

Pump Up Your Score With

N1MM Logger+

Frankford Radio Club

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Hamcomm 2015

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Agenda

- Program History & Information
- Contesting Improvements
- Selected Window Changes
- Questions or Demonstrations

N1MM Logger Classic

- Released 15 years ago
- 2007 – 2014 Code Team
 - N1MM, N2AMG, N2IC, NA3M, K3CT
- Documentation & Web: N4ZR, K8UT, VE3KI
- Based on logs, the most popular contest logging program
- Language: Visual Basic 6
 - Last VB6 release 1998
 - Unsupported since 2008
- ~250k lines of code

N1MM Logger+ Program

- SQLite Database decision at Dayton 2013
- Programming started September 2013
 - N1MM, N2AMG, N2IC, K3CT, K8UT, KU7T, NA3M
- Early signs of life November 2013
- First contest use December 2013
- Widespread contest use by Development Team members by early March 2014

N1MM Logger+ Program

- Language: Visual Studio 2012 .NET
 - Last version with WinXp support
- SQLite database
- Significant architectural differences
- 500+ Files
- 13,400 subroutines and functions
- 255,000 lines of code
- ~11,500 hours of effort
- 4,550 source versions

N1MM Logger+ Manual

- Documentation: N4ZR, K8UT, VE3KI
- Web: K8UT
- Started with Logger Classic manual
 - 722 Pages
 - 4645 Sections
 - Over 400 Screenshots
- Incorporate over 100 new features & operational changes
- Replace all screenshots, add additional


N1MM Logger+ Status

- Alpha Test volunteers joined the testing in March 2014
- Beta Testers were added in June 2014
- General availability since late September 2014
- ~24,000 downloads of the V.0 Full Installer
- 20,000 downloads of the V.1 Full Installer
- Version 1.0 released December 2014
- Support for Logger Classic ended January 2015

Contesting Improvements

- New windows
 - CW Reader
 - Network Status
 - Separate Multiplier windows
 - Rotor
 - WAE contest QTC window
 - Fonts & Colors
 - Available window Band & Modes selector
- Major visual and functional changes
 - Entry, Available, Check, Info, Multiplier, Gray Line, Telnet

Contesting Improvements

- Per operator color control, fonts, & skins
- Separate program files for each user account
- Organized directory structure
- Multi-core CPU support
- Threaded CW generation, radio control, telnet
- Simple click download / install of program updates, country, and master.scp files
- Window specific FontSizer gadget ()
- New serial port control, 99 COM ports

Contesting Improvements

- CW sending with DTR or RTS
- Contest association: function keys, master.scp, call history, goals file, Band Panel buttons, and Available window Summary Table bands
- Automatic ASCII contest history, transaction log
- Snap to window & tool tip options
- Windows forced into visible monitor area
- Editable contest start time
- Band plan (frequency to mode mapping) with Bandmap mouse clicks

Contesting Improvements

- Import of multiple call history files
- Additional call history import directives
- Self configuring local LAN, no computer limit
- Selectable master station
- QSO record stores computer ID not Station #
- Non-scrolling Digital RX window
- QSO recordings saved in directories using the contest name & date

Contesting Improvements

- Log window QSO editing
- Elimination of HF / VHF operational mode
 - Users select bands based on contest & station
- Integrated Gray Line and Score Reporting
- Rotor control improvements
- Non-Intrusive Message Box
 - Displays important program messages
 - Self clearing
 - Wider use planned

Non-Intrusive Message Box

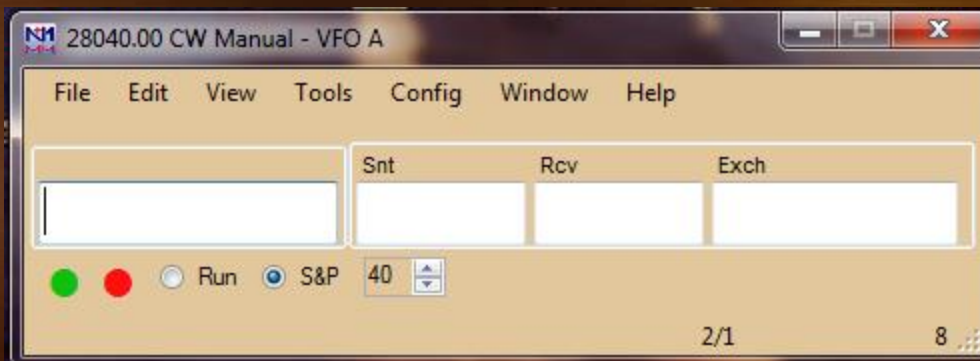
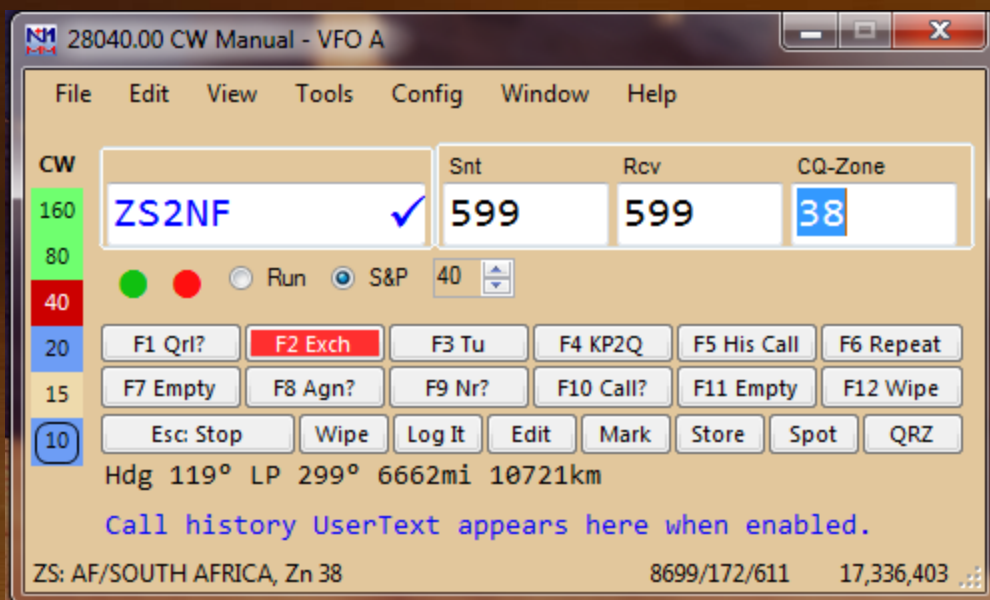
The screenshot shows a software window titled "50130.00 CW Manual - VFO A Developer Mode". The window has a menu bar with "File", "Edit", "View", "Tools", "Config", "Window", "Help", and "Development Tools". Below the menu bar, there are several input fields: "CW" (containing "XXX"), "Snt" (containing "599"), "Rcv" (containing "599"), and "CQ-Zone" (containing "25"). Below these fields are two rows of buttons: "F1 Qrl?", "F2 Exch", "F3 Tu", "F4 K3CT", "F5 His Call", "F6 Repeat" in the first row; and "F7 Empty", "F8 Agn?", "F9 Nr?", "F10 Call?", "F11 Empty", "F12 Wipe" in the second row. There are also two radio buttons labeled "Run" and "S&P", and a spinner box containing the number "36".

At the bottom of the window, a message box is displayed. The message box has a blue header with a red "X" icon and the text "Invalid QSO!". The main area of the message box is yellow and contains the text "Missing/Invalid Callsign". The message box has a close button in the top right corner.

Entry Window Changes

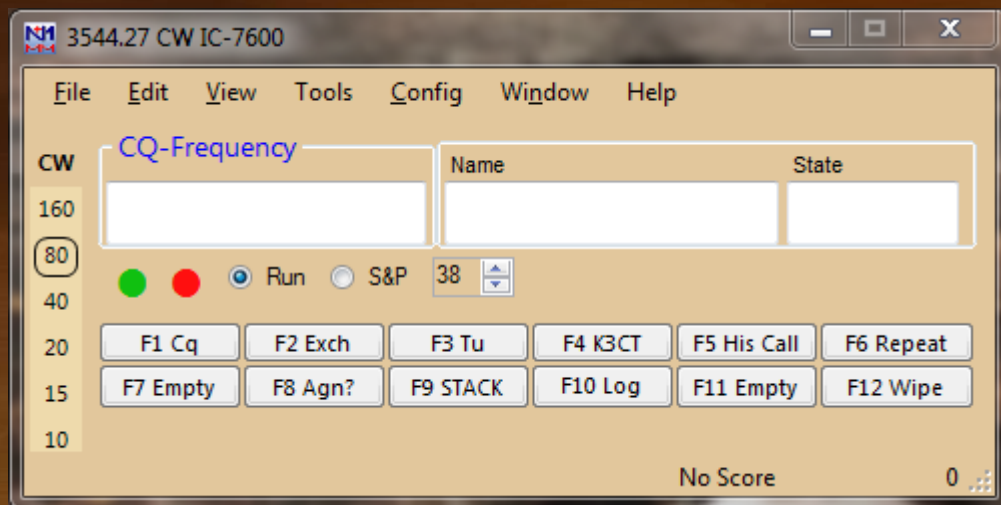
- Visual indicators (dupe, split, repeat, match)
- Band Buttons
 - Selectable bands
 - Displays stations needed for mult/QSO credit
 - Left click move to another band
 - Right click pass
- Highly configurable
- Mouse wheel radio tuning

Entry Window

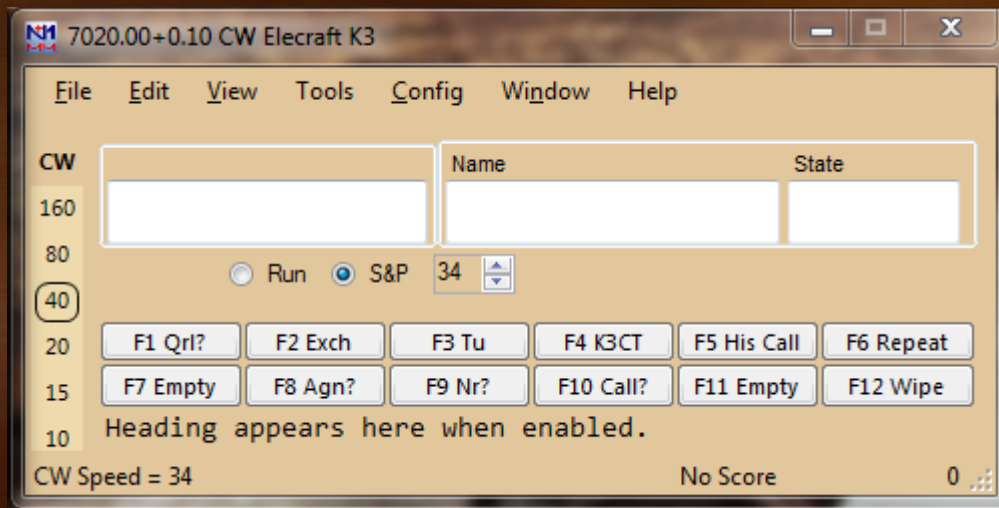


Entry Window SO2R

Radio 1



Radio 2



Log Window Changes

- Log window QSO editing, either pane
- Visual indications
 - Call not found in Master.scp (during the contest)
 - Varying exchanges (during the contest)
 - Multipliers
- Compact time format
- New menu option to display of rate to a selected QSO

Log Window

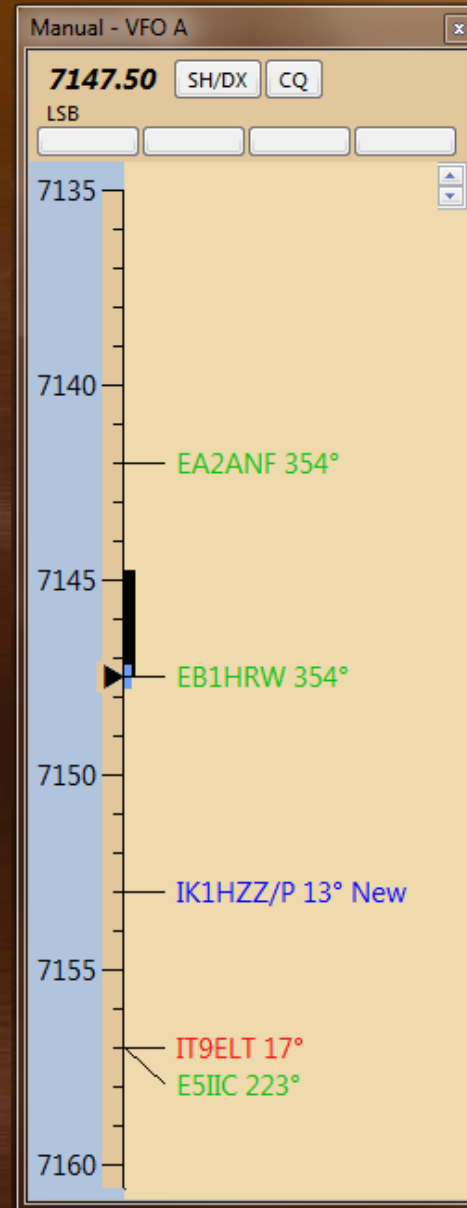
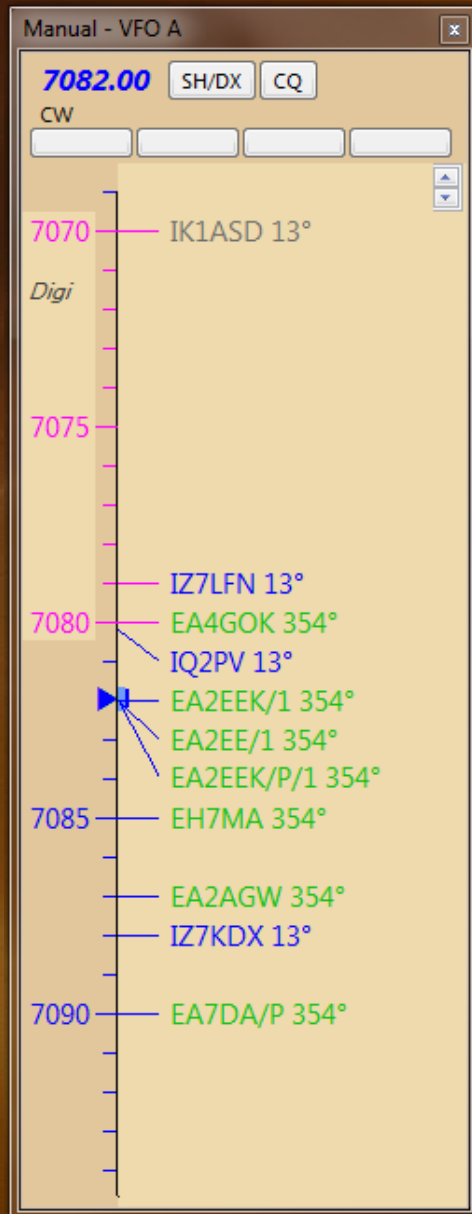
1/11/2015 00:07:00Z CQ WW CW - vb6TestingJunk.s3db

MM-DD	HH:MM	Call	Freq	Snt	Rcv	M1	ZN	M2	Pfx	Pts
01-11	00:05	LA1JJ	7030.00	599	599	✓	14	✓	LA	3
01-11	00:06	SM1WRA	7030.00	599	599		14	✓	SM	3
01-11	00:06	G3DFF	7030.00	599	599	✓	25	✓	G	3
01-12	00:04	DL1A	14030.00	599	599	✓	14	✓	DL	3
01-12	00:04	DL1A	7030.00	599	599	✓	20	✓	DL	3
01-12	00:04	DL1A	7030.00	599	599	✓	20	✓	DL	3
01-12	00:04	DL1A	14030.00	599	599	✓	14	✓	DL	3

Bandmap Window Changes

- CQ / Spot button toggles between last non-CQ frequency and Run frequency
- Programmable radio command buttons
- Visual frequency tolerance, fixed BW
- Spot history of call
- Mouse wheel click delete spot
- Mouse wheel roll changes frequency range
- Custom radio command filters saved by radio model

Bandmap Window



Check Window Changes

- “Levenshtein distance” used to select the best calls and prioritize
- Five selectable panes and several options
- No need to enter ? at the missing character
- Differences and missing letters are color coded
- Reverse lookup
 - Log data, Call and/or Exchange
 - Complete or partial call/exchange
- Several new options

Check Window

Log	Master	Telnet	Call hist
5353	47254	0	1010

Reverse lookup
6363

UA0AV	UA0A
UA0ABB	UA0AV
UA0ACG	UA0AAS
UA0APV	UA0ABB
DA0A	UA0ABK
UB0A	UA0ACG
UF0A	UA0ADX
UA0BA	UA0AGI
	UA0AKY

Available Window Changes

- Floating window to select bands & modes
- Selectable summary table bands, selection is stored with contest name
- Keyboard grab of spot, eliminates mouse use
- Mouse wheel click deletes spots
- Drag columns to reorder the table
- Compact time format
- Multiplier1 and Multiplier2 sort capability
- Hide unused columns

Available Window

Available - 61 Mults 89 Qs of 90 total spots

Mults & Qs Bands & Modes

	160	80	40	20	15	10
Mults	2	0	12	17	9	21
Qs	1	0	33	13	9	33
Total Qs	1	0	33	13	9	34

Call	Freq	Dir	Mode	Mult?	Time ^
DR1D	28475.0	008°	USB	No	0934Z
DL0XAX	28450.8	008°	USB	No	0934Z
IZ0MQN/P	7066.0	013°	CW	Yes 2	0934Z
IW0HQU/0	7195.6	013°	LSB	Yes 2	0934Z
UN7EG	28122.5	039°	CW	Yes 2	0935Z
DF0SX	28008.2	008°	CW	No	0935Z
DL2AA	28030.0	008°	CW	No	0935Z
F5MNC	14123.0	002°	RTTY	Yes 2	0935Z
DK3T	28485.0	008°	USB	No	0935Z
G5RR	14227.0	359°	USB	Yes 2	0935Z
EA2DCD	7100.0	354°	CW	Yes 2	0935Z
EA2EEK/P/1	7082.0	354°	RTTY	Yes 2	0935Z
PD1RO	28122.9	004°	CW	Yes 1	0935Z
EA4FTV	7060.0	354°	CW	Yes 2	0935Z
EA5RKB/P	7163.0	354°	LSB	Yes 2	0935Z
DG9SEH	28651.9	008°	USB	No	0935Z

Available Window Spot Display Filters

Radios

Focus Radio

Non-Focus Radio

Bands

HF VHF Mw

1.8 50 9cm

3.5 70 6cm

5 144 3cm

7 222 1cm

10 6.4mm

14 UHF 4mm

18 430 2mm

21 903 1.2mm

24 1296

28 2304

Modes

All

CW

Phone

RTTY

PSK

Radio

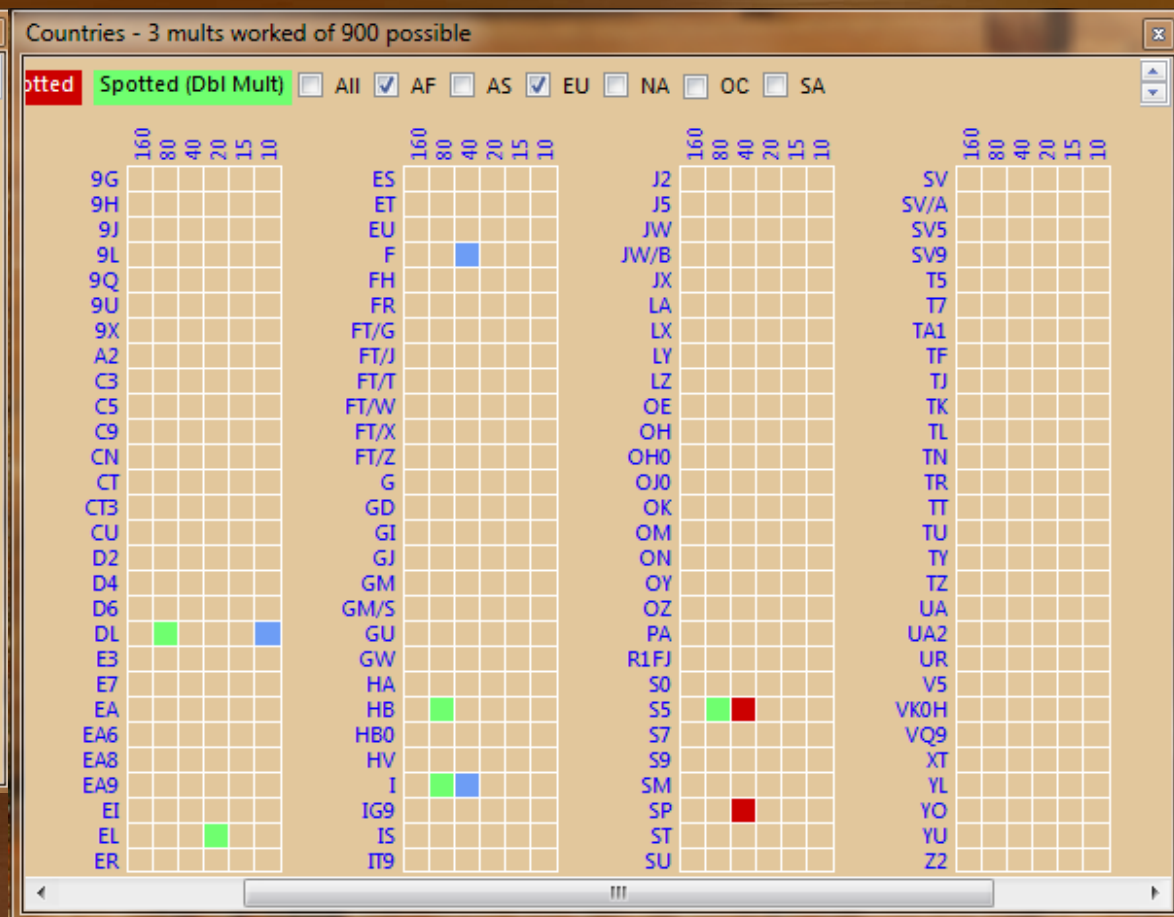
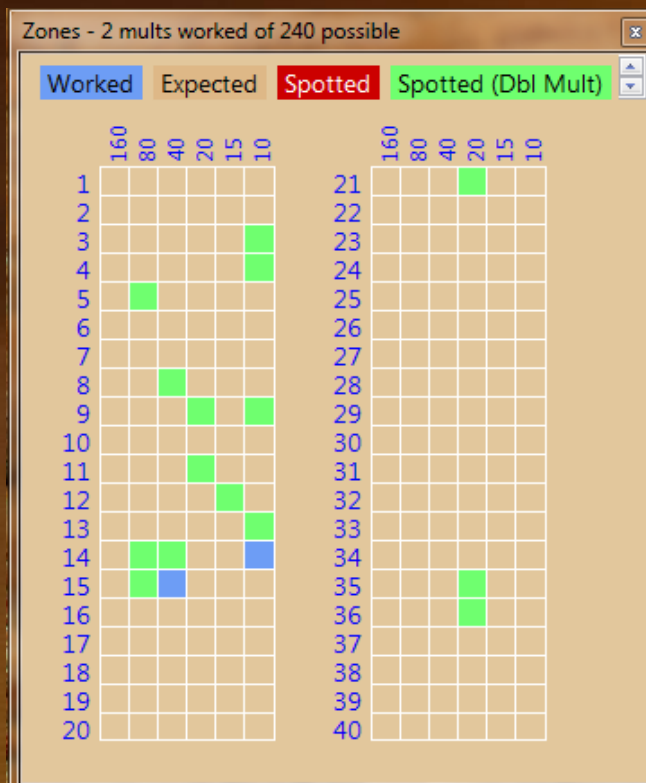
Contest

Close

Multiplier Window Changes

- Five type windows
- Can open more than one
- Selectable bands
- Color coded, clickable, unworked multiplier indicators
- Show Only Worked and Expected to Work option
 - Import/export of worked multipliers

Multiplier Windows



Telnet Window Changes

- Options are organized in four tabs
 - Cluster
 - Bands & mode
 - Spot filtering (prefix, blacklist spot/spotters)
 - Spot comment
- Filtered spots appear in gray text
- Remaining spots are colored by mode
- Mode added to outgoing spots

Telnet Window

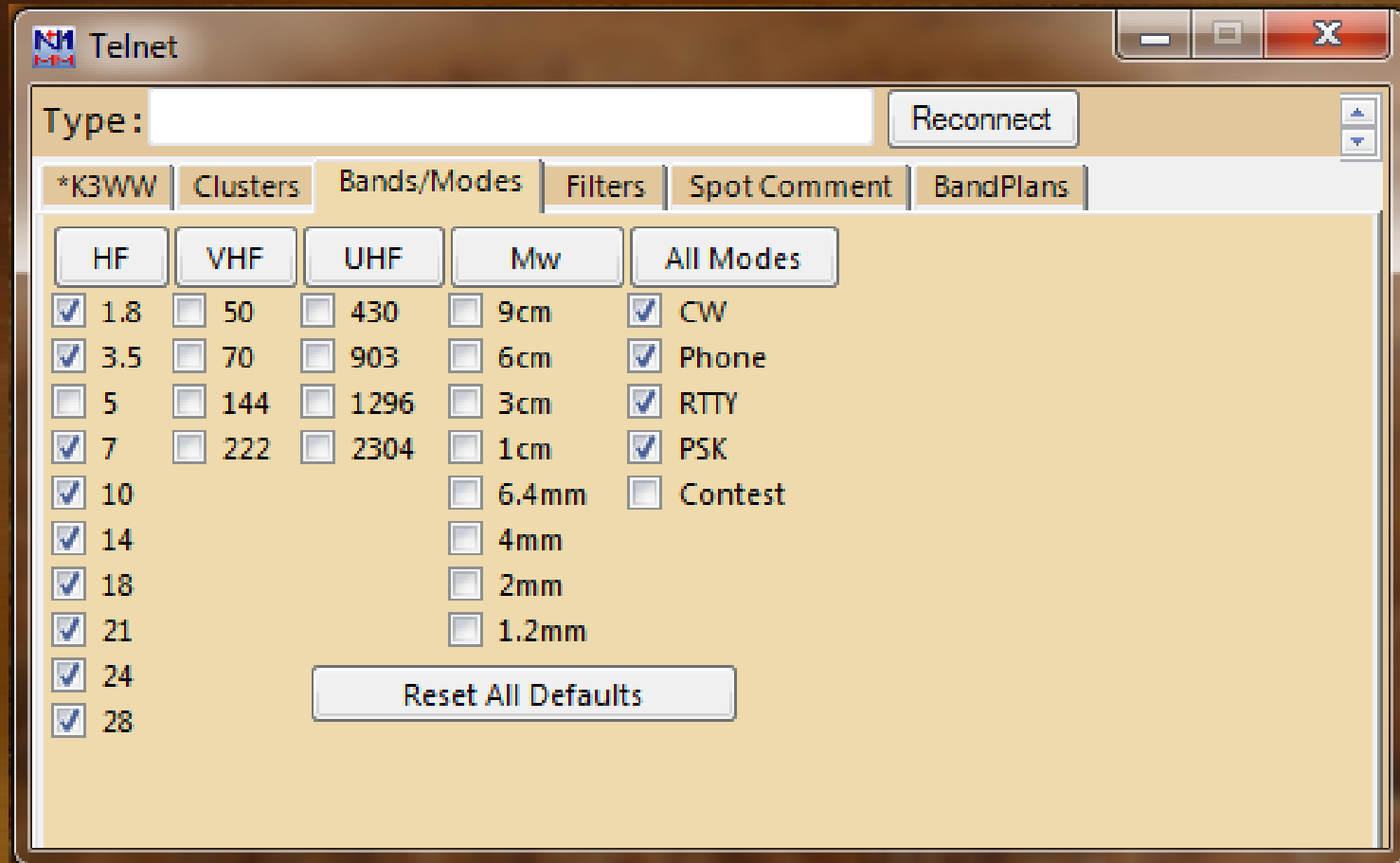
The screenshot shows a Telnet window with a title bar containing the N1MM logo and the text "Telnet". Below the title bar is a "Type:" field and a "Reconnect" button. A tabbed interface is visible with tabs for "*K3WW", "Clusters", "Bands/Modes", "Filters", "Spot Comment", and "BandPlans". The main area displays a list of radio spots in a table-like format. At the bottom, there are two rows of buttons for various actions.

*K3WW	Clusters	Bands/Modes	Filters	Spot Comment	BandPlans
DX de N7TY:	14035.3	KP4EJ	CW		PR 0109Z MD
DX de 9W6SV:	28508.0	BU2BV			0109Z
DX de NQ4A:	10139.0	EA8AQV	JT65	59.PSE LoTW.	0109Z VA
DX de NE6V:	21292.0	TX5W			0110Z CA
DX de W4EE:	7035.3	K3PA	KS		KS 0110Z MD
DX de KD5M:	50125.0	XE3/K5ENS	cq	EM60<>EL29	0110Z FL
DX de KW4BY:	50074.0	W0FY/B			0110Z
DX de W3LPL:	21017.3	AH0CO	Heard in AB		0110Z MD
DX de UA0LOF:	28120.5	VK2MOD	bpsk 31		0110Z PN53
DX de IV3NDR:	3637.5	IT9VCE	BB	CT-123	0110Z JN65
DX de KU1CW:	14039.8	K2PO	CW		OR 0111Z KS
DX de W4EE:	7035.6	AD4EB	TN		TN 0111Z MD
DX de UA9CK:	14081.7	UA9CK	tnx	QSO	0111Z
DX de KD5M:	50125.0	XE3/K5ENS	EM60<>EL61	correct grid	0111Z FL
DX de WA4NJP:	50102.0	CE2AWW	EM84DG<TEP>	FF47FA 529, rx only	0111Z GA
DX de WB7BBI:	50125.0	XE3/K5ENS	EL29HV<>EL61	heard 55 in QSO	0111Z TX

Buttons at the bottom:

BYE	CONN	DI/N	SH/DX	USERS	WWW
Clear NE	Yes DX	NE only	No DX	No VHF	K3CT

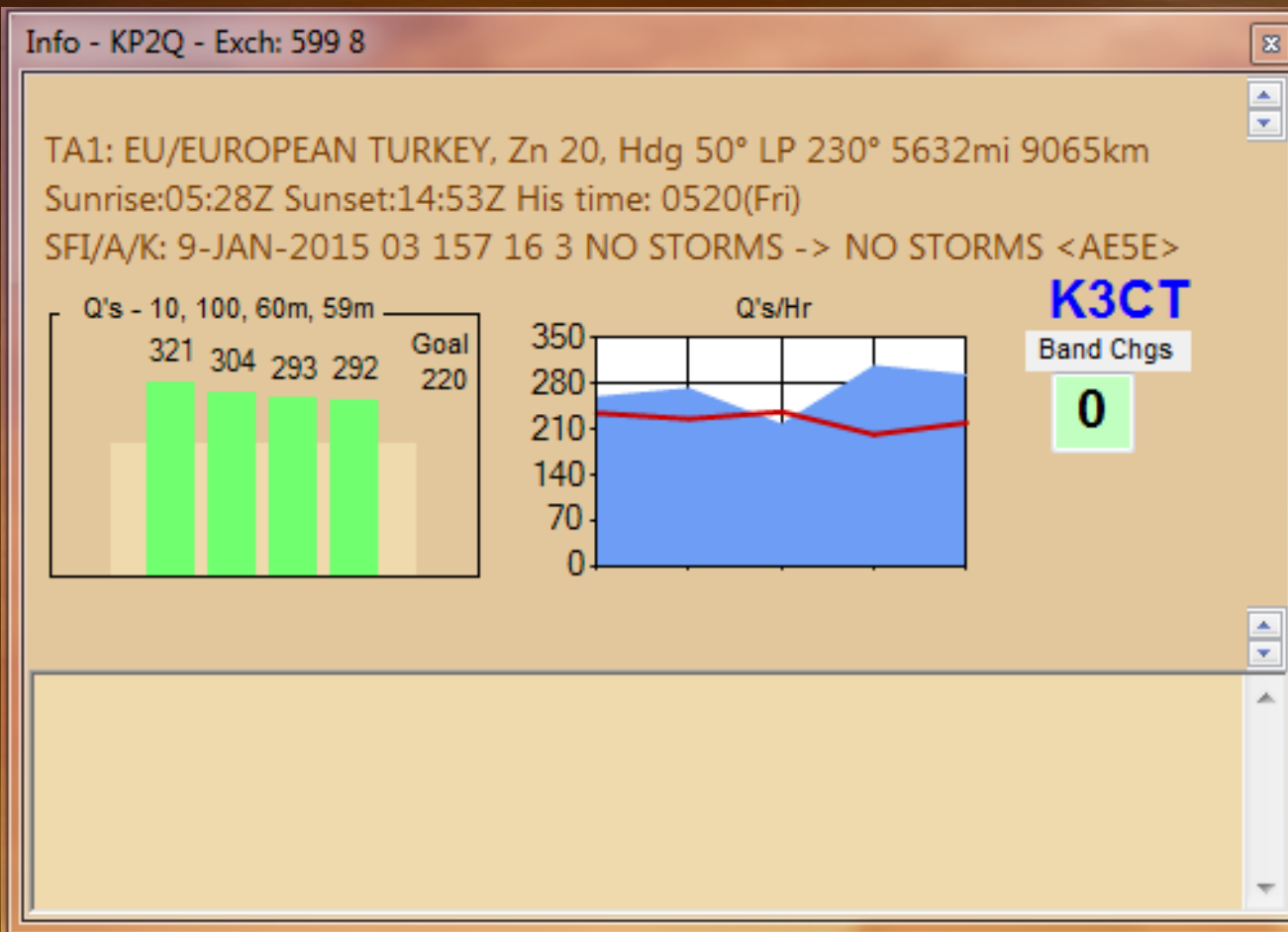
Telnet Window



Info Window Changes

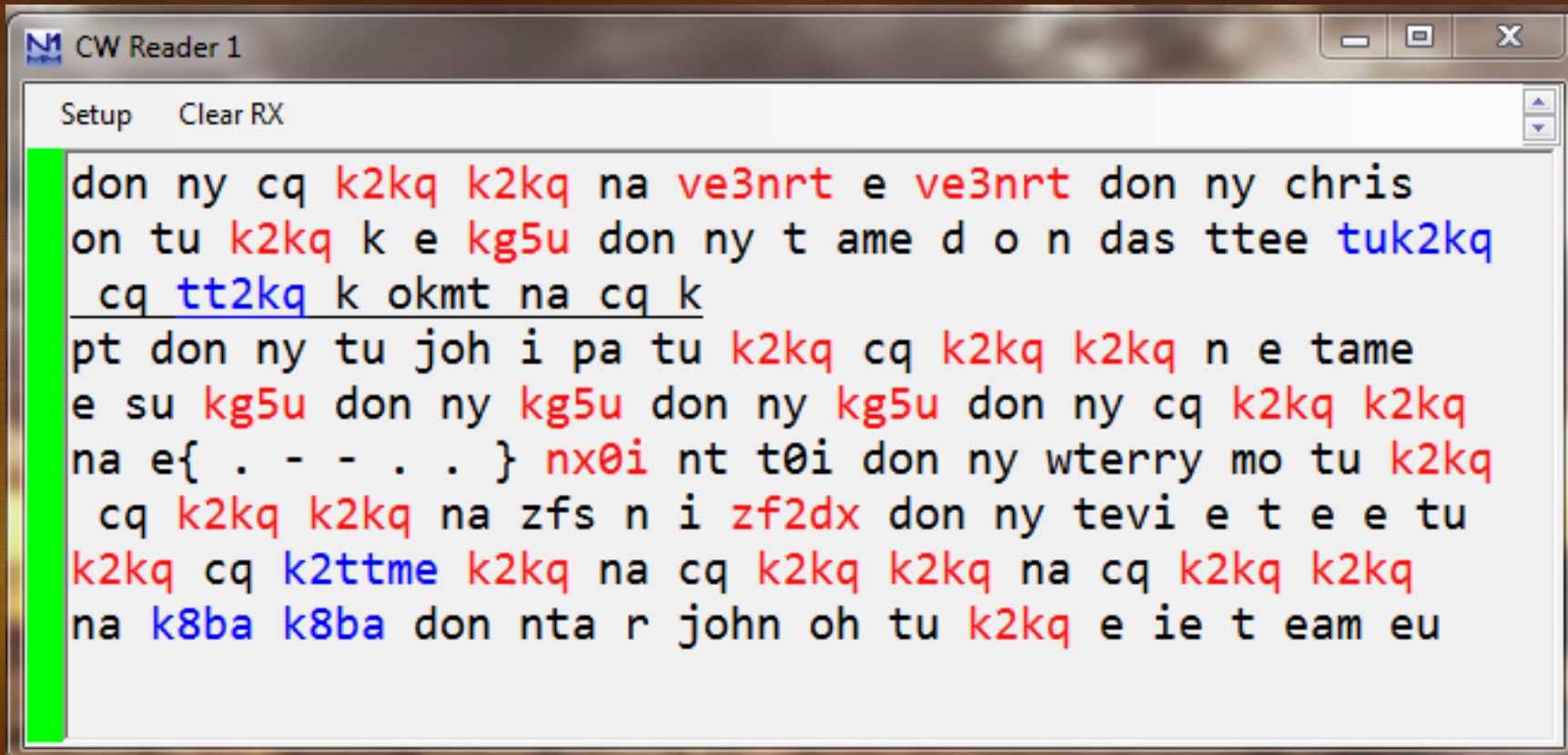
- Rate & goals graphs
- Selectable message pane and display text
- Selectable moving average period
- Display rates of all networked stations
- Edit, export, import goals

Info Window



CW Reader Window

- Fldigi or CWGet engine
- Callsign matching, click to enter



Digital Interface Window

The screenshot shows a software window titled "Digital Interface Soundcard (MMVARI)1". The window has a menu bar with "Setup", "Interface", and "Help". Below the menu bar, there are two input fields: "TX Letters/Figs" containing "NOT USED" and "MouseOver" containing "M". The main area is a text field with the following text: "ade - ct1etl@gmail.com. I wish you a happy and prosperous n w year of 2d15!!! IM58jr CQ Zone 14 * ITU Zoea 37; EPC # 0487; Address and additional info at <http://www.qrz.¥m>. GØCKI de CT1ETL SK.T ù". At the bottom, there is a list of call signs: "CT1ETL", "CT1ISH", "CU2AO", "DM780", and "W8VIJ". Below the list are buttons for "Clr RX", "TX", and "RX" (which is highlighted in green). At the very bottom, there are "Grab" and "CLR" buttons.

Setup Interface Help

TX Letters/Figs **MouseOver**

NOT USED M

ade - ct1etl@gmail.com.
I wish you a happy and prosperous n w year of 2d15!!!
IM58jr CQ Zone 14 * ITU Zoea 37; EPC # 0487; Address and additional
info at <http://www.qrz.¥m>.
GØCKI de CT1ETL SK.T ù

CT1ETL
CT1ISH
CU2AO
DM780
W8VIJ

Clr RX TX RX

Grab CLR

Statistics Window

Statistics for CQWWCW - 11/29/2014 - Band by Hour

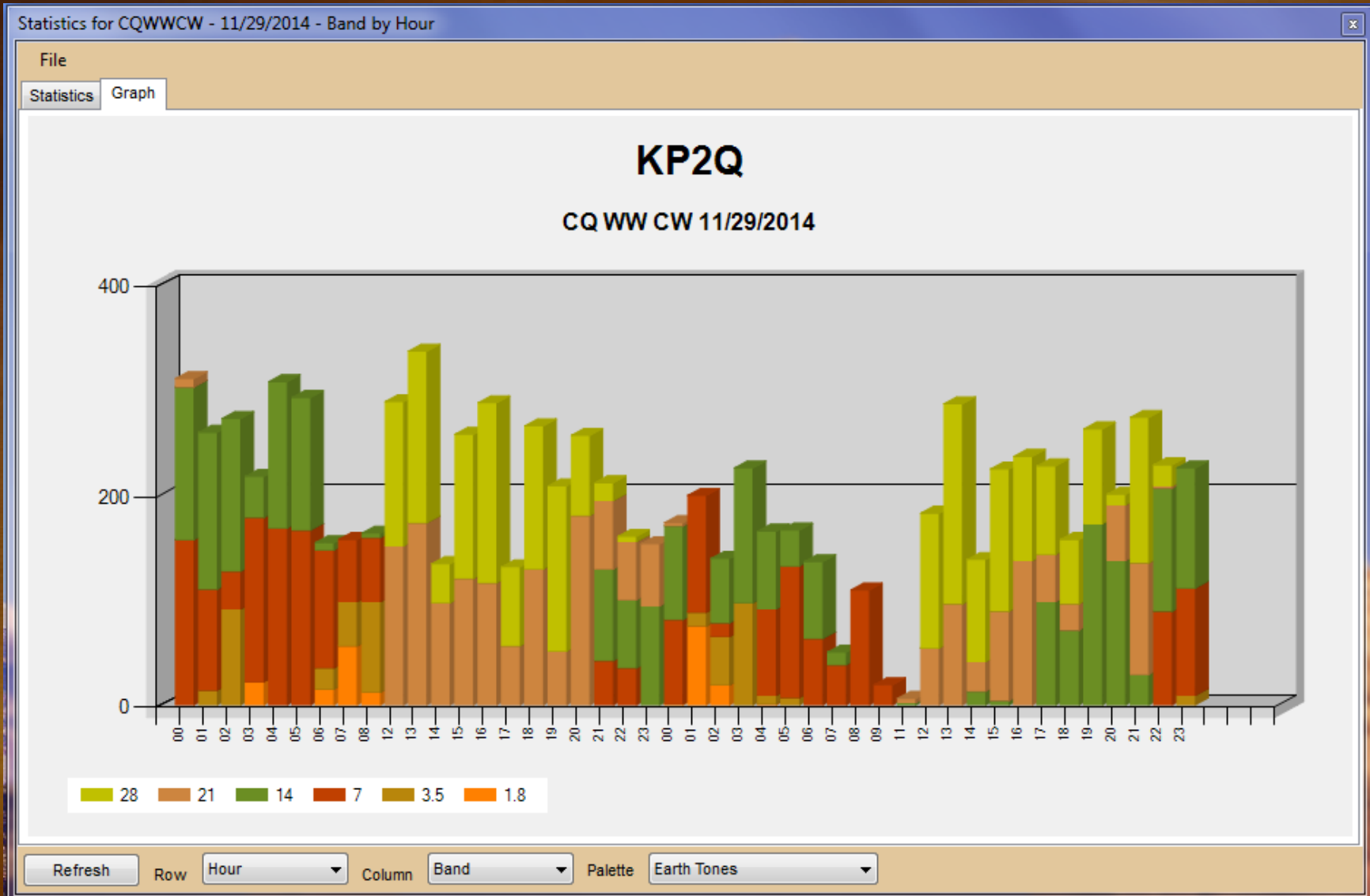
File

Statistics Graph

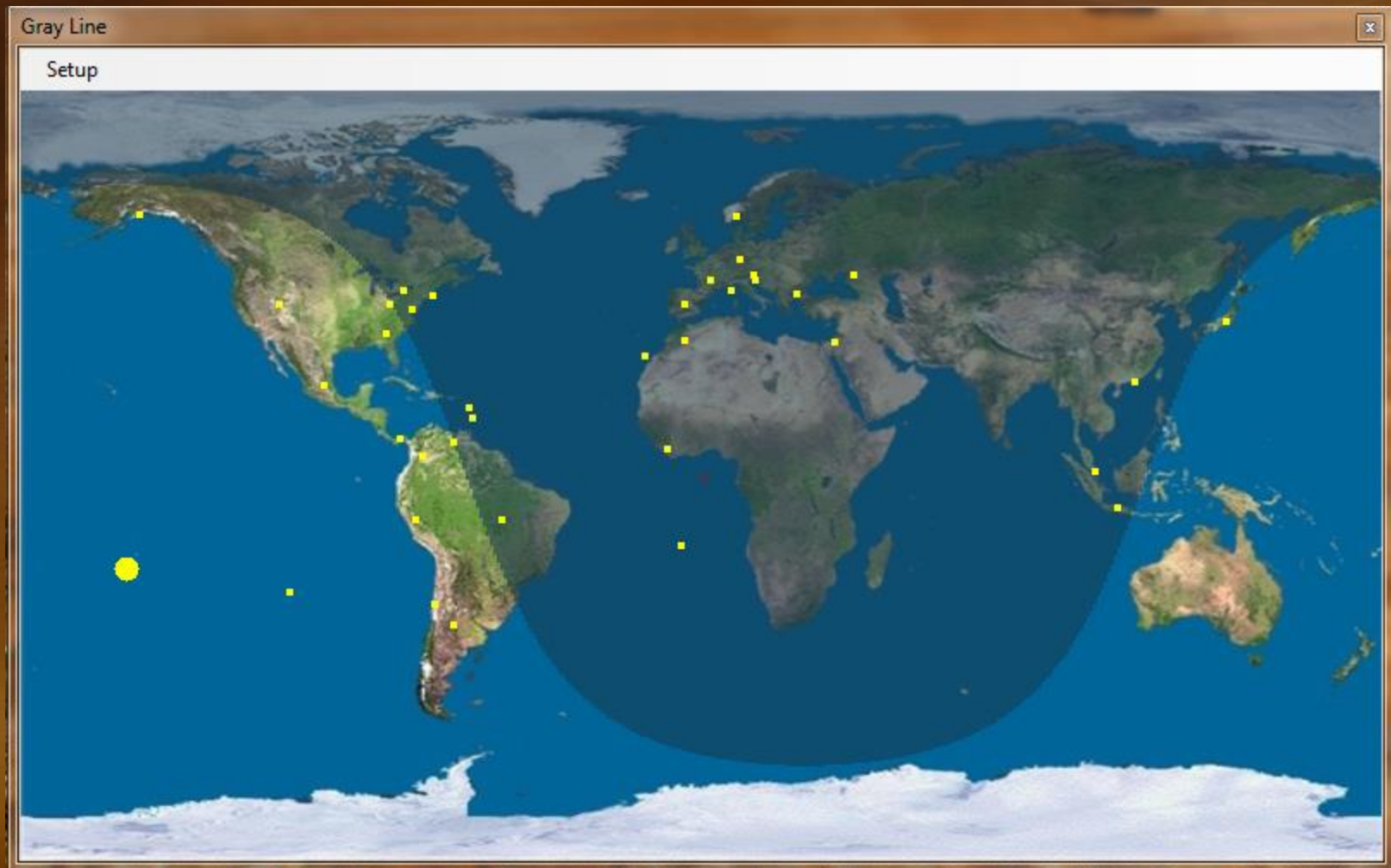
Day	Hr	1.8	3.5	7	14	21	28	Tot	Accum
2014-11-29	00			157	145	8		310	310
2014-11-29	01		14	96	149			259	569
2014-11-29	02		91	36	145			272	841
2014-11-29	03	22		156	39			217	1058
2014-11-29	04			168	139			307	1365
2014-11-29	05			166	126			292	1657
2014-11-29	06	15	20	112	7			154	1811
2014-11-29	07	56	42	59				157	1968
2014-11-29	08	12	86	61	4			163	2131
2014-11-29	12					151	137	288	2419
2014-11-29	13					173	163	336	2755
2014-11-29	14					97	37	134	2889
2014-11-29	15					120	137	257	3146
2014-11-29	16					116	171	287	3433
2014-11-29	17					56	75	131	3564
2014-11-29	18					129	136	265	3829
2014-11-29	19					51	157	208	4037
2014-11-29	20					180	76	256	4293
2014-11-29	21			42	87	65	17	211	4504
2014-11-29	22			35	65	55	5	160	4664
2014-11-29	23				94	59		153	4817

Refresh Row Hour Column Band

Statistics Window Changes



Gray Line Window

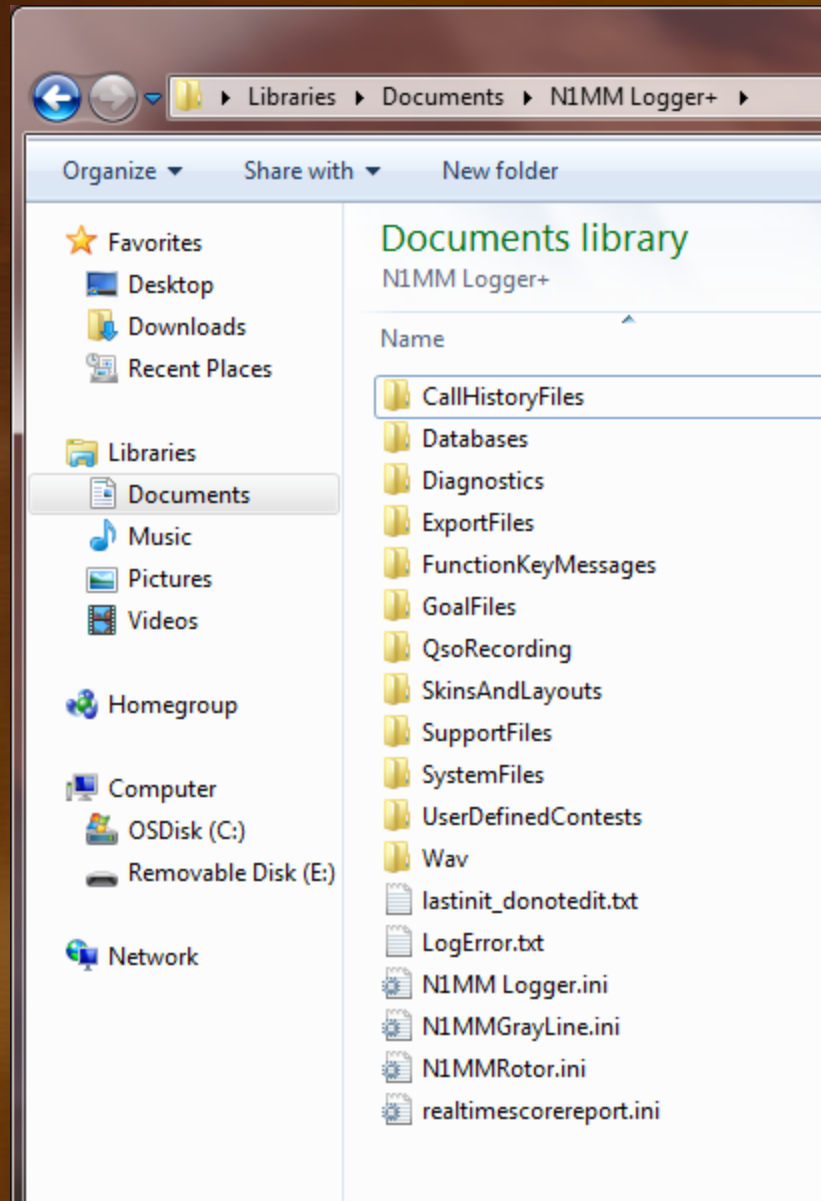


Logger+ Audio

- Functional, supports all configurations
- Under development
- Windows Vista and newer



User Files Directory



Questions?

Demonstrations?