

HF Skywave Propagation



Home → Simple and easy site navigation



Getting Started

Beginner

Frequency↔Wavelength

Basic radio wave theory

What is ham radio?

What are ham bands?

Monitoring ham activity

What is HF propagation?

Common terms explained



Current Conditions

Real-time data and current propagation conditions.

Band conditions now

Live propagation maps

Current solar indices

Solar activity updates

Today's forecast



Practical Applications

Apply propagation knowledge to improve your operations.

24-hour QSO planner

Antenna selection

Frequency planning

Long term prediction

DXing tips

Contest Strategy



Charts & Data

Visual representations — historical data and forecasting.

Forecast band conditions

Frequency analysis

Path reliability stats

Propagation charts

DX clusters

Solar index graphs

Solar cycle



Learn & Understand

Dive into propagation theory and science.

Skywave fundamentals

Ionospheric regions

Monitor→forecast→predict

Path Calculations

Global↔Regional effects

NVIS

Grayline prop.

Solar cycle effects

Solar indices quick guide

Seasonal variations

Books and articles

Quick Access Tools

Advanced Topics Advanced

Complex propagation phenomena and modeling.

Multi-hop propagation

Scattering

Propagation modeling

The LUF-MUF window?

Geomagnetic activity

What is plasma?

What is solar wind?

Why are bands closed?

Research & Studies



Quick Access Tools



Search Site



Glossary



Table of Contents



Site Map



Podcasts



References



AI Features

© 2025 4X4XM - Doron Abraham Tal (Türkel). All Rights Reserved.

Total visits since 17 August 2022.

4X4XM

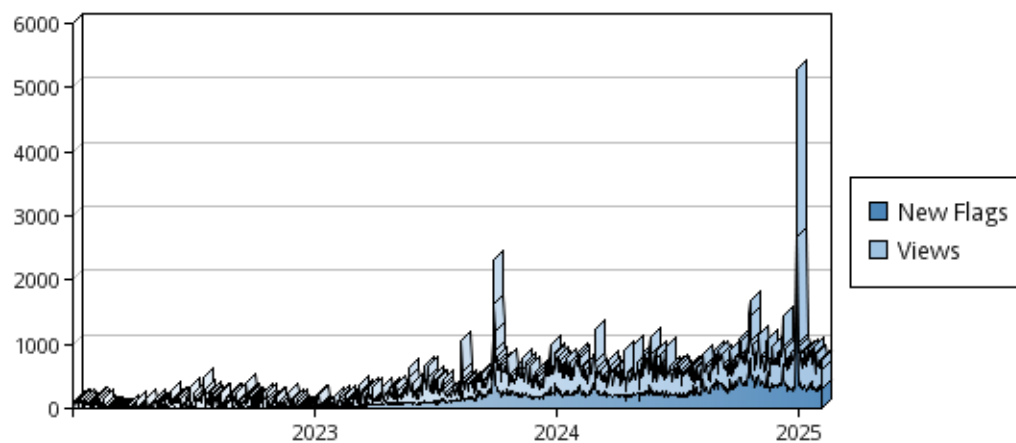
US 102,590	HR 268	UG 35	VG 11	MC 3
GB 12,607	RS 268	GE 35	VI 11	CK 3
CA 8,001	HK 265	EC 33	AO 11	TG 3
DE 4,198	UA 227	GU 33	SY 11	CG 3
NL 3,335	BD 217	JM 33	BW 10	LC 3
AU 3,255	LU 206	TN 30	NE 10	AX 3
IL 2,590	LT 188	RE 30	BO 9	LI 3
IT 2,481	PK 187	SC 30	UZ 9	BZ 3
IN 2,014	SK 174	NI 30	SV 9	AD 3
FR 1,824	CO 174	OM 28	AM 9	NC 3
PL 1,584	TW 164	MM 27	CI 9	DJ 2
ES 1,543	EG 134	JO 27	PF 9	FM 2
SE 1,439	AE 130	KW 26	SR 8	GF 2
SG 1,263	IR 117	LB 26	MV 8	GL 2
BE 1,125	UY 107	NA 26	SO 7	TJ 2
JP 1,076	NG 105	BH 25	ZW 7	NF 2
BR 1,008	EE 104	PY 25	GD 7	TL 2
NO 950	IQ 98	MW 24	SN 7	KM 2
CH 922	HN 98	LY 24	CW 7	MH 2
IE 910	VN 97	TZ 24	LA 7	CM 2
ZA 880	LV 96	MU 22	MN 7	GA 2
NZ 829	SA 93	KZ 21	SD 7	TO 2
FI 793	PE 80	BB 21	PG 6	AS 2
CN 774	VE 79	KH 20	GI 6	SL 2
DK 772	MT 77	AW 20	AI 6	AG 2
PH 689	LK 70	BY 20	FK 6	GY 2
ID 682	KE 69	GH 19	MQ 6	IO 1
AT 641	ET 69	AZ 18	SM 6	KG 1
RO 598	MA 60	DO 17	DM 5	GN 1
TR 588	MZ 59	JE 17	GP 5	BQ 1
GR 561	BA 58	GG 17	VU 5	ST 1
PT 539	IS 56	BN 15	BJ 5	BI 1
CZ 507	QA 55	FO 15	SS 5	YT 1
AR 504	MD 55	AL 14	XK 5	GM 1
HU 487	CR 55	ZM 14	BT 4	TD 1
MY 471	NP 53	CD 14	ME 4	MP 1
RU 465	DZ 53	BM 14	TC 4	WS 1
MX 442	CY 52	AF 14	PS 4	CF 1
CL 381	TT 52	GT 13	BF 4	PW 1
SI 330	CU 46	VC 12	MO 4	ER 1
TH 305	MK 42	YE 12	CV 4	
BG 304	KY 41	RW 12	MG 3	
PR 303	PA 40	FJ 12	SZ 3	
KR 297	IM 39	BS 11	LR 3	

Pageviews: 430,767

Flags Collected: 216

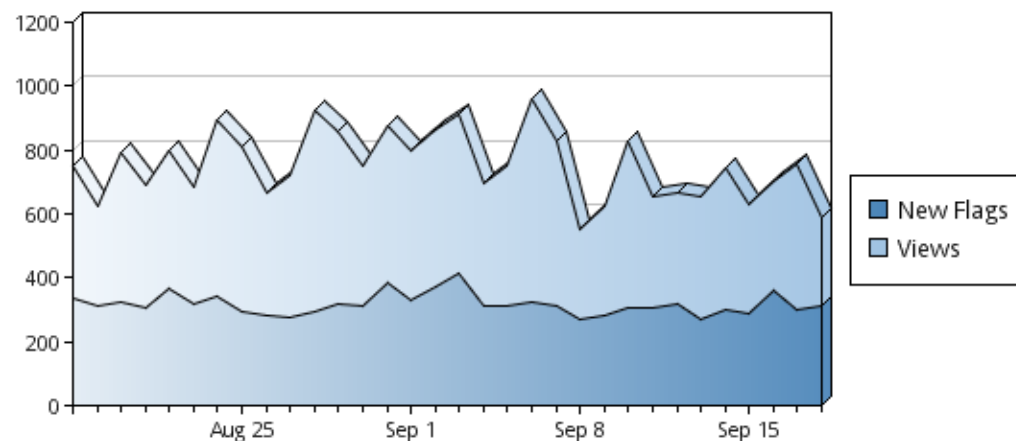
You: IL Newest: FM

Repeat visits counted as new after 24 hours.

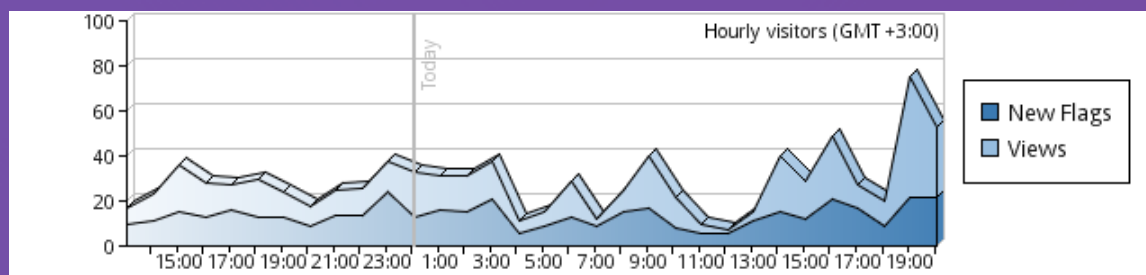


Visits (per day) since 17-August-2022

The number of site visits increased during
ionospheric events that disrupt HF radio propagation.



Visits (per day) during the last month.



Hourly visits today