

County Hunter News

August 2020
Volume 16 Issue 8

Welcome to the On-Line County Hunter News, a monthly publication for those interested in ham radio county hunting, with an orientation toward CW operation. We also cover some park chasing activities these days. Contributions of articles, stories, letters, and pictures to the editor are welcomed, and may be included in future issues at the editor's discretion.

The County Hunter News will provide you with interesting, thought provoking articles, articles of county hunting history, or about county hunters or events, ham radio or electronics history, general ham radio interest, and provide news of upcoming operating events.

We hope you will enjoy the County Hunter News. Feel free to forward, or provide links. Permission is given for copying or quoting in part or all provided credit is given to the CHNews and to the author of article.

CW County Hunter Nets run on 14.0565, 10.124.5, and 7056.5, with activity occasionally on 3556.5 KHz. Also, there is SSB activity now is on 'friendly net' 7188 KHz. The CW folks are now pioneering 17M operation on 18.0915. (21.0565, 24.9155, and 28.0565 when sunspots better). Look around 18136 or for occasional 17M SSB runs usually after the run on 20M SSB . (21.336 and 28.336)

You can see live spots of county hunter activity at ch.W6RK.com

For information on county hunting, check out the following resources:

The USACA award is sponsored by CQ Magazine. Rules and information are here:

<http://countyhunter.com/cq.htm>

For general information FAQ on County Hunting, check out:

<http://countyhunter.com/whatis.htm>

MARAC sponsors an award program for many other county hunting awards. You can

find information on these awards and the rules at:

<http://marac.org/awards.pdf>

There is a lot more information at www.countyhunter.com . Please check it out.

Back issues of the County Hunter News are available at www.CHNewsonline.com

De N4CD, Bob Voss, Editor (email: telegraphy@verizon.net)

Notes from the Editor

N4CD Rumblings

1) Sunspots – This is beginning to get old. Not much sun activity. A spot appears and is gone a day later. SFI reached 70 once, but 90% of time at SFI=68. “Poor” on 20M and 'Fair” on 40M during the day. Articles on sunspot cycle later in this issue. There was a little bounce up at the end of the month to SFI=70. Let's hope it continues upward from here.

2) State QSO Parties - The fall season for QSO Parties is arriving in August. Several good ones and hopefully mobiles will be out and running all over, along with good numbers of fixed stations. There's the NAQP SSB and CW Weekends, a KY State Park on the Air event, and a few other things going on. Likely no hamfests but maybe some small 'swapmeets' will occur.

3) .Error...Error.....Correction - ..Some gremlins crept into the last issue of the County Hunter News. Last month I reported on mobile activity of KT7Q. Nope, I messed up. The correct call is K7TQ, Randy, who has joined MARAC. He was active in the 7QP and has been running counties out west.

4) Call Change - N7JPF is now W7EEC.

5) OM2VL – needs some help

Laci, OM2VL has worked 3000 counties toward USACA. His needs are posted on the K3IMC need page. See if you can help him finish! He's got a big signal. I see various mobiles out running the counties he needs! Let's get him finished off this summer/fall.

6) Gas Prices - Here in Texas, gas prices peaked at just under \$2/gallon. Now running \$1.80/gal but who is using all that much these days!

7) Sunspots - Toward the end of the month, a cycle 25 sunspot appeared. The SFI index moved up to 70 with 'good' conditions on 20M. This is the second sunspot this month. Things could be looking up as far as next cycle starting.

MARAC Convention Canceled

With the surge in COVID-19 cases at the beginning of summer, and the 'unrest' (rioting, blocked interstates, looting, arson in Portland) now lasting more than 60 days of nightly 'incidents' – the Board of Directors announced on July 13 at the annual meeting that the 2020 MARAC Convention scheduled for October in Portland, OR, has been canceled. Too many county hunters are 'seniors' to risk it. Over half of all deaths associated with COVID ate those in the age group 60+ years old.

Donna, AG6V, put in lots of work to plan and execute this year's convention in Portland. Due to the cancellation policy of the hotel, it had to be either held - or be canceled by early July in order not to lose a considerable 'down payment'. Thus, even if the situation suddenly became a lot better as far as COVID went, it might also go the other way, and the prudent thing was to decide not to have it if few would risk coming. Most of the attendees are over 50 with many over 65.

Here, I was waiting to see if things got better before committing to 4 days of travel each way to get there. If you see the news, cases here in TX are climbing through the roof with 10,000 new cases a day, ICUs and COVID wards filled to near capacity, and things getting worse day by day. The trend was really bad for TX, CA, FL and a dozen other

states.

See you at a convention in 2021.

AI5P Trip Report

Recap - New Mexico 26 June.

Activated two northern State Parks -



El Vado Lake (K-2698) and Heron Lake (K-2700). Both parks are above 7,000 Ft and set in the beautiful northern mountains of New Mexico. Just opened on May 30 for only day use due to the Covid pandemic. The parks offer (in normal times) fishing, boating, camping, hiking and other outdoor activities. Both are not too far from Chama - the Western terminus of the Cumbres and Toltec Scenic RR.





Chama Station on Narrow Gauge RR

Conditions normal for these days but managed to log 50 from El Vado and 78 from Heron. Thanks for the spotting Help!

Rick AI5P

WV QSO Party – Late Report

Left over from last month - did not make the last issue report on the QP.

NB3A/M Mobile - 444 QSOS (all 40M SSB)
Operator(s): KN4DWZ NB3A

10 Hours of op time, around 15 hours total drive time.

4 tanks of petrol, 1077km driven, 15 counties traversed.

Thanks to the chasers, it wouldn't have been fun without you.

Thanks to Randy KD8G for doing the work and making the QSO party happen

On the Road with N4CD I

During the new TX spike in COVID-19 cases, brought about mainly by letting bars re-open and the crowds at various events, the road hasn't gone very far. I've wandered out a few times over to Spring Creek State Forest Preserve, KFF-4423/K-4423, which is 25 miles away at least once a week for the Wednesday CWT. Dallas TX is one of the hot spots with hundreds and hundreds of new cases A DAY here. Hospitals are 90+% utilization again.

Wednesday, June 27, I wandered over there to the local park on Field Day weekend. Usually, I'd join one of the two local clubs for FD but this wasn't the year. One club did have a 2 position set up near the EOC (not in it) – with allotted time slots if you wanted to sign up. Bring your own headset. Things sanitized between ops – in different tents. Had to sign a waiver to operate. No thanks but some did operate that way. Other club just didn't do anything this year. The big draw usually is the Saturday night BBQ dinners that get about 100 in attendance for each club. I'm sure most clubs around the country had way scaled back efforts, maybe some 'remotes' set up for 'guest club members' to operate, etc. Often I'd run mobile somewhere for 2 hours. In the past, I'd jointed other clubs for FD while traveling including twice in CO and twice in AK!

This year, the rules were changed to let home stations – class ID – work each other for credit. Normally they'd be zero points if they worked each other. There would be still folks out 1A, 1B – some 2A, 2B – out in the field. Even heard a 5A this year- who knows what their arrangement was. Some had a few RVs set up for FD – and stations in each – maybe 2 or 3 ops manning them on different bands. I didn't hear any '11A' type operations this year. (11 operating stations).

Before FD started, the car headed to the local POTA park. I went to 20M SSB for 20 QSOs for park chasers, then headed to 15M CW for 4 POTA contacts. (I'd just tuned up a resonator I can stick on the top mag mount on a standard 54 inch Hustler mast.) Added in a few more on 20cw.

Then FD started at 1800 – so I figured I'd put in 2 hours and then head back home. I'd be 1C – one operator, mobile, for FD.

Started on 15M and surprised to work about 25 there. N0KV, Barry from CO was doing a bang up job. He spent a lot of time on 15. Worked all over the country on 15M – mainly to big contester stations at home with good antennas. Then I went to 10M and worked a dozen there! Tried 6M and worked one station in AZ and that was in. Didn't hear anything else on 6M. Tried several times. E-skip just wasn't in.

Headed to 20m CW and put over 100 in the log. Lots of stations on top of each other – some so bad I couldn't work either of two or three on the same frequency – maybe one out west, one back east, and me in the middle. Band full of CW. SSB a mess – worked one station there then abandoned SSB the rest of the time. QRM central! Left after 2 hours of operating and headed home. Had enough fun. 165 QSOs for the short time in the park. With a 500 Hz CW filter in the IC-706, it is not the best contesting radio!

Well, 4 days later, Wednesday rolled around, and might as well head over to KFF-4423 for the weekly CWT. It was also July 1 – with two other events going on. Each year for the first week, the First Colonies special event stations get on. Also, there's a big Canadian RAC contest – it's their Independence Day (like our 4th of July). Who knows what I'd work today?

Arrived 15 minutes before the CWT. 20M – which usually perks up later – was full of VEs. Put a quick dozen in the log, then hit 40M for the CWT at 1300Z. It seems only half the normal number of people were doing CWT today. The other half were chasing the Canadians and K2x stations for First Colonies. I was working half the usual number and 40M propagation was miserable with high noise. Usually, it's the best band. Probably didn't help that the temps were already up well over 90F and the power lines were humming and making QRN bad today as all those air conditioners were fully cranked up. Back to 20M. Caught more Canadians. After CWT ended, hunted down a bunch of the First Colony stations on CW.

That was the routine here for the week. Got the urge to travel but cases are spiking and I'm a 'vulnerable senior' not looking to check out early So it goes.....the weekly trips

to the 'park' keep the car ready for trips and puts just a few miles on them to keep 'em running OK. Otherwise, it's just parked in the garage waiting for this stuff to end! The summer 100 degree temps and 105 Heat Indexes also aren't too nice, either.

Mid month I was all set to go over to the park on Saturday. Nope. Murphy struck. The six month old 80 AH AGM battery in the car decided to play dead. Measured 4v at the battery terminals. Not too great. Of course, car wouldn't start.

I had an old 12v 10 amp battery charger and I put it on to see what would happen. Normally when a battery drops below 10v, it's dead and never will recover. If it appears to do so, it will die in a few weeks again. After two days of charging, it got up to 11v. That's all.

On Monday, I managed to start the car and head to the Chevy Dealer where I had originally bought the battery. It was 3 years old in January when it tested below 50%. Those batteries are up to \$200+ bucks each these days. The dealer 'load tested it' and it failed miserably. The battery was replaced under warranty with a brand new one. (cost now \$260). Total cost to me was \$25 for 'shop supplies'. OK.....so naturally, two days later I took it out to the park to both charge it up and see that it was working. Back to normal. Car has 120,000 miles and is 3 ½ years old now.

Solar Forecast I

Solar Forecast

An interesting article predicting that Solar Cycle 25 will be one of the highest sunspot cycles in the past 70 years. Here are some snippets from this highly technical article.

Overlapping Magnetic Activity Cycles and the Sunspot Number: Forecasting Sunspot Cycle 25 Amplitude

by Scott W. McIntosh, , Sandra C. Chapman, Robert J. Leamon, Ricky Egeland, and Nicholas W. Watkins

Introduction

“The Sun exhibits a well-observed modulation in the number of sunspots over a period of about 11 years. From the dawn of modern observational astronomy sunspots have presented a challenge to understanding – their quasi-periodic variation in number, first noted 160 years ago, stimulates community-wide interest to this day. A large number of techniques are able to explain the temporal landmarks, (geometric) shape, and amplitude of sunspot “cycles,” however forecasting these features accurately in advance remains elusive. Recent observationally-motivated studies have illustrated a relationship between the Sun’s 22-year (Hale) magnetic cycle and the production of the sunspot cycle landmarks and patterns, but not the amplitude of the cycle. Using (discrete) Hilbert transforms on 270 years of (monthly) sunspot numbers to robustly identify the so-called “termination” events, landmarks marking the start and end of sunspot and magnetic activity cycles, we extract a relationship between the temporal spacing of terminators and the magnitude of sunspot cycles. Given this relationship and our prediction of a terminator event in 2020, we deduce that sunspot cycle 25 will have a magnitude that rivals the top few since records began. This outcome would be in stark contrast to the community consensus estimate of sunspot cycle 25 magnitude

Discussion

The (decadal) ebb and flow (waxing and waning) in the number of dark spots on the solar disk has motivated literally thousands of investigations since the discovery of the eponymous quasi-periodic 11-year cycle by Schwabe. Since then, emphasis has been placed on determining the underlying physics of sunspot production in addition to numerically forecasting the properties of upcoming cycles using statistical or physical methods. In recent decades, as the amplitude and timing of the sunspot cycle has reached greater societal significance, community-wide panels have been convened and charged with constructing consensus opinions on the upcoming sunspot cycle—several years in advance of the upcoming peak.

Lack of adequate constraints, conflicting assumptions related to the solar dynamo mechanism, and different techniques, safe to say, result in a broad range of submissions to these panels that cover almost all potential (“physically reasonable” outcomes. Sunspot cycle prediction is a high-stakes business. Bringing some of the most sophisticated physical model forecasts to the discussion, the international NOAA/NASA co-chaired Solar Cycle 25 Prediction Panel, delivered the following consensus prognostication: Sunspot Cycle 25) will be similar in size to Sunspot Cycle 24 . SC25 maximum will occur no earlier than the year 2023 and no later than 2026 with a minimum peak sunspot number of 95 and a maximum of 130. Following the convention of the prediction panels, throughout, we quote the smoothed sunspot number

for maxima - determined from a running thirteen month smoothing of the average number of sunspots for each calendar month. Finally, the panel expects the end of SC24 and start of SC25 to occur no earlier than July, 2019, and no later than September, 2020.

Conclusion

Using the cycle 24 terminator timing prediction of Leamon along with our regression line and prediction intervals, our best estimate for the SSN amplitude of solar cycle 25 is 233 spots, with a 68% confidence that the amplitude will fall between 204 and 254 spots. We predict with 95% confidence that the cycle 25 amplitude will fall between 153 and 305 spots.

Over the coming months, as SC25 matures, it will become evident which of these (very different) paradigms is most relevant - such is the contrast in the forecasts discussed herein. Very early indications of the spot pattern are appearing at higher than average latitudes ($\sim 40^\circ$). Historically, high latitude spot emergence has been associated with the development of large amplitude sunspot cycles - only time will tell. **Our method predicts that SC25 will probably be among the strongest solar cycles ever observed, and that it will almost certainly be stronger than present SC24 (116 spots) and most likely stronger than the previous**

cycle 23 (180 spots). This is in stark contrast to the consensus of the SC25PP, between 95 and 130 spots, i.e., similar to that of SC24.

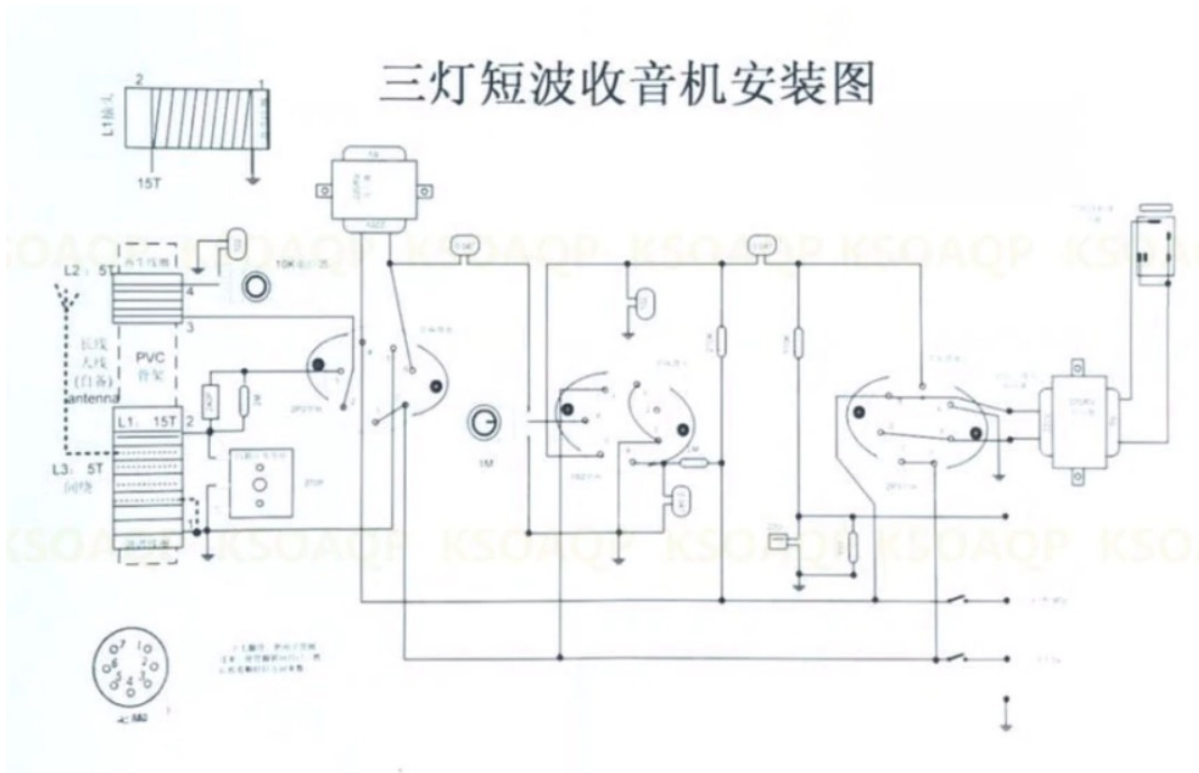
[https://arxiv.org/pdf/2006.15263.pdf?](https://arxiv.org/pdf/2006.15263.pdf?fbclid=IwAR3XAtorw7LyYvOo0OoINjsDmJiGRvhulDRbobAXC3q3isHVXQYLnNiFxYQ)

[fbclid=IwAR3XAtorw7LyYvOo0OoINjsDmJiGRvhulDRbobAXC3q3isHVXQYLnNiFxYQ](https://arxiv.org/pdf/2006.15263.pdf?fbclid=IwAR3XAtorw7LyYvOo0OoINjsDmJiGRvhulDRbobAXC3q3isHVXQYLnNiFxYQ)

On the Trail of Regens I

Last month we showed a Chinese 2 tube kit using a pair of 2P2 (3S4) dual triode (3A5) tubes. This other kit uses a pair of 2P2 tubes and a 1B2 (1S5) tube. This kit allows you to easily drive a speaker. Same first part of the kit, followed by an audio amp stage.

It's only available on the ALI web site (Chinese).



Comes with all the parts – including output transformer and small speaker, battery boxes for two 1.5v batteries for the filaments, a 9v B+ battery, and all hardware. One extra stage to the circuit described last month.

This is a typical way the Chinese show their kit 'schematics'. It's similar to way circuits were described in the US by more of a pictorial of the tube pins and connections.

The two tube version came from the US with a US schematic and drawings. On Ebay.

Annual Awards Announcement

In lieu of the usual announcement at the annual convention (canceled), N5MLP,Awards

Chairman posted the following:

Winners for Mobile of the Year – SSB

1st Place: W4SIG – Kerry Long

2nd Place: AB7NK – Mary Vince

3rd Place: KC6AWX – Bob Devine

Winners for Mobile of the Year – CW

1st Place: W4SIG – Kerry Long

2nd Place: K8ZZ – Ed Eklin

3rd Place: N4CD – Bob Voss

Winners for Mobile Team of the Year

1st Place: AB7NK/K7SEN – Mary/Neil Vince

2nd Place: KB0BA/N0XYL – Lowell/Sandra Tennyson

3rd Place: W0GXQ/K8ZZ – Jerry Mertz / Ed Eklin

Winners for Mobile Assist of the Year – SSB

1st Place: K0DEQ – Bill Morgan

2nd Place: WY0A – Butch Porter

3rd Place: KZ2P – Jim Grandinetti

Winners for Mobile Assist of the Year – CW

1st Place: K0DEQ – Bill Morgan

3rd Place: KC3X – Hollis Thigpen

Summer Reading

If you're like most of the County Hunters, you're 'resting up' at home, staying safe from the nasty germs floating around crowded spaces, restaurants, and large gatherings. All the hamfests have gone 'on-line' and likely events for the next six months or longer are not going to exist. Even my radio club meetings are now 'on-line'. One club has a weekly get together. Instead of meeting at Sammy's BBQ, you now go there for your take out order, go home, then log onto Zoom for the weekly get together!

If you're into old type radio (and some interesting reading) of the early days of radio (1920s and 1930s), many of the classics of that era are now on line at Project Gutenberg.

<http://www.gutenberg.org/ebooks/>

Type in 'radio' in the search box....and away you go!

There, you'll find most of the Radio Boys Series. Back in the day, they were sold for not too much money – and kids (and some adults) would quickly pick them up, read them, and pass them along. Libraries would have them, too. There were 31 in the Radio Boys series – by three different authors (who used pen names). If you find book 31, you'll be sitting on a gold mine. Only 200 copies of that were printed.

Other books were the Radio Detective Series (4 books)

Others you might like are The Young Wireless Operator.....

62,000 ebooks – free. Oldies but goodies.

Mobile Actitivity

Wow! There were some good trips by several mobiles that kept the bands busy for many days during the month. KB6UF was on for many many counties. K8ZZ was on many trips – joined up with W0GXQ for a bunch, and was later seen headed west again all over. N8OYY was zipping around in NJ running the entire state plus a lot more. KB0BA headed out on a trip.

Here's a summary:

At the beginning of the month:

K8ZZ, Ed, was zipping all around OH. Then into MI. Later, he'd be in IL, into MO

KA2LHO, Kraig, was running all over FL working on getting to 100 different parks in that state.

W8OP, Alan, headed to KY to run a bunch there.

KB3WAV, Kerri, and KC3RW, Ray, spotted themselves in counties in PA and MD while running parks. Do both SSB and CW.

Mike, KA4RRU, put out counties in VA and WV

KB0BA/N0XYL, Lowell/Sandra, put out counties in IA. Later headed east. Had some radio problems which limited operation.

N7JPF, Paul, now W7EEC, put out counties in OR. Did some FT-8, too.

KB6UF, Ron, ran a bunch in LA

K7TQ, Randy, was active in WA counties

K8ZZ, Ed, hooked up with W0GXQ, Jerry, and ran a bunch of KS counties. Then into SW part of CO.

Kerry, W4SIG, hopped a plane to Las Vegas and got on the air with a temporary setup in

rental car. Headed through NV to CA, up through CA to ID, UT, to Beaverhead MT, and around back.

Ron, KB6UF, made a couple day trip to KY, putting out dozens and dozens there. Circled around through OH, into IL, wound in MS putting out many there. Back into KY, TN.

Ed, K8ZZ, headed up to NE for more counties.

N8OYY, Ed, headed through PA into NJ to run them all there, then into DE.

End date 7/25/2020

Most active mobiles this month: KB6UF with over 100 counties run in a dozen states.

Ed, K8ZZ, wasn't far behind and probably on more days than anyone else.

Kerry, W4SIG, ran especially tough ones out west with current propagation on his trip at the end of the month.

It's been a good month for CW contacts, too!

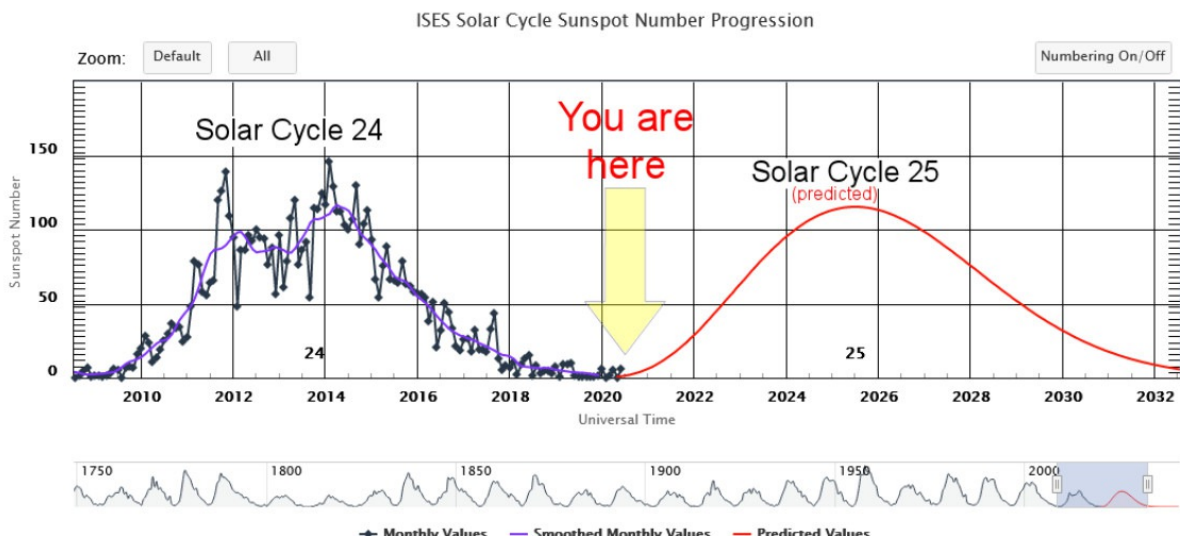
All contacts are appreciated!

Solar News

July 14, 2020: NOAA has released a new interactive tool to explore the solar cycle. It lets you scroll back through time, comparing sunspot counts now to peaks and valleys of the past. One thing is clear. Solar Minimum is here, and it's one of the deepest in a century.

Solar Minimum is a natural part of the solar cycle. Every ~11 years, the sun transitions from high to low activity and back again. Solar Maximum. Solar Minimum. Repeat. The

cycle was discovered in 1843 by Samuel Heinrich Schwabe, who noticed the pattern after counting sunspots for 17 years. We are now exiting Solar Cycle 24 and entering Solar Cycle 25.

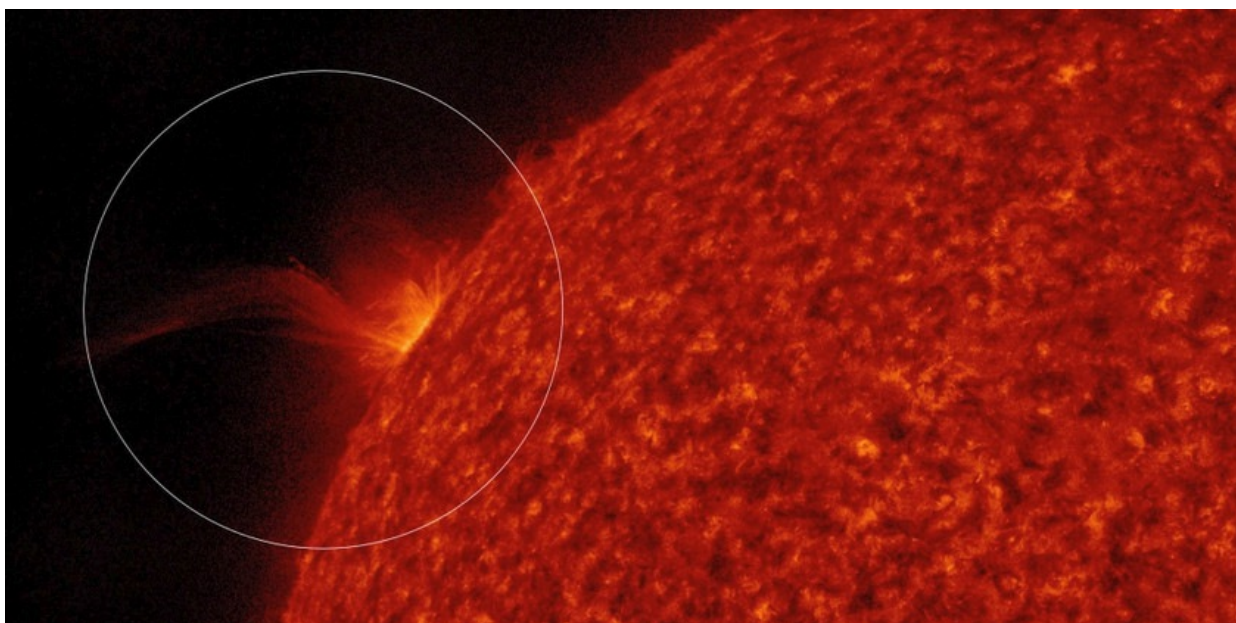


During Solar Minimum, the sun is usually blank—that is, without sunspots. The solar disk often looks like a big orange billiard ball.

In 2019, the sun went 281 days without sunspots, and 2020 is producing spotless suns at about the same rate. To find a year with fewer sunspots, you have to go all the way back to 1913, which had 311 spotless days. This makes 2019-2020 a century-class Solar Minimum; solar flares are rare, geomagnetic storms are almost non-existent, and Earth's upper atmosphere is cooling.

Some people worry that the sun could “get stuck” in Solar Minimum, producing a mini-Ice Age caused by low solar activity. There is no evidence this is happening. On the contrary, the next solar cycle (Solar Cycle 25) is showing unmistakable signs of life.

On May 29th, the sun unleashed the strongest solar flare in years—an M1-class eruption that just missed Earth. The blast came from an active region belonging to Solar Cycle 25.



Observers are also seeing a growing number of Solar Cycle 25 sunspots. So far in 2020, the sun has produced a dozen sunspots. Nine of them (75%) have the magnetic polarity of Solar Cycle 25. This compares to only 17% in 2019 and 0% in 2018. The sun is clearly tipping from one solar cycle to the next.

A NOAA-led panel of experts actually predicted this behavior. Last year they said that Solar Minimum would hit rock bottom sometime in late 2019-early 2020. Activity would then quicken in 2021-22, ramping up to a new Solar Maximum in 2023-26.

So far, so good.

<https://spaceweatherarchive.com/2020/07/14/solar-cycle-update/?fbclid=IwAR1qwHGybv2ETAyS9exBPPYuD6axs3ddR-KBAAWvboQZCL-znZoGN4RLI-M>

Awards Issued

USA - CW #159 Single Band 17M #2	N8CIJ, Dick KC3X, Hollis	9 July 2020. July 6, 2020
- - - - -		
Ran All Delaware #73	KB6UF, Ron	4/21/2007.
Ran All Florida #40	KB6UF, Ron	3/16/2010
Ran All Georgia #27	KB6UF, Ron	11/25/2005.
Ran All Indiana	KB6UF, Ron	
Ran All Illinois #35	KB6UF, Ron	6/18/2016.
Ran All Kansas. #37	KB6UF, Ron	10/20/2010.
Ran All Kentucky #25	KB6UF, Ron	8/12/2007
Ran All Washington #32.	KC7YE, Jack	8/8/1989
Ran All Pennsylvania #26	N8OYY, Ed	6/192020.
Ran All Ohio #23	N8OYY, ED	6/16/2020
Ran All West Virginia 3rd time #2	W8OP, Alan	16 July 2020
Ran All State Louisiana #29	KB6UF, Ron,	6 July 1992
Ran All State Massachusetts #18	KB6UF, Ron	4 June 2005
Roadrunner #7	W0GXQ, Jerry,	16 July 2010

Events for County Hunters

Aug 1 0001z to Aug 2 2359z
10-10 International Summer Contest,
SSB Ph Name, mbr or "0," SPC
www.ten-ten.org

Aug 1 1800z to 2 0559z
1.8-28
North American QSO Party, CW
CW Name, state/DC/province/country
www.ncjweb.com

Aug 8 1400z to Aug 9 0400z
1.8-144, 432
Maryland-DC QSO Party
CW Ph Dig Entry class,
county or SPC
w3vpr.org/mdcqsop

Aug 15 1800z to Aug 16 0559z
1.8-28
North American QSO Party, SSB Ph
Name, state/DC/province/country
www.ncjweb.com

Aug 22 0400z to Aug 24 0400z
1.8-28
Hawaii QSO Party CW Ph Dig
RS(T) + HI district or SPC

www.hawaiiqsoparty.org

Aug 22 1600z to Aug 23 0400z

3.5-28

Ohio QSO Party CW Ph

RS(T), county or SPC

www.ohqp.org/index.php/rules

Aug 29 1400z to Aug 29 2200z

3.5-28

Kentucky State Parks on the Air CW Ph Dig

KY park abbreviation or SPC

k4msu.com/kypota

Aug 29 1400z to Aug 30 2000z

3.5-50

Kansas QSO Party CW Ph Dig

RS(T), county or SPC

ksqsoparty.org/rules/KSQPRules2019.pdf