Navigating e-Callisto data with VWO

This document describes a method to access e-Callisto data sets by time range using the NASA Virtual Wave Observatory (VWO) Query Builder tool.

To begin, point a web browser to <u>https://vwo.nasa.gov/</u>



On the VWO home page click Data Query to access the Query Builder.

+ Home	VWO Query Builder	version: 3.0
VWO Query Builder	Restrict your query to the followi then press Apply This Condition Double click on a data source	ng available Data Sources button e element s metadata.
Data Source Selection	Apply The Following Condition	ot
Magnetospheric State	Time Range	Stari
Location	Start: 2000-01-01T00:00:00.000Z	= 2000-01-02T23:59:59.999Z + Events
Keywords	-1 day -1 hr +1 hr +1 day	-1 day -1 hr +1 hr +1 day
View Intersection Times	Measurement Type Passive Active Frequency Range - From: 0	AC Electric Antenna C Ground-based AC Magnetic Antenna To: 0 kHz
Run Query	Data Set Selection	SO VIRBO VITMO VMR
	Observatory	Instrument
	ASWS Brisbane Camden Canberra	ASWS Brisbane Brisbane lonosonde ASWS Camden Camden lonosonde ASWS Canberra

Start by entering a date/time combination to start the time range. The stop date/time may be entered manually or incremented by day or hour using the controls below the date/time input field.

Time Range			
Start:		Stop:	
2016-01-01T00:00:00.000Z	=	2016-01-01T06:00:00.000Z	+ Events
-1 day -1 hr +1 hr +1 day		-1 day -1 hr +1 hr +1 day	

Measurement Type

Data Set Selection

For this example the date range is set to 2016/01/01 00:00:00Z to 2016/01/01 06:00:00Z. The options for observatories, instruments and data products in the Data Set Selections panel will activate (gray highlight) or deactivate (no highlight) based on the availability of those items for the chosen date range.

Observ	atory	Instrument	
Macquarie Islar Mawson Niue Norfolk Island Perth Townsville Vanimo Weipa Willis Island e-Callisto	nd	ASWS Niue ASWS Norfolk Island ASWS Perth ASWS Townsville ASWS Vanimo ASWS Weipa ASWS Willis Island e-Callisto Network Spectrometers GIRO	
		Data Product	_
Network Spectr CALLISTO Qu CALLISTO So	ometers uicklook Solar Spe lar Spectrogram	ectrogram Plots FITS files	

Select e-Callisto in the Observatory pane and the associated instruments available for the date range will appear selected.

Data Set Selection

Obse	ervatory	Instrument
Observatory Macquarie Island Mawson Niue Norfolk Island Perth Townsville Vanimo Weipa Willis Island e-Callisto		ASWS Mawson ASWS Niue ASWS Norfolk Island ASWS Perth ASWS Townsville ASWS Vanimo ASWS Vanimo ASWS Weipa ASWS Willis Island e-Callisto Network Spectrometers
		Data Product
Network Spe CALLISTO CALLISTO	ctrometers Quicklook Sol Solar Spectro	ar Spectrogram Plots gram FITS files

Single-click each desired entry in the Data Product pane to add that product to the query.

Data Set Selection



When done, click the Apply The Above Conditions button to lock in the query elements.

The left-hand menu provides a summary count of the observatories, instruments and products selected for the query in the SOURCES panel - a quick scan of this can be a handy confirmation of user selections prior to the query request.

In the left-hand menu click Run Query to send the request to the VWO server.

Instrument: e-Callisto		1	Expand
VWO Query Processing	Close 🗙	Y	
Searching VWO database (eCallisto Spectrogram) Status: COMPLETE			
		J	

When the request has completed the Query Processing popup will display a "COMPLETE" label - click the X in the upper right-hand corner to dismiss the popup.



Click Expand in the upper right-hand corner of an instrument's listings to view the products and dates available for the declared time range.

WO Query Builder	version: a	
nstrument: e-Callisto	Collapse	
Product: CALLISTO Quicklook Solar Spectrogram Plots (170 retu) This will open an image tab. Date/Tim Images: ALASKA LMRO_Australia RCAG ROSWELL-NM SSRT Date/Time: 20 00:00:01 Image: MEXART		
Date/Time: 2016/01/01 00:00:03 Image: INDONESIA		
Date/Time: 2016/01/01 00:00:05 Image: KASI		
Date/Time: 2016/01/01 00:05:18 Image: BIR		
Date/Time: 2016/01/01 00:15:00		

When the results are available they are presented as a list of available date/time values providing links to individual remote data files, which can be viewed via the web browser.

