

SHORTWAVE BULLETIN

Issue no. 1687 Feb 21, 2010.

Deadline e-mail next issue: 0900 SNT, March 7, 2010.

I detta nummer finns en inbjudan till årets konvent som kommer att hållas i Halmstad. Det är viktigt att vara ute i god tid eftersom vi denna gång måste boka rum på ett vandrarhem. Så ring till CB så fort som möjligt och anmäl er.

På Perseus Yahoo-group har det varit mycket inlägg om att signaler från Voyager 1 fångats upp bland annat med hjälp av Perseus. Därför kommer lite mer information än vanligt om denna händelse.

Mycket tips har också anlänt vilket är riktigt trevligt.

R Symban har gått igenom här nere i Ängelholm trots sin ringa effekt. JE har också hunnit få QSL på sin loggning.

Idag har vintern slagit till i Götaland och de fjällresenärer som skall till Sälen får åka konvoj i Dalsland. Snacka om riktigt vinter. Kan inte minnas att vi haft snö under så lång period som detta år.

Keep on

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SWB-info

SWB online på HCDX: <http://www.hard-core-dx.com/swb>
SWB member information: <http://www.hard-core-dx.com/swb/member.htm>
SWB anniversary issue: http://www.hard-core-dx.com/swb/SWB_history.pdf
Dateline Bogotá 1993-1998: <http://www.hard-core-dx.com/swb/Dateline.htm>
SWB latest issue: <http://hem.ektv.nu/~ekt035221/password.htm>

Meddelande från Bengt Dalhammar:

Ingen medlemsavgift kommer att tas ut för SWB 2010! Däremot tas portokostnaden ut för de som fortfarande önskar bulletinen per brev! SWB will be free for all members during 2010!

QSL, kommentarer, mm.

Jan Edh: Hej Thomas, tro det eller ej, men här kommer ett bidrag från mig igen. Enlogg om än kort...

Jag kom ut redan sen eftermiddag till Fredriksfors. Mellanvägen mot Asien gav inget av värde, men däremot hittade jag ett par ljuspunkter när jag kollade kortvägen.

20/2: I avvaktan på att väderhelvetet ska braka loss med ännu värre förhållanden, just nu "andas" vi med -14, klar himmel och iskall hård blåst och efter en förfärlig gårdag kan jag glädja mig åt första kortvägs-qsl:et på väldigt länge. **Radio Symban 3268,5**. Email. V/s Tom Tsamouras, lärare som jobbar åt stationen sedan tolv år.

Robert Wilkner, Pompano Beach, Florida, US Logs with 746ProDL and Drake R8. Antenna modified for roof repair. 60 meter band with one leg up and the other on the ground. Seems to still work well on 60.

Lars Skoglund: Några svar har kommit dvs **Radio Slovakia Int 5915** med special-QSL för ADXB och **Radio Belarus 6155** med folder, vykort och eterhälsning.

Olle Bjurström: Min aktivitet på kortvägen de senaste månaderna har varit minimal. Just nu verkar störningsnivåerna vara väldigt höga hos mig. En bidragande orsak kan eventuellt vara det kalla vädret som gör att många elektriska installationer går för högttryck.

Jag har experimenterat lite med flagg antenner och tycker att de verkar väldigt trevliga fram för allt på grund av deras okänslighet för störningar. Visserligen är effektiviteten låg men det kan kompenseras med en förstärkare vid antennen. Just nu har jag bara en i 270 grader riktning men avser att sätta upp för Asien så snart vädret tillåter.

Det jag mellan varven lyssnat på är bara de gamla vanliga asiaterna som förekommer ofta i tipsspalten. En kommentar till SA's loggning i förr numret på 4755. Jag hörde samma station första gången den 10/1 med ryska från 15 till 16 då den avslutade med Internationalen, men därefter fortsatte med ett nytt språk liknande arabiska. När jag lyssnade idag 20/2 hade stationen drivit till 4755,060 och körde program identiskt med tidigare loggning. Båda gångerna verkade det som det låg ytterligare en station i bakgrunden eller eventuellt ytterligare en av misstag inkopplad mikrofon. Döm sedan om min förvåning när jag rattade runt på bandet och fann samma station både på 4705 och 4655 kHz! Har inte lyckats att identifiera den, men verkar ligga bortåt Asien baserat på bästa hörbarheten har jag på en 70 graders antenn. Vi får se vem som knäcker denna station, om det inte redan är gjort!

(Håller helt med om att flagg-antennerna är väldigt trevliga. Den jag kör med är 13 x 4 m och med lämplig balun blir signalen mer än tillräckligt stark över Perseus brusnivå. Ännu bättre signal får jag från en bredbandsloop typ ALA100 (exkl förstärkare) med samma typ av balun. Har funderat på att skaffa Wellbrook förstärkare till båda antennerna men har ännu inte blivit färdig till att beställa.

Kolla dessutom vilka fantastiska resultat AHK har nått denna säsong med sina ALA100 ute på Dalarö. Om jag inte misstar mig så är de c:a 4 x 3 m och utrustade med Wellbrook förstärkare. /red)

Loggen

(UTC)

2368,484	15.2	1918	Radio Symban in parallell with their webstream http://www.radiosymban.com.au/ . Heard for the first time Feb 7 but with very weak audio. This day weak but clear with Greek mx. Best reception just before 1930. See Perseus print screens below. The carrier is drifting slowly within 1,5 Hz, which is clearly exposed at AHK website http://dxperseus.blogspot.com/ during a longer recording. TN
2368,5	13.2	1740	Radio Symban med program på grekiska. Svag men tydbar. QSA 2 JE
2860	19.1	0200-	Radio San Carlos , Ciudad Quesada, Costa Rica. Kiitos Mikalle (MTM) vinkistä! Kuului tänä yönä varsin hyvin. Tarkka taajuus 2859.82 ja lopetti 0210 utc. Muina tämän peditionin öinä ei pihaustakaan. LEM289/HS&JMS
3249.636			Unid 0000 several nights , weak en espanol? [Wilkner]
3309.976			Radio Mosoj Chaski , 0938, fair with Andean flute music, mention of "Cochabamba." Also noted het against CHU (3330) around this time (and wonder if it was Peruvian, Ondas del Huallaga.) 12 February. (David Sharp, NSW Australia)
3309.98			Radio Mosoj Chaski , Cochabamba 2355 fair to poor with the noise reducing antenna packed away for roof repair [Wilkner]
3995	13.2	1545	RRI Kendari oväntat bra med musik, annonseringar och en liten kvällsbön. Sekunderna före 16 blev allt dränkt i drm-mörkret. QSA 3. JE
4319 u			Diego Garcia . 2336 nx in English [Wilkner]
4409.84			Radio Eco , Reyes 2330 musica de Bolivia [Wilkner]
4451.241			Radio Santa Ana , Santa Ana de Yacuma 2330 [Wilkner]
4699.94			R San Miguel , Riberalta 2330 [Wilkner]
4699.983			Radio San Miguel , 1019, Spanish, nice to hear this one again, fair at best with talk by a man and at least one reference to "Riberalta." First time I've heard this in awhile. 15 February. (David Sharp, NSW Australia)
4700	15.2		R San Miguel , Riberalta noted with om en espanol at 0815 to 0820. Very early for them? [Wilkner]
4716.19			Radio Yura , Yura, 2340 rather well received, good CP music [Wilkner]
4716.746			Radio Yura , 1031, almost too late for this one, but still readable on peaks with nice local music and occasional talk. Tried for R. San Miguel (4700v) but not even a carrier. 12 February (David Sharp, NSW Australia)
4754,925v	29.1	0110	Radio Imaculada Conceicao , (tentative) Campo Grande, Brazil, man talking, signal not so bad but low modulation (Bernardini)
4755			Re Stig's unid on 4755 ; There's been for some time now a CIS/RUS mixing product on 4755. I haven't checked which frequencies are involved, possibly a mw freq minus 6 MHz freq or 7 MHz minus 6 MHz freq. There are two audios audible. The dominant is Russian language in parallel t.ex. 5940. They come on the air on 4755 a few minutes before 1500 UT. The weaker audio is giving at that time the normal CIS type tuning tones. Well, when I heard this first time weeks ago, I was hoping for something exotic, but no :-). (Best 73, Jari Savolainen)
4774.9			Radio Tarma . Tarma 2335-2345 male vocal followed by ID by om en espanol, good signal, music. [Wilkner]
4775	20.2	0300	WWCR med religiöst på denna nya frekvens. Hördes svagt i det kraftiga bruset som numera alltid råder på kortvåg i min fastighet. CB
4780			RTV Djibouti , Horn of Africa music, strong signal 0330 [Wilkner]
4789.928			Radio Vision , 0915, presumed, with continuous huaynos. Really nice copy, despite some distant thunderstorm QRN. First time noted here in awhile. 15 February. (David Sharp, NSW Australia)
4790	15.2		Radio Visión Chiclayo [Wilkner]
4800			XERTA , Radio Trans. 2350 om vocal en espanol, weaker than a month or two ago but regular [Wilkner]
4805			Radio Difusora do Amazonas , Manaus 2352 yl vocal [Wilkner]
4824.502			LV de la Selva , 1026, ad string or similar by man, comments by a woman, into local music. Weak-Fair signal. 15 February. (David Sharp, NSW Australia)
4828			V o Zimbabwe 0430 some audio, weak. [Wilkner]
4835.38			Radio Marañon Jaen 2345 OS music, good strong signal [Wilkner]
4845,237v	29.1	0120	Radio Cultura , Manaus, Brazil, nice songs, fair (Bernardini)
4857.34			Radio La Hora , Cusco, om dj with ments de Universidad San Marcos, "hoy en ?..." [Wilkner]

4894.94	15.2		Radio Novo Tempo , Campo Grande PR [Wilkner]
4905.08	15.2		Radio Anhanguera , Araguaína [Wilkner]
4914,941v	29.1	0130	Radio Difusora do Macapà , Brazil, songs, ids, fair (Bernardini)
4915	15.2		Radio Daqui -ex Anhanguera-- Goiânia, GO [Wilkner]
4935	15.2		Radio Capixaba , Vitória, ES [Wilkner]
4935,231v	29.1	0140	tent. Radio Capixaba , Brazil, talks, drifting, too poor (Bernardini)
4985			Radio Brasil Central , Goainia 0000 16 February, Pop music, excellent signal, om with full ID "onda tropical...Radio Brasil Central", mention of frequency and kilowatts [Wilkner]
4990	15.2		Radio Apintie , Paramaribo 0750-0830 [Wilkner]
5019.977			SIBC , 2012, English, noted with program about corruption in the Pacific (i.e. PNG), would have been a BBC or Radio Australia produced program; noted them several hours earlier (0700+) with open carrier. Feb 19. (David Sharp, NSW Australia via DXLD.)
5055.000			Radio Vanuatu , 0740, Pidgin, fading-in with talk by a woman and island music. Parallel 3945. So, I wonder if 7260 is also on the air? Feb 19. (David Sharp, NSW Australia via DXLD.)
5044.95	15.2		Radio Cultura Ondas Curtas , PP very strong signal [Wilkner]
5045	19.2	0126	Radio Cultura , Belem, Brazil, nice songs, fair (Bernardini)
5460.36			Radio Bolivar Cd. Bolivar 0010 16 February noted with music, fair signal [Wilkner]
5485.45			Radio Reina de la Selva , Chachapoyas 0005 16 February with mention of station, not ID good signal...seems back with a decent transmitter. [Wilkner]
5770	29.1	*0028	Myanma Army Radio , Burma, start BC with music, fair/good (Bernardini)
5910	31.1	0055	Marfil Estereo , Colombia, nice songs, good signal but stopped by Radio Romania Int. at 0057. (Bernardini)
5915	29.1	0036	Myanma Radio , Burma, music, later talks by woman, //7200 (mixed with Russia) fair/good slow fading (Bernardini)
5940	31.1	0058	Voz Misionaria , Brazil, talks, fair, but at 0100 QRM BBC WS from Cyprus (Bernardini)
5952.350			Radio Pio XII , 1012, presumed with Quechua talks, very difficult, as sandwiched between two powerhouses, some copy possible in LSB. 12 February. (David Sharp, NSW Australia)
6030	20.2	0051	Radio Martí , Clandestine to Cuba, on air again after one night off, sport talks, impressive 9+30 signal. (Bernardini)
6035.025			LV del Guaviare , 0935, presumed with nice local music (mainly easy-listening ballads), brief comments by a man. 15 February. (David Sharp, NSW Australia)
6050.000			HCJB , carrier on at 0825, comments by man at 0830 and into lang (Quechua listed). Modulation seemed a bit low. All alone on freq 'till 0900. (David Sharp, NSW Australia)
6090	20.2	0054	Dr. Gene Scott University Network , Anguilla, usual religious prg in English, nice S9 signal. Light QRM from China (Bernardini)
6104,76v	20.2	-0222	Candela FM , Mexico, serious talks in Spanish mentionig "Mexico", commercials, really weak but with slow fading sometimes better (I used narrow filters in SSB with SDR-IQ), at 0205 nice songs, other commercials. (Bernardini)
6155.264			Radio Fides , 1020, tough copy in USB, against presumed China (on nominal, lowside). Brief snippets of Andean flute music but no ID, so tentative. 12 February(David Sharp, NSW Australia)
6160	29.1	0000	CKZN , St.John's, Canada, news, relay CBC, poor (Bernardini)
6160	28.1	2359*	Gospel for Asia , via UAE, ending BC in unid language with ids mentioning "Gospel". Good (Bernardini)
6185	6.2	0025	Radio Nacional do Amazonia , Brazil, Brazilian songs, "Radio Nacional..." good (Bernardini)
6765.100U			Bangkok Meteorological Radio , 2005, music box interval signal, then into reports by Thai man. Parallel to 8743 USB, which was much stronger. 13 February. (David Sharp, NSW Australia)
7125.000			RTVG , Conakry, 0752, good with continuous hilife, ID by French man just after 0800, brief comments and more music at 0803. First time heard at this time here, similar signal strength to 1900+ (averages about S9+30 on peaks). 9 February. (David Sharp, NSW Australia)
7145.000			Lao National Radio , 1215, Vietnamese (listed) woman announcer with nice local music. Frequent breaks in transmission. 12 February. (David Sharp, NSW Australia)
7185.71			Unid Radio Myanmar [?] last three morning 1300 to 1315 [Wilkner]
7185,8	19.2	0030	Myanma Radio , Burma, start BC, talks, later music, fair (Bernardini)
7260	31.1	0045	Mongolian Radio , Mongolia, nice slow music, //4985, strong signal but QRM from 7255 kHz. (Bernardini)
7270	29.1	0014	AIR Chennai , India, in Tamil, reports, good (Bernardini)
7295	29.1	0007	Traxx FM , Malaysia, talks in English, commercials, songs, good signal but splatters, fair

			(Bernardini)
7305	29.1	0018	AIR Bengaluru , India, Indian music, fair (Bernardini)
7315	29.1	0021	CNR2 , Xian, China, reports in Chinese, //7335 good (Bernardini)
8743	29.1	0024	Bangkok Meteorological Radio , Thailand, USB, interval signal, id in English, info, fair (Bernardini)
9490	19.2	0041	Radio Republica , Clandestine to Cuba, talks about la prensa castrista, Spanish, good NOT reported by EIBI (Bernardini)
9565	6.2	0000	Super Radio Deus è Amor , Brazil, a lot of announcements with the frequencies. Really good (Bernardini)
9630	31.1	0031	Radio Aparecida , Brazil, Holy Rosary, religious songs, fair, low modulation (Bernardini)
9645,311v	31.1	0025	Radio Bandeirantes , Brazil, sport talks, fair but in USB to avoid VOA from Thailand on 9645 (Bernardini)
9760.000			CBC, Cyprus , 2214, guitar interval signal, announcements, into radio drama or similar. Plug pulled mid-sentence at 2244. Surprised to hear 7210 parallel (though it was much weaker). 13 February (David Sharp, NSW Australia)
10000	19.2	0025	Observatorio Nacional , Brazil, usual ids time, weak (Bernardini)
10000.000			PPE , 0810, continuous announcements by a woman with "Observatorio Nacional" prior to time checks. Weak, under WWVH and WWV. First time I have heard this. 9 February. (David Sharp, NSW Australia)
11710.629			RAE , 0226, weak and warbly carrier, sounded like English service but really difficult copy. Starting to peak just prior to 0300 with interval signal and multi-lang ID's. First time noted on this freq here. 13 February. (David Sharp, NSW Australia)
11710,786v	29.1	0100	RAE , Argentina, announcements in several languages, fair (Bernardini)
11945	14.2	1250	Radio Australia , Shepparton, in English, reports, fair (Bernardini)
12120	14.2	1246	KSDA AWR , Agat, Guam, in Chinese, talks, good S but QRM utility (Bernardini)
13660	14.2	1243	Radio New Zealand Int. , in English, reports, very good signal (S 9+) but some QRM from CRI on 13665 and everywhere! (Bernardini)
13765	14.2	1238	KTWR , Agana, Guam, talks and slow songs religious style, reported to be in Burmes, good (Bernardini)
15225	14.2	1232	Radio Veritas , Philippines, long talk in Asian language, fair/good (Bernardini)
15360	14.2	1229	Radio Habana , Cuba, in Spanish, reports, id at 1230, music, //15120 weak (Bernardini)
15400	14.2	1224	HCJB, Kununurra , Australia, in English, talks, fair (Bernardini)
15550	7.2	1610	WJHR Milton FL med sedvanlig predikant. Svag signal men stationen är igång igen med testsändningar. CB
15825	8.1	1245	WWCR med Bob Padulas "Australian DX Report". 3-4 CB
17725	14.2	1217	Voice of Africa , Lybia, in Swahili, talks, id, music/songs mixed African and Arabic style. fair (Bernardini)
17860	14.2	0800	Amateur Radio Mirror International via Meyerton, Sydafrika, med sin söndagssändning till Östafrika. 2 CB
21715	14.2	1214	Radio Farda , Irana Wila, Sri Lanka, in Farsi, music, ids good (Bernardini)

NB! All David Sharp items submitted by Robert Wilkner except for those marked DXLD



Perseus print screens from reception here in Ängelholm of 2368,484 R Symban Feb 15 at 1918-1930 UTC Note the unstable signal evident despite the only 11 minute recording (TN)

Stationsnyheter

GERMANY. I guess this went by completely unnoticed?

<http://www.amrum-news.de/2009/02/18/radio-oomrang-geht-wieder-auf-sendungto/>

Radio Öömrang, first shortwave transmissions in 2006 after Deutsche Telekom helped them through the bureaucratic jungle. Apparently annually since. On 21 Feb 2009 at 1600 on **15230**, apparently to North America (they specify "time in New York"), "with five times more power than in 2008" and costing 300 Euro, so apparently Wertachtal 500 kW.

I just came across this by way of googling for Radio Öömrang, prompted by an announcement that this time they have a temporary FM licence for the Amrum island. Never heard a word about it before.

(Kai Ludwig, Germany, Dec 18, DX LISTENING DIGEST) Mark calendars 21 Feb 2010! (gh)

MYANMAR. 7185.70, Myanma Radio, 1444-1530*, Feb 13, ex: 5915; in vernacular with EZL indigenous songs; almost fair; 1528 sign off announcement with frequencies; followed by indigenous instrumental music till off the air. Not // 5985; Myanmar not heard on 5915 or 9730.8v. Even though this frequency will cause new QRM for hams, it is infinitely better than former 5915, which had strong CRI QRM. More people should now be able to hear and enjoy this station here! Seeing as the frequency is off set, perhaps it is via Yangon and not Naypyidaw (Ron Howard, Asilomar Beach, CA, Etón E1, dxldyg via DXLD)

VANUATU. An update on the new frequency from Vanuatu. Adrian Sainsbury, Frequency Manager at RNZI advises that yesterday was the first day on 5055 and the transmitter is only 1.5kw on 5055 at present. It will be operating 24 hours a day over the next few days (open carrier noted at 1815 UTC but nothing evident at 0515 UTC check). Adrian also advises there will be some tests on 7260kHz at some stage.

(Bryan Clark, Mangawhai, New Zealand via DXLD)

ZAMBIA 4965 R. Christian Voice Rel Pop-like mx at 0112 t/in. 0200 long mission statement by W w/mx. 0201 more EG pgming w/W host and giving upcoming pgm highlights. Unbelievably strong signal. Never hrd so strong. In fact I thought it was a new or current US Rel. broadcaster on a new freq.!!! Amazing 100% clear copy like it was right next door!! (4 Feb) (73, Dave Valko via Cumbre DX)

USA 4775 WWCR 0937 "The Power Hour" pgm w/M and W pgm host tlk abt removing street camera's in regards to violating human rights. Finally a canned ID at 1010, then back to the pgm. Very strong and 100% copy of course. Found while checking for 4965 which I thought was a new US station at the time. Like 4965, I didn't have time to listen to this, so I thought this and 4965 might be the same stn. So I was surprised 4965 was Christian Voice and disappointed this turned out to be WWCR. (4 Feb) (73, Dave Valko via Cumbre DX)

Övriga radionyheter

ARC/SWB Konvent 2010

Vi bjuder härmed in till ett nytt konvent för medlemmarna i Arctic Radio Club och Shortwave Bulletin. Denna gång blir det något annorlunda.

Konventet äger rum lördagen den 24 april och söndagen den 25 april. Vi börjar som vanligt på lördagen vid 15-tiden och avslutar med fika vid 10-tiden på söndag förmiddag.

Den stora nyheten är att konventet äger rum på Knebildstorps Gård, ett vandrarhem ca 2 km från Halmstads centrum i riktning mot Tylösand.

Vi har bokat ett antal fyrbäddsrum. Kostnaden är 600:- för ett sådant rum, dvs. 150:- per person. Om man inte själv har med lakan och handduk tillkommer 50:-. Frukostbuffén kostar 70:-. Till detta kommer kostnaden för övriga måltider.

Det finns också möjlighet till enkelrum för dem som så önskar men man måste vara ute i god tid eftersom tillgången är mycket begränsad.

Det är denna gång extra viktigt att vi får anmälningarna i så god tid som möjligt men allra senast den 28 mars.

Program:

- Bengt E. berättar om Arctic Radio Morokulien
- Tävling
- Middag på restaurang
- Årsmöte för Shortwave Bulletin
- Årsmöte för Arctic Radio Club
- Trevlig samvaro

Vi hoppas på stort intresse för vårt konvent.

Ring till Christer Brunström på telefon 035-108090 eller mejla christer.brunstrom@telia.com.

To my DXplorer friends

It is my sad duty to inform you that yesterday John Bryant fell from a ladder and received injuries that resulted in his death this morning. As you are, I am shocked--John was not only one of my best friends but also a writing partner and travel buddy. As I find out details on arrangements I will keep you posted. Please raise a glass to John--we have all lost a valued friend and colleague. (Harold Cones via DXplorer Yahoo group & DXLD)

Our deepest sympathy and condolences go to the family of John Bryant at this sad moment. This is really a big loss for the DX community. /SWB-editor

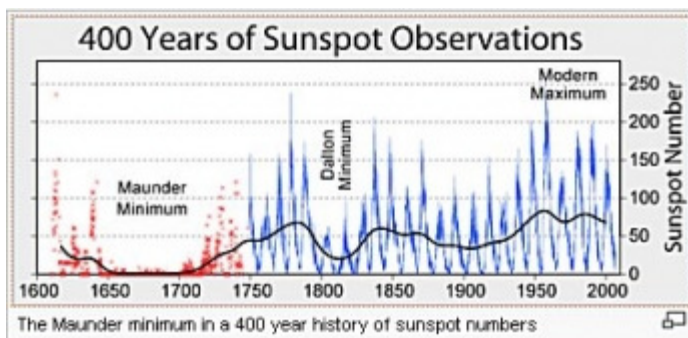
Solfläckar och istid

Iskyla råder både i Europa och i Nordamerika där man upplever de värsta snöstormarna på snart 100 år. Samtidigt lyser solfläckarna med sin frånvaro.

Förra året fastslog Space Weather Prediction Center hos NOAA att minimum i solcykel 24 hade inträffat i december 2008 och att nästa maximum kan väntas i maj 2013. Samtidigt konstaterades att det sannolikt blir ett ganska blygsamt sådant med ett solfläckstal runt 90. Men sedan den prognosen gjordes har antalet solfläckar ökat långsammare än vad man prognosticerat.

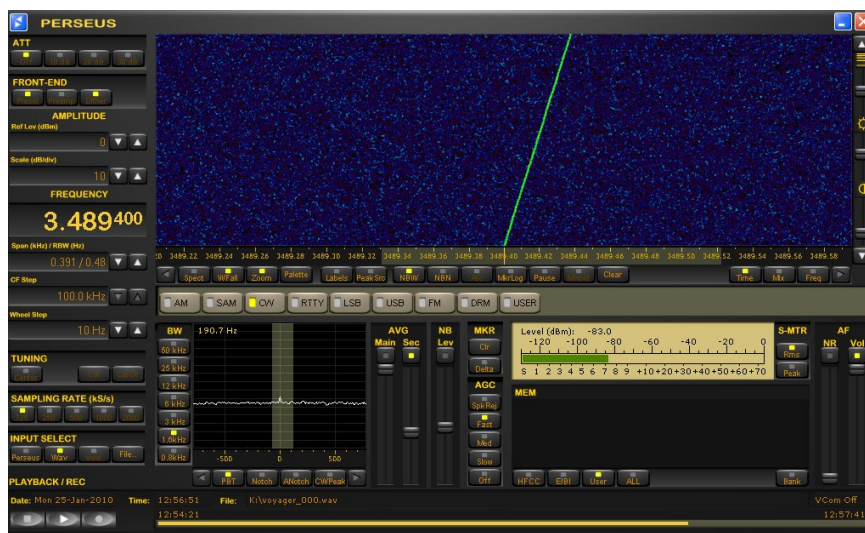
Det har fått en del att börja undra om vi är på väg mot ett nytt **Maunder Minimum** som var en period från cirka 1650 till början av 1700-talet då det nästan inte fanns några solfläckar alls. Det var samtidigt en period av extrem kyla som kom att kallas Lilla istiden. Vattnen runt Danmark frös och Karl X Gustav kunde tåga över över Bält med sin här.

(Källa: ARRL, Wikipedia och www.ssa.se via Lennart Deimert NORDX)



WEAK SIGNALS FROM THE VOYAGER SPACECRAFT ON A PERSEUS!!

The Perseus receiver has been used to see the weak flea power signals from Voyager 1 spacecraft, many millions of miles from earth, at the very far outreaches of the solar system!! Check the Perseus Yahoo group for all the details, and for a link for both a Perseus file from the Voyager craft, and one from the Venus Express spacecraft. Check the screen capture below, and notice the doppler effect, hence the frequency appears to wander. The screen capture below is my own capture, made while playing back the recording. Fancy having access to the equipment and the 40m dish!!! Some dxers can't get a 40m long wire up!!! For more details, go to the Perseus Yahoo group messages.



Voyager I experiment technical details for reception are listed below:

Ground Station:

Antenna: Yebes 40 m dish, Nasmyth focus
Aperture efficiency @ 8.4 GHz: 60%
Beamwidth @ 8.4 GHz: 210 arc sec.
Cryogenic Preamplifier Noise Temperature: 4 K
Total Receiver Noise Temperature: 9 K (with polarizer + horn)
Total System Noise Temperature: 45 K (in the sky)
Frequency Reference: Hydrogen maser
Backend: VLBI BBC (8 MHz BW) + Perseus SN 01690 communications receiver

Voyager I (12:55 UTC 25 Jan 2010)

Polarization: LCP
Power: 18W
S/C Antenna: 3.74 m
Distance (JPL ephemeris): 1.688-1010 Km (3.5 x distance to Pluto!)
Radial velocity (JPL ephemeris): -1.804 Km/sec = -6495 Km/hr
Doppler shift (calculated): -50.678 KHz
Signal to Noise (measured in 2 Hz BW): 10 dB
Frequency (measured): 8420.479431 (add 8416.99 MHz to displayed value)
Frequency rate (measured): -17 Hz/min

(From Scottish DX-er Ken Baird's website: http://www.ayrshirehistory.eu/tadx/transatlantic_logs_february_2010.html)

You can listen to the Voyager time compression sound (mp3) at this link: http://homepage.sverige.net/~a-0901/Voyager_time_compression.mp3 (via swb-editor)

40 m Radiotelescope OAN/IGN in Yebes

The new radiotelescope will be able to perform observations as a single-dish or in combination with other large radiotelescopes around the world. By using the Very Long Baseline Interferometry (VLBI) techniques, combining the signals of several distant telescopes, it is possible to obtain maps with the highest angular resolution ever achieved in astronomy. These studies are of fundamental importance to understand some of the most distant objects known in the Universe, like black holes in the centres of radiogalaxies. VLBI also has applications in Geodesy and Geophysics, as it can measure the tectonic plate displacements or the precise position of the Earth's pole. As a single-dish antenna, the new radiotelescope will be a general-purpose instrument in astronomy and will be used for many interesting studies such as the chemical composition of comets, the formation of stars in our Galaxy and the structure of local and distant galaxies.



From <http://www.craf.eu/nwsl0501.htm#5>

Picture from http://www.ib.man.ac.uk/~pdiamond/Calendar_images/07_July.jpg

Read more at: http://laeff.inta.es/projects/astrid/Laeff/Astrid/2009_Workshop/14_Bachiller_OAN_Madrid20090924.Ir.pdf

8.4 GHz amplifier

For those interested in how an 8.4 GHz amplifier with NF=0.04 dB looks like:

Material: Latón dorado

Temperatura de operación: 15 K (-258 °C)

Resultados 8.1-9.0 GHz @ 15 K

Temperatura de ruido / NF med.: 3.0 K / 0.044 dB

Ganancia (variación de ganancia): 38.0 dB (± 0.2)

Ref. de entrada (8.4-8.5 GHz): < -11.9 dB

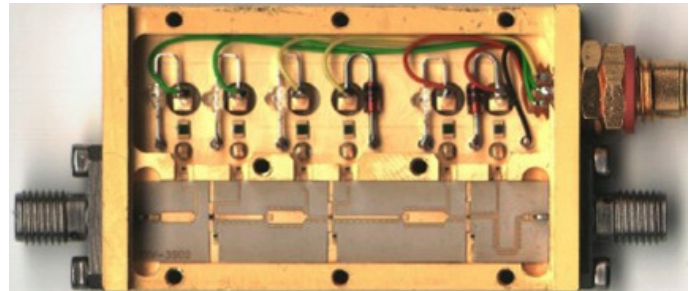
Ref. de salida (8.4-8.5 GHz): < -23.3 dB

Compresión 1dB @ 8.45 GHz: 7.3 dB

IP3 @ 8.45 GHz: 18.0 dB

Retardo de grupo (8.4-8.5 GHz): 7 ps pico-pico

Fluctuaciones de ganancia @ 1 Hz: 9.15×10^{-5} Hz $^{-1/2}$



http://www.fomento.es/MFOM/LANG_CASTELLANO/DIRECCIONES_GENERALES/INSTITUTO_GEOGR_AFICO/Astronomia/Investigacion/Tecnologia/ESOC.htm

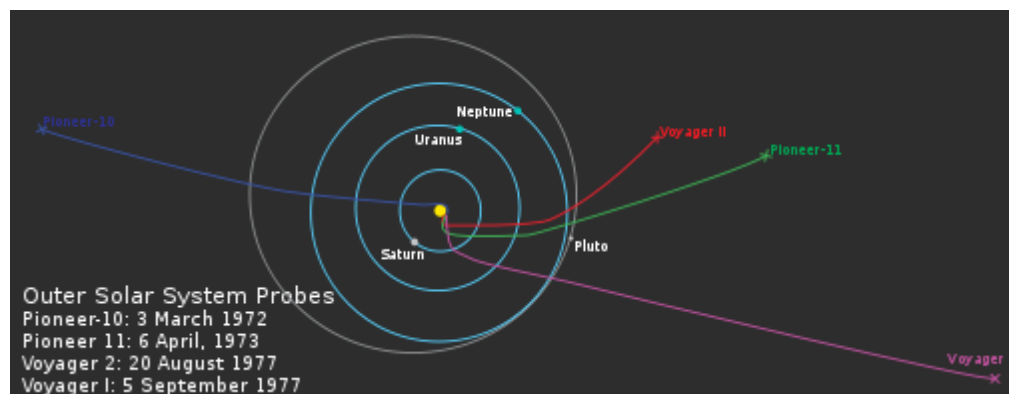
Voyager 1

Voyager 1 is an unmanned robotic space probe within the Voyager program launched by NASA September 5, 1977 with a Titan 3E Centaur. Voyager 1 is the most distant human-made object from Earth. It is identical to the sister space probe Voyager 2. The original mission was to visit Jupiter and Saturn. It still receives commands from, and transmits information to Earth, currently pursuing its extended mission to locate and study the boundaries of the Solar System and provide us with detailed images and data. This data has completely changed our view of our neighbor planets.

In May 2009 Voyager 1 was at a distance of 110 AU (astronomical units) from the sun, which equals 16,4 billion kilometers. This distance means that it takes more than 15 hours to send a signal to Voyager 1, despite the signal travels with the speed of light. As a comparison it takes only 15 minutes to send a signal to a space probe near Mars. Voyager 1 travels with a speed of a little more than 17 km/sec, which means that the signal delay increases with roughly 30 minutes annually.

On March 31, 2006, the amateur radio operators from AMSAT in Germany tracked and received radio waves from *Voyager 1* using the 20-meter (66 ft) dish at Bochum with a long integration technique. Its data was checked and verified against data from the Deep Space Network station at Madrid, Spain. This is believed to be the first such tracking of *Voyager 1*.

(From http://sv.wikipedia.org/wiki/Voyager_1)



(Regarding flickering display in Perseus

Hi, I've commented on this issue a few times, however this time may be of interest to those willing to go on an adventure. I have noticed that many of the so-called bugs seem to be either intermittent or happen only on randomly/mysteriously selected PC's. Obviously there is a reason but it is certainly not evident.

Before you jump into this task, it is important to note I was originally planning to start again from a clean disk in the hopes of ending up with a genuinely clean setup free of aborted install crud, etc. So I decided, with pretty much nothing to lose, to try the following.

My Perseus 2ndary display started out just fine, but i recently realized the flicker had increased to very annoying levels...up to several flickers per second, perhaps, sometimes stable. I decided to try a freeware utility called Ccleaner. I know...I know, some of you don't approve of any utilities whatsoever---that's fine, but I have found that the PC actually does fill up with crud over time--at least with my usage patterns.

Ccleaner installed without problems, features an unusually intuitive set of menus, and is comparatively fast in its cleanups. It has facilities with which one can sift through all sorts of aspects of the PC--it revealed bits & pieces of software I thought was long-gone. My PC, until a few weeks ago, was patrolled and "cleaned" by McAfee Security Suite...it is McAfee that contributed to the recent alleged trojan alert involving perseus.exe---it was all false. I finally replaced it with AVG and have had no issues. It took 4 passes of disk cleanup, reboot and registry cleanup (you can easily do a reg backup) until I got clean scans. At this point, the PC runs generally more smoothly AND the Perseus display flicker has subsided to a very low level---in fact at this point, I get the impression perhaps we're seeing a strobed discrepancy between the PC display refresh rate and the rewrite rate of the Perseus 2ndary display...that's an impression, not a diagnosis.

Again, I was ready to rebuild the Perseus PC from scratch when I began this---based on the results, I will hold off and see how the PC and flicker situation respond to routine maintenance using Ccleaner. It is a big step to let yet another utility onto one's PC---don't make the decision lightly.

As an added bonus, the similar flicker in PC-ALE, Skysweeper, etc has all but disappeared also. While CPU usage has not changed, I noticed that the disk accesses are fewer, if that actually means anything.

While I'm no closer to a genuine diagnosis than when the flicker first became evident, I expect it is safe to say that the configurations on a PC-by-PC basis have a profound influence on the Perseus flicker issue. Perhaps rather than a bug this could be considered a sensitivity... I expect we have proven that the Perseus software is capable of operating without flicker---we have also proven that the flicker can be intermittent, varying with no evident cause.

Other than endlessly fiddling with my own PC's, I do not work with PC's or software...I can appreciate, though, how difficult it must be to solve an issue like this when it doesn't happen on your own PC's and you cannot actually work with any of the PC's on which it is happening

in any case, if you're up for an adventure---maybe this would help.....
best, John C.

I can add an "Amen!" to John's comments about the CCleaner utility. I have used it every week or two on my PCs for nearly two years. It's an excellent free utility that does exactly what John described.

Others worth using regularly to help keep your PC in good tune are:

- [Spybot Search & Destroy](#) (free spyware cleaner), an alternative to the free [Ad-Aware](#) cleaner
- [MyDefrag](#) Freeware hard disk defragmenter; more efficient and thorough than the built-in Windows utility for defragmentation

(73, Guy Atkins Puyallup, WA USA <http://fivebelow.squarespace.com> via Perseus yahooogroup)