

# Documentation of MSAP3-34 for PLATO

## *Validation*

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# 1 Introduction

## 1.1 Scope of the document

This document aims to provide a description of the validation algorithm for the selection and validation module of the MSAP5. It provides technical details (inputs, outputs, data types) as well as the functional description (implementation) for the L1/L2 stellar pipeline. The justification for the choice of this specific algorithm and a description of its scientific performances is provided in [please provide the reference of the justification document]. Moreover, the exact position of this algorithm within the data processing pipeline is described in [RD1].

## 1.2 Nomenclature

See tab:nomenclature and tab:datatypes.

Table 3: Nomenclature

Term	Description
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Table 4: Standard data types

Type	Size	Values
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## 1.3 Referenced documents

The following documents are referenced:

## 1.4 Abbreviations

**PLATO** PLAnetary Transits and Oscillations of Stars

## **2 General overview**

### **2.1 Name of the algorithm and status**

### **2.2 Synopsis**

### **2.3 Model**

### 3 Lists of inputs and outputs

#### 3.1 Complete list of inputs

Table 5: Input parameters

Name	Source	Status	Data type	Dimension	Unit
x	x	mandatory/optional	x	x	x

#### 3.2 Complete list of outputs

Table 6: Output parameters

Name	Status	Data type	Dimension	Unit
x	mandatory/optional	x	x	x

## **4 Processing description**

### **4.1 Type of delivery**

*Prototype*

### **4.2 Algorithm maturity**

*Algorithm concept defined, but interfaces (inputs/outputs) unstable*

### **4.3 Algorithm source**

*TODO*

### **4.4 Pseudo-code**

*N/A*

### **4.5 Flow diagram**

*N/A*

## 5 Test case(s)

### 5.1 Implementation test case(s)

*Test cases are necessary for the technical validation of the implementation by the PDC . Given input(s) you provide, the PDC will test if it obtains exactly the same output(s). One or several technical reference test(s) shall be provided to allow the PDC for checking the implementation for the different configurations of the algorithm. For each test case, the following must be provided:*

- *A short definition of the test.*
- *values of the inputs. Please provide a link or send the data to the WP12 office.*
- *values of the outputs. Please provide a link or send the data to the WP12 office.*

### 5.2 Scientific test case(s)

Please specify here and describe if you need or will need simulated data to be produced or provided by the WP12 office for the scientific validation of the performances of thee algorithm.