Join us at the MAARS Christmas Party!!!

Friday, December 10th, 6 P. M. at the Manhattan Church of Christ, 2510 Dickens Ave., Manhattan, KS.

Bring a dish to share and a gift of $10 or less for the gift exchange.

27 Day Solar Predictions

Date	Flux 10.7 cm	A Index	Kp Index
Dec 01	83	7	3
Dec 02	83	5	2
Dec 03	85	7	3
Dec 04	85	7	3
Dec 05	85	5	2
Dec 06	85	5	2
Dec 07	85	5	2
Dec 08	85	5	2
Dec 09	85	5	2
Dec 10	85	5	2
Dec 11	85	7	3
Dec 12	88	7	3
Dec 13	88	7	3
Dec 14	88	7	3
Dec 15	85	7	3
Dec 16	85	5	2
Dec 17	80	5	2
Dec 18	80	5	2
Dec 19	80	5	2
Dec 20	80	5	2
Dec 21	80	5	2
Dec 22	80	5	2
Dec 23	80	5	2
Dec 24	80	7	3
Dec 25	80	7	3
Dec 26	83	5	2
Dec 27	83	5	2

Solar Flux: This flux number is measured from the amount of radiation on the 10.7cm band (2800MHz). It is closely related to the amount of ultraviolet radiation, which is needed to create an ionosphere. The lowest possible number for this solar flux is 63.75. Single hop propagation already starts at 70 in lower latitude areas. Worldwide long distance propagation (DX) may turn up already with a solar flux at 120. From experience, an average solar flux of 170 seems to be ideal for 10m-20m bands QRP DX with good possibilities during these conditions to reach every possible part of the globe with a simple dipole running as low as 5 Watts!

A- and K-index: Geomagnetic activity indices, high indices (K:>5 or A:>20) means stormy conditions with an active geomagnetic field. The more active, the more unstable propagation with possible periods of total propagation fade-out. Especially around the higher latitudes and especially at the polar regions, where the geomagnetic field is weak, propagation may disappear completely. Extreme high indices may result in aurora propagation, with strongly degraded long distance propagation at all latitudes. Sporadic-E is strongest during low indices. Low indices result in relative good propagation, especially noticeable around the higher latitudes, when transpolar paths may open up. Maximum K-index is 9, and the A-index can exceed well over 100 during very severe storm conditions, with no maximum. The ARRL often reports the K-index from the Alaskian station where this index is known as the College K-index. Other stations reporting K-indices include Planetary and Boulder. In contrast, the A-indices are usually reported for the Planetary station only.

The higher the K-index, the more unstable propagation becomes, the effect is stronger at high latitudes, but weaker near low latitudes.

When storm level is reached, propagation strongly degrades, possibly fade out at high latitudes.Solar Flux: This flux number is measured from the amount of radiation on the 10.7cm band (2800MHz). It is closely related to the amount of ultraviolet radiation, which is needed to create an ionosphere. The lowest possible number for this solar flux is 63.75. Single hop propagation already starts at 70 in lower latitude areas. Worldwide long distance propagation (DX) may turn up already with a solar flux at 120. From experience, an average solar flux of 170 seems to be ideal for 10m-20m bands QRP DX with good possibilities during these conditions to reach every possible part of the globe with a simple dipole running as low as 5 Watts!

Your membership in MAARS is important to help keep the club alive and maintain equipment. If you haven't already done so please consider joining MAARS at a prorated fee. We also have a student rate available. Dues should be mailed to MAARS, P.O. Box 613, Manhattan, KS 66505.

THE TREASURER'S REPORT
November 1st 2010 to December 1st 2010
Submitted by: Christine Chainey KCØYJN, Treasurer

As of November 1, 2010
- Cash on Hand $110.00
- Checking account . . . . . $ 61.56
- Savings account $950.39

TOTAL $1,121.95

Income:
- Dues $190.00

Expenditures:
- AT&T $35.50

As of December 1, 2010
- Cash on Hand $110.00
- Checking account $216.06
- Savings account $950.39

TOTAL $1,276.45