USING NØNBH « SOLAR DATA » BANNER

Memo by Eric F4FAP – V3 apr 2026 *Disponible en français : hamtech.fr -ou- ara35.fr*

SOLAR-TERRESTRIAL DATA

SFI: Solar Flux Index (2800 MHz – 10,7 cm) ● 60↔300 ● A higher Index means higher (and more favourable) ionisation and MUF ● Correlated with SN.

SN: Sunspot Number ● 0↔≥250 ● The higher the number, the more favourable HF propagation is ● Correlated with SFI.

A: 24-hour planetary geomagnetic indicator ● 0↔400 ● The higher the index, the more the HF propagation is degraded.

K: 3-hour planetary geomagnetic Indicator ● 1↔9 ● The higher the index, the more the HF propagation is degraded.

X-Ray: X-ray level ● A_x B_x C_x M_x X_x ● The higher the index, the more the absorption conditions (D layer) exist and degrade HF propagation.

304A: Relative intensity of solar UV measured at wavelength 304 angstrom (30.4 nm) ● *Average low* ≈134↔*Average high* ≈200 ● The higher the number, the more favourable HF propagation is.

@SEM: Satellite instrument (GOES) giving measurement 304A.

Pf: Proton density (Proton Flux) in the solar wind (SW) ● 0↔∞ ● The higher the index, the more the absorption conditions (D layer) exist and degrade HF propagation ● Average flow measured under calm conditions ≈10.

Ef: Electron density (Electron Flux) in the solar wind (SW) ● <1↔>1000 ● The higher the index, the more the absorption conditions (D layer) exist and degrade HF propagation.

Aurora: Aurora probability (N/n = x) ● N : 1↔10.

Bz: Orientation of the Interplanetary Magnetic Field ● 50↔-50 ● A negative value indicates a weakness of the Earth's magnetosphere in relation to solar wind particles.

SW: Solar wind ● Varies in speed and temperature ● 300↔800↔1500 km/sec ● The stronger the solar wind, the more it influences the ionosphere negatively.

HF CONDITIONS

Band Day Night: Estimated HF general conditions Day/Night ● Poor Fair Good.

VHF CONDITIONS

Aur Lat: Estimation of the global lowest auroral latitude ● Calculated value from 67.5 to <45.0.

Aurora: Auroral event reported by DX-Robot ●
Closed High LAT AUR = auroral activity ≥ latitude 60° MID LAT AUR = auroral activity between latitude 60° et 30°.

EsEU/NA: Europe/North America E-sporadic conditions reported by DX-Robot ●
Band Closed High MUF = Conditions rising 50MHz Es *and/or* 70MHz Es *and/or* 144MHz Es = band reported open via Es.

EME Deg: Index of degradation of Earth-Moon-Earth bounce reported by Make-More-Miles ●
Very Poor Poor Fair Good Excellent.

Solar Flare Prb: Probability of coronal mass ejection within 24 hours computed by Bradford University ● 0↔100%.

MUF: Maximum Usable Frequency related to layer E (Es) reported by Make-More-Miles ● Color-coded 24-hour progressive band indicating the theoretically accessible band: **grey** = inactive ; **blue** = 6m ; **green** = 4m, **yellow** = possibly 2m ; **red** = 2m.

MS: Probability of Meteor-Scatter reported by Make-More-Miles ● Color-coded 24-hour progressive band indicating the probability according to time (Min/Max color code under the banner) ● **Grey** = no MS condition.

Geomag Field: General calculated state of the Earth's magnetic field:
Inactive Very quiet Quiet Unsettled Active Minor storm Major storm Severe storm Extreme storm.

Sig Noise Lvl: Computed background noise ● S1↔S9.

MUF US BOULDER: Reported MUF in Boulder (Colorado, USA) ● NoRpt = no report.