

Search Parameter Overview

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Component Overview

The **'Core Search Parameters'** section contains the most common search parameters for the selected data collection, which can vary between the different collections. This page overviews the types of search components and how to specify parameter constraints for components that can be found on multiple data collections.

Parameter Constraint Syntax

There are three categories of search parameters: string (i.e. text), numeric, and datetime. There are thus three slightly different syntaxes when adding additional conditions to a parameter. The specifications outlined below apply equally to [core parameters](#), [additional search parameters](#), and any mission-specific fields.



Hovering over a filter box in the search form will show "tooltips" on using search conditions.

Parameter Constraints: String Fields

How to specify constraints for search components that accept strings: search conditions, valid formats, and some examples.

Search Operation	Format	Example
Exact match	abc	Dataset ID, e.g. ICDM79040 Dataset Name= ICDM79040
		Names of Filters/Gratings, e.g. G130M or POL60UV;PR200L Filters / Gratings= F8ND;F220W;CLEAR3;CLEAR4
		Add or remove additional columns to filter results Column Name= Operating Mode Condition= SPEC

Wildcard

*ab*c

Dataset ID, e.g. ICDM79040

Dataset Name=

X*E*0T



Names of Filters/Gratings, e.g. G130M or POL60UV;PR200L

Filters / Gratings=

F1*W

Multiple	abc, def ab*, def abc, de*, fg*	Dataset ID, e.g. ICDM79040 Dataset Name= Z06A0101R,I9ZF01010 ▲
Exclude	!abc !ab*c !abc,!def !ab*,!cd*	Names of Filters/Gratings, e.g. G130M or POL60UV;PR200L Filters / Gratings= !G130M ▼

Type ahead

character
or
character
string

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Parameter Constraints: Numeric Fields

How to specify constraints for search components that accept numeric data types (integer, float): search conditions, valid formats, and some examples.

Search Operation	Format	Example
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Exact Number	any number	Exposure duration in seconds, e.g. 1200 Exposure Time= 1000
	= any number	Exposure duration in seconds, e.g. 1200 Exposure Time= 14660

Comparison

> number

>=
number

< number

<=
number

Add or remove additional columns to filter results

Column Name=
Spectral Res

Condition=
>= 20000

X

Range

num1 ..
num2

Add or remove additional columns to filter results

Column Name=

RA (J2000)

Condition=

15.0567 ..17.6709

Column Name=

Dec (J2000)

Condition=

-10.00 .. 5.56

Calculated Range	num1 +- num2	Add or remove additional columns to filter results Column Name= Exp Time Condition= 400 +- 300 × Column Name= Central Wavelength Condition= 3000 +- 15% ×
	num1 +- num2%	

Parameter Constraints: DateTime Fields

How to specify constraints for search components that accept dates or times: search conditions, valid formats, and some examples.

Search Operation	Format	Example
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Exact date /time	yyyy-mm-dd yyyy-mm-dd hh:mm:ss	Find data observed on or between these dates Obs Start Date= 2010-06-09 Time= 00:00:00 to Obs Start Date= 2010-06-13 Time= 03:15:00
Comparison	> yyyy-mm-dd >= yyyy-mm-dd < yyyy-mm-dd <= yyyy-mm-dd	Add or remove additional columns to filter results Column Name= Release Date Condition= <= 1999-10-21

Range	yyyy-mm-dd .. yyyy-mm-dd	Add or remove additional columns to filter results Column Name= Archive Date Condition= 2010-05-10 .. 2010-06-30
	yyyy-mm-dd hh:mm:ss .. yyyy-mm-dd hh:mm:ss	

Examples of Spectral Element Searches

Operation	Examples	Note
Exact match	G130M	Type an exact name of the filter, grating, or the combination filter set to retrieve only observations associated with the input string. Combination filter sets are delimited by a semicolon (;). Remember that combination sets are single strings.
	MIRRORA	
	POL120UV; F330W	
	F2ND; CLEAR2; F1ND;F372M	
Wildcard	G*M	This example retrieves observations that used grating names starting with 'G' and ending with 'M' such as 'G150M' or 'G220M'.
	F81*	Since a combination filter set is considered as a single string, the input wildcard characters 'F81*' retrieve all observations associated with the filter 'F814W' and the other ones such as 'F814W;POLQN18' and 'F814W;F791W'.
Multiple	G130M, F550W	The 'Multiple' operator (',') acts as the logical operator 'OR'. Thus this example retrieves observations used the grating 'G130M' or the filter 'F550W'.
	F550W, POL60UV; PR200L	This example retrieves observations used the filter 'F550W' or the combination filter set 'POL60UV;PR200L'. Be sure to use the 'Multiple' operator, comma (,) not a semicolon (;) used for appending filters for combination filter set names.
Exclude	!F550W	This operation excludes any observations using the filter 'F550W'.
	G*;!G140L	This search retrieves observations using all grating options ('G*') except the grating 'G140L'.
Type ahead		Type ahead limitation Note that this only shows a list of single spectral elements and not combination filter sets.

For Further Reading...

- [Mission Search Guide Home](#)
- [HST Search Components](#)

- [CLASSY Search Components](#)
- [ULLYSES Search Components](#)