

Code: 1010-TPSH-1414-A

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CIT Project	System/Subsystem: WEB SOFTWARE
Title : TEST PROCEDURE - SBDB API- SW TEST PROCEDURE - TP	

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SUMMARY:

The objective of this document is present the description of the test for the validation of the **SBDB Close-Approach Data API**.

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1 INTRODUCTION

1.1 PURPOSE

The objective of this document is present the description of the test for the validation of the **SBDB Close-Approach Data API**.

1.2 SCOPE

1. The scope of this test procedure y detail the different test suit applicable for the validation of the **SBDB Close-Approach Data API**.

1.3 APPLICABLE DOCUMENTS/API

<https://ssd-api.jpl.nasa.gov/cad.api>

1.4 REFERENCE DOCUMENTS

1. SBDB Close Approach Data API (nasa.gov)
2. 1010-THSS-1212-A -SBDS API Acceptance Test Plan

1.5 DEFINITIONS, ACRONYMS AND ABBREVIATIONS

N/A (No applicable)

2 ENVIRONMENT

2.1 DOCKER DESKTOP

1. The configuration of the environment is set on the framework:
phermosilla/newman Image ID 7936797a923.
Newman version: 5.2.4
Alpine: v3.15
For the installation of the image execute from a console the command:
@ push phermosilla/newman

2.2 POSTMAN:

1. Test Collections:
Test_Acceptance_SBDB_API:
JSON: <https://www.getpostman.com/collections/3b8900b1fc716efbd8f3>
Test_Acceptance-FilterClass:
JSON: <https://www.getpostman.com/collections/61e7aefc9979c6d08921>
Test_Acceptance_SBDB_BodyFilter
JSON: <https://www.getpostman.com/collections/dbccbf8a5c41f9d5641f>

2.3 REPORTS JSON AND HTML:

1. The execution of each test suit have two outload report .JSON and .HTML.

For *Test_Acceptance_SBDB_API*:

SBDB-API-Report.json

SBDB-API-Report.html

For *Test_Acceptance-FilterClass*:

SBDB-FilterClass-Report.json

SBDB-FilterClass-Report.html

For: *Test_Acceptance_SBDB_BodyFilter*

SBDB-BodyClass-Report.json

SBDB-BodyClass-Report.html

3 TEST_ACCEPTANCE_SBDB_API

1. The test if this collection are executed in docker as described in test Plan document.
2. Execute the command in a console as is described below:

```
Execution command:
docker run -v "%cd%":/etc/newman -t phermosilla/newman:latest run
https://www.getpostman.com/collections/3b8900b1fc716efbd8f3 --reporters
json,cli,htmlextra --reporter-json-export="SBDB-API-report.json" --reporter-
htmlextra-export="SBDB-API-report.html"
```

3.1 QUERY-DATA OUTPUT – TEST CASE 1

1. Objective: The objective of the test case is verify that the output parameter declare on [SBDB Close Approach Data API \(nasa.gov\)](#), are present on the query and that the values of the field are valid according the described document.
2. The execution of the test and version are described on the test attached on the folder collection/ Test_Acceptance_SBDB_API.postman_collection

```
/*
Test 1: Query-Selectors-Validation
Objective: Test Query return Values of https://ssd-api.jpl.nasa.gov/cad.api
Object: https://ssd-api.jpl.nasa.gov/cad.api
Object version: 1.4
Test Version: v1.0
Date: 31/08/2022
*/
```

3.2 QUERY-FILTERS-VALIDATION – TEST CASE 2

1. Objective: The objective of the test case is verify and validate the filters declare on [SBDB Close Approach Data API \(nasa.gov\)](#).

```
/*
Test 2: Query-Filters-Validation
Objective: Verify and validate filters with existent values.
Object: https://ssd-api.jpl.nasa.gov/cad.api
Object version: 1.4
Test Version: v1.0
Date: 31/08/2022
*/
```

2. The execution of the test and version are described on the test attached on the folder collection/ Test_Acceptance_SBDB_API.postman_collection
3. Verification: A status command is add at the end of the test script to verify that the test response with correct values.

4 TEST_ACCEPTANCE-FILTERCLASS

1. The objectives of this test suit is verify the Class field.
2. The test if this collection are executed in Docker as described in test Plan document.

Execute the command in a console as is describe bellow:

```
Execution command:
docker run -v "%cd%":/etc/newman -t phermosilla/newman:latest run
https://www.getpostman.com/collections/61e7aefc9979c6d08921 --reporters
json,cli,htmlextra --reporter-json-export="SBDB-FilterClass-report-json.json" --
reporter-htmlextra-export="SBDB-FilterClass-report.html"
```

4.1 VERIFY-FILTER-CLASS – TEST CASE 3

1. Objective: The objective of the test case is verify that the Class filter parameters declare on [SBDB Close Approach Data API \(nasa.gov\)](#), are possible to configure and are validated correctly.

The execution of the test and version are described on the test attached on the folder collection/
Test_Acceptance-FilterClass.postman_collection.

```
/*
Test 3: Verify-Filter-Class
Objective: Test Class filter with valid values
Object: https://ssd-api.jpl.nasa.gov/cad.api
Object version: 1.4
Test Version: v1.0
Date: 31-08-2022
*/
```

4.2 VERIFY-FILTER-CLASS-FAIL – TEST CASE 4

1. Objective: The objective of the test case is verify that when incorrect values are introduce on Class filter the query do not response with any data.
2. The first script verify that do not accept integer values as a parameters
3. The second script verify a valid value in lower case, to verify that the API is key sensitive.
4. At the end of the test the status is verified to validate that no data of the query were as response.

```
/*
Test 2: Query-Filters-Validation
Objetive: Verify and validate filters with existent values.
Object: https://ssd-api.jpl.nasa.gov/cad.api
Object version: 1.4
Test Version: v1.0
Date: 31/08/2022
*/
```

5 TEST_ACCEPTANCE_SBDB_BODYFILTER

1. The objective of this test suit is validate the Body filter with parameters.

2. The test if this collection are executed in Docker as described in test Plan document. Excecute the command in a console as is describe bellow:

```
Execution command:
docker run -v "%cd%":/etc/newman -t phermosilla/newman:latest run
https://www.getpostman.com/collections/dbccbf8a5c41f9d5641f --reporters
json,cli,htmlextra --reporter-json-export="SBDB-BodyClass-report-json.json" --
reporter-htmlextra-export="SBDB-BodyClass-reporte.html
```

5.1 VERIFY-FILTER-BODY – TEST CASE 5

1. The objective of the test case is verify that the “body” filter declare on [SBDB Close Approach Data API \(nasa.gov\)](#), are able to execute with correct values.

The execution of the test and version are described on the test attached on the folder collection/
Test_Acceptance_SBDB_BodyFilter.postman_collection

```
/*
Test 5: Verify-Filter-Body
Objective: Test filter body and validate all the correct values.
Object: https://ssd-api.jpl.nasa.gov/cad.api
Object version: 1.4
Test Version: v1.0
Date: 31/08/2022
*/
```

5.2 VERIFY-FILTER-BODY-FAIL– TEST CASE 6

1. The objective of the test case is verify that the “body” filter do not response with data when invalid values are introduced.
2. In the first script an incorrect name is set in the body filter.
3. In the second test a number an integer value is set in the body filter
4. At the end and status validate is set to verify that there is not response from Query.

```
/*
Test 6: Verify-Filter-Body-Fail
Objective: Test filter body with invalid parameter.
Object: https://ssd-api.jpl.nasa.gov/cad.api
Object version: 1.4
Test Version: v1.0
Date: 31/08/2022
*/
```

6 ITEM PASS/FAIL CRITERIA

1. A test item will be considered accepted after passing OK the 100% of the test procedures.
2. In case that the test case is not correct, it will be rewritten in a new version of the document.