



BIRDS-3 CW Analysis Software

Manual

17 June, 2019 Makiko Kishimoto from BIRDS-3 member



CW analysis software



BIRDS-3 CW Analysis Software V2.1	- 🗆 X
Kyutech Kyutu institute of technology	GS Callsign : Your Callsign
UTC: 20XX/XX/XX XX:XX:XX Start CW Satellite:	NepaliSat-1 (JG6YLF) V CW code: 0123456789 Analysis
CW Type1	CW Type2
Battery Voltge [V] :	Gyro X [deg/sec] :
Battery Current [mA] :	Gyro Y [deg/sec] :
Battery Temperature [C] :	Gyro Z [deg/sec] :
Operation Mode :	Auto HSM : Auto CAM :
Kill Main : Kill FAB :	Auto LDM : Auto ADCS :
Antenna Deployment : Solar Cell -Y :	Battery Heater :
Solar Cell -Z : Solar Cell +Y :	Reservaton Command Check :
Solar Cell +Z :	Uplink Success :
Time after last reset :	Backplane Temperature [C] : Cross Store
BIRDS-3 Information	Close
BIRDS-3 satellites' frequency Please visit to	BIRDS-3 Project Website :
CW beacon: 437.375MHz FM (GMSK - 4800bps) Downlink: 437.375MHz There is the C	W upload form. Thank you for your cooperation. Save



Put your GS Callsign



CVT Type1 Battery Voltge [V]: Battery Voltge [V]: Battery Temperature [C]: Operation Mode: Kill Main: Kill FAB: Solar Cell +Y: Solar Cell +Y: Solar Cell +Z: Battery Imperature [C]: Description Mode: Kill Kable: Solar Cell +Z: Solar Cell +Z: Solar Cell +Z: Solar Cell +Z: Solar Cell +Z:
Kyntech Kurter Kurter Kurter Kurter Kurter Kurter Battery Voltge [V]: Battery Voltge [V]: Battery Current [mA]: Battery Temperature [C]: Operation Mode: Kill Main: Kill FAB: Antenna Deployment: Solar Cell +X: Solar Cell +Y: Solar Cell +Z: Time after last reset: GS Callsign: Your Callsign Andensa Gyro X [deg/sec]: Gyro Z [deg/sec]: Auto HSM: Auto ADCS: Battery Heater: Reservation Command Check: Uplink Success:
UTC: 20XX/XX/XX XXXX Start CW Satellite: NepaliSat-1 (JG6YLF) ~ CW code: 1123456789 Analysis CW Type1 Battery Voltge [V]:
CW Type1 Battery Voltge [V]: Battery Current [mA]: Battery Current [mA]: Battery Temperature [C]: Operation Mode: Kill Main: Kill FAB: Antenna Deployment: Solar Cell +X: Solar Cell +Z: Solar Cell +Y: Solar Cell +Z: Time after last reset: CW Type2 Gyro X [deg/sec]: Gyro X [deg/sec]: Gyro Y [deg/sec]: Gyro Z [deg/se
Battery Voltge [V]: Gyro X [deg/sec]: Battery Current [mA]: Gyro Y [deg/sec]: Battery Temperature [C]: Gyro Z [deg/sec]: Operation Mode: Auto HSM : Kill Main: Kill FAB: Antenna Deployment: Auto LDM : Solar Cell +X: Solar Cell -Y: Solar Cell +Z: Solar Cell +Y: Lime after last reset: Backplane Temperature [C]:
Battery Current [mA]: Gyro Y [deg/sec]: Battery Temperature [C]: Gyro Z [deg/sec]: Operation Mode: Auto HSM: Kill Main: Kill FAB: Antenna Deployment: Auto LDM: Solar Cell +X: Solar Cell -Y: Solar Cell +Z: Solar Cell +Y: Solar Cell +Z: Solar Cell +Y: Solar Cell +Z: Battery Heater: Battery Heater : Uplink Success : Uplink Success : Due to the sum of
Battery Temperature [C]: Gyro Z [deg/sec]: Operation Mode: Auto HSM: Kill Main: Kill FAB: Antenna Deployment: Auto LDM: Solar Cell +X: Solar Cell -Y: Solar Cell +Z: Solar Cell +Y: Solar Cell +Z: Solar Cell +Y: Time after last reset: Backplane Temperature [C]:
Operation Mode : Auto HSM : Auto CAM : Kill Main : Kill FAB : Auto LDM : Auto ADCS : Antenna Deployment : Battery Heater : Battery Heater : Solar Cell +X : Solar Cell -Y : Reservaton Command Check : Solar Cell +Z : Solar Cell +Y : Uplink Success : Time after last reset : Backplane Temperature [C] :
Kill Main: Kill FAB: Antenna Deployment: Solar Cell +X: Solar Cell -Z: Solar Cell +Z: Time after last reset: Backplane Temperature [C]:
Antenna Deployment : Solar Cell +X : Solar Cell +Z : Solar Cell +Z : Time after last reset : Backplane Temperature [C] :
Solar Cell +X : Solar Cell -Y : Solar Cell -Z : Solar Cell +Y : Solar Cell +Z : Uplink Success :
Solar Cell -Z : Solar Cell +Y : Solar Cell +Z : Uplink Success : Time after last reset : Backplane Temperature [C] :
Solar Cell +2 :
BIRDS-3 Information Please visit to BIRDS-3 Project Website : Clear
BIRDS-3 satellites' frequency <u>https://birds3.birds-project.com/</u>
FM (GMSK - 4800bps) Downlink: 437.375MHz There is the CW upload form. Thank you for your cooperation. Save





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Kyutech Kyutech	GS Callsign : Your Callsign
UTC: 20XX/XX/XX XX:XX:XX Start CW Satellite:	NepaliSat-1 (JG6YLF) V CW code: 0123456789 Analysis
CW Type1	CW Type2
Battery Voltge [V] :	Gyro X [deg/sec] :
Battery Current [mA] :	Gyro Y [deg/sec] :
Battery Temperature [C] :	Gyro Z [deg/sec] :
Operation Mode :	Auto HSM : Auto CAM :
Kill Main : Kill FAB :	Auto LDM : Auto ADCS :
Antenna Deployment : Solar Cell +X : Solar Cell -Y :	Battery Heater :
Solar Cell -Z : Solar Cell +Y :	Reservaton Command Check :
Solar Cell +Z :	Uplink Success :
Time after last reset :	Backplane Temperature [C] : Correction (Construction)
BIRDS-3 Information	PIRDS 2 Project Website : Clear
BIRDS-3 satellites' frequency	ttps://birds3.birds-project.com/
CW beacon: 437.375MHz FM (GMSK - 4800bps) Downlink: 437.375MHz There is the C	W upload form. Thank you for your cooperation. Save



Select the satellite



BIRDS-3 CW Analysis Software V2.1	- 🗆 X
Kyutech Kyushu institute of Technology	GS Callsign : Your Callsign
CW Type1	-CW Type2
Battery Voltge [V] :	Gyro X [deg/sec] :
Battery Current [mA] :	Gyro Y [deg/sec] :
Battery Temperature [C] :	Gyro Z [deg/sec] :
Operation Mode :	Auto HSM : Auto CAM :
Kill Main : Kill FAB :	Auto LDM : Auto ADCS :
Antenna Deployment : Solar Cell +X : Solar Cell -Y :	Battery Heater :
Solar Cell -Z : Solar Cell +Y :	Reservaton Command Check :
Solar Cell +Z :	Uplink Success :
Time after last reset :	Backplane Temperature [C] :
BIRDS-3 Information	
Please visit to	BIRDS-3 Project Website : Clear
CW beacon: 437.375MHz	ttps://birds3.birds-project.com/
FM (GMSK - 4800bps) Downlink: 437.375MHz There is the C	W upload form. Thank you for your cooperation. Save



Put the CW HK data



BIRDS-3 CW Analysis Software V2.1	- 🗆 X
Kyutech Kyushu institute of Technology	GS Callsign : Your Callsign
UTC: 20XX/XX/XX XX:XX:XX Start CW Satellite :	NepaliSat-1 (JG6YLF) V CW code: 0123456789 Analysis
CW Type1	CW Type2
Battery Voltge [V] :	Gyro X [deg/sec] :
Battery Current [mA] :	Gyro Y [deg/sec] :
Battery Temperature [C] :	Gyro Z [deg/sec] :
Operation Mode :	Auto HSM : Auto CAM :
Kill Main : Kill FAB :	Auto LDM : Auto ADCS :
Antenna Deployment : Solar Cell -Y :	Battery Heater :
Solar Cell -Z : Solar Cell +Y :	Reservaton Command Check :
Solar Cell +Z :	Uplink Success :
Time after last reset :	Backplane Temperature [C] :
BIRDS-3 Information	Clear
BIRDS-3 satellites' frequency	https://birds3.birds-project.com/
CW beacon: 437.375MHz FM (GMSK - 4800bps) Downlink: 437.375MHz There is the C	W upload form. Thank you for your cooperation. Save



CW HK data





<u>Call Sign</u>

- Uguisu (Japan): JG6YLE
 NepaliSat-1 (Nepal): JG6YLF
- Raavana-1 (Sri Lanka): JG6YLG

Short Message

BIRDS-3 will send short message to satellites which is from Amateur radio community or organization whose GS has callsign.

House Keeping Data

There are 5 bytes (40 bits) data and it shows satellite's health condition.



Click "Analysis"



KULLEN KULLEN KULLEN KULLEN KULLEN KULLEN KULLEN KULLEN KULLEN KULLEN KULLEN KULLEN KULLEN KULLEN KULLEN KULLEN KULLEN KULLEN KULLEN KULL
UTC: 20XX/XX/XX XX:XX Start CW Satellite: NepaliSat-1 (JG6YLF) ~ CW code: 0123456789 Analysis CW Type1
CW Type1 CW Type2 Battery Voltge [V] : Gyro X [deg/sec] : Battery Current [mA] : Gyro Y [deg/sec] : Battery Temperature [C] : Gyro Z [deg/sec] :
Battery Voltge [V]: Gyro X [deg/sec]: Battery Current [mA]: Gyro Y [deg/sec]: Battery Temperature [C]: Gyro Z [deg/sec]:
Battery Current [mA]: Gyro Y [deg/sec]: Battery Temperature [C]: Gyro Z [deg/sec]:
Battery Temperature [C] : Gyro Z [deg/sec] :
Operation Mode : Auto HSM : Auto CAM :
Kill Main: Kill FAB: Auto LDM: Auto ADCS:
Antenna Deployment : Solar Cell +X : Solar Cell +Y : Battery Heater :
Solar Cell -Z : Solar Cell +Y : Reservaton Command Check :
Solar Cell +Z : Uplink Success :
Time after last reset : Backplane Temperature [C] : Constraint
BIRDS-3 Information Clear
BIRDS-3 satellites' frequency https://birds3.birds-project.com/
CW beacon: 437.375MHz FM (GMSK - 4800bps) Downlink: 437.375MHz There is the CW upload form. Thank you for your cooperation.

After analyzing, don't need to save each time.



When finished operation..



BIRDS-3 CW Analysis Software V2.1					
Kyutech Kyuhu Institute of Technology			GS Callsign :	Your Callsig	n
UIC: 20XX/XX/XX XX:XX Start CW	Satellite :	epansat-1 (JG01LF) V	Cw code : 01234	430789	Analysis
CW Type1		CW Type2			
Battery Voltge [V] :		Gyro X [deg/sec] :			
Battery Current [mA] :		Gyro Y [deg/sec] :			
Battery Temperature [C] :		Gyro Z [deg/sec] :			
Operation Mode :		Auto HSM :	Auto	CAM :	
Kill Main : Kill FAB :		Auto LDM :	Auto	ADCS :	
Antenna Deployment :		Battery Heater :			
Solar Cell +X : Solar Cell +Y :		Reservaton Comman	d Check :		
Solar Cell +Z :		Uplink Success :			
Time after last reset :		Backplane Temperatu	ure [C] :	<u>72月70日</u> 編明	
BIRDS-3 Information				_	
RIPOC 2 established fragmanen	Please visit to BII	RDS-3 Project Website :			Clear
CW beacon: 437.375MHz	http: There is the Citty	s://birds3.birds-project.	<u>com/</u>		Save
Fivi (Givisk - 48000ps) Downlink: 457.375MHz	mere is the CW t	грюци јогт. тнитк уби ј	for your cooperation	011.	

Please "save" Excel file from here.



After Click "Save"



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整理 ▼ 新しいフォルダー					?
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タウンロード	BIRDS-3_Operation_Report_2	2019/06/17 9:19	Microsoft Excel 7	зKB	
デスクトップ	BIRDS-3_Operation_Report_3	2019/06/17 9:23	Microsoft Excel 7	зKB	
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Please decide file name, and Save to any folder.



Saved Excel file



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		А		В	С	D	Е	F	
1	2019/	6/17 0:19:11	JG6YBW	(Kyutech)	JG6YLF	NP	040000C046		
2	2019/	6/17 0:19:32	JG6YBW	(Kyutech)	JG6YLF	NP	9F89876000		
3	2019/	6/17 0:22:29	JG6YBW	(Kyutech)	JG6YLF	NP	040000C046		
4	2019/	6/17 0:22:53	JG6YBW	(Kyutech)	JG6YLF	NP	9F89876000		
5	2019/	6/17 0:23:19	JG6YBW	(Kyutech)	JG6YLG	SL	040000C049		
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10									-
	\mathbf{F}	BIRDS-3	CW Raw	Data	+	€ ◀			•
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There are data (UTC data and time, Satellite Callsign, satellite country, GS Callsign, Raw Data).





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Solar Cell +Z :	Uplink Success :
Time after last reset :	Backplane Temperature [C] :
BIRDS-3 Information	Clear
BIRDS-3 satellites' frequency h	ttps://birds3.birds-project.com/
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There are information about frequency and operation.



Amateur Radio Operators





We will upload information about satellites after antenna deployment. There are information about CW format, CW timing, CW frequency and Downlink frequency.



Satellite Data Collection



BIRDS-3 Satellite Data Collection × +	- 0 ×
← → C https://birds3.birds-project.com/document/birds-3-satellite-data-collection/	🔤 🛧 🧔 🖷 💹 🖬 🙆 🚯 🗄
About Amateur Radio Operators Articles Events Lab News Member BIRDS Newsletter Documents	
Satellite Data Collection	Search in the blog
⊘ May 20, 2019	Recent Posts
Data Collection This form is for collecting data of the BIRDS-3 CubeSat Constellation from amateur radio contributors all over the World. *必須 Which type of data did you receive? * 選択	QSL Cards CW format BIRDS-3 Deployment Date BIRDS-3 Launch date Press Conference
Which BIRDS-3 satellite did you receive the data from? * 選択 Please insert the data that you received * 回答を入力	

This is the form to update received CW data. We will acknowledge your CW reception from our satellites with QSL cards.

https://birds3.birds-project.com/2019/06/17/qsl-cards/



Message Request



message request registration ×	- 0 ×
← → C ♠ https://birds3.birds-project.com/document/message-request/	🗟 🕁 🤷 🕷 💹 🚍 🚱 🙆 👘 E
About Amateur Radio Operators Articles Events Lab News Member BIRDS Newsletter	
Documents	
HC Message Request ators	Search in the blog Q
Satellite Data Collection Message kequest	
O March 31, 2019 D May 20, 2019	Recent Posts
	<u>QSL Cards</u>
Massage Deguast Degistration	<u>CW format</u>
Message Request Registration	BIRDS-3 Deployment Date
Please fill out the following details with a six letter message that you would like to be displayed in the CW beacon of BIRDS-3 Satellites. Please note that you need to have a valid Call Sign to submit the request.	BIRDS-3 Launch date Press Conference
*必須	
Call Sign * Please enter a valid Call Sign	f
回答を入力	
Your Name *	
回答を入力	
https://birds3.birds-project.com/document/message-request/	

One of BIRDS-3 mission is Sending Short Message from BIRDS-3 satellites, which is from Amateur radio community or organization whose GS has callsign. Please apply your short message to BIRDS-3. It will may be heard from BIRDS-3 satellites!!