



Long Path



Volume 33 Issue 7

SEMDXA NEWSLETTER

July 2023



From the Editor's DESK



Another delayed issue! Life is just getting too complicated.

SEMDXA held their annual election at the June Meeting. I'll let our president announce the results in a later issue of The Long Path, so stayed tuned.

Man-o-man. What gives with 6M? If anyone has an explanation, me, Al, Rick, Fred (number one) and a lot more would like a reasonable explanation (or any would be OK). This is the worst! Although I did work a new one, but I was expecting many more. Very disappointing. Magic Band? Humbug! No magic this season.

Hope everyone had a safe and enjoyable 4th of July. We in Sarnia, enjoy watching fireworks in Port Huron from across the river. It's always an annual crowd pleaser!

Enjoy your summer. 73. Chet VE3CFK

NEXT Meeting:

In-Person

September 13th, 2023 at 7 PM

Fork n' Pint in Waterford

Program

TBA

SEMDXA OFFICERS

President: Fred Goeckel, **KD8ZYD**
Vice-president: Pete Gladysz, **K8PGJ**
Treasurer: Brad Nowak, **N8SNM**
Secretary: Vacant
Program Director: Ted Pauck, **K8NA** and Steve Culp, **K8QKY**
Directors: Doug **N8VY** and Bob **K8RGM**
Club Appointees:
Web Site Editor: Doug Basberg, **N8VY**
LP Publisher: Chet Latawicz, **VE3CFK**
ARRL and CQ Appointees:
DXCC Checker: Stan Arnett, **AC8W**
DXCC Checker: Bill Jones, **N8KF**
VUCC Checker: Al Bailey, **K8SIX**
VUCC Checker: Jim Sanford, **K8ZZU**
CQ Checker: Mike Rudzki, **N8MR**
CQ Checker: Al Bailey, **K8SIX**

SEMDXA Meeting Minutes

May Meeting

The meeting started at 7:00PM and was led by our President Fred, KD8ZYD. There were 17 people present and 4 who ZOOMed in.

Acceptance of meeting minutes for the April meeting as presented in the May issue of the Long Path was requested by Chet, VE3CFK. With no comments or corrections, acceptance was motioned by Fred, W1SKU and seconded by Fred, KD8ZYD.

Treasurers report was presented by Brad, N8SNM. Motion to accept by Tim, K8NWD and seconded by Pete, K8PGJ.

Old Business:

- Club DUES are due

•New Business:

- Chet VE3CFK made a motion to decrease the 350km zoning for DX entities down to 175 km, which would increase the DXCC count. Stan, AC8W was asked to forward the motion to the ARRL DXCC committee. It was accepted by Steve, K8QKY and 2nded by Fred KD8ZYD.
- Chet, VE3CFK made a second motion to do away with the need to operate a DXpedition from land. Proposing operation from the dock or a reasonable distance from shore is acceptable if confirmed by GPS reporting as accomplished by marine vessels as they ply the seas. Motion accepted by Fred, KD8ZYD and 2nded by Steve, K8QKY. Stan, AC8W was asked to take the proposal to the ARRL DXCC committee.

The evenings presentation was by Bob Allphin, K4UEE on his 11 DXpeditions which were at the time on the Top 10 Most Wanted

Thank you Bob for the excellent presentation!

Meeting adjourned at 8:40, Pete, K8PGJ motioning to close with Steve, K8QKY 2nding.

June Meeting

The meeting started at 6:53PM and was led by our President Fred, KD8ZYD. There were 13 people present and 5 who ZOOMed in.

There was NO request for meeting Minute acceptance, as the May minutes were not published in the June issue of The Long Path.

Treasurers report was presented by Brad, N8SNM. Motion to accept by Keith, KB1SF and seconded by Fred, W1SKU.

Old Business:

- Club DUES are due

New Business:

- Brad, K8SNM proposed that the club dues be reduced from \$25 to \$20 per year, as the club expenses have decreased dramatically since guest speakers are now ZOOMing their presentations rather than travelling to the club meeting. Discussion was held amongst the membership present. Those in attendance agreed to keep the fee at \$25. The motion to keep the membership dues at \$25/year was made by Keith, KB1SF and seconded by Doug, N8VY. All those in attendance agreed.
- SEMDXA elections were held. The results are pending announcement by our past president in the September issue of The Long Path.

The evenings presentation was by Glenn Johnson, W0GJ on the recent DXpedition to Sable Island, CY0J.

Thank you Glenn for the excellent presentation!

The meeting adjourned at 8:38 PM with motion to close from Al, K8SIX and 2nded by Mike, WD8S 2nding.

PJ5 - Sint Eustatius

Our PJ5 setup is now ready to start. Spiderbeam and verticals are now available, hoping they remain up in the strong winds. As I got some question regarding the use of the special PE6Q call, this might need some explanation. The license for PE6Q is granted by the Dutch Authorities under the limiting condition that it may only be used within the Netherlands Territory. The Netherlands Territory is defined as Netherlands plus the so called BES island (Bonaire, Sint Eustatius and Saba). The same Dutch Authority issued also the PJ5C special call as the BES islands are 100% under their jurisdiction (contrary to Aruba, Sint Maarten en Curacao). So hope to work you all soon on the band!

E6 - Niue

Stan, LZ1GC and Dimo, LZ1ON changed their dates to October 10-23 for their Niue Island DXpedition.

Postal Rate Increases

Product	Current Prices	New Prices
First-Class Mail Letters (1 oz.)	\$0.63	\$0.66
First-Class Mail Letters (metered 1 oz.)	\$0.60	\$0.63
Domestic Post-cards	\$0.48	\$0.51
First-Class Mail International Letter (1 oz.)	\$1.45	\$1.50
First-Class Mail International® Postcards	\$1.45	\$1.50

Price increases go into effect July 9th, 2023

ZOOM MEETINGS

In person meetings have resumed. We are getting better at presenting ZOOM meetings. Really hope you can join us in person, but if you can't, please join our ZOOM meeting.

For those not familiar with ZOOM, please refer to the 2020 October or November issues of The Long Path which are accessible online on the SEMDXA Website for details on how to setup your computer for a ZOOM meeting.

Use the one step process and just click on the link below to join upcoming meetings.

<https://umich.zoom.us/j/91352970493?pwd=N0t3N1RpUFZjVGQzZHZwTnU0bHpuUT09>

3C - Eq. Guinea

Ersoy, TA2OM is QRV as 3C3CA from Bioco Island, IOTA AF-010, for another two months.

FP - St. Pierre & Miq.

Eric, KV1J will be QRV as FP/KV1J from June 27 until July 11. Activity will be on 80 to 6 meters using CW, SSB, and various digital modes, with a focus on 60 and 6 meters.

5MHz on Kosovo

Dear all: This is to inform you that the Kosovo parliament has recently approved the 5 Mhz frequency band for amateur radio services in Kosovo, as confirmed by ARKEP (The Kosovo Regulatory Authority for Telecommunication services).

Best wishes and greetings from Kosovo
Vjollca, Z61VB - President of SHRAK, Kosovo

T2C - Tuvalu



Our return to the Pacific is scheduled for the fall of 2023. With the help of Jared N7SMI and John KK7L, important details for Tuvalu – T2 could be clarified. It is really difficult to find perfect antenna opportunities on Funafuti island.

As of July 2023, we have all permits in hand. Accommodation as well as flights for our planned destination in October 2023 are booked and confirmed. This means we are ready to announce a new serious and lightweight expedition to Tuvalu.

The team consists largely of members of the 2022 P29RO expedition, supplemented by new experienced OPs. We are all looking forward to October 10 to be on the air on with the call sign T2C until October 30. Members are Ronny DG2RON, Fred DH5FS, Olaf DJ7TO, Werner DJ9KH, Joe DK5WL, Frank DL1KWK, Georg DL4SVA, Christian DL6KAC, Axel DL6KVA, Olaf DL7JOM, Rolf DL7VEE and Andree DL8LAS. Some team members will leave a few days earlier.

It is planned to operate four stations with power amplifiers in CW, SSB, RTTY and FT8 from 160 to 6m, including 60m, 24 hours a day. We will use our private equipment. The focus lies – given the current state of the solar cycle – on the higher bands.

Any donations are welcome.

NOT CANCELLED YET

Some things to look forward to:

- SEMDXA September in-person meeting at Fork n' Pint in Waterford on Wednesday, September 13th at 7:00 PM
- 2024 Hamvention
- The August issue of The Long Path
- W9DXCC
- Thanksgiving, Christmas

Hamfests

- 7/15/23 - GM ARC Trunk Swap, Shelby Twp, MI
- 7/15/23 - NOARS Fest, Elyria, OH
- 7/16/23 - Van Wert, Van Wert, OH
- 7/22/23 - Ashtabula County Hamfest, Pierpont, OH

VK9X - Christmas Is.

VX9XGM will be a November 21 to December 5 DXpedition by GM4YXI, Keith, and GM3WOJ, Chris. Keith says it feels really good to be planning this after the several year pause in their DX travels. The last trip was November-December, 2019. That was just before the coronavirus made international travel challenging at best, impossible at worst. The ops enjoy these trips, ZK2V and ZK2X in 2011, A35V and A35X in 2014, and V6Z in 2015 and 2016. They had a plan to go to Niue, E6 when they saw others going there in April and October, 2023.

Solar NEWS

From spaceweather.com

SUNSPOT COUNTS HIT A 21-YEAR HIGH:

The sun is partying like it's 2002. That's the last time sunspot counts were as high as they are now. The monthly average sunspot number for June 2023 was 163, according to the Royal Observatory of Belgium's [Solar Influences Data Analysis Center](http://www.solar.be). This eclipses every month since Sept. 2022:



Above: [This plot](#) is based on NOAA's interactive Solar Cycle Progression. [Check it out!](#)

Solar Cycle 25 wasn't expected to be this strong. When it began in Dec. 2019, forecasters believed it would be a weak cycle akin to its immediate predecessor Solar Cycle 24. If that forecast had panned out, Solar Cycle 25 would be one of the weakest solar cycles in a century.

Instead, Solar Cycle 25 has shot past Solar Cycle 24 and may be on pace to rival some of the stronger cycles of the 20th century. The last time sunspot numbers were this high, the sun was on the verge of launching the [Great Halloween Storms](#) of 2003, which included the strongest X-ray solar flare ever recorded ([X45](#)), auroras as far south as Texas, and [a CME so powerful](#) it was ultimately detected by the Voyager spacecraft at the edge of the solar system.

FT5X - Kerguelen Is

KERGUELEN ISLANDS.... FT5X...



It's apparently no secret that Thierry F6CUK of **FT8WW** fame plans (emphasis on *plans*) to go with a second operator to the Kerguelen Islands in late 2024. No exact dates or further info is known, but this news was also announced from the stage at the GDXF forum, FHN 2023. Wait and see for more..

W8S - Swains Is

The W8S team would like to offer you the opportunity to join a presentation where they will explain their planning and setup of the upcoming Swains 2023 DXpedition. There will also be time for Q&A with the team members.

How: via Zoom.

When: 14 July 2023.

Time: 18:00 UTC.

Duration: approx. 1 hour.

If you want to attend this presentation, please send a confirmation to w8s@dx.to. Please also include your call sign. After we have received your confirmation, you will receive a mail with the link to join the presentation.

H40 - Tomotu Is



The Intrepid-DX Group is pleased to announce that all of our plans to activate H40 Temotu Province are going well.

Due to changes in flight schedules, we are announcing our operational dates will be from October 26th and we will complete our operations on November 9th.

We have assembled a team of eight operators to make a fifteen-day activation of this entity. Temotu Province ranks #45 on Club Log's most wanted DXCC list.

Team members include: Rob N7QT, Paul N6PSE, Sandro VE7NY, Jun OE1JUN/JH4RHF, Heye DJ9RR, Al K3VN, Arliss W7XU and David WD5COV. We will make a significant effort on the low bands during this activation. We will use 1500 watts on the 80/160 meter bands. We will use CW/SSB and FT8 Fox/Hound modes. We plan to be active during the CQ WW SSB Contest October 28th-29th.

As you can imagine, shipping all of our gear, generators etc. to Temotu Province is quite costly. The H40WA Temotu 2023 team appreciates any and all sponsors and donors who wish to support our mission. All individual donors of \$10 or more will automatically receive your LoTW and QSL cards via the mail. You may donate via PayPal to intreiddxgroup@gmail.com

VK5DG/9 - Norfolk

David, VK5DG will be active from Norfolk Island as VK5DG/9 during July 21-27, 2023. This is a satellites activity / DXpedition, focusing on Greencube IO-117 but he also hopes to use the LEOs AO-91, Tevel series, PO-101, RS-44 and AO-7 sats.

V31 - Belize

Mark DK8MM and Uwe DL8UD will be active from Maya Hill Lodge, Belize as V31XT and V31KO during September 6-14, 2023. participation in the WAE SSB contest as V3O. QSOs will be uploaded to Club Log and LoTW.

OX3LX - Greenland



Bo, OZ1DJJ will be QRV from Qaanaaq (Grid: FQ57JL) as OX3LX during June 28 to July 16, 2023. Focus on 6m and 4m but he will also be on HF bands. Possibility of a short trip to Herbert Island or Meteorit Island (both NA-134)

Thank you to Bernie, W3UR, The Daily DX, The Weekly DX, ARRL and DX World, NG3K, CLUBLOG, Dales Tales and CQ magazine for their contributions to this newsletter.

CLUBLOG

Most wanted - Top 25

1. P5 DPRK (NORTH KOREA)
2. 3Y/B BOUVET ISLAND
3. FT5/W CROZET ISLAND
4. BS7H SCARBOROUGH REEF
5. CE0X SAN FELIX ISLANDS
6. BV9P PRATAS ISLAND
7. KH7K KURE ISLAND
8. KH3 JOHNSTON ISLAND
9. 3Y/P PETER 1 ISLAND
10. FT/G GLORIOSO ISLAND
11. FT5/X KERGUELEN ISLAND
12. YV0 AVES ISLAND
13. VK0M MACQUARIE ISLAND
14. ZS8 PRINCE EDWARD & MARION IS.
15. KH4 MIDWAY ISLAND
16. PY0S SAINT PETER AND PAUL ROCKS
17. PY0T TRINDADE & MARTIM VAZ IS.
18. KP5 DESECHEO ISLAND
19. VP8S SOUTH SANDWICH ISLANDS
20. KH5 PALMYRA & JARVIS ISLANDS
21. ZL9 NEW ZEALAND SUBANTARCTIC IS.
22. FK/C CHESTERFIELD ISLANDS
23. EZ TURKMENISTAN
24. VK0H HEARD ISLAND
25. YK SYRIA

SOLAR STUFF

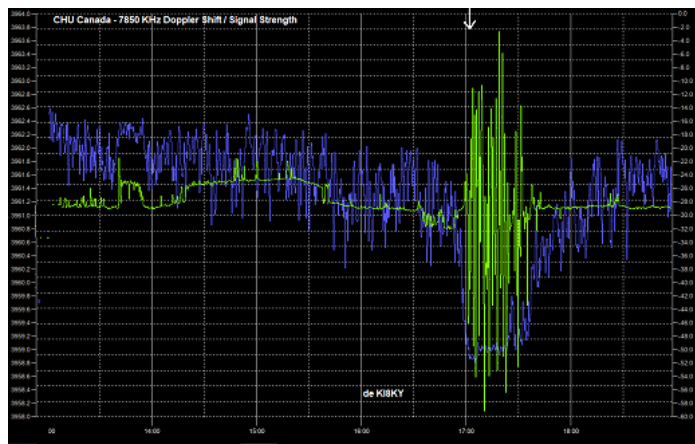
From spaceweather.com

A NEW WAY TO DETECT SOLAR FLARES:

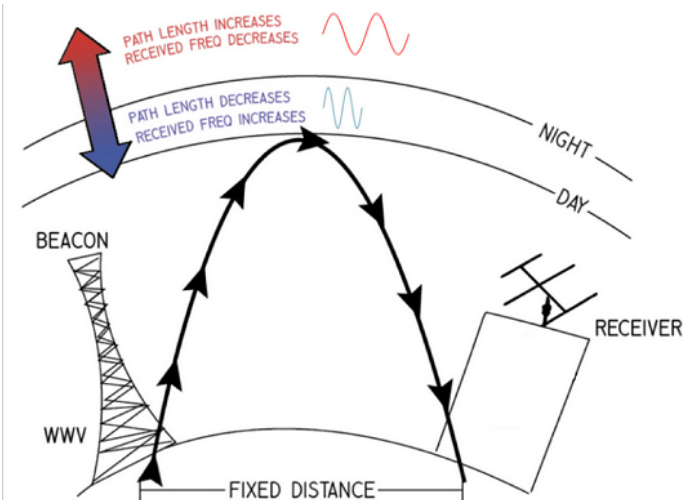
Around the world, ham radio operators are experimenting with a new way to detect solar flares--the Doppler Shift method. Brian Curtis of Sault Ste Marie, Michigan, demonstrated the technique on June 20th when the sun produced a powerful X1.1-class solar flare:

"I monitor the frequency and field strength of Canada's CHU time station transmitting at 7850 KHz," explains Curtis. "During the X-class flare event, I was able to detect the Doppler shift of the station's

carrier frequency (green plot). It shifted by 5 Hz, which is a small change, but very obvious!"



When radiation from a solar flare hits Earth's atmosphere, it ionizes the air, temporarily boosting the thickness of our planet's ionosphere. Any radio station skipping off the ionosphere will suddenly find its frequency Doppler shifted (because its reflection point is moving). Shortwave stations such as WWV, WWVH, and CHU transmit carriers with atomic-clock grade frequency stability, so they are perfect sources for Doppler monitoring.



"I have been monitoring radio stations for decades, noting sudden changes in signal strength as a means of monitoring space weather events," says Curtis. "It is only fairly recently (~4 months) that I started to experiment with monitoring the Doppler shift of HF stations. The June 20th X-class flare event is by far the most dramatic that I have witnessed thus far."

PERIODIC TABLE OF MAJOR AMATEUR RADIO CONTESTS

by Chet VE3CFK



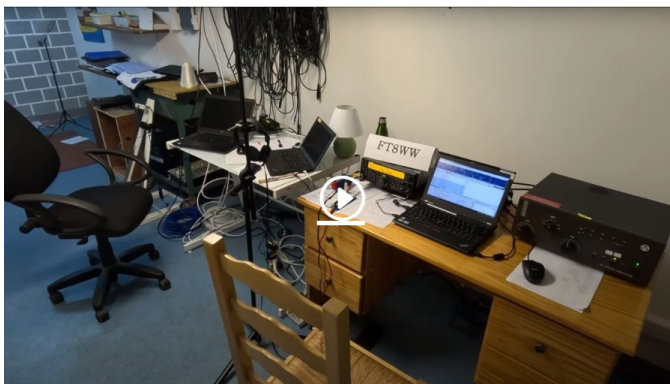
2023

Multimode	CW	Digital
Off-the-air	SSB	VHF/UHF

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1 0800Z 2358Z HAPPY NEW YEAR	4 2300Z 0300Z NA Sprint CW	5 0000Z 2400Z ARRL DX SSB	1 1500Z 1500Z SP Polish DX	2 1500Z 7QP/IN/DE New England QSO Parties	3 1800Z 2358Z ARRL Int'l Digital	1 0000Z 2358Z RAC CANADA DAY	5 1800Z 0600Z NAQP CW	6 0000Z 2358Z CW Ops CW Open	7 0600Z 0600Z Oceania PHONE	4 2100z 0300Z ARRL SS CW	1 2200z 1600Z ARRL 160
7 0800Z 2358Z ARRL RTTY Roundup	8 0000Z 2358Z CQWW WPX RTTY	11 2300Z 0300Z NA Sprint RTTY	12 0700Z 1300Z JIDX CW	9 1200Z 1158Z CQ-M DX	13 1200Z 0300Z ARRL June VHF	8 1200Z 1200Z IARU HF	9 0000Z 2358Z WAE CW	12 0000Z 2358Z WAE SSB	13 0000Z 0600Z Oceania CW	14 0600Z 0600Z WAE RTTY	15 0000Z 2358Z ARRL 10 Meter
14 0800Z 0558Z NAQP CW	15 0000Z 2400Z ARRL DX CW	18 1200Z 0200Z Russian DX	19 1600Z 0400Z Michigan QSO Party	15 1200Z 2100Z Contest University	16 1800Z 2400Z All Asian CW	17 0000Z 2400Z CQ WW VHF	18 1800Z 2100Z NAQP SSB	19 0000Z 0600Z WANJ/NH QSO Parties	20 1500Z 1458Z Worked All Germany	18 2100z 0300Z ARRL SS SSB	20 0000z 2358Z RAC Winter
21 1800Z 0558Z NAQP SSB	22 2300Z 2200Z CQ 160 SSB	24 0000Z 2358Z CQWW WPX SSB	25 1200Z 1200Z SP DX RTTY	26 1300Z 1700Z Hamvention	19 1800Z 2100Z ARRL Field Day	23 1200Z 1200Z Family Time	24 0000Z 2400Z WW Digi	26 1200Z 1200Z CQWW RTTY	27 0000Z 2400Z CQ WW SSB	28 0000Z 2400Z CQ WW CW	24 0000z 2358Z Happy Holidays
27 2200Z 2358Z CQ 160 CW			29 1200z 1158Z UK/EI DX CW	30 0600Z 2358Z CQ WPX CW	27 1200Z 1200Z RSGB IOTA	29 1200Z 1200Z RSGB IOTA	30 1200Z 1200Z RSGB IOTA				

Rev 1

FT8WW



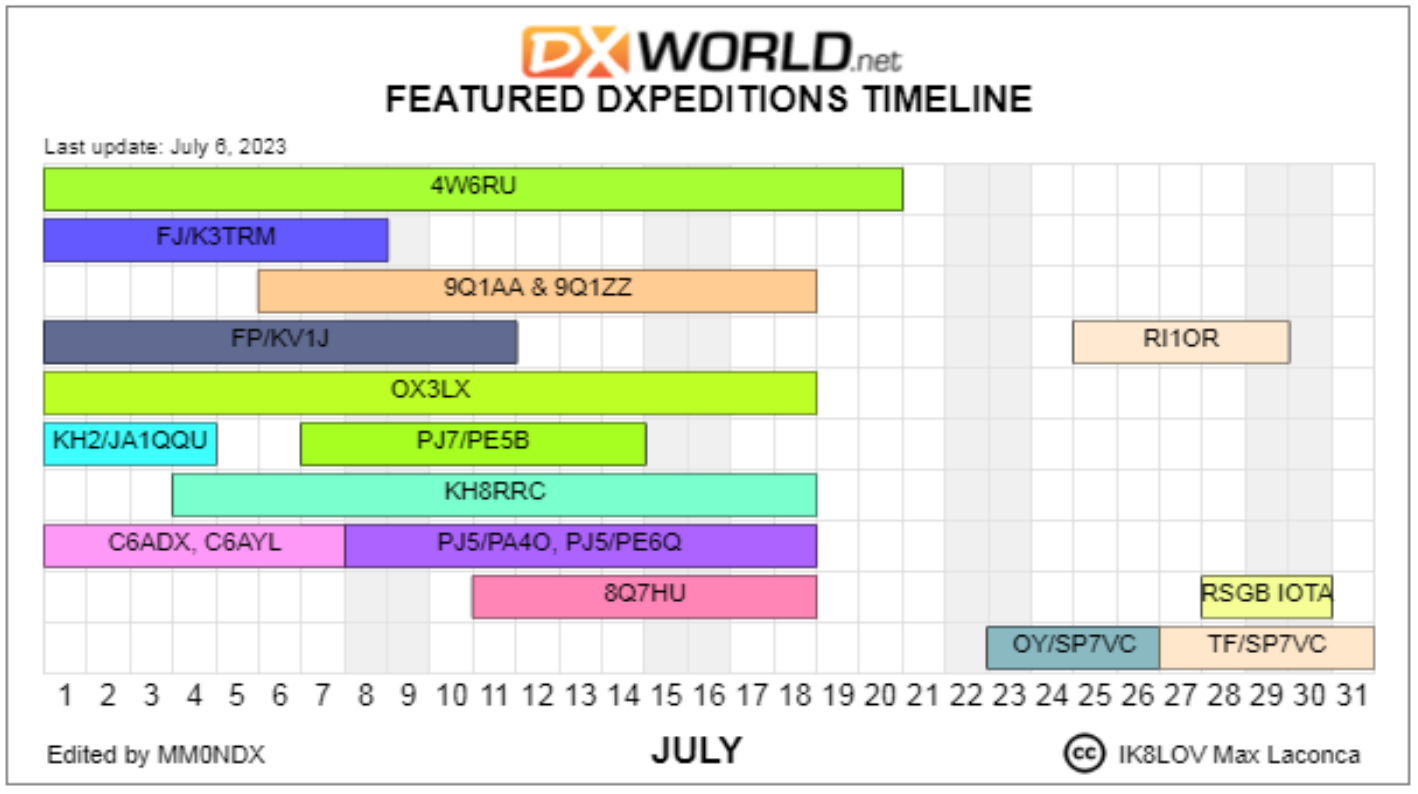
Compliments of DX World: a most excellent video (play above) produced by Patrick F2DX who says:

In this 21 minute 4k video you will discover not only CROZET (place of FT8WW amateur radio expedition from December 2022 to April 2023) but also the TROMELIN, KERGUELEN, SAINT-PAUL and AMSTERDAM islands which are part of the Terres Australes et Antarctiques Françaises (French Southern and Antarctic Lands).

- 00:43 Reunion Island
- 01:38 Tromelin Island
- 03:44 Crozet Archipelago
- 14:26 Kerguelen Archipelago
- 16:43 Amsterdam Island
- 19:53 Saint-Paul Island

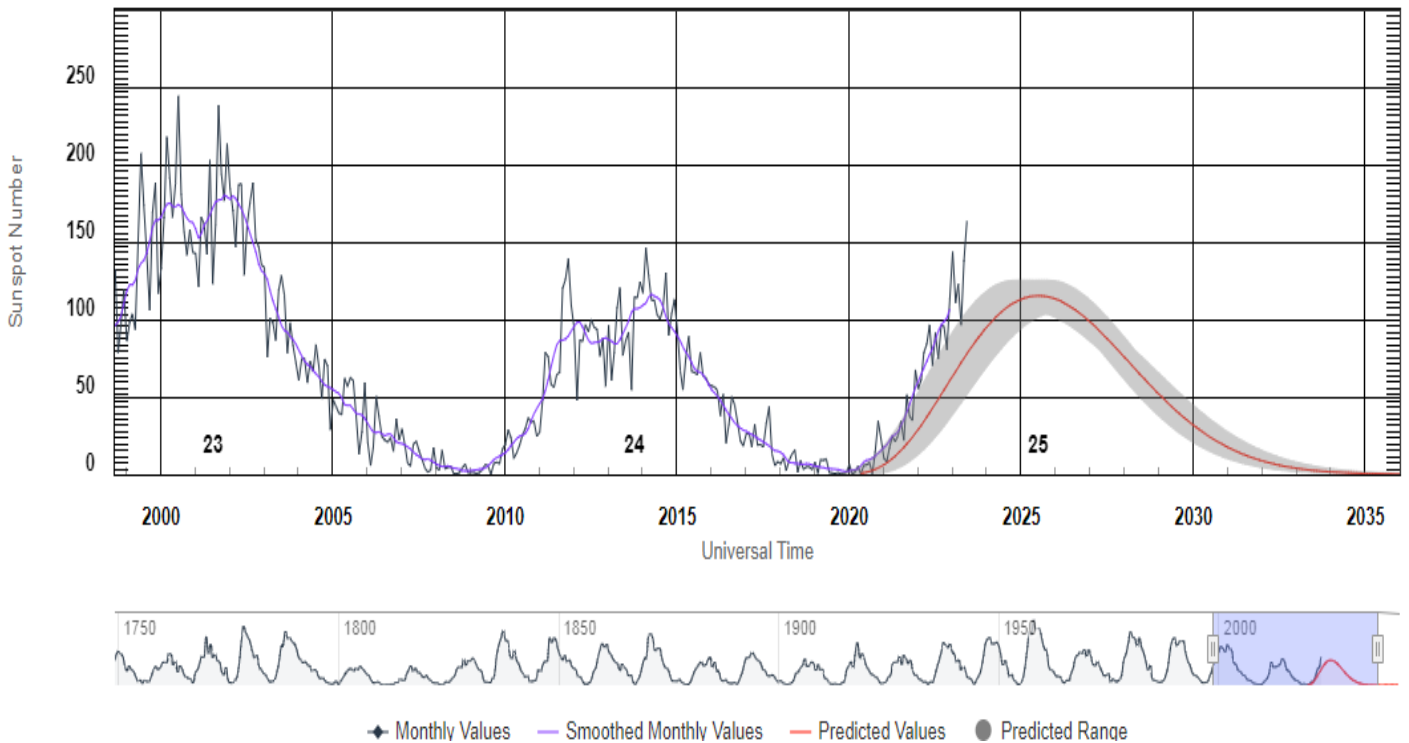
Upcoming DX

Credit to DX World



SOLAR CYCLE 25

NOAA/SWPC



Upcoming DX

Credit to: NG3K Amateur Radio
Contest/DX Page

Editors NOTE:

I've intentionally left a wide
margin here for your notes on
band and mode fills required.

Start Date	End Date	DGCC Entity	Call	QSL via	Reported by
2023					
June					
2023 Jun27	2023 Jul11	St Pierre & Miquelon	FP [spots]	LoTW	DXW.Net 20221114
2023 Jun28	2023 Jul18	Greenland	OX3LX [spots]	LoTW	425DXN 20230623
2023 Jun28	2023 Jul28	Timor Leste	4W6RU [spots]	LoTW	DXW.Net 20230629
July					
2023 Jul02	2023 Jul10	Rotuma	3D2BJ [spots]	LoTW	DXW.Net 20230702
2023 Jul04	2023 Jul18	American Samoa	KH8RRC [spots]	LoTW	425DXN 20230616
2023 Jul06	2023 Jul18	DR Congo	9Q1AA [spots]	LoTW	TDDX 20230425
2023 Jul06	2023 Jul18	Saba & St Eustatius	PJ5 [spots]	Club Log OQRS	PA8AD 20230219
2023 Jul07	2023 Jul14	Sint Maarten	PJ7 [spots]	LoTW	425DXN 20230630
2023 Jul11	2023 Jul18	Maldives	8Q7HU	CX3AN	OPDX 20230531
2023 Jul23	2023 Jul26	Faroe Is	OY	LoTW	DXW.Net 20230622
2023 Jul23	2023 Aug04	Guatemala	TG4	LoTW	KT8X 20230222
2023 Jul27	2023 Aug17	Iceland	TF	LoTW	DXW.Net 20230622
RSGB IOTA Contest (Jul 29-30, 2023) Check here for pericontest activity					
August					
2023 Aug20	2023 Sep09	DR Congo	9Q2WX	IZ8CCW	DXW.Net 20230510
2023 Aug28	2023 Sep12	St Kitts & Nevis	V47JA	LoTW	W5JON 20220530

Upcoming DX

Credit to: NG3K Amateur Radio
Contest/DX Page

2023 Aug31	2023 Sep14	Mariana Is	KH0	LoTW	DL2AH 20230116
September					
2023 Sep06	2023 Sep14	Belize	V31XT	LoTW	DXW.Net 20230707
2023 Sep12	2023 Sep18	Palau	T8	See Info	EA1CS 20230119
2023 Sep15	2023 Sep21	Greenland	OX0J	LoTW	DXW.Net 20230219
2023 Sep16	2023 Sep30	Guam	KH2	LoTW	DL2AH 20230116
October					
2023 Oct01	2023 Oct14	Samoa	5W0LM	9A3MR	DXW.Net 20230529
2023 Oct01	2023 Oct31	Vanuatu	YJ0TT	TBA	TDDX 20221222
2023 Oct02	2023 Oct10	St Vincent	J88PI	GW4DVB Direct	TDDX 20220216
2023 Oct02	2023 Oct15	French Pol- ynesia	TX6D	LoTW aft 6 mos	DXW.Net 20230623
2023 Oct03	2023 Oct15	Marshall Is	V7	LoTW	DL2AH 20230116
2023 Oct04	2023 Oct17	Swains I	W8S	TBA	DXW.Net 20230517
2023 Oct10	2023 Oct23	Niue	E6AM	LoTW	TDDX 20230105
2023 Oct10	2023 Oct30	Tuvalu	T2C	LoTW	TDDX 20230630
2023 Oct18	2023 Oct30	Micronesia	V63AH	LoTW	DL2AH 20230116
2023 Oct20	2023 Nov04	Chatham I	ZL7	LoTW	DXW.Net 20230616
2023 Oct25	2023 Oct31	Saba & St Eustatius	PJ5	LoTW	W5JON 20230205
2023 Oct26	2023 Nov09	Temotu	H40WA	LoTW	N6PSE 20230126

[CQ Worldwide DX Contest, SSB \(Oct 28-29, 2023\) Check here for pericon-](#)

Upcoming DX

Credit to: NG3K Amateur Radio
Contest/DX Page

November					
2023 Nov03	2023 Nov10	Niue	E6AJ	DF8AN (B/d)	DXW.Net 20230406
2023 Nov04	2023 Nov19	Marquesas	TX7L	LoTW	TDDX 20230306
2023 Nov08	2023 Nov27	Timor Leste	4W8X	DJ4MX	TDDX 20230622
2023 Nov15	2023 Nov28	Micronesia	V6EU	LoTW	DL2AWG 20230707
2023 Nov15	2023 Nov29	Solomon Is	H44WA	M0URX	DXW.Net 20230513
2023 Nov21	2023 Dec05	Christmas I	VK9XGM	LoTW	DXW.Net 20230506
CQ Worldwide DX Contest, CW (Nov 25-26, 2023) Check here for pericon-					
2023 Nov26	2023 Dec08	St Martin	TO9W	LoTW	K9EL 20230508
2024					
January					
2024 Jan18	2024 Feb01	Clipperton I	TX5S	LoTW	DXW.Net 20230321
February					
2024 Feb13	2024 Feb20	Juan Fernandez	CB0ZA	HA1AG	DXW.Net 20230605
2024 Feb14	2024 Feb24	Guyana	8R	LoTW	DK6SP 20230611
March					
2024 Mar04	2024 Mar16	Grenada	J3	LoTW	ON4MA 20230622