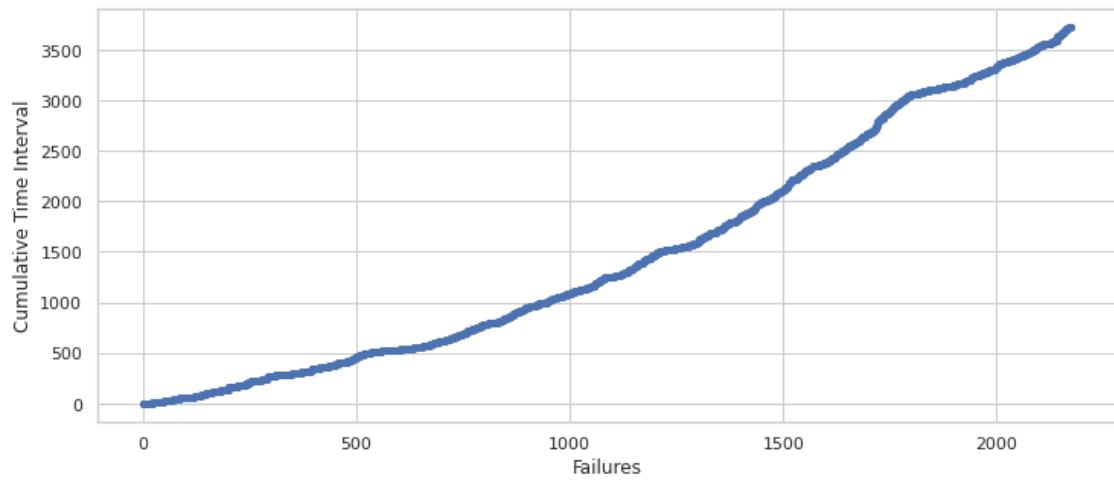
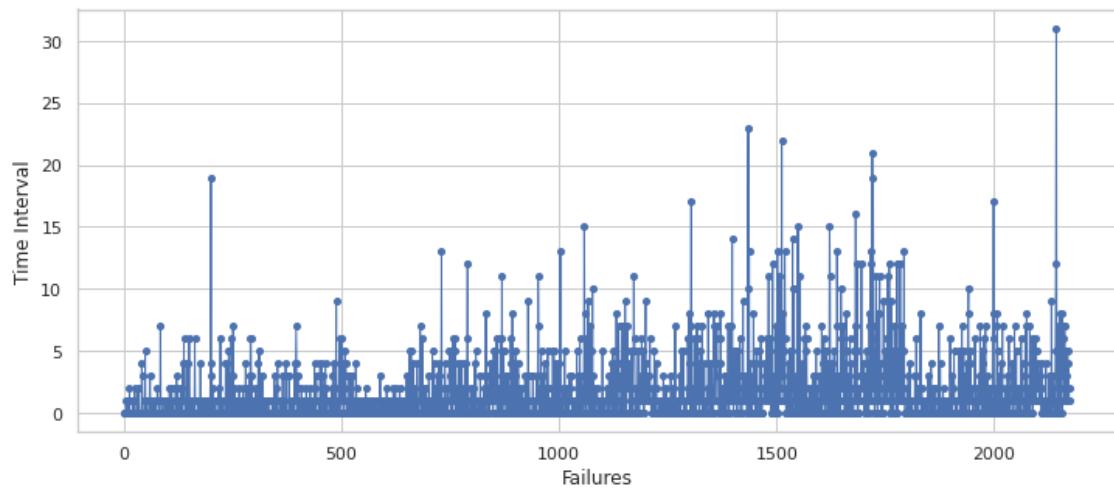
```
351 src/test/java/org/apache/commons/lang3/event/EventUtilsTest.java  
352 src/test/java/org/apache/commons/lang3/JavaVersionTest.java  
353 src/main/java/org/apache/commons/lang3/concurrent/ConcurrentInitializer.java  
354 src/test/java/org/apache/commons/lang3/CharRangeTest.java
```

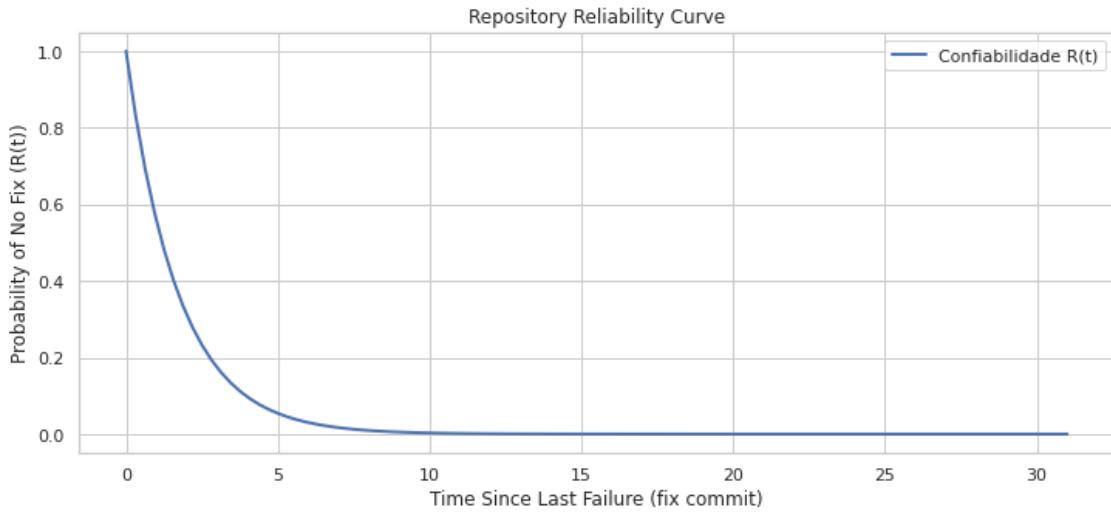
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 2.0 | 0.500000 | 0.606531 |
| 3 | 2 | 2.0 | 0.500000 | 0.606531 |
| 4 | 2 | 2.0 | 0.500000 | 0.606531 |
| .. | .. | ... | ... | ... |
| 350 | 2 | 4144.0 | 0.000241 | 0.999759 |
| 351 | 2 | 4171.0 | 0.000240 | 0.999760 |
| 352 | 2 | 4174.0 | 0.000240 | 0.999760 |
| 353 | 2 | 4523.0 | 0.000221 | 0.999779 |
| 354 | 2 | 4535.0 | 0.000221 | 0.999780 |

[355 rows x 5 columns]

== nifi ==







```

Confiabilidade R(1) = 0.5581
Confiabilidade R(5) = 0.0542
Confiabilidade R(10) = 0.0029
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

0      nifi/nifi-nar-bundles/nifi-standard-bundle/nifi-standard-processors/src/test/java/org/apache/nifi/nar-bundles/framework-bundle/framework/core/src/test/java/org/apache/nifi/controller/repository
1      nifi-nar-bundles/nifi-graph-bundle/nifi-graph-processors/src/test/java/org/apache/nifi/p...
2      nifi-nar-bundles/nifi-standard-bundle/nifi-standard-reporting-tasks/src/main/java/org/apache/nifi-commons/nifi-schema-utils/src/test/java/org/apache/nifi/repository/schema/TestSchema...
...
1386    nifi-commons/nifi-utils/src/test/java/org/apache/nifi/stream/io/util/TextLineDemarcatorTest
1387    nifi-toolkit/nifi-toolkit-cli/src/main/java/org/apache/nifi/toolkit/cli/impl/command/nifi...
1388    nifi-nar-bundles/nifi-framework-bundle/nifi-framework/nifi-web/nifi-web-api/src/main/java/or...
1389    nifi-nar-bundles/nifi-provenance-repository-bundle/nifi-persistent-provenance-repository...
1390    nifi-nar-bundles/nifi-hadoop-bundle/nifi-hdfs-processors/src/test/java/org/apache/nifi/p...

```

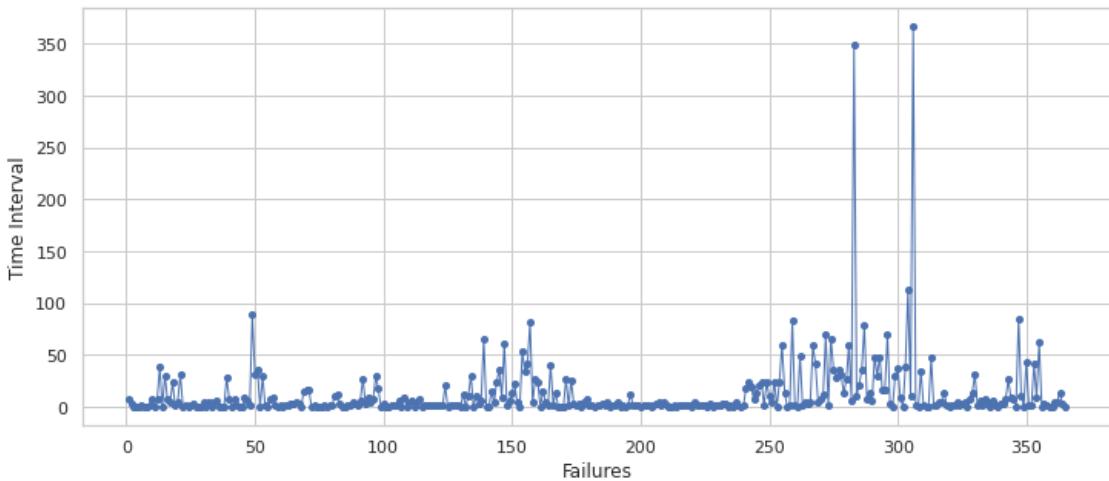
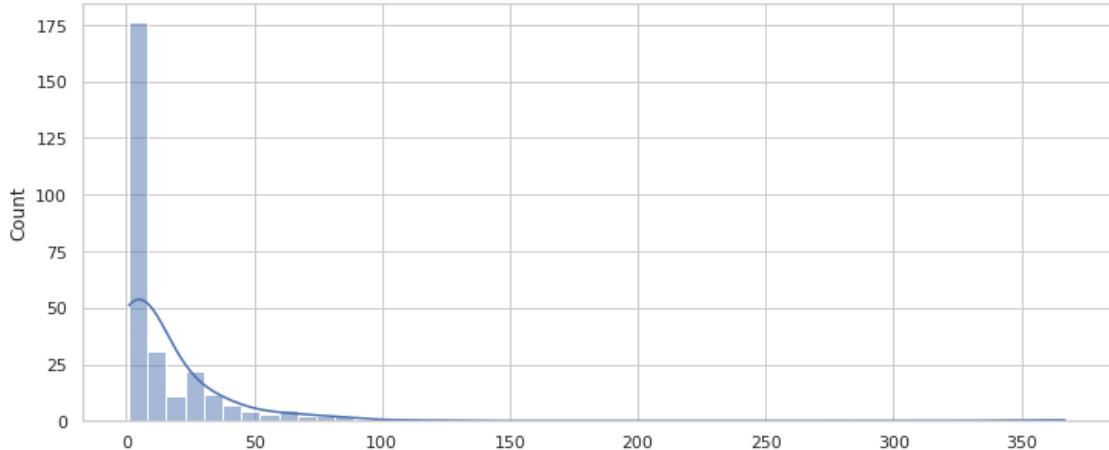
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 1386 | 2 | 2166.0 | 0.000462 | 0.999538 |
| 1387 | 2 | 2417.0 | 0.000414 | 0.999586 |
| 1388 | 2 | 2456.0 | 0.000407 | 0.999593 |
| 1389 | 2 | 2491.0 | 0.000401 | 0.999599 |

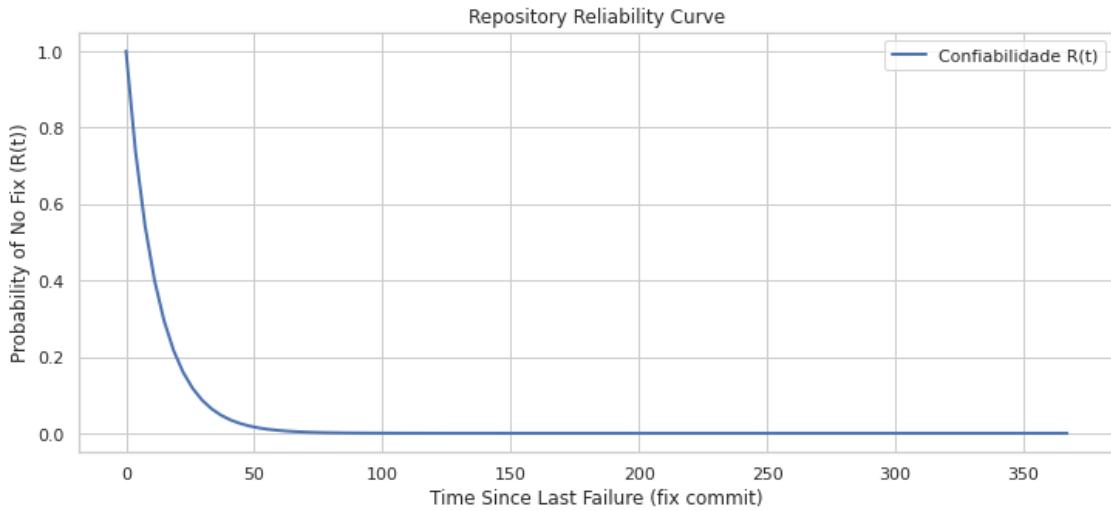
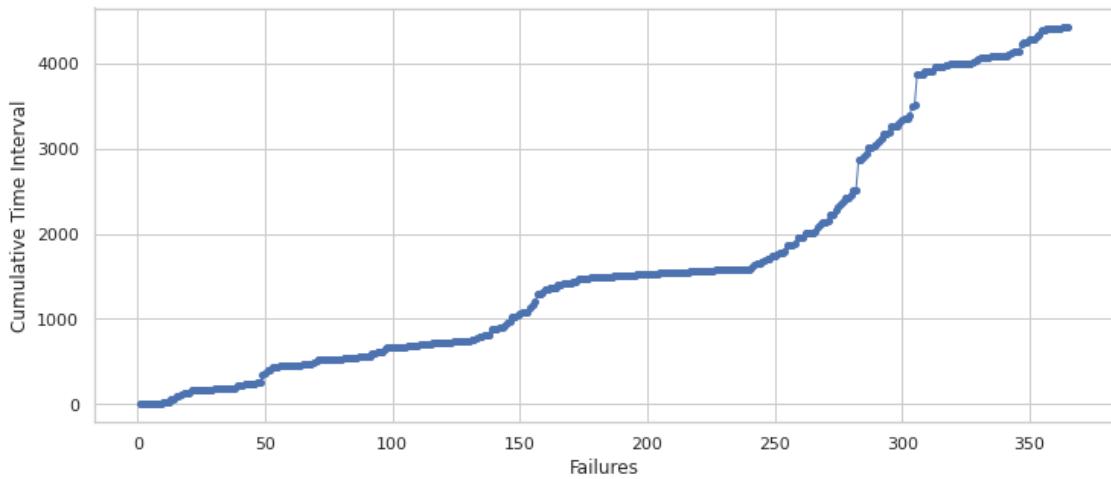
```
1390 2 2576.0 0.000388 0.999612
```

```
[1391 rows x 5 columns]
```

```
-- glide ==
```

The histogram of Time Between Failures (TBF) glide





Confiabilidade $R(1) = 0.9209$

Confiabilidade $R(5) = 0.6622$

Confiabilidade $R(10) = 0.4385$

Confiabilidade $R(50) = 0.0162$

Confiabilidade $R(100) = 0.0003$

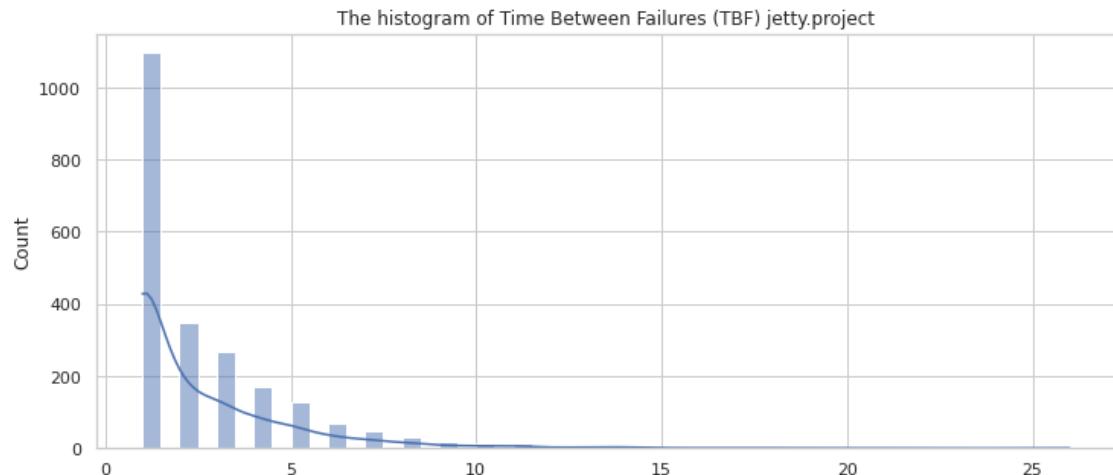
filepat
0 library/test/src/test/java/com/bumptech/glide/load/engine/cache/LruCacheTest.java
1 library/tests/src/com/bumptech/glide/LruCacheTest.java
2 library/src/main/java/com/bumptech/glide/load/resource.bitmap/DownsampleStrategy.java
3 library/src/com/bumptech/glide/resize/request/BitmapRequest.java
4 library/src/main/java/com/bumptech/glide/load/engine/ResourceRunner.java
...
221 library/src/main/java/com/bumptech/glide/load/data/mediastore/MediaStoreUtil.java

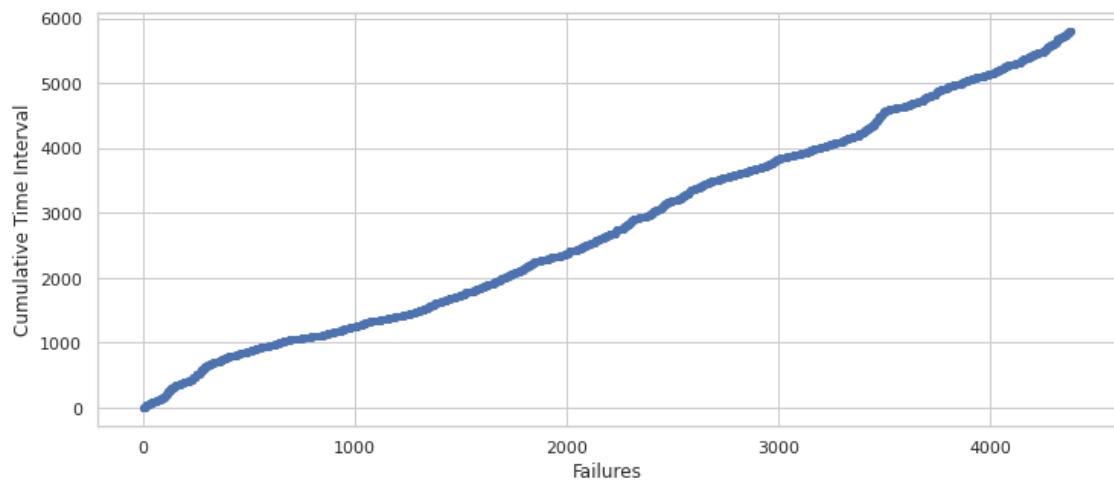
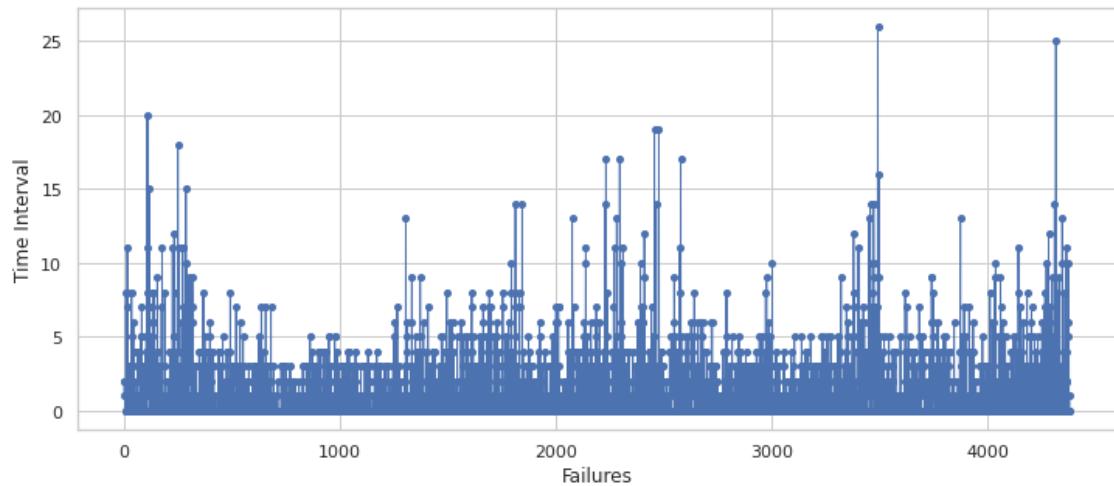
```
222 library/src/main/java/com/bumptech/glide/util/LruCache.java  
223 library/src/main/java/com/bumptech/glide/load/resource.bitmap/StreamBitmapDecoder.java  
224 library/src/main/java/com/bumptech/glide/util/ExceptionCatchingInputStream.java  
225 library/src/main/java/com/bumptech/glide/load/resource.bitmap/DefaultImageHeaderParser.ja
```

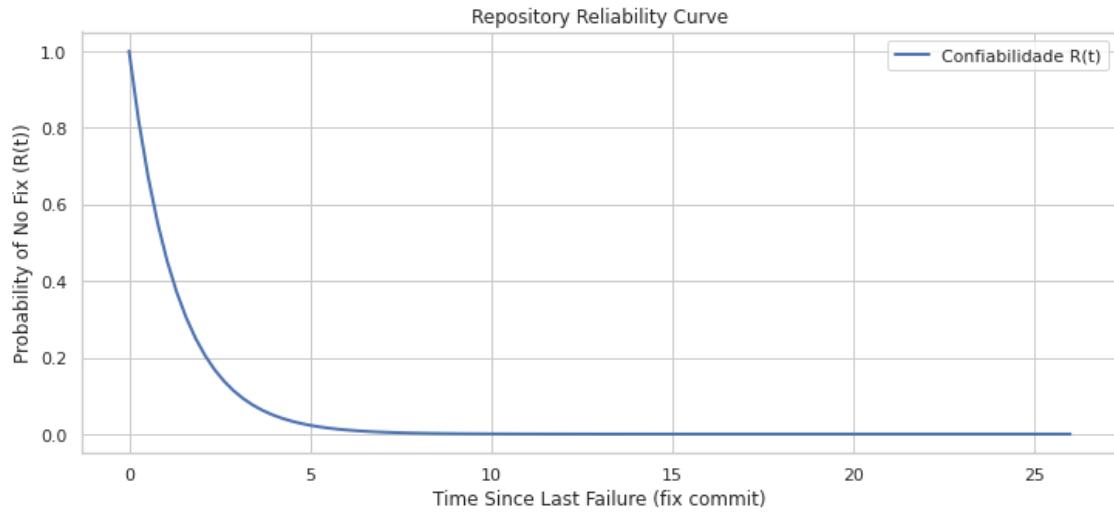
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 3 | 1.5 | 0.666667 | 0.513417 |
| .. | .. | ... | ... | ... |
| 221 | 2 | 2076.0 | 0.000482 | 0.999518 |
| 222 | 2 | 2102.0 | 0.000476 | 0.999524 |
| 223 | 2 | 2152.0 | 0.000465 | 0.999535 |
| 224 | 2 | 2255.0 | 0.000443 | 0.999557 |
| 225 | 2 | 2600.0 | 0.000385 | 0.999615 |

[226 rows x 5 columns]

== jetty.project ==







```

Confiabilidade R(1) = 0.4705
Confiabilidade R(5) = 0.0231
Confiabilidade R(10) = 0.0005
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

0    jetty-spdy/spdy-http-server/src/test/java/org/eclipse/jetty/spdy/server/http/WriteThrough...
1    jetty-hazelcast/src/main/java/org/eclipse/jetty/hazelcast/session/HazelcastSessionDataSt...
2    jetty-websocket/websocket-tests/src/test/java/org/eclipse/jetty/websocket/tests/server/j...
3    jetty-websocket/websocket-common/src/main/java/org/eclipse/jetty/websocket/common/func...
4    tests/test-integration/src/test/java/org/eclipse/jetty/test/AbstractJettyTestCase.java
...
2025   jetty-util/src/test/java/org/eclipse/jetty/util/IteratingCallbackTest.java
2026   jetty-util/src/test/java/org/eclipse/jetty/util/BlockingArrayQueueTest.java
2027   jetty-jndi/src/main/java/org/eclipse/jetty/jndi/local/localContextRoot.java
2028   jetty-util/src/main/java/org/eclipse/jetty/util/MultiException.java
2029   jetty-jndi/src/test/java/org/eclipse/jetty/factories/TestMailSessionReference.java

```

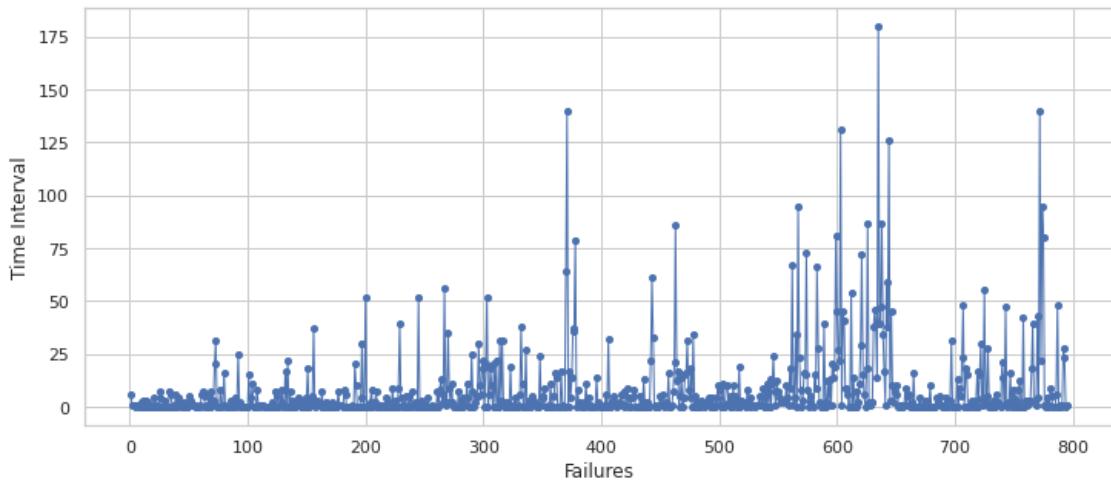
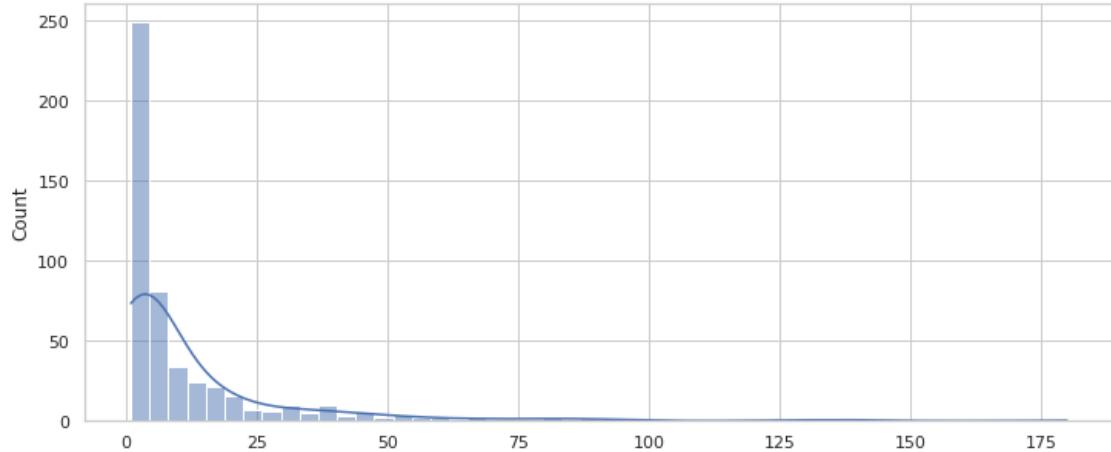
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|-------------|----------------|----------|
| 0 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 1 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 2 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 3 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 4 | 4 | 0.333333 | 3.000000 | 0.049787 |
| ... | ... | ... | ... | ... |
| 2025 | 2 | 3427.000000 | 0.000292 | 0.999708 |
| 2026 | 2 | 3577.000000 | 0.000280 | 0.999720 |
| 2027 | 2 | 3598.000000 | 0.000278 | 0.999722 |
| 2028 | 2 | 3739.000000 | 0.000267 | 0.999733 |

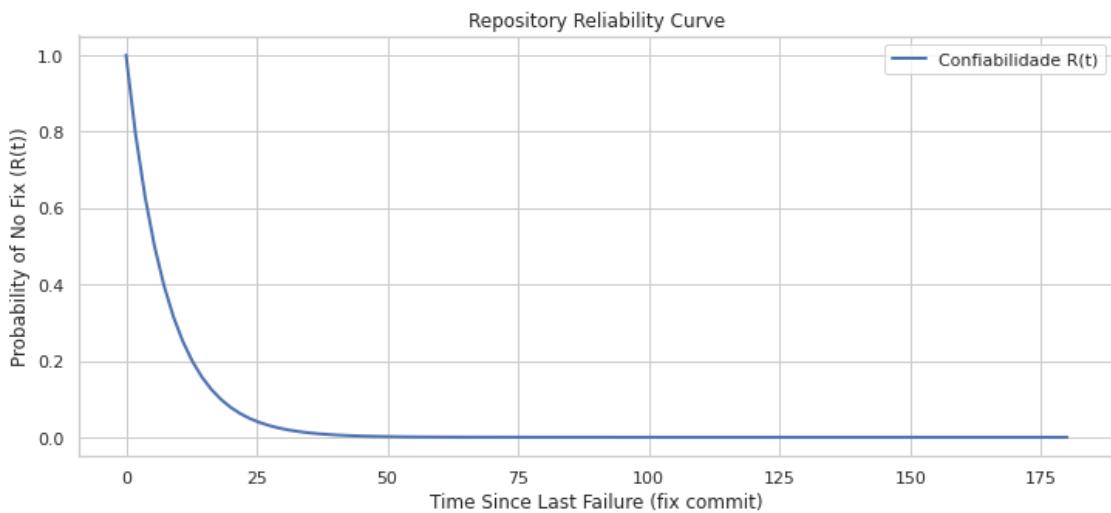
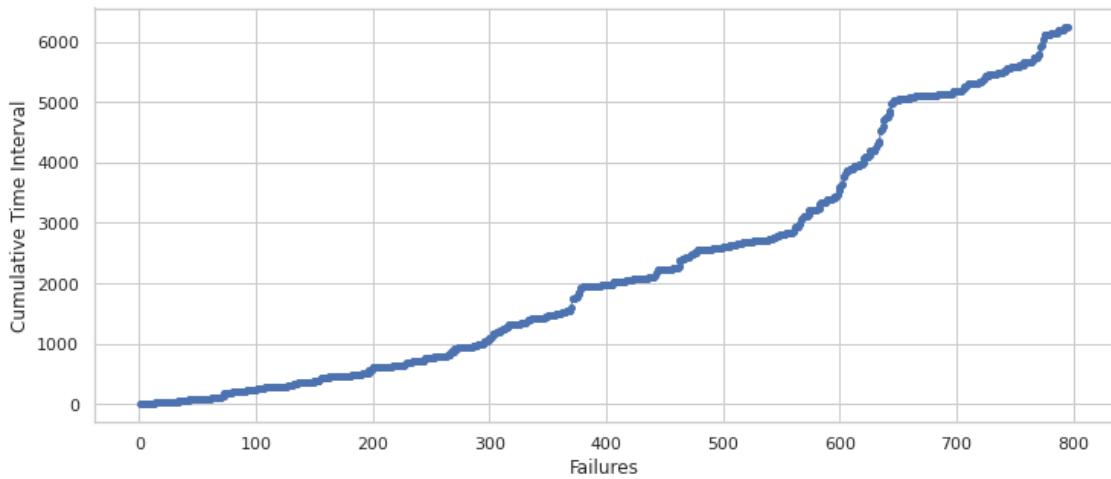
2029 2 3894.000000 0.000257 0.999743

[2030 rows x 5 columns]

== mockito ==

The histogram of Time Between Failures (TBF) mockito





```

Confiabilidade R(1) = 0.8804
Confiabilidade R(5) = 0.5291
Confiabilidade R(10) = 0.2799
Confiabilidade R(50) = 0.0017
Confiabilidade R(100) = 0.0000
  
```

```

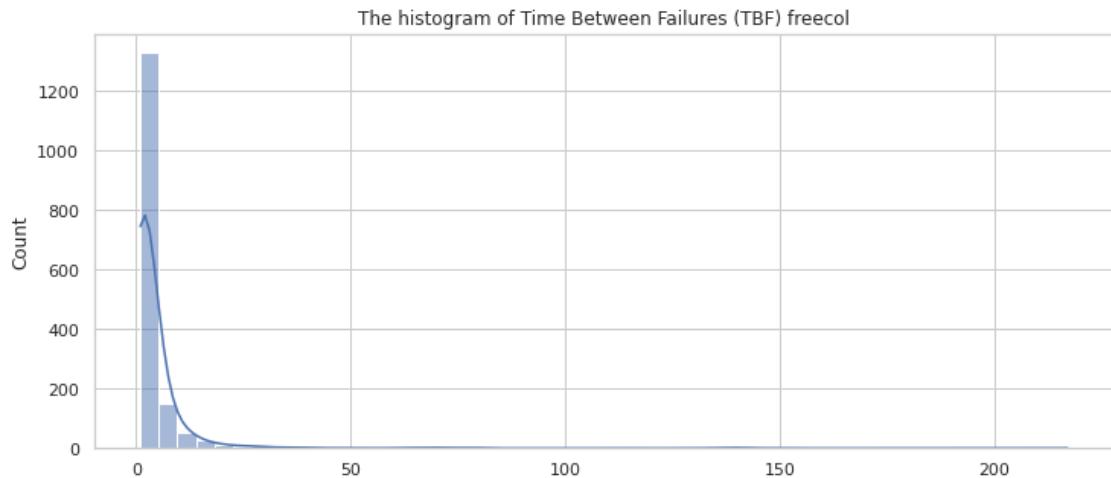
filepath \
0   src/org/mockito/internal/RegisteredInvocations.java
1   src/org/mockito/internal/verification/NoMoreInteractionsMode.java
2   buildSrc/src/main/groovy/org/mockito/release/comparison/SourceJarComparator.java
3   test/org/mockito/internal/util/ShallowCopyToolTest.java
4   src/org/mockito/exceptions/MockitoAssertionError.java
...
680  src/main/java/org/mockito/internal/hamcrest/HamcrestArgumentMatcher.java
  
```

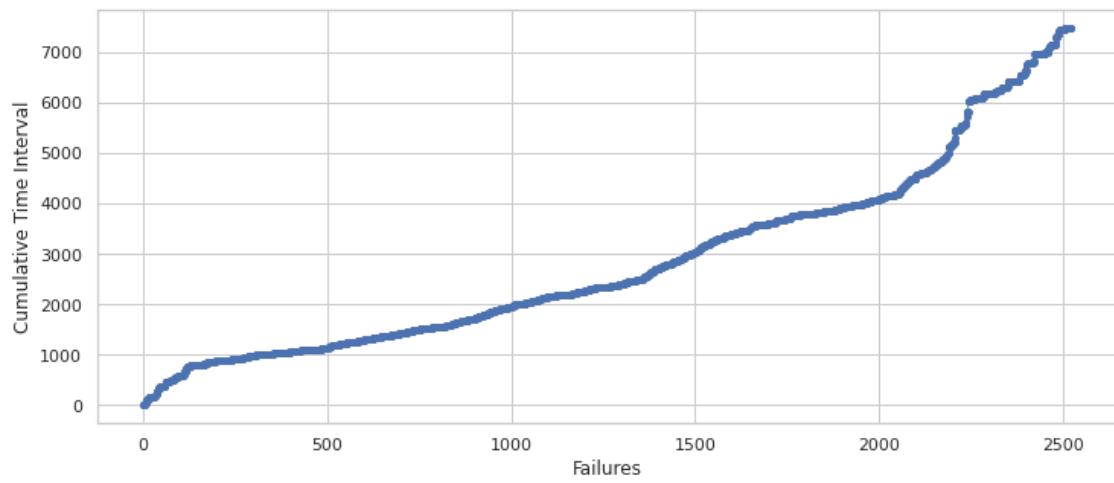
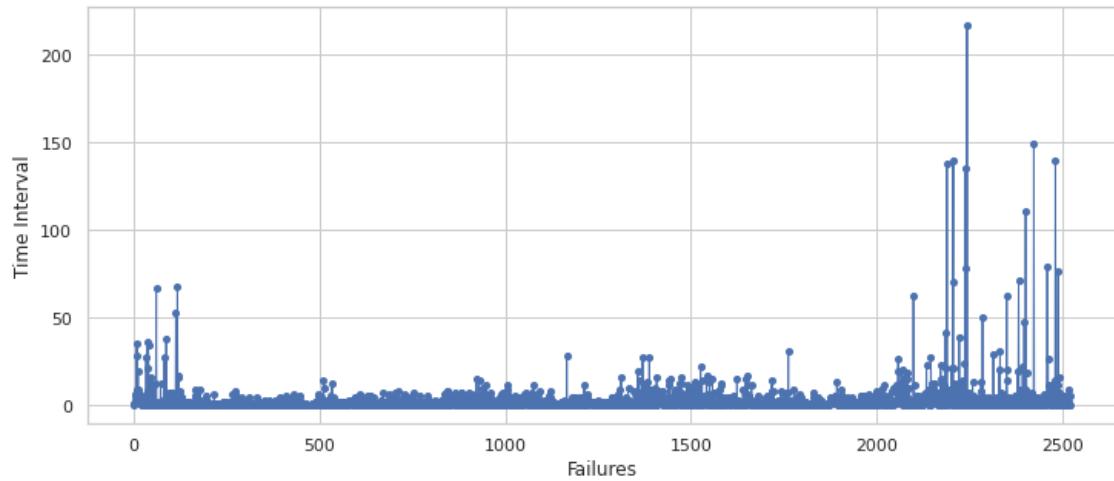
```
681 src/main/java/org/mockito/internal/verification/NoMoreInteractions.java  
682 src/main/java/org/mockito/internal/progress/ArgumentMatcherStorageImpl.java  
683 src/main/java/org/mockito/internal/verification/AtMost.java  
684 src/main/java/org/mockito/MockitoFramework.java
```

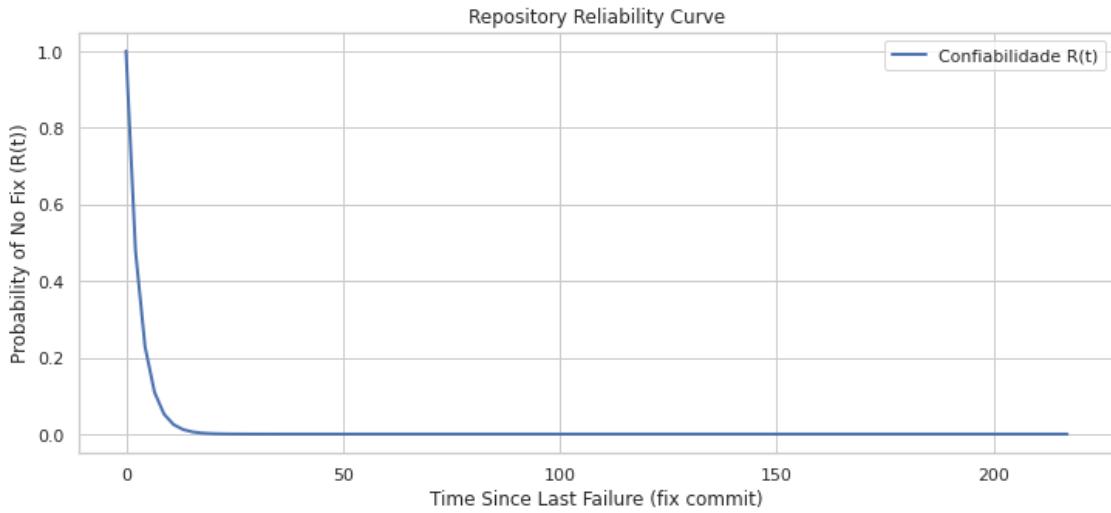
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|-------------|----------------|----------|
| 0 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 1 | 4 | 0.666667 | 1.500000 | 0.223130 |
| 2 | 2 | 1.000000 | 1.000000 | 0.367879 |
| 3 | 2 | 1.000000 | 1.000000 | 0.367879 |
| 4 | 2 | 1.000000 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 680 | 2 | 1757.000000 | 0.000569 | 0.999431 |
| 681 | 2 | 1757.000000 | 0.000569 | 0.999431 |
| 682 | 2 | 1772.000000 | 0.000564 | 0.999436 |
| 683 | 2 | 1912.000000 | 0.000523 | 0.999477 |
| 684 | 2 | 2959.000000 | 0.000338 | 0.999662 |

[685 rows x 5 columns]

== freecol ==







```

Confiabilidade R(1) = 0.7139
Confiabilidade R(5) = 0.1855
Confiabilidade R(10) = 0.0344
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

filepath \
0   src/net/sf/freecol/server/ai/military/DefensiveMap.java
1   src/net/sf/freecol/common/model/Limit.java
2   src/net/sf/freecol/common/model/Resource.java
3   src/net/sf/freecol/common/util/Xml.java
4   src/net/sf/freecol/client/gui/panel/ReportCompactColonyPanel.java
...
543  src/net/sf/freecol/common/model/NationType.java
544  src/net/sf/freecol/common/resources/VideoResource.java
545  src/net/sf/freecol/common/util/Introspector.java
546  src/net/sf/freecol/common/io/FreeColModFile.java
547  src/net/sf/freecol/client/gui/panel/AboutPanel.java

```

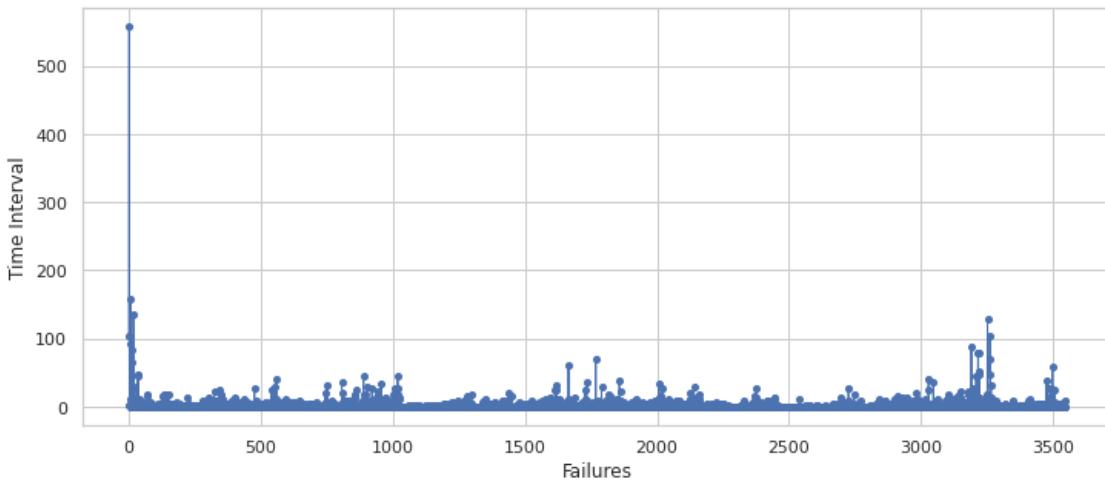
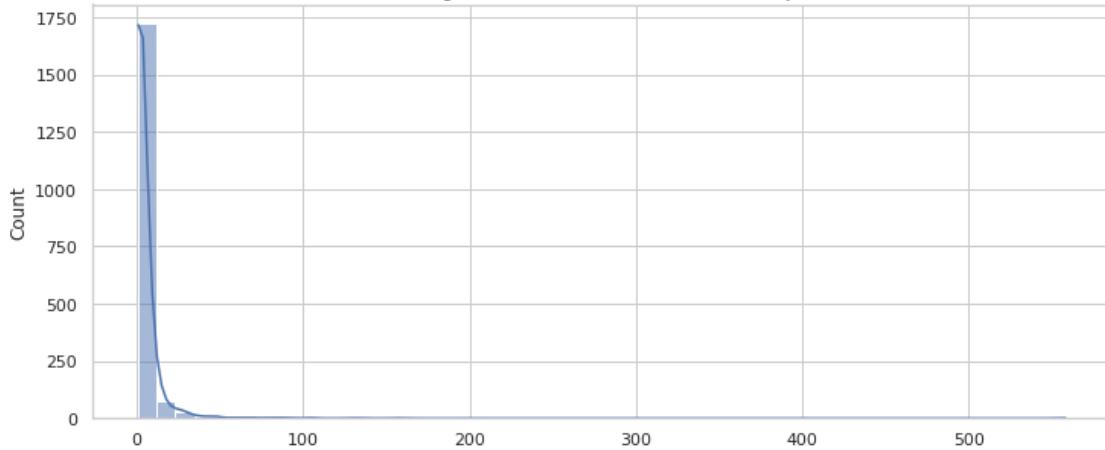
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 5 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 3.0 | 0.333333 | 0.716531 |
| 4 | 2 | 4.0 | 0.250000 | 0.778801 |
| ... | ... | ... | ... | ... |
| 543 | 2 | 4741.0 | 0.000211 | 0.999789 |
| 544 | 2 | 4917.0 | 0.000203 | 0.999797 |
| 545 | 2 | 4988.0 | 0.000200 | 0.999800 |
| 546 | 2 | 5025.0 | 0.000199 | 0.999801 |

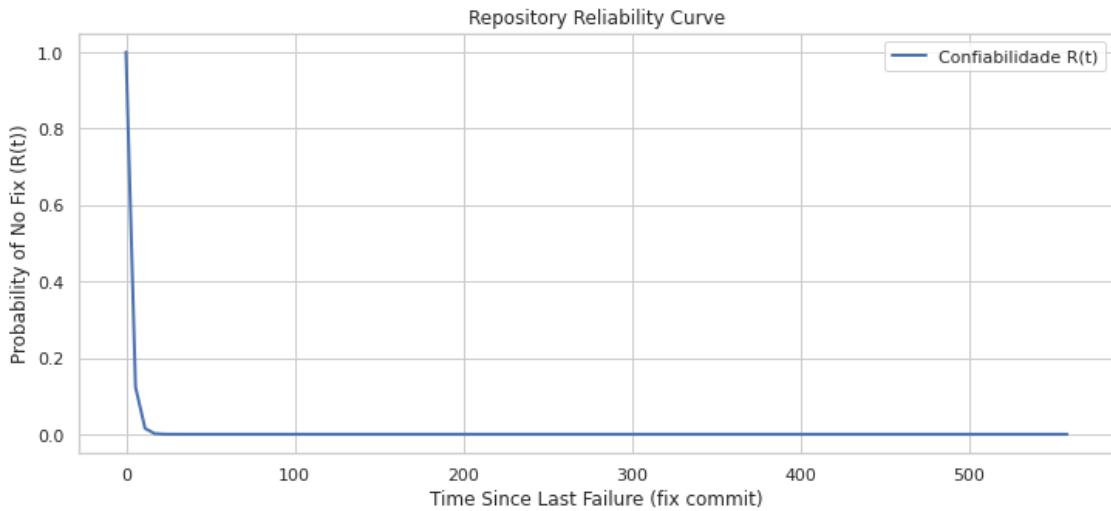
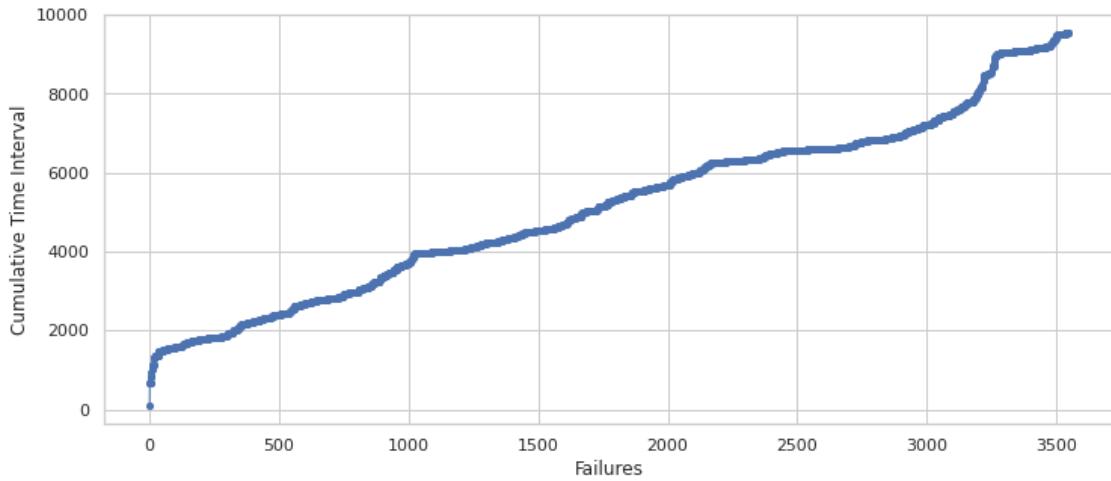
547 2 5067.0 0.000197 0.999803

[548 rows x 5 columns]

== jmeter ==

The histogram of Time Between Failures (TBF) jmeter





```

Confiabilidade R(1) = 0.6900
Confiabilidade R(5) = 0.1564
Confiabilidade R(10) = 0.0245
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

filepath

```

0   src/core/src/main/java/org/apache/jmeter/gui/util/VerticalPanel.java
1   src/components/org/apache/jmeter/assertions/CompareAssertion.java
2   src/components/org/apache/jmeter/assertions/CompareAssertionBeanInfo.java
3   src/core/org/apache/jmeter/testbeans/gui/TypeEditor.java
4   src/protocol/jms/org/apache/jmeter/protocol/jms/sampler/TimeoutEnabledQueueRequestor.java
...
766  src/core/org/apache/jmeter/util/ColorHelper.java

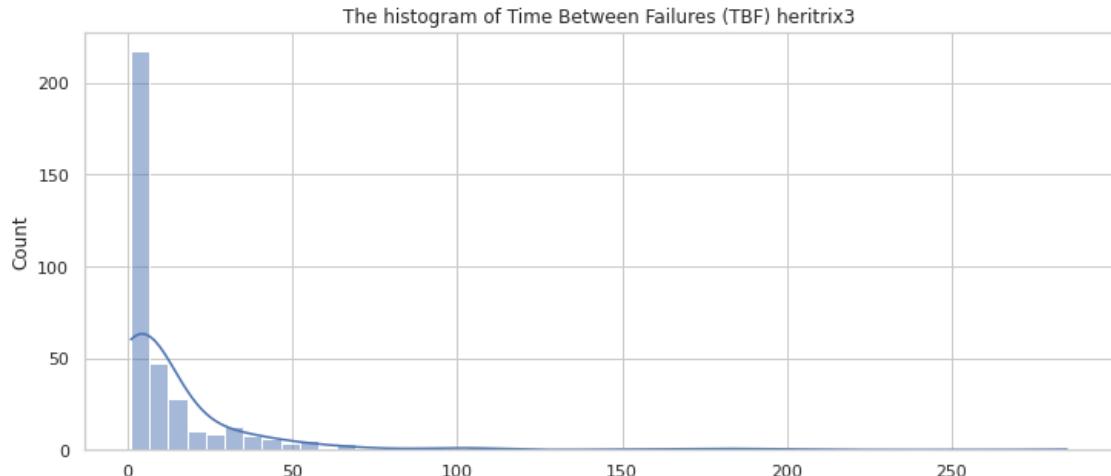
```

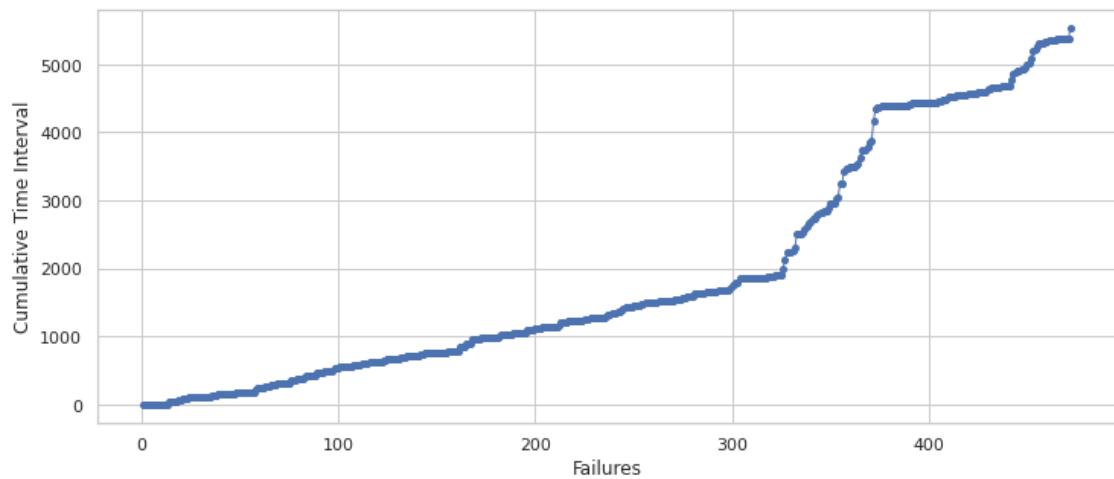
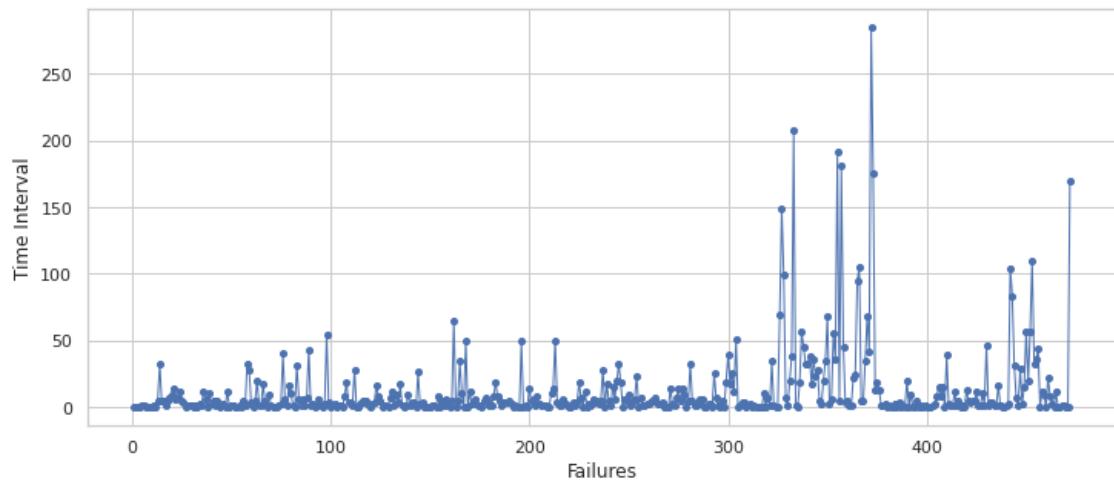
```
767 src/protocol/java/org/apache/jmeter/protocol/java/config/JavaConfig.java  
768 src/core/org/apache/jmeter/timers/gui/AbstractTimerGui.java  
769 src/protocol/java/org/apache/jmeter/protocol/java/sampler/JavaSamplerClient.java  
770 src/core/org/apache/jmeter/engine/util/NoThreadClone.java
```

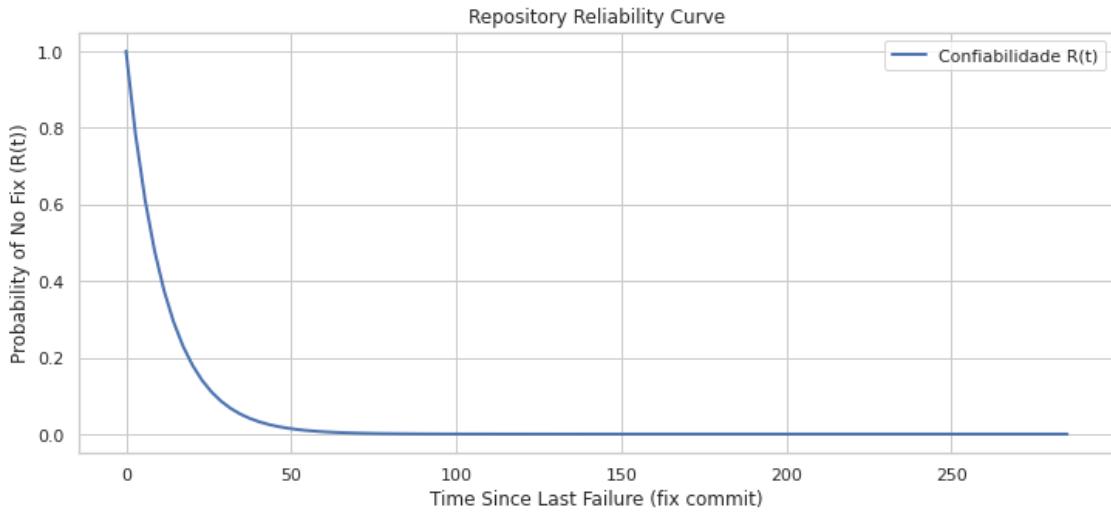
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 766 | 2 | 4968.0 | 0.000201 | 0.999799 |
| 767 | 2 | 5022.0 | 0.000199 | 0.999801 |
| 768 | 2 | 5068.0 | 0.000197 | 0.999803 |
| 769 | 2 | 5070.0 | 0.000197 | 0.999803 |
| 770 | 2 | 5085.0 | 0.000197 | 0.999803 |

[771 rows x 5 columns]

== heritrix3 ==







```

Confiabilidade R(1) = 0.9183
Confiabilidade R(5) = 0.6530
Confiabilidade R(10) = 0.4264
Confiabilidade R(50) = 0.0141
Confiabilidade R(100) = 0.0002

```

```

file
0   modules/src/test/java/org/archive/modules/extractor/ExtractorMultipleRegexTest.java
1   contrib/src/main/java/org/archive/crawler/prefetch/HostQuotaEnforcer.java
2   engine/src/main/java/org/archive/crawler/postprocessor/LowDiskPauseProcessor.java
3   modules/src/main/java/org/archive/modules/fetcher/RecordingSessionInputBuffer.java
4   contrib/src/main/java/org/archive/modules/recrawl/hbase/SingleHBaseTable.java
...
...
161  modules/src/main/java/org/archive/modules/extractor/ExtractorMultipleRegex.java
162  modules/src/test/java/org/archive/modules/extractor/ExtractorHTMLTest.java
163  engine/src/main/java/org/archive/crawler/frontier/URIAuthorityBasedQueueAssignmentPolicy.java
164  engine/src/main/java/org/archive/crawler/restlet/PagedRepresentation.java
165  engine/src/main/java/org/archive/crawler/restlet/EditRepresentation.java

```

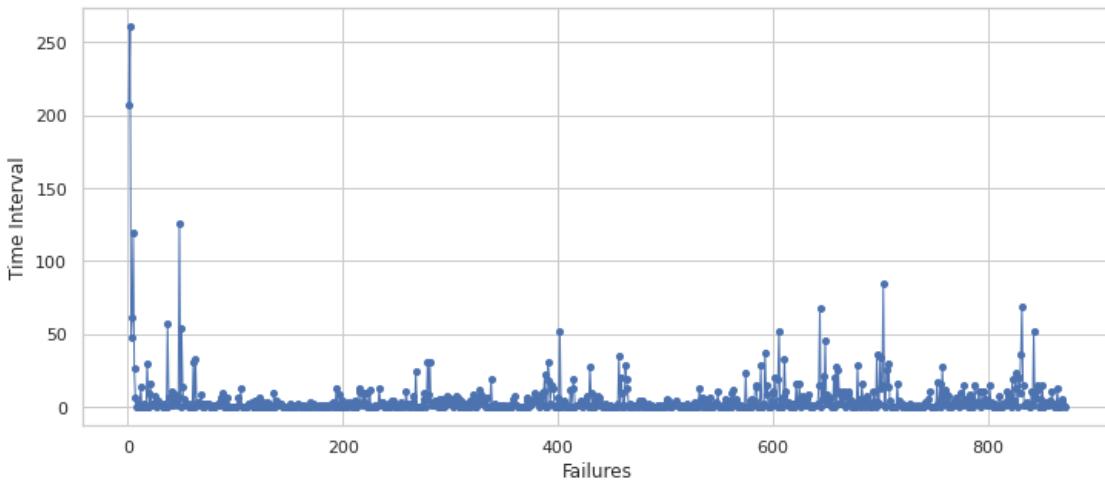
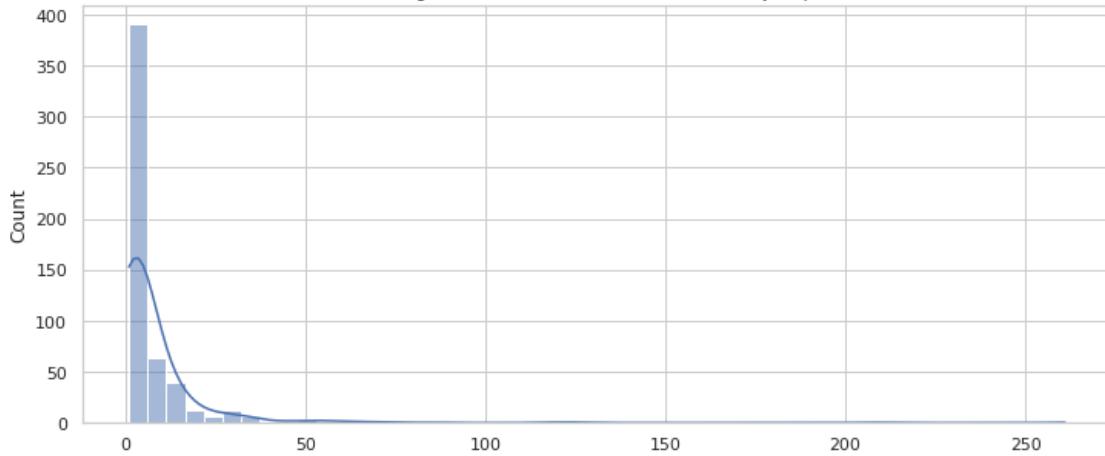
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 3 | 0.5 | 2.000000 | 0.135335 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 2.0 | 0.500000 | 0.606531 |
| ... | ... | ... | ... | ... |
| 161 | 2 | 2687.0 | 0.000372 | 0.999628 |
| 162 | 2 | 3340.0 | 0.000299 | 0.999701 |
| 163 | 2 | 3720.0 | 0.000269 | 0.999731 |
| 164 | 2 | 3808.0 | 0.000263 | 0.999737 |

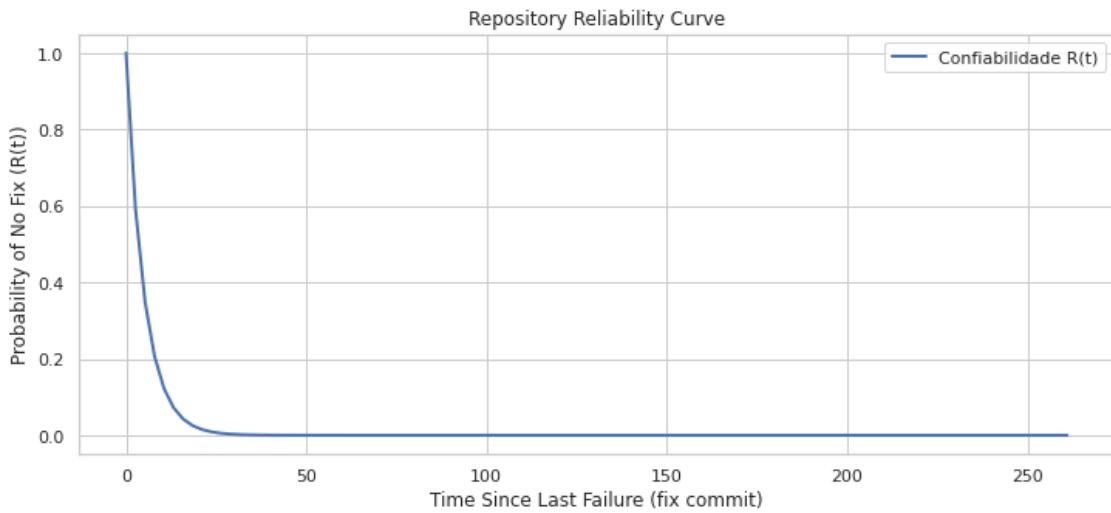
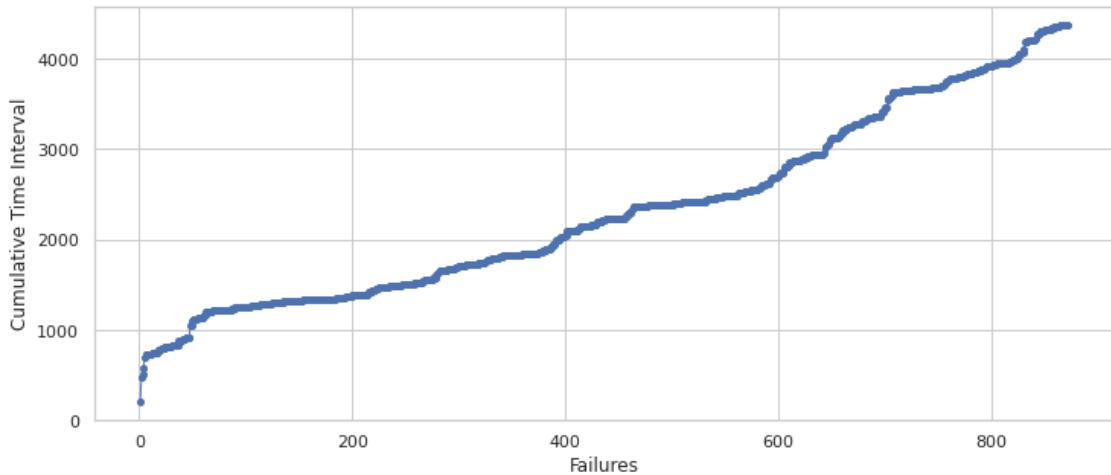
```
165 2          3880.0  0.000258      0.999742
```

```
[166 rows x 5 columns]
```

```
== javaparser ==
```

The histogram of Time Between Failures (TBF) javaparser





Confiabilidade $R(1) = 0.8193$

Confiabilidade $R(5) = 0.3691$

Confiabilidade $R(10) = 0.1362$

Confiabilidade $R(50) = 0.0000$

Confiabilidade $R(100) = 0.0000$

0

javaparser-core/src/main/java/com/github/javaparser/utils/LineEnding.java

1

java-symbol-solver-core/src/main/java/me/tomassetti/symbolsolver/javaparsermodel/contexts,

2

javaparser-symbol-solver-core/src/main/java/com/github/javaparser/symbolsolver/javaparser

3

javaparser-core-testing/src/test/java/com/github/javaparser/printer/YamlPrinterTest.java

4

java-symbol-solver-core/src/main/java/me/tomassetti/symbolsolver/logic/GenericTypeInference

..

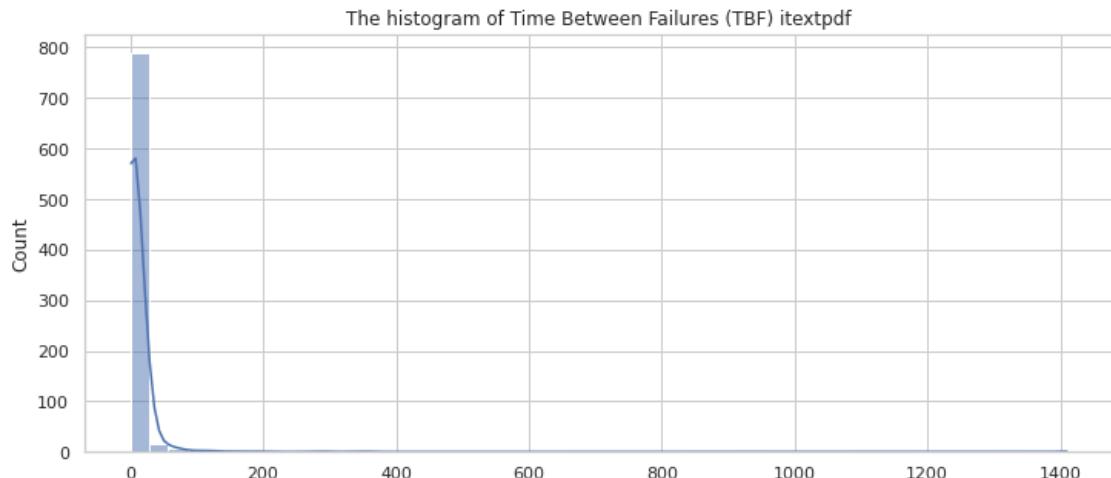
468 javaparser-core-generators/src/main/java/com/github/javaparser/generator/core/other/Tokeni

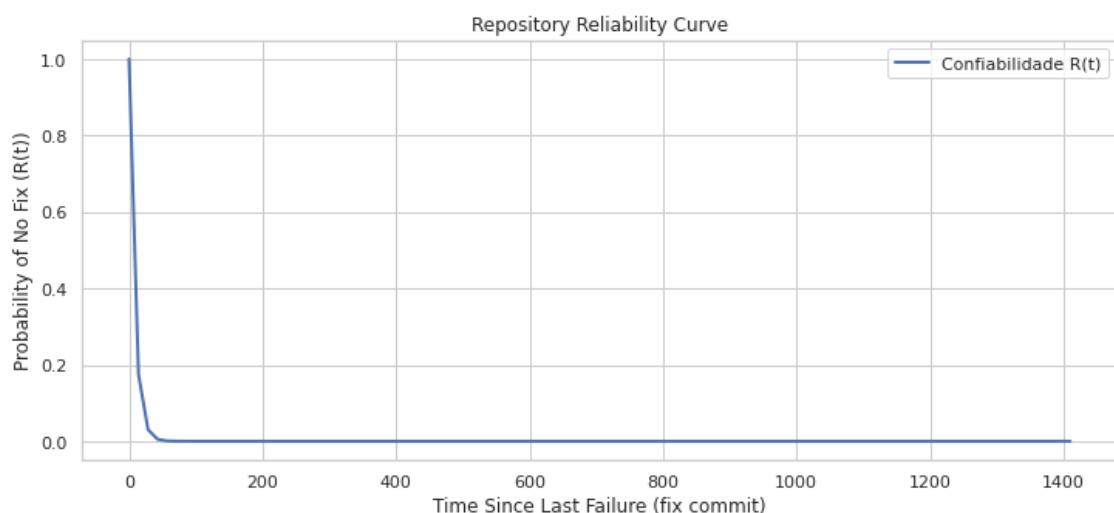
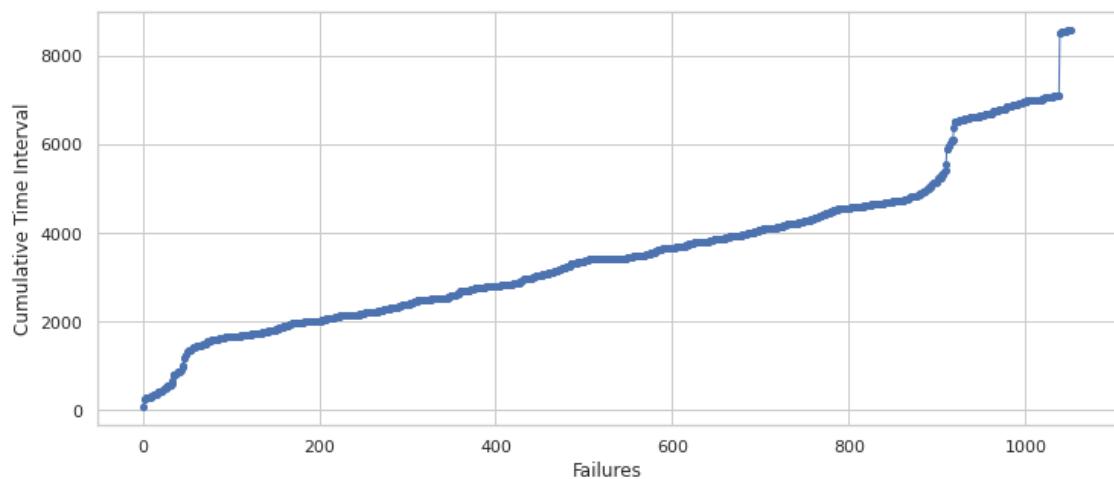
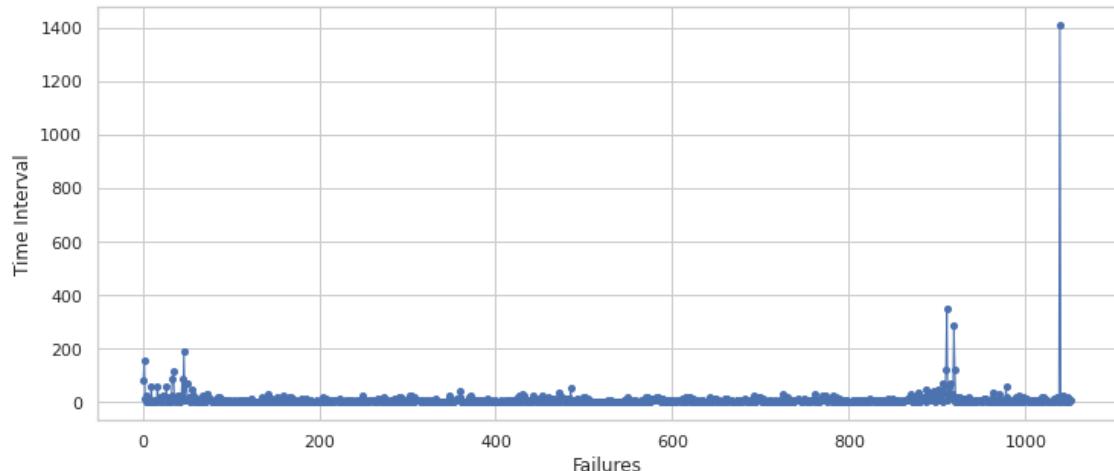
```
469 javaparser-core/src/main/java/com/github/javaparser/ast/stmt/SwitchEntry.java
470 javaparser-symbol-solver-core/src/main/java/com/github/javaparser/symbolsolver/javaparser...
471 javaparser-core-testing/src/test/java/com/github/javaparser/ast/stmt/SwitchStmtTest.java
472 javaparser-symbol-solver-core/src/main/java/com/github/javaparser/symbolsolver/javaparser...
```

| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|-------------|----------------|----------|
| 0 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 1 | 3 | 0.500000 | 2.000000 | 0.135335 |
| 2 | 4 | 0.666667 | 1.500000 | 0.223130 |
| 3 | 4 | 0.666667 | 1.500000 | 0.223130 |
| 4 | 2 | 1.000000 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 468 | 2 | 2085.000000 | 0.000480 | 0.999520 |
| 469 | 2 | 2112.000000 | 0.000473 | 0.999527 |
| 470 | 2 | 2114.000000 | 0.000473 | 0.999527 |
| 471 | 2 | 2121.000000 | 0.000471 | 0.999529 |
| 472 | 2 | 2263.000000 | 0.000442 | 0.999558 |

[473 rows x 5 columns]

== itextpdf ==





```

Confiabilidade R(1) = 0.8847
Confiabilidade R(5) = 0.5419
Confiabilidade R(10) = 0.2937
Confiabilidade R(50) = 0.0022
Confiabilidade R(100) = 0.0000

filepath \xtra/src/main/java/com/itextpdf/text/pdf/mc/MCParser.java
filepath \xtra/src/main/java/com/itextpdf/text/pdf/mc/MCFieldFlattener.java
filepath \xtra/src/main/java/com/itextpdf/text/pdf/mc/StructureItems.java
filepath \itext/test/core/com/itextpdf/text/pdf/parser/LocationAwareTextExtractionTest.java
filepath \xtra/src/main/java/com/itextpdf/text/pdf/mc/StructureItem.java
...
459  ...
460  ...
461  ...
462  ...
463  ...

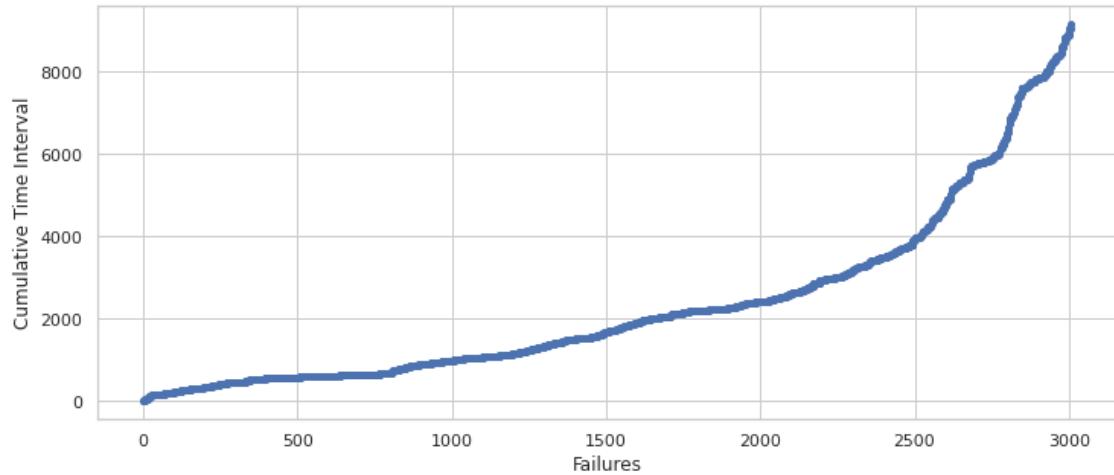
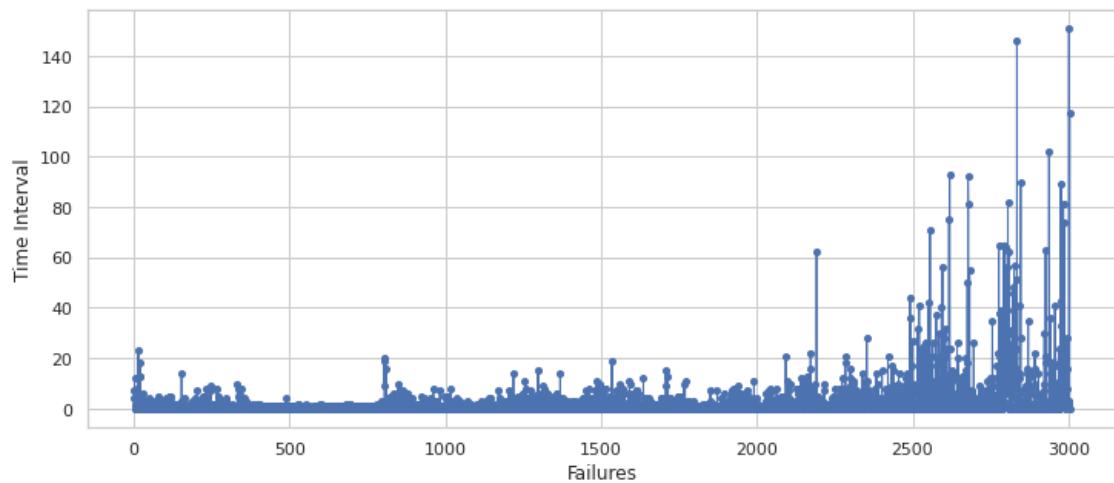
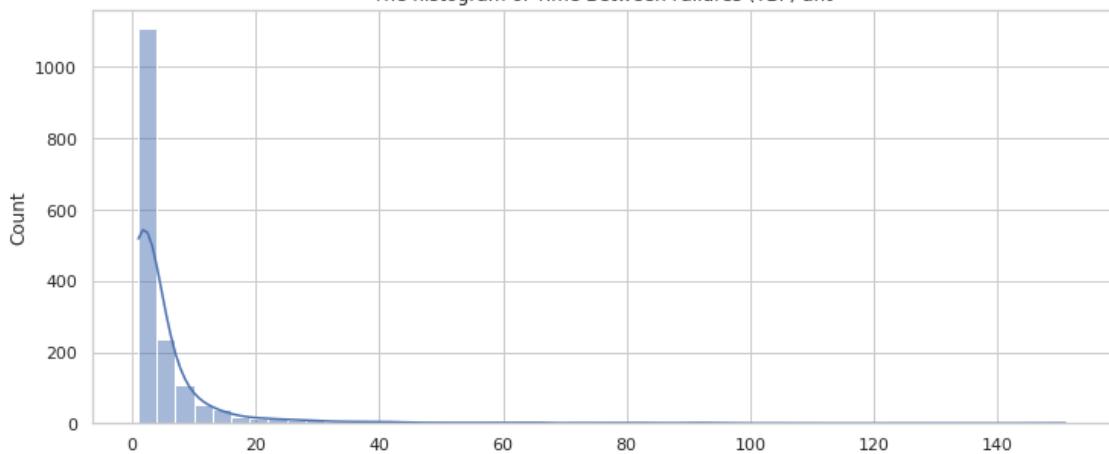
      n_commits   MTBF  lambda_failure      R_t
0      3          0.5    2.000000    0.135335
1      3          0.5    2.000000    0.135335
2      3          0.5    2.000000    0.135335
3      2          1.0    1.000000    0.367879
4      2          1.0    1.000000    0.367879
...
459  ...
460  ...
461  ...
462  ...
463  ...

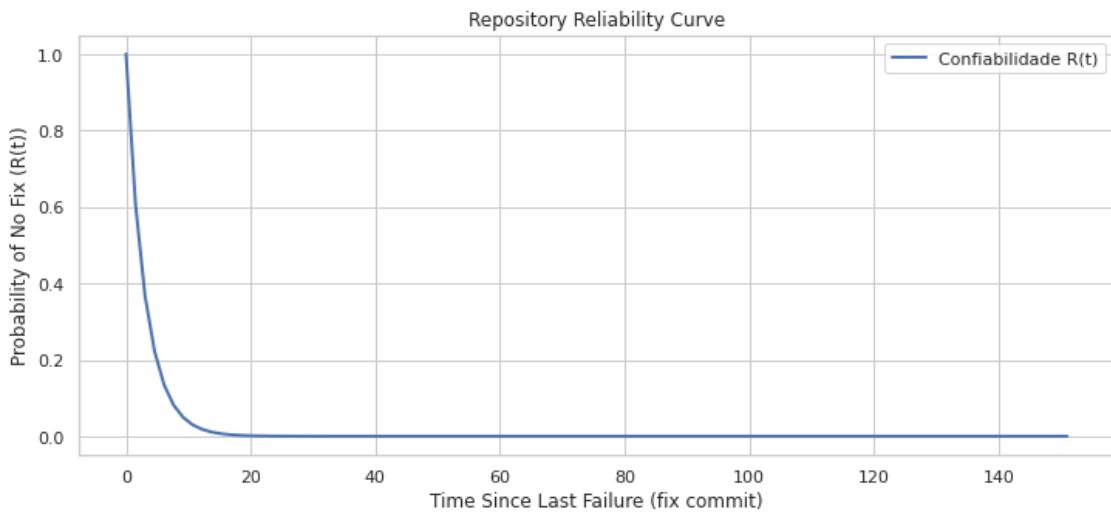
[464 rows x 5 columns]

== ant ==

```

The histogram of Time Between Failures (TBF) ant





```

Confiabilidade R(1) = 0.7202
Confiabilidade R(5) = 0.1937
Confiabilidade R(10) = 0.0375
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

filepath \
0 proposal/myrmidon/src/main/org/apache/tools/ant/UnknownElement.java
1 proposal/myrmidon/src/main/org/apache/tools/ant/taskdefs/Get.java
2 proposal/myrmidon/src/todo/org/apache/tools/ant/ProjectHelper.java
3 proposal/myrmidon/src/main/org/apache/tools/ant/ProjectHelper.java
4 proposal/myrmidon/src/todo/org/apache/tools/ant/taskdefs/Get.java
...
1044 src/tests/junit/org/apache/tools/ant/taskdefs/JarTest.java
1045 src/main/org/apache/tools/ant/filters/BaseParamFilterReader.java
1046 src/main/org/apache/tools/ant/taskdefs/Deltree.java
1047 src/main/org/apache/tools/ant/types/Permissions.java
1048 src/main/org/apache/tools/ant/taskdefs/compilers/JavacExternal.java

```

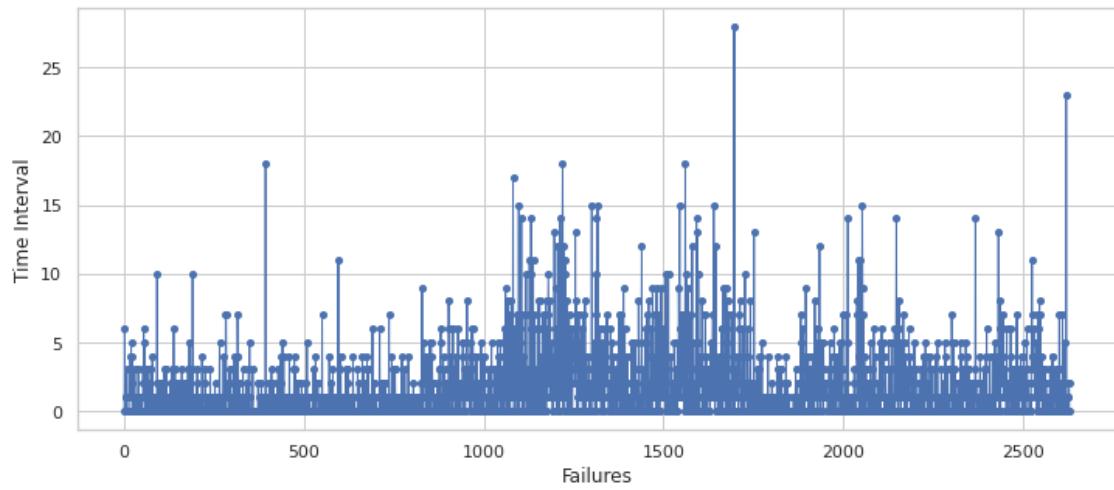
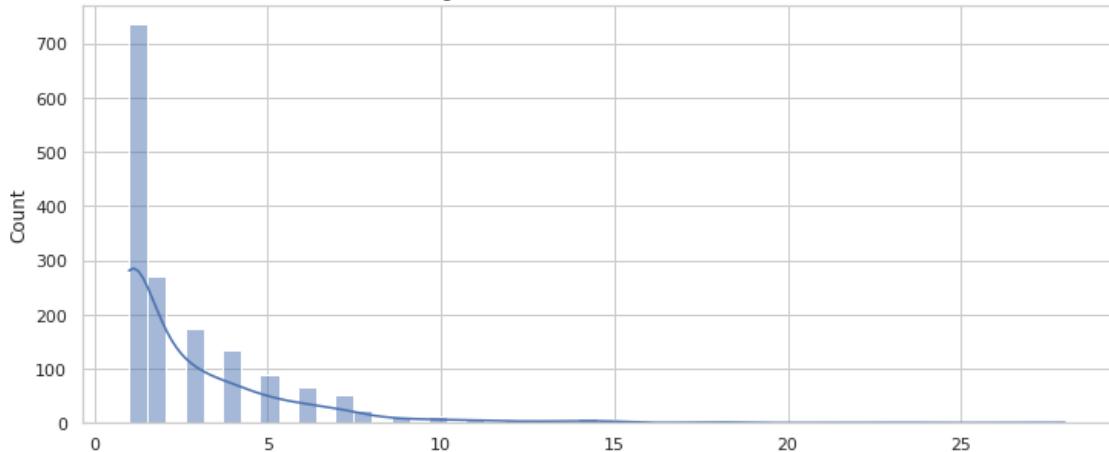
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|-------------|----------------|----------|
| 0 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 1 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 2 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 3 | 4 | 0.333333 | 3.000000 | 0.049787 |
| 4 | 4 | 0.333333 | 3.000000 | 0.049787 |
| ... | ... | ... | ... | ... |
| 1044 | 2 | 5868.000000 | 0.000170 | 0.999830 |
| 1045 | 2 | 5870.000000 | 0.000170 | 0.999830 |

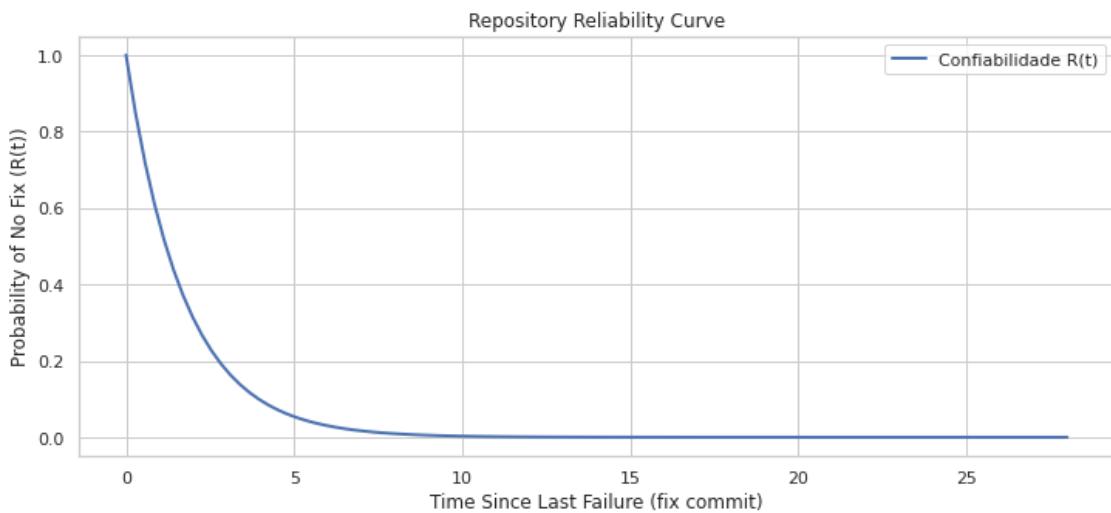
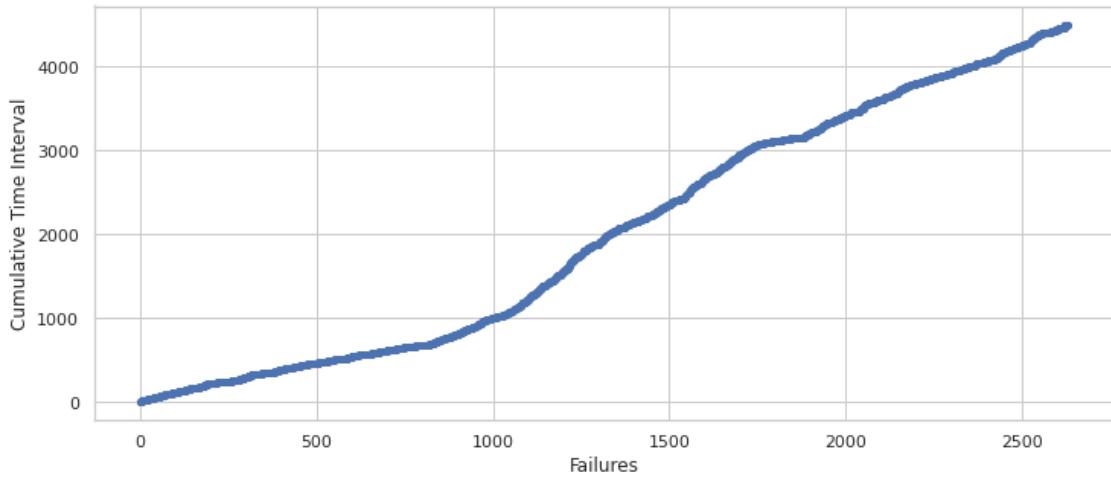
| | | | | |
|------|---|-------------|----------|----------|
| 1046 | 2 | 6584.000000 | 0.000152 | 0.999848 |
| 1047 | 2 | 7289.000000 | 0.000137 | 0.999863 |
| 1048 | 2 | 7527.000000 | 0.000133 | 0.999867 |

[1049 rows x 5 columns]

== druid ==

The histogram of Time Between Failures (TBF) druid





Confiabilidade $R(1) = 0.5578$

Confiabilidade $R(5) = 0.0540$

Confiabilidade $R(10) = 0.0029$

Confiabilidade $R(50) = 0.0000$

Confiabilidade $R(100) = 0.0000$

```

0      services/src/main/java/io/druid/cli/Initialization.java
1      examples/src/main/java/druid/examples/webStream/InputSupplierUpdateStream.java
2      processing/src/main/java/io/druid/query/aggregation/post/ConstantPostAggregator.java
3      extensions-core/lookups-cached-global/src/main/java/io/druid/server/lookup/namespace/URI
4      indexing-common/src/main/java/com/metamx/druid/indexer/data/InputRowParser.java
...
2051    server/src/test/java/org/apache/druid/server/coordination/ZkCoordinatorTest.java

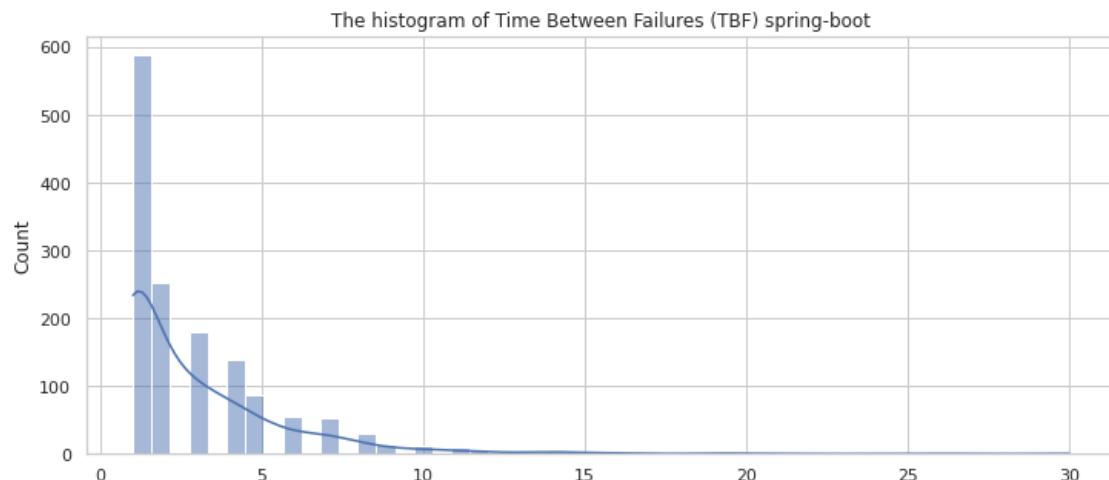
```

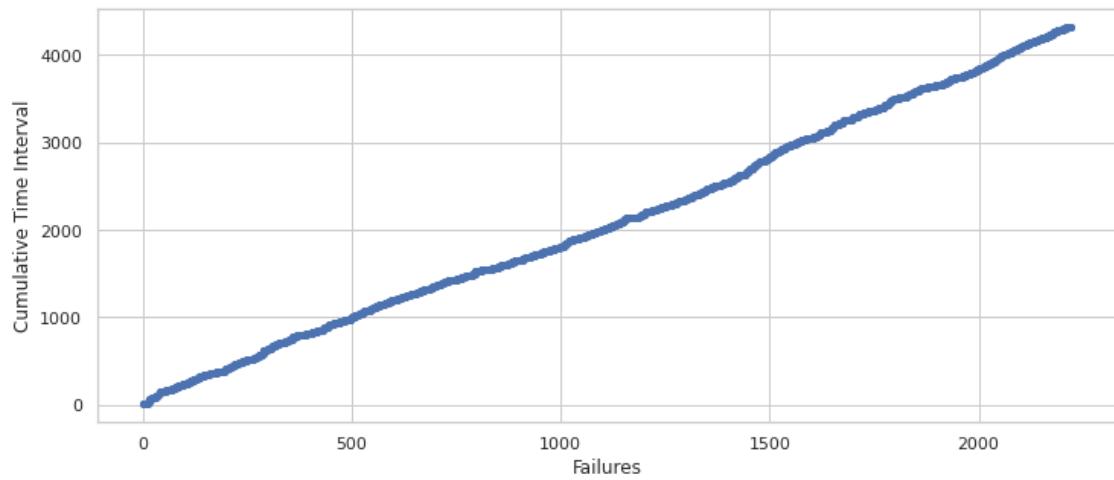
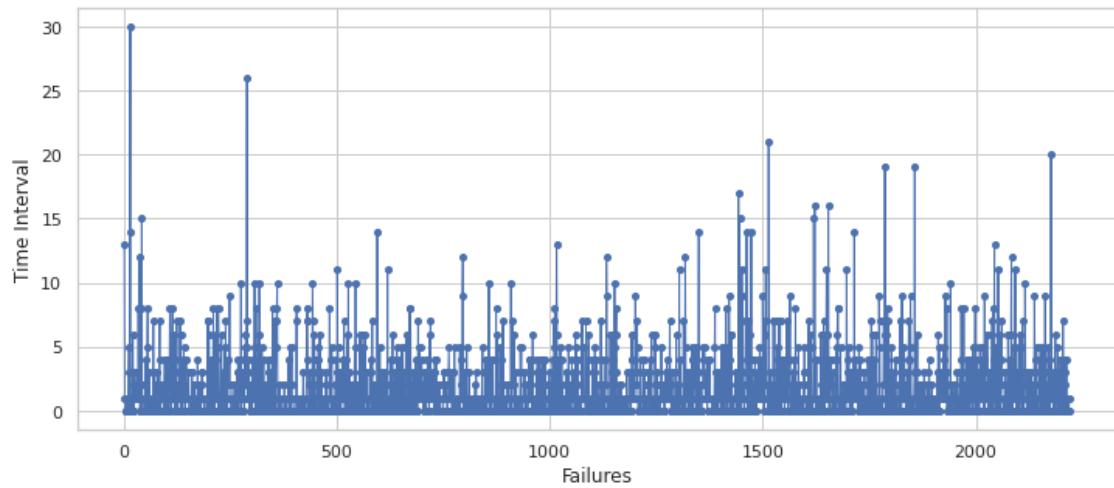
```
2052 processing/src/main/java/org/apache/druid/query/topn/PooledTopNAlgorithm.java  
2053 processing/src/main/java/org/apache/druid/query/search/UseIndexesStrategy.java  
2054 processing/src/test/java/org/apache/druid/segment/serde/HyperUniquesSerdeForTest.java  
2055 processing/src/test/java/org/apache/druid/segment/data/CompressedVSizeColumnarIntsSupplier.java
```

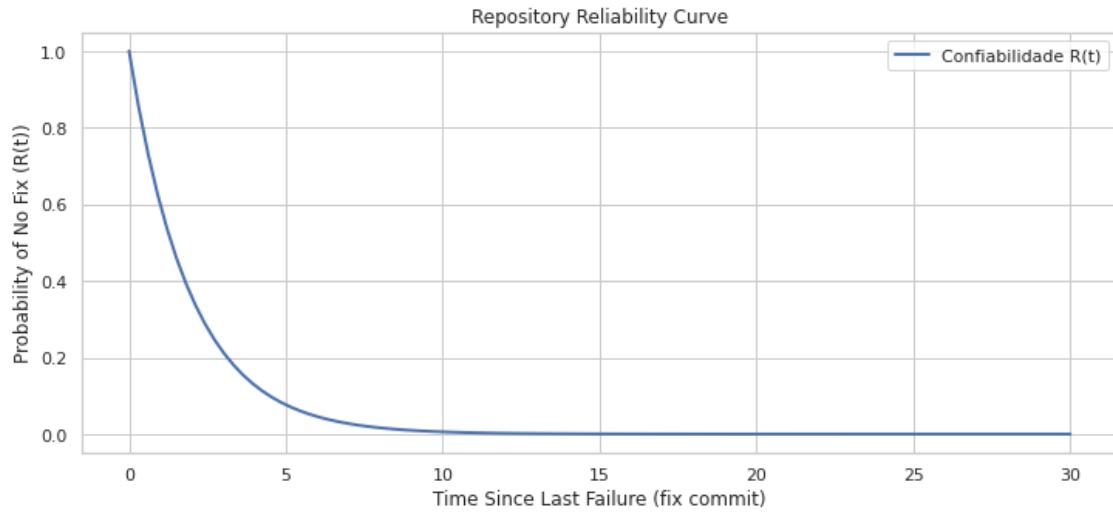
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 3 | 0.5 | 2.000000 | 0.135335 |
| 2 | 5 | 0.5 | 2.000000 | 0.135335 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 2051 | 2 | 2114.0 | 0.000473 | 0.999527 |
| 2052 | 2 | 2247.0 | 0.000445 | 0.999555 |
| 2053 | 2 | 2288.0 | 0.000437 | 0.999563 |
| 2054 | 2 | 2295.0 | 0.000436 | 0.999564 |
| 2055 | 2 | 2295.0 | 0.000436 | 0.999564 |

[2056 rows x 5 columns]

== spring-boot ==







```

Confiabilidade R(1) = 0.5980
Confiabilidade R(5) = 0.0765
Confiabilidade R(10) = 0.0059
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

```

0    spring-boot-project/spring-boot-tools/spring-boot-loader-tools/src/main/java/org/springframework/boot/loader/resource/ResourceExtractor.java
1    spring-boot-project/spring-boot-tools/spring-boot-maven-plugin/src/intTest/projects/building-blocks/maven-project/pom.xml
2    spring-boot-project/spring-boot/src/test/java/org/springframework/boot/logging/LoggingSystemTests.java
3    spring-boot-actuator/src/main/java/org/springframework/boot/actuate/autoconfigure/SecurityAutoConfiguration.java
4    spring-boot-project/spring-boot/src/test/java/org/springframework/boot/logging/log4j2/Log4j2LoggingSystemTests.java
...
1037   spring-boot-project/spring-boot-actuator/src/main/java/org/springframework/boot/actuate/auditor/AuditorEvent.java
1038   spring-boot-project/spring-boot-test/src/test/java/org/springframework/boot/test/context/ContextBootStrapTests.java
1039   spring-boot-project/spring-boot/src/test/java/org/springframework/boot/context/properties/PropertiesFileParserTests.java
1040   spring-boot-project/spring-boot-actuator/src/main/java/org/springframework/boot/actuate/auditor/AuditorEvent.java
1041   spring-boot-project/spring-boot-test/src/main/java/org/springframework/boot/test/util/TestPropertyValues.java

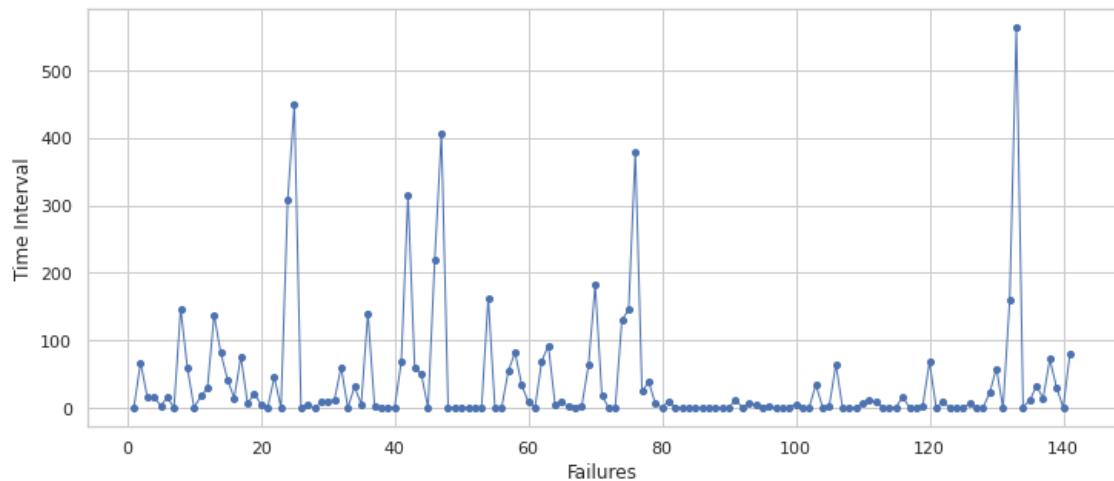
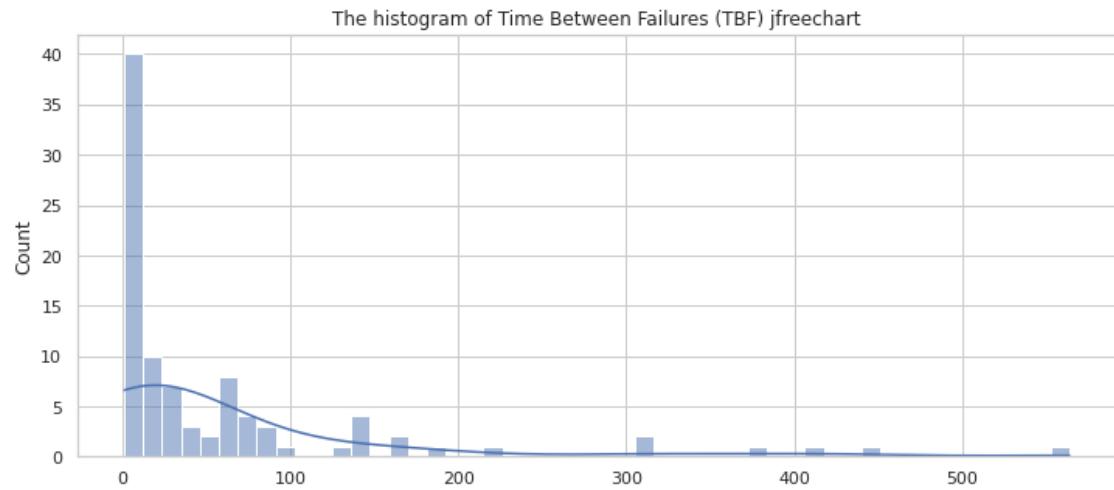
```

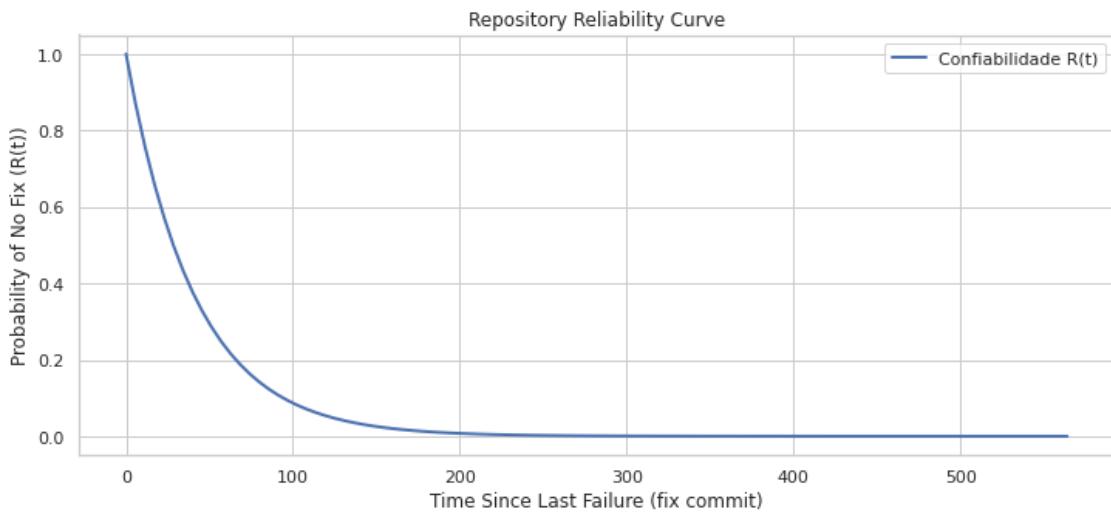
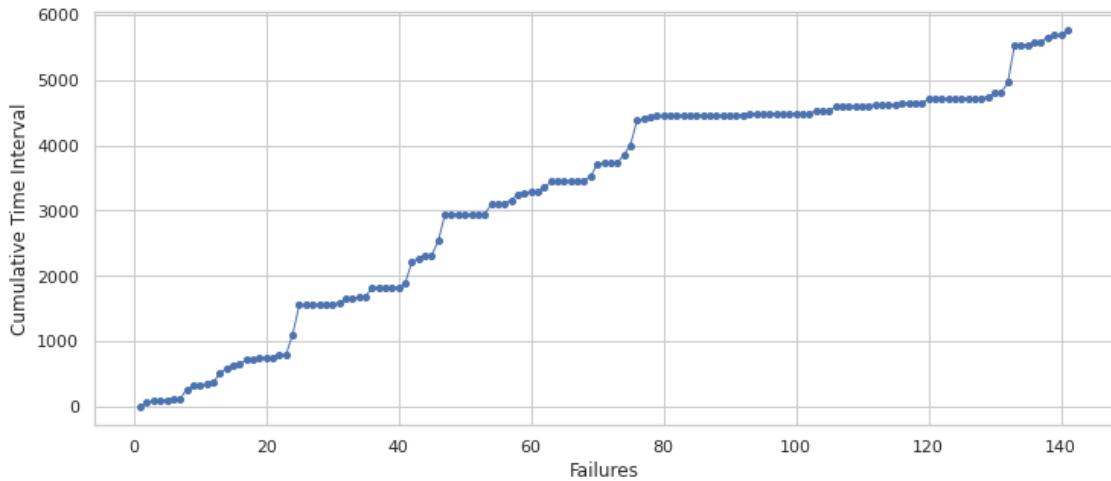
| | n_commits | MTBF | lambda_failure | R_t |
|------|-----------|--------|----------------|----------|
| 0 | 3 | 0.5 | 2.000000 | 0.135335 |
| 1 | 3 | 0.5 | 2.000000 | 0.135335 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 1037 | 2 | 2548.0 | 0.000392 | 0.999608 |
| 1038 | 2 | 2591.0 | 0.000386 | 0.999614 |
| 1039 | 2 | 2621.0 | 0.000382 | 0.999619 |
| 1040 | 2 | 2621.0 | 0.000382 | 0.999619 |

```
1041 2          2621.0  0.000382          0.999619
```

```
[1042 rows x 5 columns]
```

```
-- jfreechart ==
```





```

Confiabilidade R(1) = 0.9759
Confiabilidade R(5) = 0.8849
Confiabilidade R(10) = 0.7831
Confiabilidade R(50) = 0.2946
Confiabilidade R(100) = 0.0868

```

```

filepath \
0  src/test/java/org/jfree/data/xy/XYSeriesTest.java
1  src/test/java/org/jfree/data/statistics/RegressionTest.java
2  src/main/java/org/jfree/data/xy/XYSeriesCollection.java
3  src/test/java/org/jfree/chart/XYLineChartTest.java
4  src/test/java/org/jfree/chart/renderer/xy/XYStepRendererTest.java
..
54  src/main/java/org/jfree/chart/text/TextBlock.java

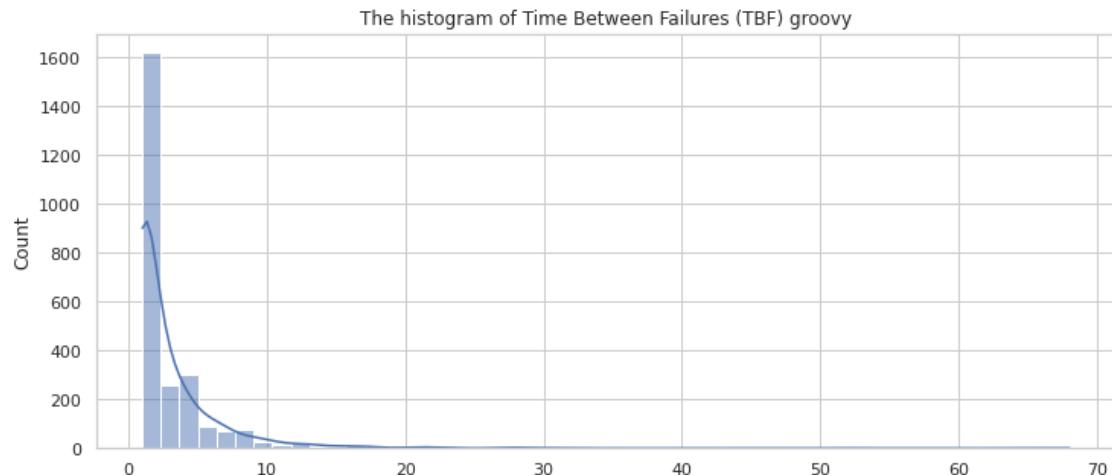
```

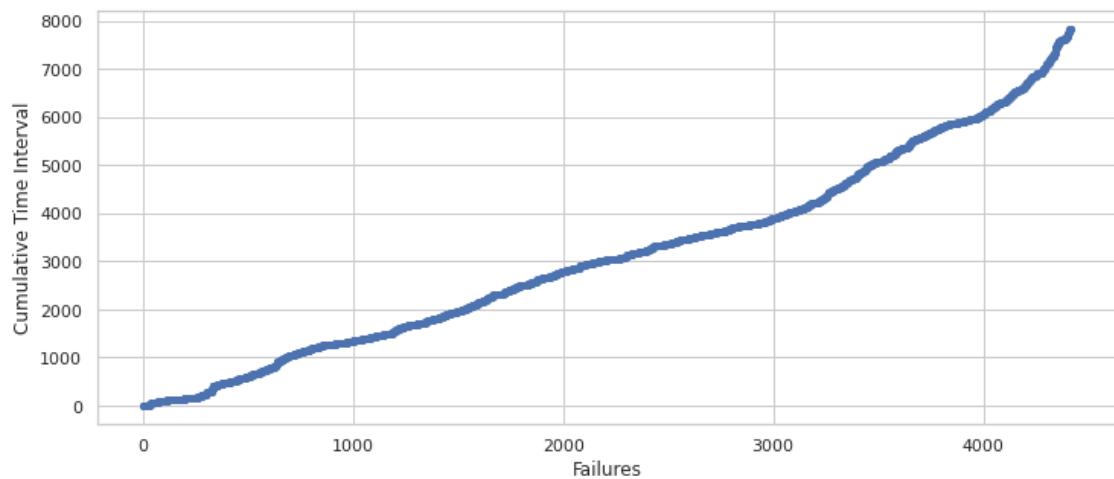
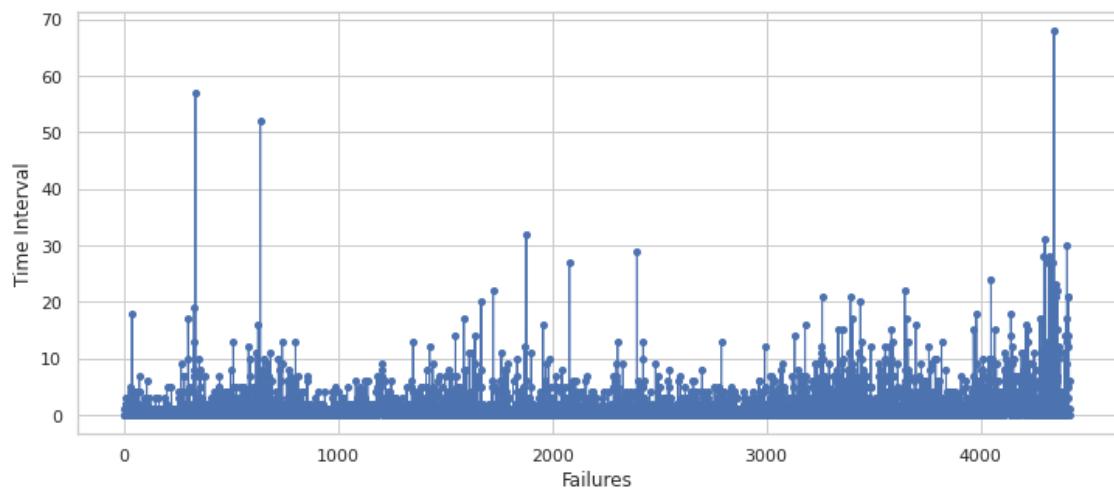
```
55 src/test/java/org/jfree/chart/axis/DateAxisTest.java  
56 src/main/java/org/jfree/chart/axis/ValueAxis.java  
57 src/main/java/org/jfree/chart/renderer/xy/XYLineAndShapeRenderer.java  
58 src/main/java/org/jfree/chart/renderer/AbstractRenderer.java
```

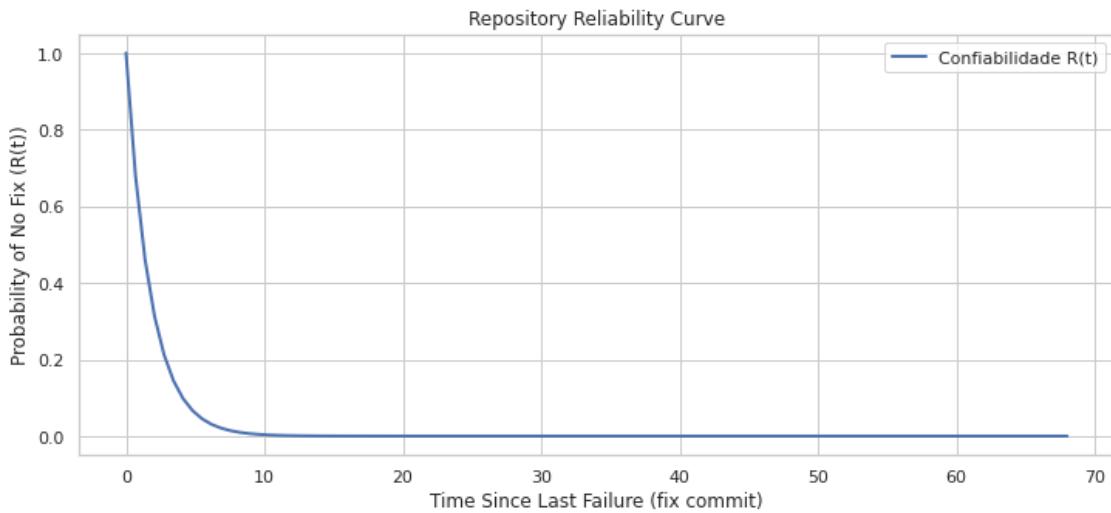
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 2.0 | 0.500000 | 0.606531 |
| 3 | 2 | 2.0 | 0.500000 | 0.606531 |
| 4 | 2 | 2.0 | 0.500000 | 0.606531 |
| ... | ... | ... | ... | ... |
| 54 | 2 | 1257.0 | 0.000796 | 0.999205 |
| 55 | 2 | 1298.0 | 0.000770 | 0.999230 |
| 56 | 2 | 1685.0 | 0.000593 | 0.999407 |
| 57 | 2 | 1689.0 | 0.000592 | 0.999408 |
| 58 | 2 | 1730.0 | 0.000578 | 0.999422 |

[59 rows x 5 columns]

== groovy ==







```

Confiabilidade R(1) = 0.5691
Confiabilidade R(5) = 0.0597
Confiabilidade R(10) = 0.0036
Confiabilidade R(50) = 0.0000
Confiabilidade R(100) = 0.0000

```

filepath

```

0   src/test/groovy/SomeClass.java
1   subprojects/groovy-templates/src/main/groovy/groovy/text/GStringTemplateEngine.java
2   src/main/org/codehaus/groovy/sandbox/util/slurpersupport/NodeChildren.java
3   src/main/org/codehaus/groovy/transform/sc/transformers/ClosureExpressionTransformer.java
4   src/main/org/codehaus/groovy/tools/shell/util/AnsiPrintWriter.java
...
742  subprojects/groovy-xml/src/main/java/groovy/xml/XmlUtil.java
743  src/main/groovy/lang/Tuple.java
744  src/test/groovy/lang/TupleTest.java
745  src/main/org/codehaus/groovy/antlr/LexerFrame.java
746  src/test/org/codehaus/groovy/ast/ModuleNodeTest.java

```

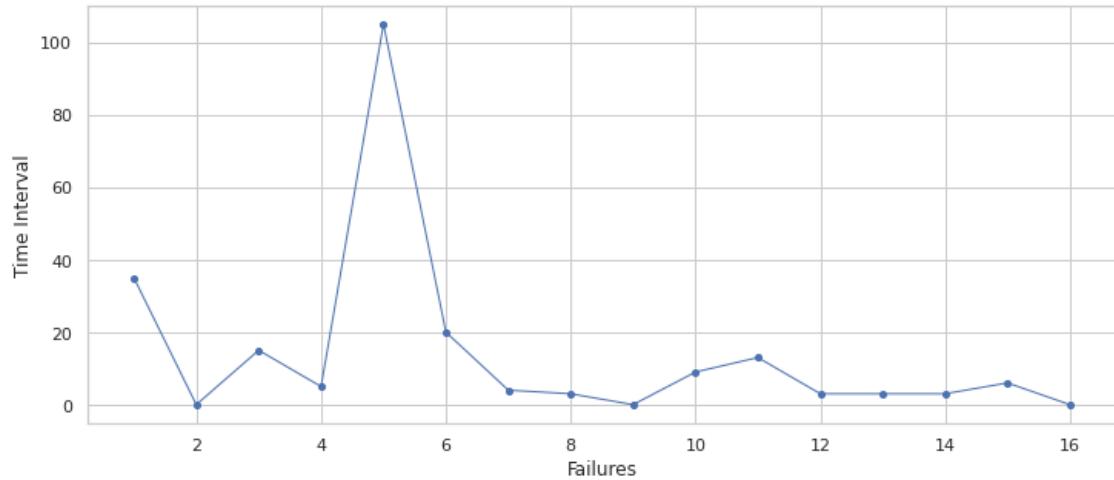
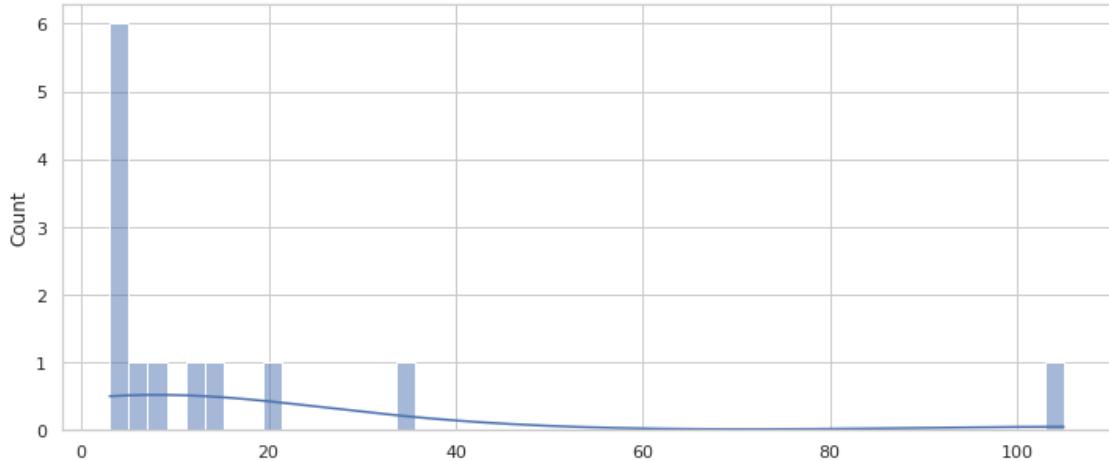
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 742 | 2 | 3941.0 | 0.000254 | 0.999746 |
| 743 | 2 | 4101.0 | 0.000244 | 0.999756 |
| 744 | 2 | 4101.0 | 0.000244 | 0.999756 |
| 745 | 2 | 4168.0 | 0.000240 | 0.999760 |

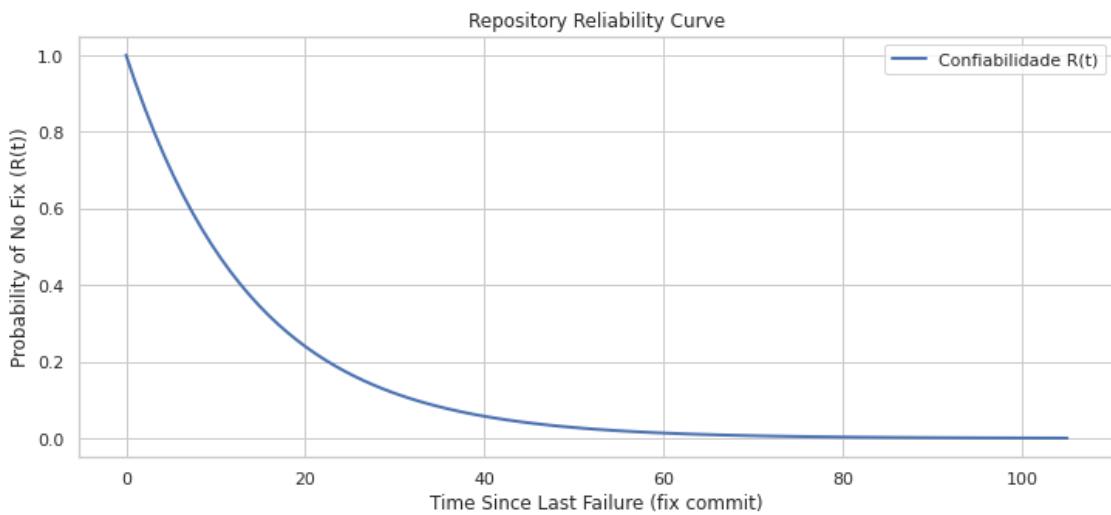
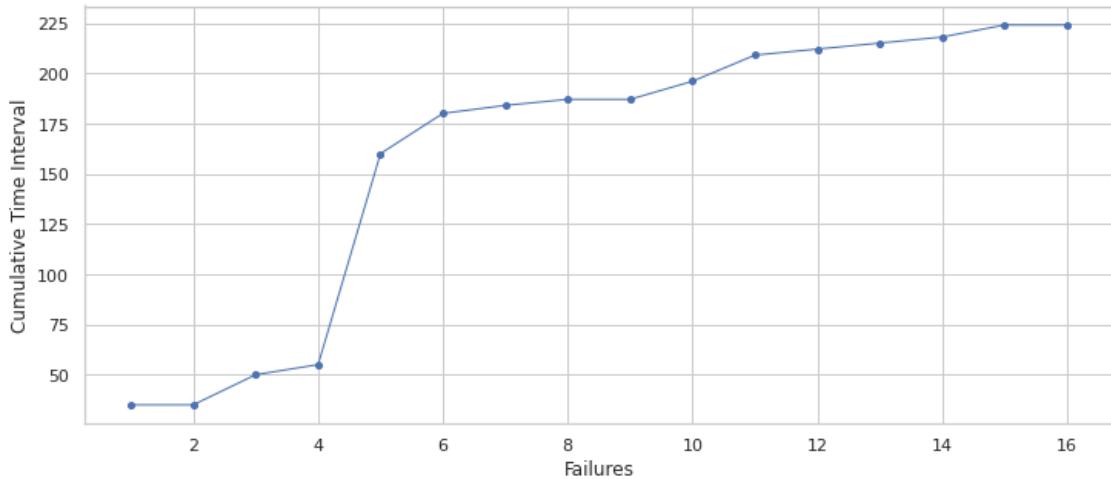
746 2 5259.0 0.000190 0.999810

[747 rows x 5 columns]

== Firestorm ==

The histogram of Time Between Failures (TBF) Firestorm





Confiabilidade $R(1) = 0.9311$

Confiabilidade $R(5) = 0.6997$

Confiabilidade $R(10) = 0.4895$

Confiabilidade $R(50) = 0.0281$

Confiabilidade $R(100) = 0.0008$

filepath

```

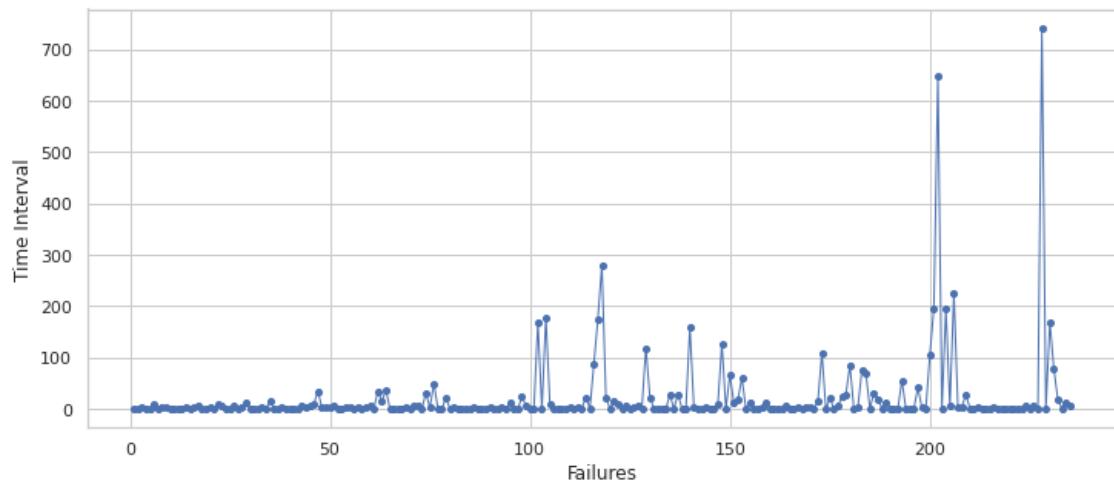
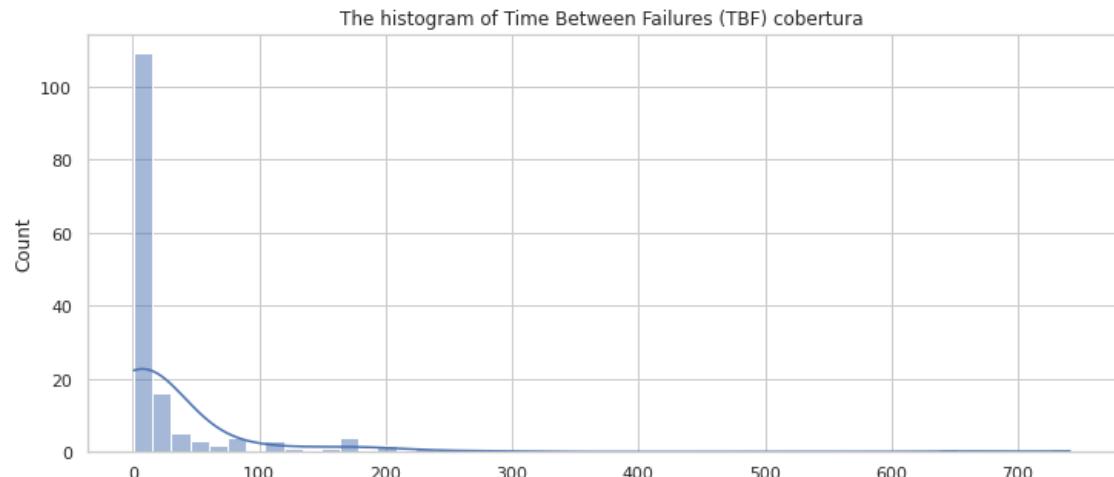
0 client-mr/src/main/java/org/apache/hadoop/mapred/SortWriteBufferManager.java
1 client-mr/src/main/java/org/apache/hadoop/mapred/RssMapOutputCollector.java
2 client-mr/src/main/java/org/apache/hadoop/mapreduce/RssMRUtils.java
3 client-spark/spark2/src/main/java/org/apache/spark/shuffle/RssShuffleManager.java
4 client-spark/spark3/src/main/java/org/apache/spark/shuffle/RssShuffleManager.java
5 client-spark/spark2/src/main/java/org/apache/spark/shuffle/writer/RssShuffleWriter.java
6 client-spark/common/src/main/java/org/apache/spark/shuffle/writer/WriteBufferManager.java

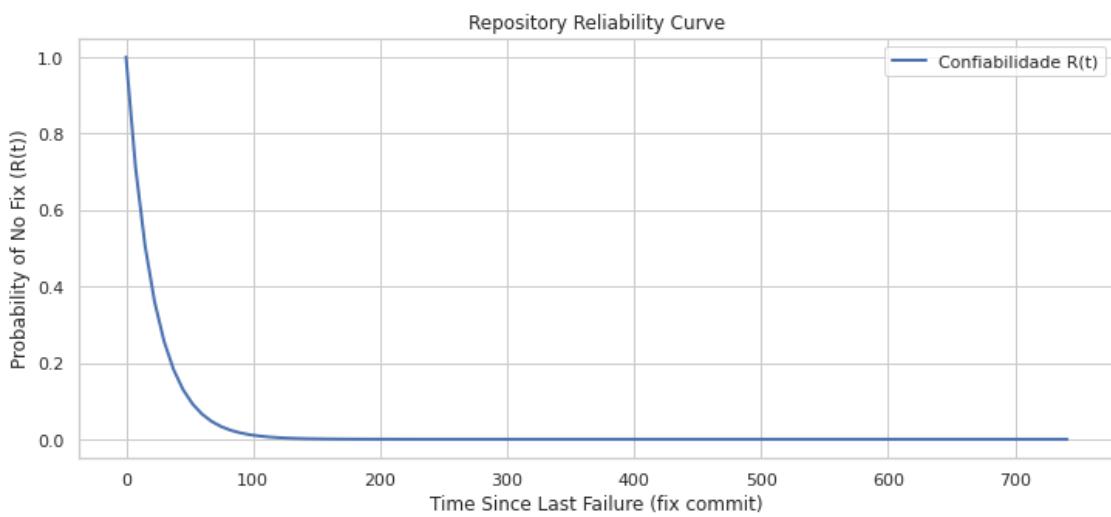
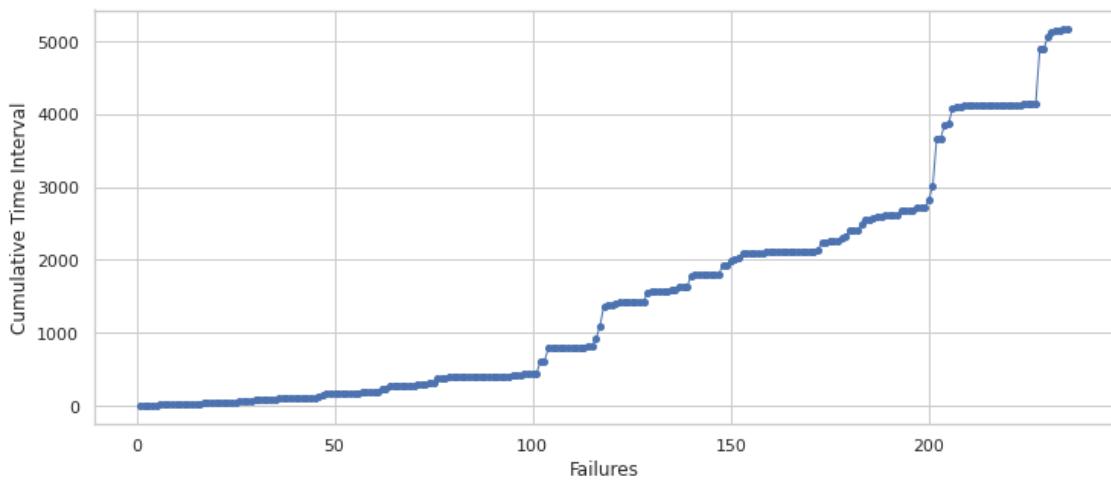
```

```
7 client-spark/spark3/src/main/java/org/apache/spark/shuffle/writer/RssShuffleWriter.java  
8 client/src/main/java/com/tencent/rss/client/impl/ShuffleWriteClientImpl.java
```

| | n_commits | MTBF | lambda_failure | R_t |
|---|-----------|-------|----------------|----------|
| 0 | 2 | 3.0 | 0.333333 | 0.716531 |
| 1 | 2 | 3.0 | 0.333333 | 0.716531 |
| 2 | 2 | 13.0 | 0.076923 | 0.925961 |
| 3 | 3 | 22.0 | 0.045455 | 0.955563 |
| 4 | 2 | 38.0 | 0.026316 | 0.974027 |
| 5 | 2 | 55.0 | 0.018182 | 0.981982 |
| 6 | 2 | 55.0 | 0.018182 | 0.981982 |
| 7 | 2 | 55.0 | 0.018182 | 0.981982 |
| 8 | 2 | 160.0 | 0.006250 | 0.993769 |

```
== cobertura ==
```





Confiabilidade $R(1) = 0.9556$

Confiabilidade $R(5) = 0.7967$

Confiabilidade $R(10) = 0.6347$

Confiabilidade $R(50) = 0.1030$

Confiabilidade $R(100) = 0.0106$

filepath \

```
0  cobertura/javancss/test/Test110.java
1  cobertura/javancss/test/Test120.java
2  cobertura/javancss/test/Test130.java
3  cobertura/javancss/test/Test132.java
```

```

4    cobertura/javancss/test/Test133.java
...
204   cobertura/src/net/sourceforge/cobertura/util/FileFinder.java
205   cobertura/src/test/java/net/sourceforge/cobertura/jdk/JDK7Test.java
206   cobertura/src/net/sourceforge/cobertura/check/Main.java
207   cobertura/src/main/java/net/sourceforge/cobertura/javancss/Javancss.java
208   cobertura/test/net/sourceforge/cobertura/coveredata/ProjectDataTest.java

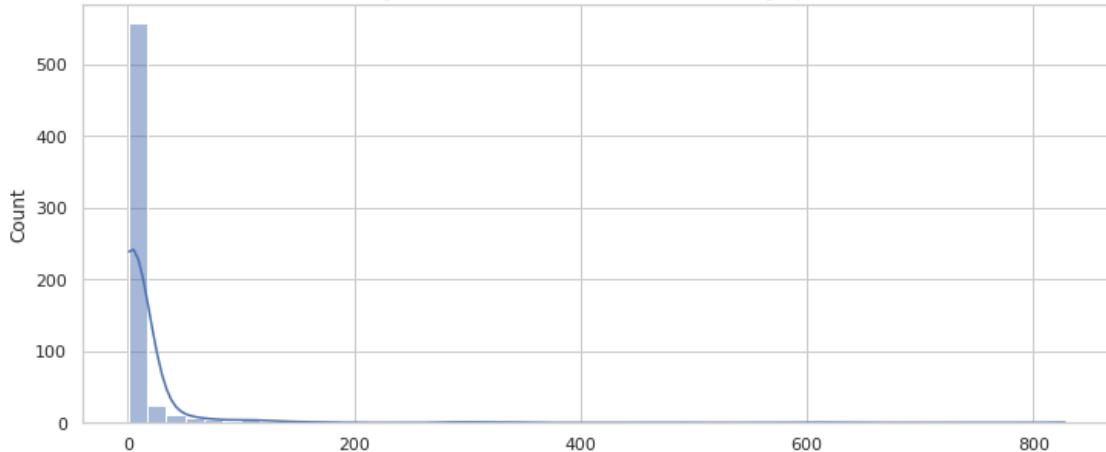
```

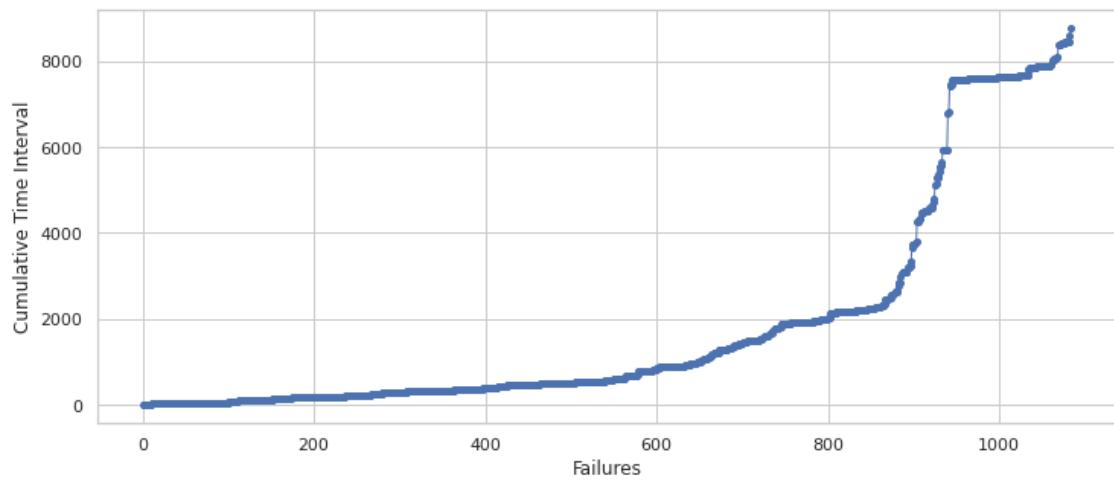
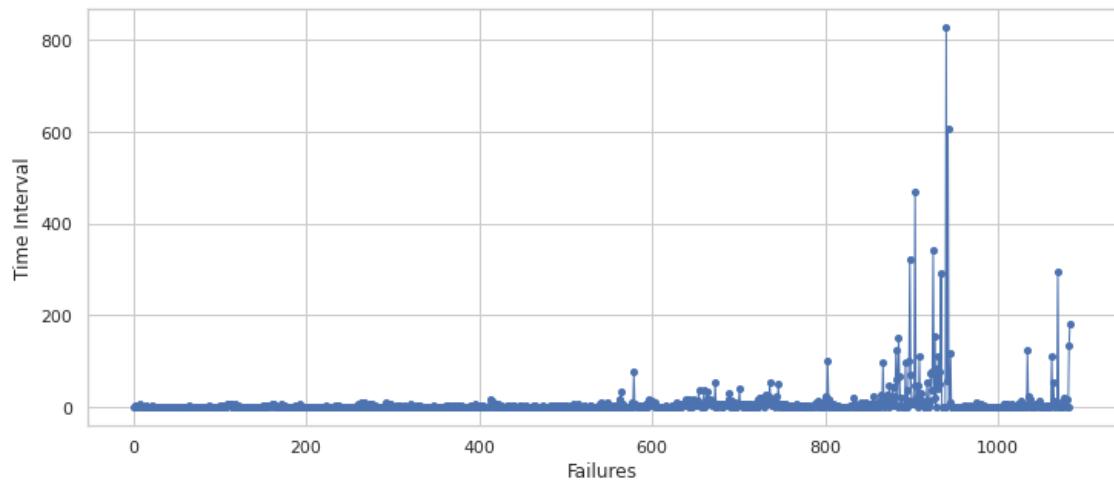
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| ... | ... | ... | ... | ... |
| 204 | 2 | 1254.0 | 0.000797 | 0.999203 |
| 205 | 2 | 1351.0 | 0.000740 | 0.999260 |
| 206 | 2 | 1374.0 | 0.000728 | 0.999272 |
| 207 | 2 | 1445.0 | 0.000692 | 0.999308 |
| 208 | 2 | 1728.0 | 0.000579 | 0.999421 |

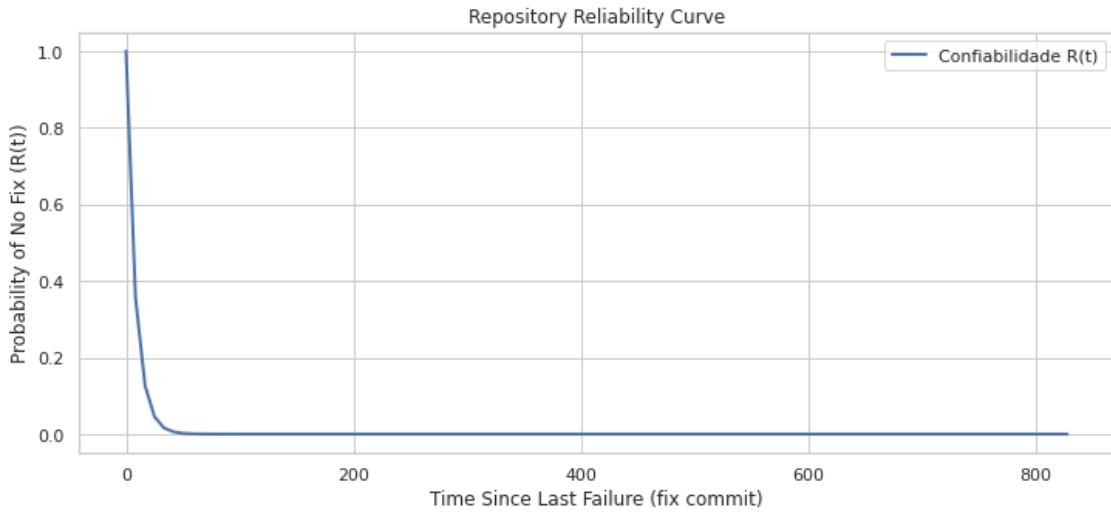
[209 rows x 5 columns]

== xmlgraphics-batik ==

The histogram of Time Between Failures (TBF) xmlgraphics-batik







```

Confiabilidade R(1) = 0.8838
Confiabilidade R(5) = 0.5393
Confiabilidade R(10) = 0.2908
Confiabilidade R(50) = 0.0021
Confiabilidade R(100) = 0.0000

```

```

filepath \
0    sources/org/apache/batik/parser/LengthParser.java
1    sources/org/apache/batik/refimpl/bridge/DefaultBridgeContext.java
2    sources/org/apache/batik/refimpl/bridge/SVGFeColorMatrixElementBridge.java
3    sources/org/apache/batik/refimpl/bridge/SVGUtilities.java
4    sources/org/apache/batik/gvt/DecoratedShapeNode.java
...
862   sources/org/apache/batik/bridge/SVGFeFloodElementBridge.java
863   sources/org/apache/batik/bridge/SVGFeTurbulenceElementBridge.java
864   sources/org/apache/batik/bridge/MarkerBridge.java
865   sources/org/apache/batik/bridge/ClipBridge.java
866   contrib/scroll/ScrollExample.java

```

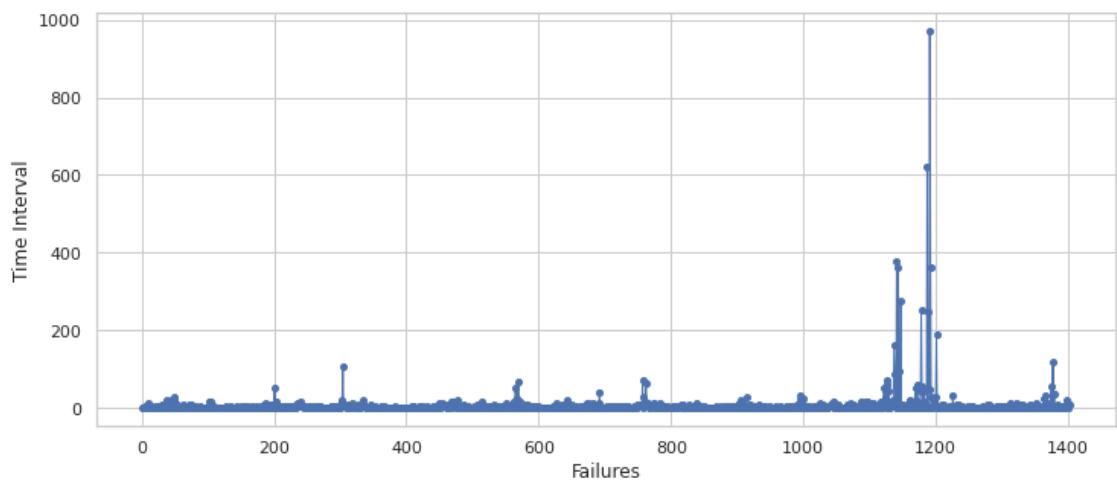
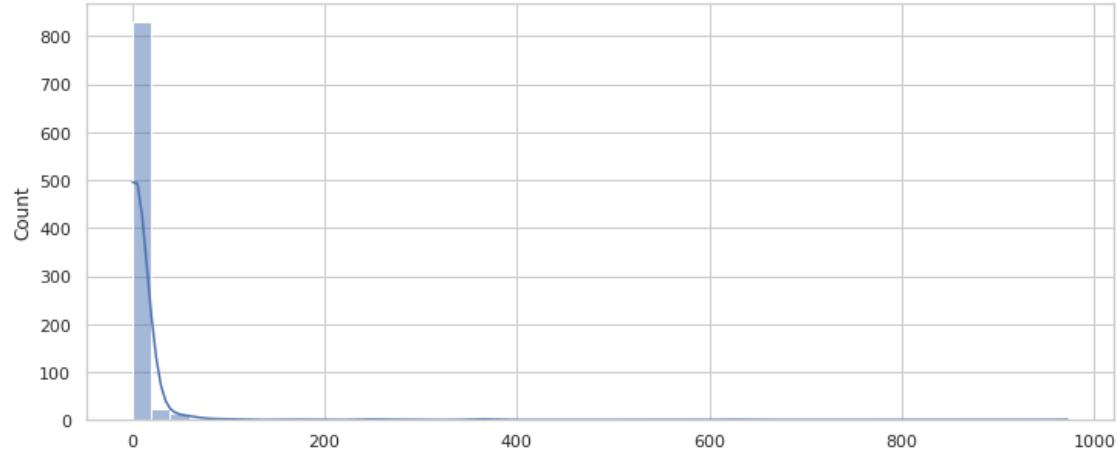
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|---------|----------------|----------|
| 0 | 2 | 1.00 | 1.000000 | 0.367879 |
| 1 | 2 | 1.00 | 1.000000 | 0.367879 |
| 2 | 4 | 1.00 | 1.000000 | 0.367879 |
| 3 | 6 | 1.00 | 1.000000 | 0.367879 |
| 4 | 5 | 1.25 | 0.800000 | 0.449329 |
| ... | ... | ... | ... | ... |
| 862 | 2 | 4205.00 | 0.000238 | 0.999762 |
| 863 | 2 | 4205.00 | 0.000238 | 0.999762 |
| 864 | 2 | 4210.00 | 0.000238 | 0.999762 |
| 865 | 2 | 4307.00 | 0.000232 | 0.999768 |

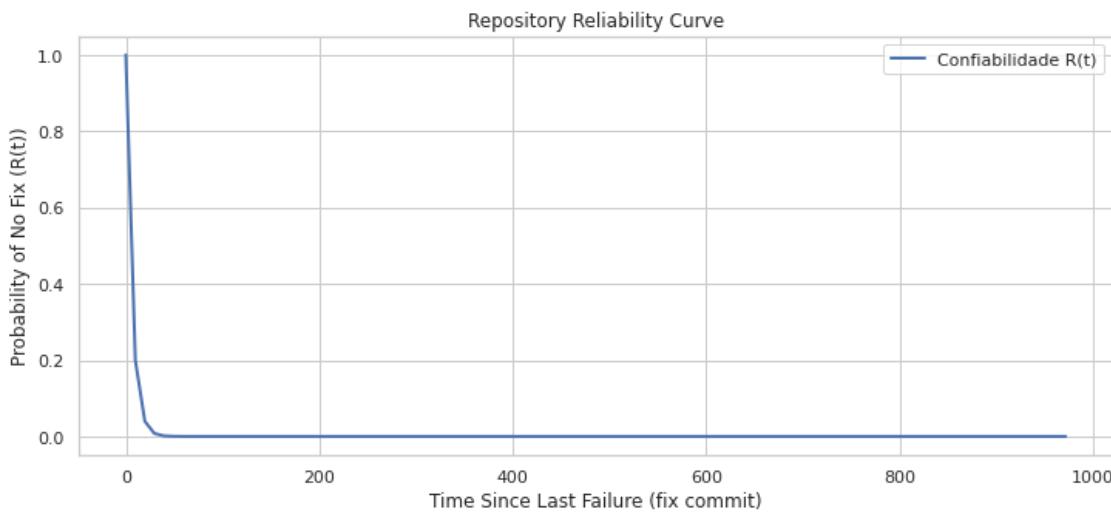
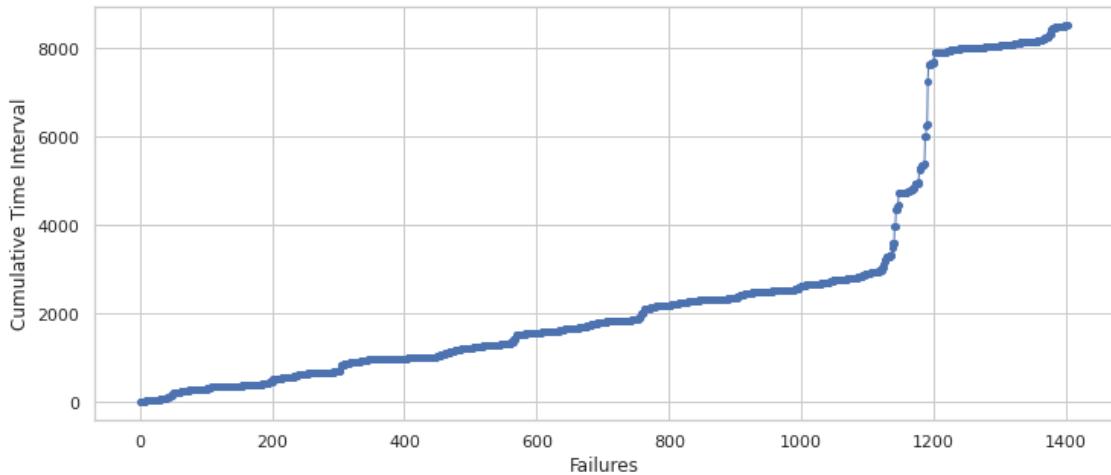
866 2 5041.00 0.000198 0.999802

[867 rows x 5 columns]

== drjava ==

The histogram of Time Between Failures (TBF) drjava





```

Confiabilidade R(1) = 0.8485
Confiabilidade R(5) = 0.4399
Confiabilidade R(10) = 0.1935
Confiabilidade R(50) = 0.0003
Confiabilidade R(100) = 0.0000

```

```

filepath \
0 drjava/src/edu/rice/cs/drjava/Gap.java
1 drjava/src/edu/rice/cs/drjava/Brace.java
2 dynamicjava/src/koala/dynamicjava/interpreter/Distinction1415Test.java
3 drjava/src/edu/rice/cs/drjava/ModelList.java
4 dynamicjava/src/koala/dynamicjava/interpreter/TypeChecker.java
...
982 drjava/src/edu/rice/cs/util/swing/CheckBoxJList.java

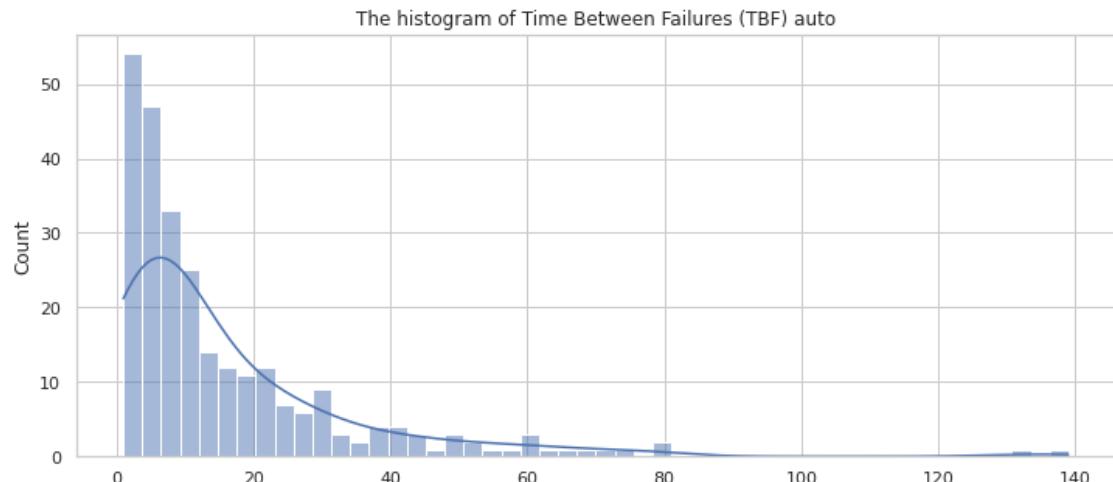
```

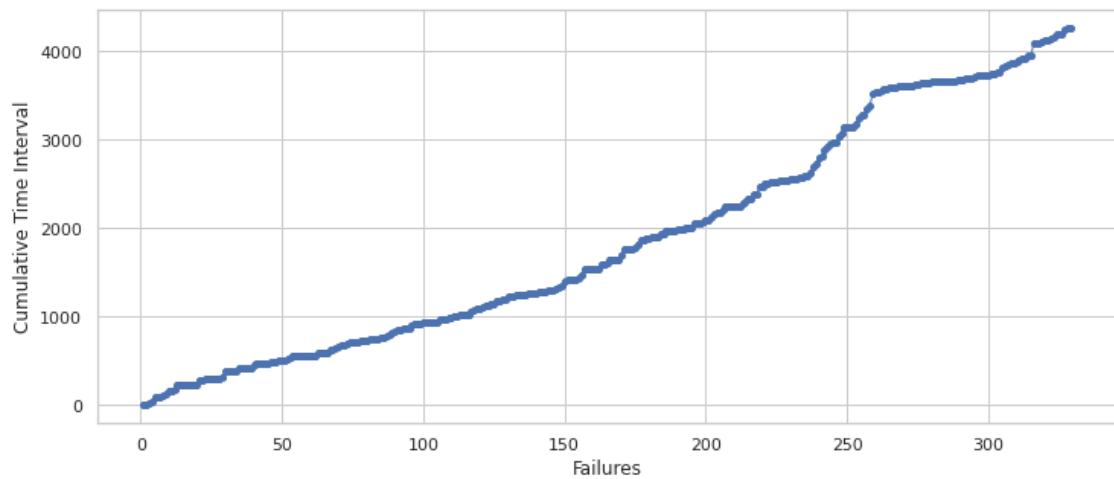
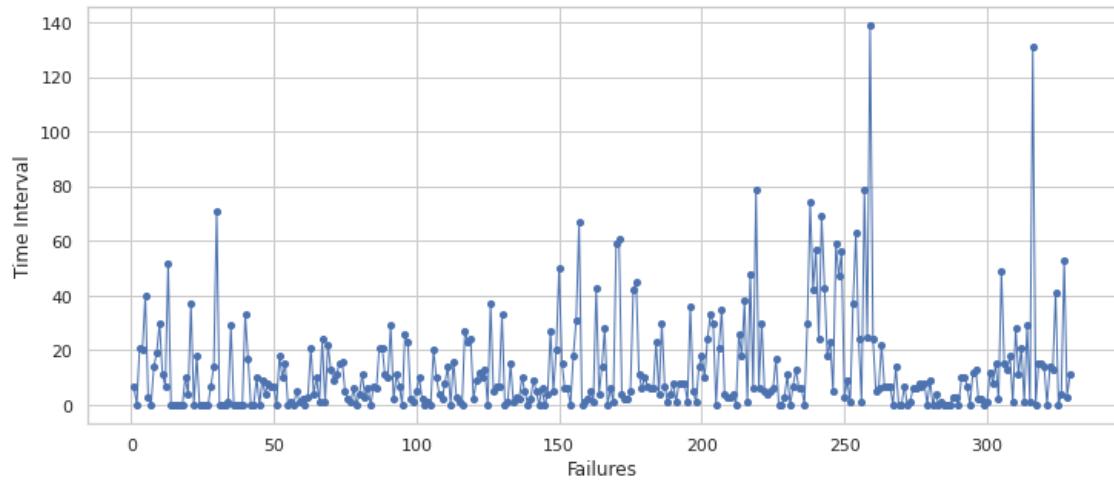
```
983 plt/src/edu/rice/cs/plt/debug/VoidLog.java  
984 plt/src/edu/rice/cs/plt/reflect/AbstractClassLoader.java  
985 platform/src-windows/edu/rice/cs/drjava/platform/WindowsPlatform.java  
986 platform/src-mac/edu/rice/cs/drjava/platform/MacPlatform.java
```

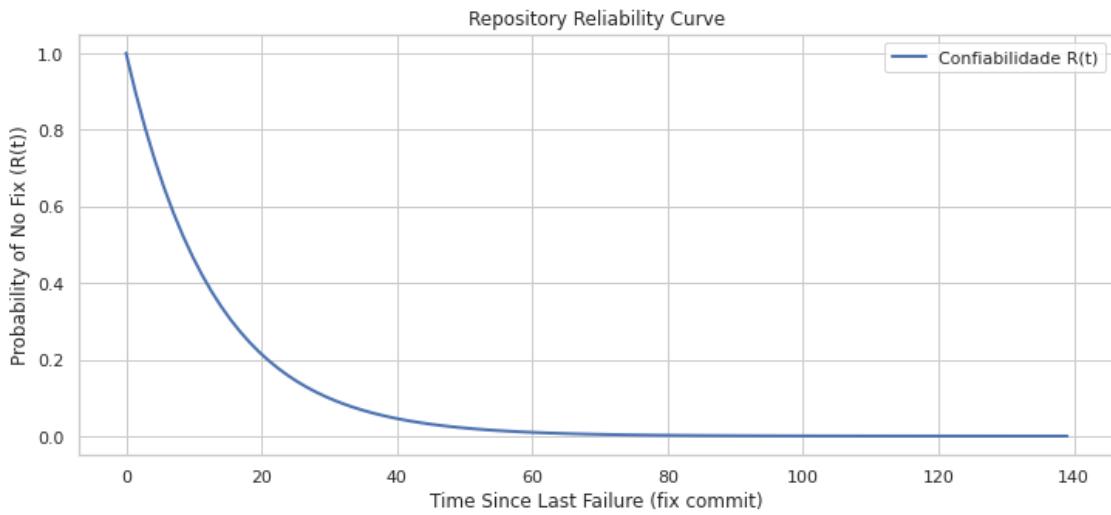
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.000000 | 0.367879 |
| 1 | 2 | 1.0 | 1.000000 | 0.367879 |
| 2 | 2 | 1.0 | 1.000000 | 0.367879 |
| 3 | 2 | 1.0 | 1.000000 | 0.367879 |
| 4 | 2 | 1.0 | 1.000000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 982 | 2 | 2694.0 | 0.000371 | 0.999629 |
| 983 | 2 | 3073.0 | 0.000325 | 0.999675 |
| 984 | 2 | 3427.0 | 0.000292 | 0.999708 |
| 985 | 2 | 3663.0 | 0.000273 | 0.999727 |
| 986 | 2 | 4066.0 | 0.000246 | 0.999754 |

[987 rows x 5 columns]

== auto ==







```

Confiabilidade R(1) = 0.9258
Confiabilidade R(5) = 0.6802
Confiabilidade R(10) = 0.4626
Confiabilidade R(50) = 0.0212
Confiabilidade R(100) = 0.0004

```

filepath

```

0   factory/src/test/resources/expected/SimpleClassPassedDepsFactory.java
1   compile-testing/src/main/java/com/google/testing/compile/JavaSourcesSubject.java
2   factory/src/test/resources/expected/FactoryImplementingGenericInterfaceExtensionFactory.java
3   factory/src/test/resources/expected/ClassUsingQualifierWithArgsFactory.java
4   factory/src/test/resources/expected/SimpleClassNullableParametersFactory.java
...
107  ...
108  ...
109  ...
110  ...
111  ...

```

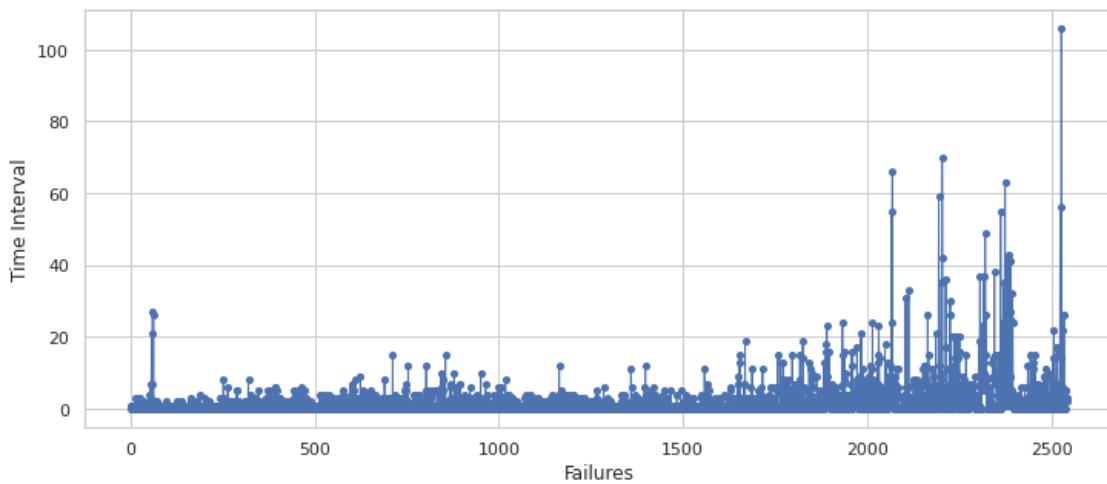
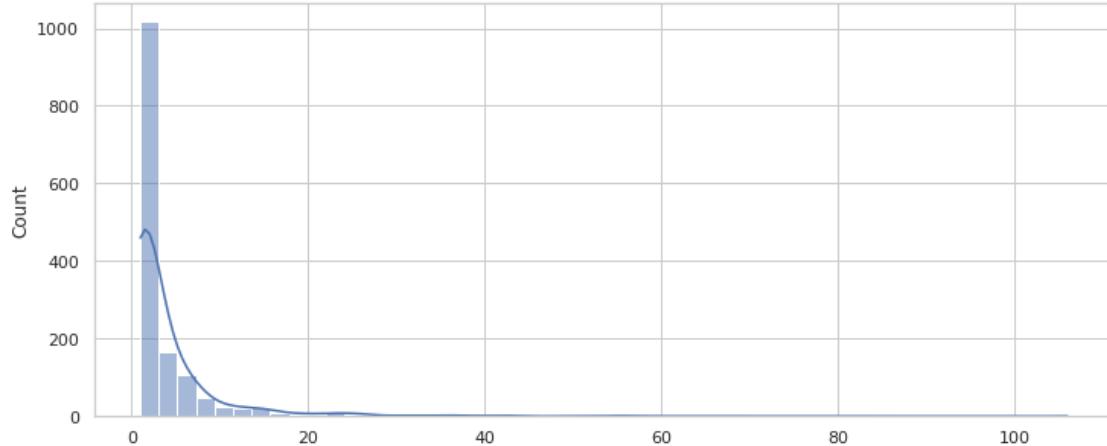
| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 3.0 | 0.333333 | 0.716531 |
| 1 | 2 | 3.0 | 0.333333 | 0.716531 |
| 2 | 2 | 3.0 | 0.333333 | 0.716531 |
| 3 | 2 | 3.0 | 0.333333 | 0.716531 |
| 4 | 2 | 3.0 | 0.333333 | 0.716531 |
| ... | ... | ... | ... | ... |
| 107 | 2 | 1519.0 | 0.000658 | 0.999342 |
| 108 | 2 | 1626.0 | 0.000615 | 0.999385 |
| 109 | 2 | 1696.0 | 0.000590 | 0.999411 |
| 110 | 2 | 3304.0 | 0.000303 | 0.999697 |

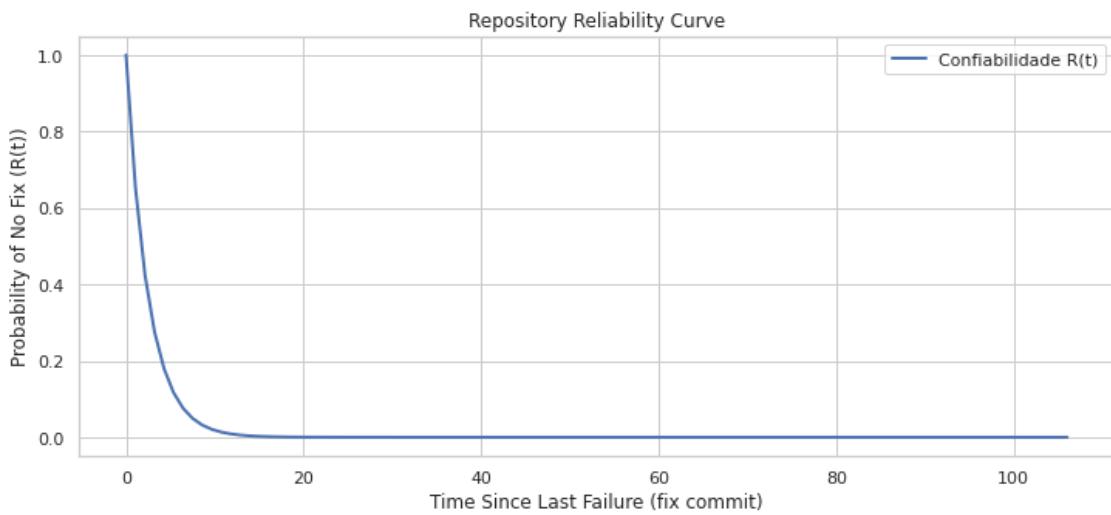
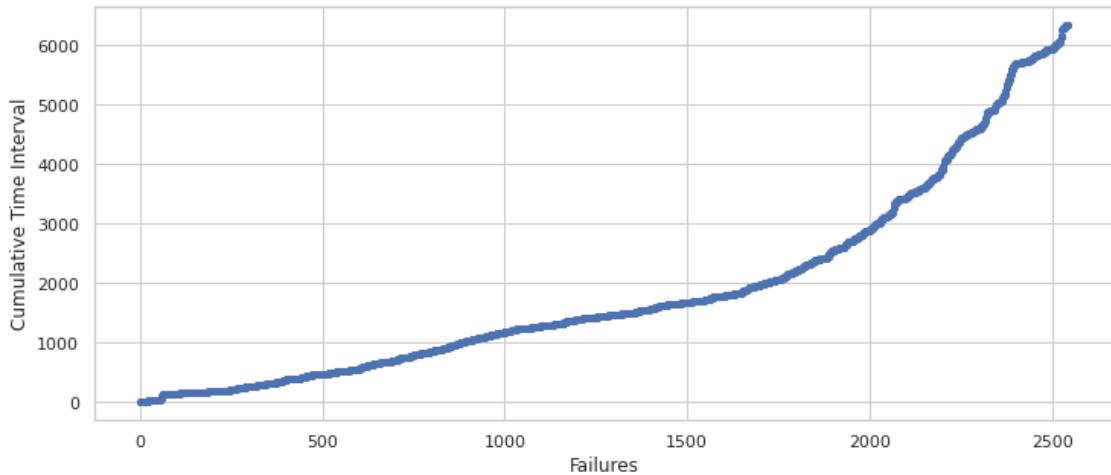
```
111 2      3304.0  0.000303      0.999697
```

```
[112 rows x 5 columns]
```

```
== visualvm ==
```

The histogram of Time Between Failures (TBF) visualvm





Confiabilidade $R(1) = 0.6696$

Confiabilidade $R(5) = 0.1346$

Confiabilidade $R(10) = 0.0181$

Confiabilidade $R(50) = 0.0000$

Confiabilidade $R(100) = 0.0000$

```

0  plugins/buffermonitor/src/com/sun/tools/visualvm/modules/buffermonitor/BufferMonitorView...
1  visualvm/truffle.heapwalker/src/com/sun/tools/visualvm/truffle/heapwalker/r/RObject.java
2  lib.profiler/src/org/netbeans/lib/profiler/results/locks/LockCCTNode.java
3  plugins/tracer/src/com/sun/tools/visualvm/modules/tracer/impl/PackagesView.java
4  visualvm/heapviewer.truffle/src/com/sun/tools/visualvm/heapviewer/truffle/TruffleSummaryV...
..
668 samples/sampleBundle/src/org/nb/samplebundle/subnodes/subnodesPanelVisual.java

```

```
669 samples/sampleBundle/src/org/nb/samplebundle/pluggableViewDemoSuite/pluggableViewDemoSuite
670 samples/sampleBundle/src/org/nb/samplebundle/pluggableViewDemoSuite/pluggableViewDemoSuite
671 samples/pluggableViewDemoSuite/helloWorldPluggableView/src/org/hellovisualvm/HelloWorldVi
672 samples/pluggableViewDemoSuite/helloWorldViewPlugin/src/org/netbeans/helloworldplugin/Hell
```

| | n_commits | MTBF | lambda_failure | R_t |
|-----|-----------|--------|----------------|----------|
| 0 | 2 | 1.0 | 1.00000 | 0.367879 |
| 1 | 2 | 1.0 | 1.00000 | 0.367879 |
| 2 | 2 | 1.0 | 1.00000 | 0.367879 |
| 3 | 2 | 1.0 | 1.00000 | 0.367879 |
| 4 | 2 | 1.0 | 1.00000 | 0.367879 |
| .. | .. | ... | ... | ... |
| 668 | 2 | 4766.0 | 0.00021 | 0.999790 |
| 669 | 2 | 4766.0 | 0.00021 | 0.999790 |
| 670 | 2 | 4766.0 | 0.00021 | 0.999790 |
| 671 | 2 | 4767.0 | 0.00021 | 0.999790 |
| 672 | 2 | 4767.0 | 0.00021 | 0.999790 |

[673 rows x 5 columns]