

**Ham Radio QSL
Worldwide Ham Radio Stations
TopSite Listing w/Rankings
Rated by Ham's for Ham's
webmaster@hamqsl.com**



Do not use HTML code from translated pages.

HamQSL Frequently Asked Questions



Peter, SV3AUW/M0LPT

[Predicted Solar Data](#)

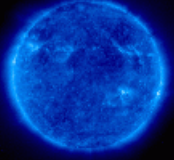
[Current Solar Data](#)

- What is HamQSL?
 - HamQSL is a brand new international web directory that contains Ham (Amateur) related websites with an active webpage that details your operations.
 - It allows you to submit your website to be listed, rated, and viewed by geographical location.
 - Unlike other Ham (Amateur) related sites, HamQSL does not care where you are located, or what type of station you operate. The only limitation is that you provide any Ham (Amateur) related data on your web page.

- How does it work?
 - Once you put the Button Code (provided when you join, or can be viewed using the control panel) on your site, a counter at HamQSL is incremented when it's clicked.
 - Every time someone clicks the HamQSL Button on your website, they actually Vote for your site!
 - Visitors to HamQSL can then view the listings and rate and review your website.
 - The more people that "vote" for your site, the higher your daily ranking. Your average ranking is taken on the average number of votes per week.

- How long does it take for my website to show up in the list?
 - Immediately! Website submissions are approved automatically, and I receive an email to verify the submitted site contains Ham (Amateur) related content.
 - If it does not contain Ham (Amateur) related content, it will be removed.

Solar-Terrestrial Data
 2010 May 25 1506 UTC
 SFI: 73 SN: 17
 A-Index: 1
 K-Index: 1 / 9 nT
 X-Ray: A3.7
 304A: 116.6 @ SEM
 Ptn Flx: 2.61e-01
 Etc Flx: 1.24e+02
 Aurora: 6 /n=1.08
Geomag Field VR QUIET
Sig Noise Lvl S0-S1
Current Solar Image



<http://www.n0nbh.com>
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Online SN/SFI Converter

-- SFI (64-300)
 -- SN (0-250)

Convert Clear

Online K-Index/Noise Converter

-- K-Index (0-9)
 -- K-nT (0-999)
 -- Sig Noise (0-60)
 -- GeoMag Field
 (Quiet|UNSET|Active|Storm)

Convert Clear

Online Aurora/Latitude Converter

-- Aur (0-10++)
 -- K-Index (0-9)
 -- Lat° (40-90)

Convert Clear

- Do I need the Button Code?
 - Yes! In order for HamQSL to be able to rank your site and track hits you must install the button code on your website. It looks like the button



below:

- Where should I put the code?
 - Your homepage is probably the best choice, however if your visitors arrive at another page via a bookmark or favorites link their visit won't register.
 - The best solution is to put the Button Code on an element that appears on every page, such as a border or frame.
 - As an alternative you can put it manually on every page in your site to maximize your hit count.
- When do the daily stats reset?
 - HamQSL resets daily page views at midnight Pacific Time.
- What type and how big can my Banner URL image be?
 - You can use any weather or Ham (Amateur) Radio related banner/sticker you want - provided it is not bigger than 500 pixels wide by 300 pixels tall.
- Where do I find my button code?
 - Your unique Button Code is sent to you at the time of registration, and can be retrieved at any later date in the Control Panel
- Why is my ranking at Zero?
 - If your ranking is a zero, the most common problem is because your code is not correctly inserted on your website pages.
 - Check your unique code in the user control panel. Alternatively, it is because you have not yet received a unique vote for that week.
- What does it cost?
 - The listing service is free.
- Why wont the registration process accept my banner URL?
 - Usually because the banner size is bigger than 500X300 pixels.
 - If you want to display your banner, please make sure its within these limits.
- Why can't I get to my Control Panel?
 - If you have problems getting to the Control Panel, hold down the "shift" key when you click the link and this will open it in a new window.

Solar-Terrestrial Data Frequently Asked Questions

- How do I add Solar-Terrestrial Data to my Website?



[Click to join HamQSL](#)



Echolink

- o [Echolink Home Page](#)
- o [Echolink Maps](#)

Repeater Info

- o [Artscipub](#)
- o [K5EHX Repeater Map](#)
- o [US Repeaters](#)
- o [Ham-Shack](#)
- o [K1IW Repeater Search](#)
- o [HamsRUs](#)
- o [Repeater Builders](#)

Free Online Manuals

- o [AC6V - all](#)
- o [Marcucci Italy-Icom](#)
- o [Ham Radio India-Icom & Kenwood](#)
- o [Kenwood](#)
- o [BAMA](#)
- o [ICOM Japan](#)

- o From the main HamQSL webpage, click the "Add Solar Data" link in the menu bar, or click on the Solar-Terrestrial banner above.
- o Then just cut and paste the html that is provided in the text box next to the banner you want (color and style) into your webpage at the location you want the current Solar-Terrestrial Data to appear. A word of caution, if you resize the banners, they will look terrible (text as a gif does that!). There are no adds, so please **DO NOT** change the code (except position) or the free service **WILL** go away!.
- o The solar banners are available in 11 different configurations, two with VHF Openings, three with current solar images that are selectable, and two World Sunlight (one flat map and one globe). One banner is available with NOAA K-Index or selectable Norway K-Index (for Europe HAMS). Four banners are available in four background colors and corresponding text colors, and also support transparent backgrounds. The five with VHF and solar images, and two current world sunlit items do not support background or transparent. All banners have selectable 304A source data.
- o Cut and Paste the html from <http://www.hamqsl.com/solar.html> into your web page at the location you want the current Solar-Terrestrial Data to appear. There are a number of choices that select panels have, as indicated in the table on my [main Solar Page](#). *A word of caution here, if you add special characters (like "/" or "\"), you will still get a banner, but it WILL NEVER UPDATE FROM THE 1ST TIME YOU USE IT!*
 - To change the SoHO CELIAS/SEM 304A source data to the new SDO EVE 304A source data (available on all banners), modify the php text as follows:
 - If this is your only selectable choice, add "?heline=eve" to the url. For example, change "http://www.hamqsl.com/solar100sc.php" to "http://www.hamqsl.com/solar100sc.php?heline=eve"
 - If you already use selectable choices, append "&heline=eve" to the url. For example, "http://www.hamqsl.com/solar100sc.php?bgcolor=blue" to "http://www.hamqsl.com/solar100sc.php?bgcolor=blue&heline=eve"
 - To select other than a non-transparent black background for those that indicate background and transparent, modify the php text as follows:
 - Choose a background color - available in black, orange, blue, or white (spelling and case important). Command is ?bgcolor=
 - Decide if you want the background transparent - remember you still have to choose a background color as the text is different (white text on a white background does not display). Command is ?back=transparent
 - Modify the php url. If you use both, you have to add a "&" to join the commands. So for example:
 - For a blue background non-transparent small vertical format (without index/SFI explanations), change "http://www.hamqsl.com/solar100sc.php" to "http://www.hamqsl.com/solar100sc.php?bgcolor=blue"
 - For an orange background (black static text and red dynamic text) transparent horizontal format, change "http://www.hamqsl.com/solar101sc.php" to "http://www.hamqsl.com/solar101sc.php?bgcolor=orange&back=transparent"
 - For a black background transparent large vertical format (with the index/SFI explanations), change "http://www.hamqsl.com/solar2.php" to "http://www.hamqsl.com/solar2.php?back=transparent"
 - To select the desired image you want (only available on the sun image panels), modify the php text as follows:
 - Choose a solar image (see the table above for more information about each image) if other than the default mdi (orange sun) image shown - available in eit171 (blue sun), eit195 (green sun), eit284 (gold sun), eit304 (red sun), vsm1 (B&W mag), vsm2 (red mag), sh (orange mag), corona (white light), c2 (LASCO white light), c3 (LASCO white light), mag (mdi mag), or mdi (mdi orange). Command is ?image=
 - Modify the php url. So for example:
 - For a vertical format blue sun , change "http://www.hamqsl.com/solarpic.php" to "http://www.hamqsl.com/solarpic.php?image=eit171"
 - For a horizontal format orange magnetic sun , change "http://www.hamqsl.com/solar101pic.php" to "http://www.hamqsl.com/solar101pic.php?image=sh"
 - To change from the default NOAA K-Index to either Tromso or Dombas Norway (only available on the solar101vhf panel), modify the php text as follows:
 - Change "http://www.hamqsl.com/solar101vhf.php" to "http://www.hamqsl.com/solar101vhf.php?kindex=tromso"



- [Radio Amateur](#)
- [Clegg, Swan/Atlas, others](#)
- [CQHamRU - tons](#)
- [Alinco](#)
- [Mirage](#)
- [Radio Shack/Realistic](#)
- [Radionut53 - older](#)

Misc Ham

- [APRS Home Page](#)
- [javAPRS Page](#)
- [AMSAT Home Page](#)
- [EHam Home Page](#)
- [QRZ Home Page](#)
- [QTH Home Page](#)
- [QSL Home Page](#)
- [Mods DK Home Page](#)
- [HAM DMZ RO Home Page](#)
- [Rigpix Home Page](#)
- [Band Chart #1](#)
- [Band Chart #2](#)
- [US Grid Square Chart](#)
- [US Freq Allocation Chart](#)

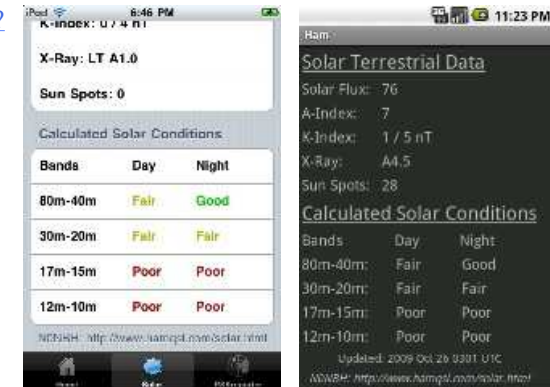
Solar Activity

- [AE4RV Prop Tutorial](#)
- [Current Prop Data](#)
- [Max Usable Freq \(MUF\)](#)
- [Critical F2 Layer Freq Map](#)
- [Max Height of F2 Layer](#)
- [E Layer Freq Map](#)
- [Solar Activity Compare](#)
- [27 Day Forecast](#)

- Change "<http://www.hamqsl.com/solar101vhf.php>" to "<http://www.hamqsl.com/solar101vhf.php?kindex=dombas>"
- Can I put the banner on my desktop, in a toolbar, as a Sidebar Gadget, on my Blackberry, or on my iPhone/iPod?
 - YES. I, and a growing number of other people have created numerous Gadgets that can be displayed in the sidebar (computer), the main page of your BlackBerry, your iPhone/iPod, your MAC, worldpress, and even Joomla.
 - To place on your Windows XP desktop (requires google desktop):
 - Click this [download google desktop](#) to download the self executable file and follow instructions to install google desktop
 - Open Google Desktop Sidebar and add a gadget. Search for "solar" - it should come up. Then just add the gadget.
 - If you do not see both gadgets, you can download them from the following links:
 -  [Solar/HF Propagation Data with K/A Index/SFI explanations](#)
 -  [Solar/HF Propagation Data without K/A Index/SFI explanations](#)
 - The panel reloads every hour so the 3-hour update will be displayed.
 - Email me with any problems you may encounter.
 - To place on your Windows7/Vista Desktop (thanks to Kelly (K7MHI):
 - Click on [this link](#) and follow the download instructions.
 - To place on your Windows Vista Desktop (mine):
 - Click one of the following links to download the desired self extracting executable file
 - [Small vertical format](#) (without index/SFI explanations)
 - [Large vertical format](#) (with index/SFI explanations)
 - When prompted save to your hard drive
 - When prompted click "run", or open the Solardata.exe in My Computer
 - When prompted browse to your "C" drive. Note that the files need to be placed in the following path: C:\Program Files\Windows Sidebar\Gadgets in the Solardata.Gadget (small) or Solardata1.Gadget (large) folder. If you select the C Drive, the executable should place in the proper location and make the new folders. **You will need administrator permissions to do this!**
 - Close the window, and select your Gadgets
 - Grab the "Solar Data" icon and move to your sidebar. The Solar-Data panel should be displayed on your sidebar.
 - The panel reloads every hour so the 3-hour update will be displayed.
 - Email me with any problems you may encounter.
 - To place on your Macintosh Desktop (thanks to Jan Lategahn (DO5LJ):
 - Click on [this link](#) and follow the download instructions.
 - To place on the main page of your iPhone or iPod (thanks to Paul Picazo KI6KIK):
 - The iPhone app is available at the following link

<http://itunes.apple.com/WebObjects/MZStore.woa/wa/viewSoftware?id=327730462>

- The Android (Google Phone) app is available at the following link <http://www.android.com/market/>
- The links above are used just like a normal hyperlink for iPhone / iPod touch users on their desktops to find the application.
- Paul is using the same exact data I am using for the stickers and gadgets, so it updates every 3-hours as well.
- Partial screenshot is shown at right, for both the iphone and google phone applications.



- To place on your webpage as a WordPress Plugin (thanks to Tom (NS6T)):
 - Click on [this link](#) and follow the download instructions.
- To place on your webpage as a Joomla CMS Extension (thanks to Miro (PA4RM)):
 - To download the Joomla Solar Panel extension, click on the [this link](#) and follow the download instructions.
- To place on the main page of your BlackBerry (mine):
 - ON YOUR BLACKBERRY, download the following programs from <http://m.jonathanfisher.co.uk/webshortcuts/>. You will get a prompt saying the application was downloaded. Click OK (not RUN) on both downloads.
 - [Shortcut hub utility](#)
 - [Web shortcut 1](#)
 - Open the “shortcut hub utility” from your blackberry
 - Enter the follow data under “Shortcut 1 Config:
 - Title: Solar HF/Propagation
 - Site: <http://www.hamqsl.com/solargadget.php> (for the small vertical panel) or <http://www.hamqsl.com/solargadget1.php> (for the large vertical panel)
 - Icon: <http://www.hamqsl.com/bbicon.png>
 - Press the Back key and select save
 - Open the generic “web shortcut 1” icon
 - You will most likely get a permissions window. Under “Don’t ask again for:” you need to select “file connections to...” (not the all file connections) then select “Allow this connection”
 - Repeat this as many times as necessary (usually 3-4) for all the files.
 - You will see a “download icons” progress bar, then the banner should be displayed.
 - Press the back arrow until your main screen is displayed and verify the new solar icon is there. Click on it to display the banner.
 - Highlight the “shortcut hub utility” icon and select “hide” (you don’t need to see this anymore-but it has to remain on the BB).
 - The panel reloads every time you select it - no auto refresh.
 - Email me with any problems you may encounter.

- Why is the data sometimes different in some of the banners?
 - Because I cache data and banners in order to reduce the bandwidth and processing, not only on my server, but also the servers I get my data.
 - Data that I get for the banners is cached every 10 minutes.
 - The banner image you download is also cached every 10 minutes.
 - This rarely impacts the 3-hour data, like Solar Flux, A/K Index, SN, etc. It will impact the more dynamic data such as X-Ray, Proton/Electron Flux, Aurora, etc.
 - So if you hit everything at the right moment (maybe wrong is better), the oldest the data will ever be is 20 minutes (10 + 10). Typically, it is much less than that.
- Where can I find information on the data provided in the banner?
 - Here is an outstanding 71 slide PowerPoint briefing by Charlie Christmann (K5CEC) for understanding the impacts that [SpaceWeather](#) has on HF propagation (in layman's terms so a normal person can actually understand it).
 - I did find a good write-up on explaining the data in the banner in the May 09 addition of the [WT4RA newsletter](#).
 - There are also a number of good places on NOAA websites. One such is the [NOAA Space Weather Scales](#) webpage.
 - For a one stop solution, I have created the easy to understand abbreviated table below that provides HF/VHF Propagation conditions based on the current Solar-Terrestrial Data and other sources. Factors provided include background X-Ray, Proton Flux, and K index (including the nT measurement), Solar Flux Index (SFI), Sunspots (SN), Electron Flux, and Aurora (includes Normalization factor (n) less than 2.0 = high confidence, greater than 2.0 = low confidence).
 - Because some items are better when high, and others low, I have color coded the blocks. Green is best conditions, yellow marginal, red unacceptable.
 - A printable page (best using landscape) is also provided for ease of use in the shack. This single page easy to understand table is a must for any HF/VHF operator (with a memory as bad as mine has gotten).





[Click for printable Solar events page](#)

Category	Radio Blackouts Use X-Ray	Solar Radiation Storms Use Proton Flux	Geomagnetic Storms Use K-Index/K-nT/Aurora	Band Openings Use Solar Flux (SN)	Electron Alert Use Electron Flux
Extreme	X20 (1 per cycle) Complete HF blackout on entire sunlit side lasting hours	1.0e+06 (1 per cycle) Complete HF blackout in polar regions	K=9 (nT=>500) [Aur=10++] (4 per cycle) HF impossible. Aurora to 40°. Noise S30+.	200-300 (SN=160-250) Reliable communications all bands up through 6m	>1.0e+03 Alert Partial to complete HF blackout in polar regions
Severe	X10 (8 per cycle) HF blackout on most of sunlit side for 1 to 2 hours	1.0e+05 (3 per cycle) Partial HF blackout in polar regions	K=8 (nT=330-500) [Aur=10+] (100 per cycle) HF sporadic. Aurora to 45°. Noise S20-S30.	150-200 (SN=105-160) Excellent conditions all bands up through 10m w/6m openings	
Strong	X1 (175 per cycle) Wide area HF blackout for about an hour on sunlit side	1.0e+04 (10 per cycle) Degraded HF propagation in polar regions	K=7 (nT=200-330) [Aur=10] (200 per cycle) HF intermittent. Aurora to 50°. Noise S9-S20.	120-150 (SN=70-105) Fair to good conditions	
Moderate	M5 (350 per cycle) Limited HF blackout	1.0e+03 (25 per cycle) Small effects on HF in	K=6 (nT=120-200) [Aur=9] (600 per cycle)	<1.0e+03 Active Degraded HF	

	on sunlit side for tens of minutes	polar regions	HF fade higher lats. Aurora to 55°. Noise S6-S9.	all bands up through 10m	propagation in polar regions
Minor	M1 (2000 per cycle) Occasional loss of radio contact on sunlit side	1.0e+02 (50 per cycle) Minor impacts on HF in polar regions	K=5 (nT=70-120) [Aur=8] (1700 per cycle) HF fade higher lats. Aurora to 56°. Noise S4-S6.	90-120 (SN=35-70) Fair conditions all bands up through 15m	<1.0e+02 Active Minor impacts on HF in polar regions
Active	C1 Moderate Flare Low absorption of HF signals	1.0e+01 Active Very minor impacts on HF in polar regions	K=3-4 (nT=20-70) [Aur=6-7] Unsettled/Active Minor HF fade higher lats. Aurora 60-58°. Noise S2-S3.	70-90 (SN=10-35) Poor to fair conditions all bands up through 20m	<1.0e+01 Normal No impacts on HF
Normal	A1-B9 No/Small Flare No or very minor impact to HF signals	1.0e+00 Normal No impacts on HF	K=0-2 (nT=0-20) [Aur=<5] Inactive/Quiet No impacts on HF. Aurora 67-62°. Noise S0-S2.	64-70 (SN=0-10) Bands above 40m unusable	<1.0e+00 Normal No impacts on HF
VHF Conditions					
<p>Aur Lat (Auroral Latitude): Indicates lowest latitude from the current Aurora Activity measurement. Text color coded for low activity, hi-latitude, & mid-latitude. Aurora (Northern Auroral Activity): Band Closed = No/Low Auroral activity. High LAT AUR = Auroral activity >60°N. MID LAT AUR = Auroral activity 60° to 30°N. EsEU (Sporadic E - Europe): Band Closed = No Sporadic E (SE) activity. High MUF (2M only) = Cond support 2M ES 50/70/144MHz ES = Respective band open EsNA (Sporadic E - North America): Band Closed = No Sporadic E (SE) activity. High MUF = Cond support 2M ES 144MHz ES = SE reported @ 2M MUF (Max Usable Frequency Bar Color): No Sporadic E (SE) activity / SE reported @ 6M / SE reported @ 4M / Cond support 2M ES / SE reported @ 2M MS (Meteor Scatter Bar): Use color code below bar to determine relative activity.</p> <p style="text-align: center;">©N0NBH Paul L. Herrman 2010</p>					

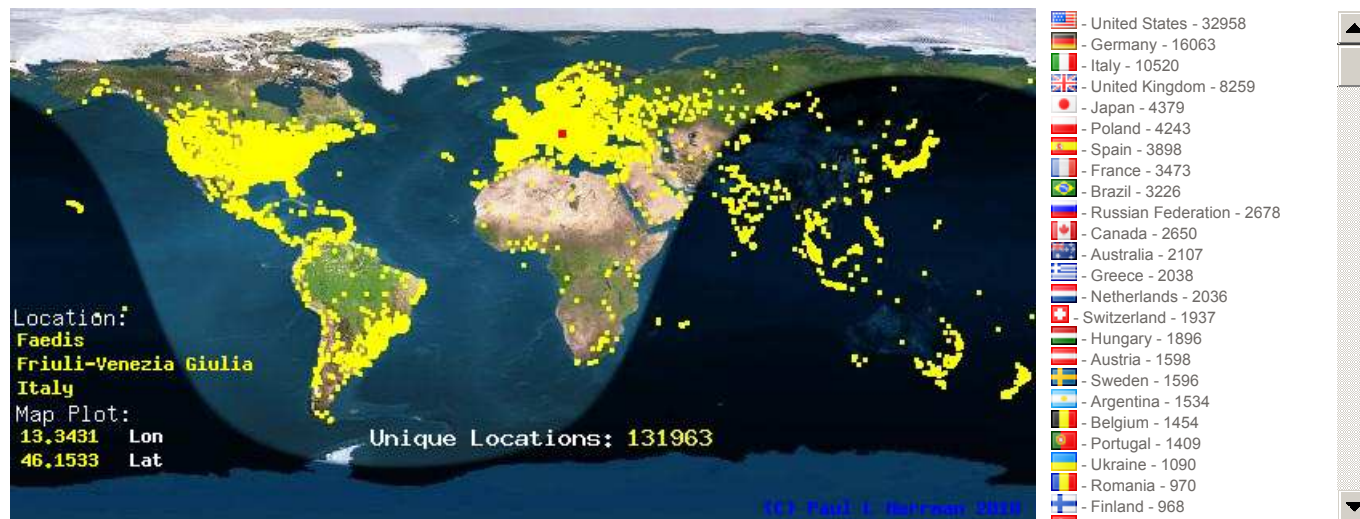
- How are the Band Conditions Calculated?
 - Because the various solar conditions affect HF frequencies in different ways, calculations are provided for four HF band spectrums separately.
 - Calculations take into account the indices, background radiation, day/night conditions, and also take into account both propagation and noise.
 - While the band condition calculations are not 100% accurate all the time, they should provide a pretty good representation of the current state of the HF bands.
 - Raw data is also provided for the more experienced HF operators that understand the affects of each element.
 - Data for the VHF Conditions is from [DXrobot - Gouda](#) and [Make More Miles on VHF](#) (data used with permission).
- What are the band condition ratings?
 - Poor, Fair, and Good.
- Where does the Solar-Terrestrial Data come from?
 - From the NOAA website. For the selectable K-Index, from the Norway site.
- How often is the solar data updated?
 - It depends on the data itself, and the source file I get it from at NOAA's website.
 - Solar Flux, A/K Index, and SN data is updated every 3-hours.
 - X-Ray, Proton and Electron Flux data is updated every hour.
 - Aurora is close to realtime.
- How often is the solar data updated on my webpage?
 - When you open your page, the php script is run and acquires the latest data from the NOAA website.

- Keep in mind that depending on your browser settings, the gif banner may be displayed from cache memory.
 - To update the solar data in the banner on your webpage with the latest NOAA data, just perform a refresh on your browser.
 - The Date and Time at the top of the banner is when the NOAA data was last updated.
 - Please do not auto-refresh any sooner than 15 minutes on your page that is displaying a solar banner. Each refresh reads the file again even though it only updates every three hours, and adds to the bandwidth problem. I have already been shut down once because of this.
- Why is the banner a gif file?
 - GIF files are supported on all browsers, and are very small, and load very quickly.
- How big is the gif file?
 - In most cases very small.
 - Terrestrial data in small vertical format w/o band calculations is 3.8kb, 155 X 185
 - Terrestrial data in small vertical format is 4kb, 155 X 220
 - Terrestrial data in large vertical format is 5.6kb, 155 X 300
 - Terrestrial data in large vertical format with current solar image is 11.1kb, 155 X 319
 - Terrestrial data in large vertical format with both HF and VHF data is 5.2kb, 155 X 337. My thanks to [DXrobot - Gouda](#) for the VHF Aurora and sporadic E (Es) data, and also to [Make More Miles on VHF](#) for the MUF sporadic E and Meteor Scatter data. Data used with permission.
 - Terrestrial data in horizontal format with w/o band calculations and current solar image is 10kb, 290 X 168
 - Terrestrial data in horizontal format is 6kb, 460 X 125
 - Terrestrial data in horizontal format with current solar image is 15kb, 410 X 125
 - Terrestrial data in current world sunlit map format is 30kb, 400 X 200
 - Terrestrial data in current world sunlit globe format is 30kb, 400 X 200
- What can I do if I need a different size or color?
 - Contact me if you want additional colors.
- Is Solar-Terrestrial Data available as a XML or RSS Feed?
 - Yes. I recognize that a lot of you would like to create your own solar terrestrial related web information. So, to make it easier, I am offering the data in XML and RSS format. Please be aware, these feeds will last as long as I do not hear grief from my ISP provider. If I do they are gone!! So please only select to update every hour - that is the update period for the flux parameters (rest are 3-hour updates). Credit to HAMQSL.com would be appreciated.
 -  Click to subscribe to an [XML feed](#) of the current Solar-Terrestrial Data
 -  Click to subscribe to an [RSS feed](#) of the current Solar-Terrestrial Data
- Can I change the code that I copy into my website?
 - Please do not change the code (except for positioning - center, left, right).
 - There are no advertisements, just a link back to the HamQSL website page where others can add the banner to their website.
 - This is a free service, and it will remain that way as long as the code remains unchanged.

A FRIENDLY WARNING

First, I want to thank the majority of all the webmasters that use this data for not removing the link in the html code. However, I am noticing a small but growing number of web pages that use this banner are removing the link back to www.hamqsl.com (yes I can see all the referring URLs on my server). I remind all of you that, unless to make arrangements with me (as a small number of sites have - including <http://www.solarcycle24.com>), the html is not to be modified to remove the link. I am trying to keep this free service free for all with no advertising. The link is there so others can use the data on their page - nothing more.

- What if I have trouble registering, have a question, need help, or have recommended changes to the site?
 - You can contact the [site administrator](#) by email with any requests, questions or comments you may have.



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