

# INTERNATIONAL EQUATORIAL ELECTROJET NEWS

## AIM OF THE LETTER

The aim of this bi-monthly letter is to inform about the International Equatorial Electrojet Year project in the Europe-Africa sector.

## CEA RADAR AT KORHOGO

*Rectification* : The CEA radar aerials have been installed during February; the radar should be operational at the end of March. Two intensive campaigns are expected : 15 days during early April and three weeks in June. Between these two periods the radar will be on routine schedule. M. Jean CHARLOT will take care of the follow-up of the experiment at Korhogo in February, March and April. After June the CEA radar will be re-installed at LAMTO.

## MAGNETO-TELLURIC CHAIN

The Chain of stations have been working well since it was completed at the end of November. The first results have been analysed. They will be presented at the IAGA section 7.1 on early IEEY results.

## PHD STUDY AND REPORT

M. SAMBOU Ephrem (Cheikh Anta Diop, University Dakar) will hold his 3d Cycle Thesis at Dakar on March 19. The title of his thesis is : "Contribution to the study of the equatorial ionosphere : variation in the F2 peak ionization density with large-scale electrodynamic processes".

This work deals with the ionosonde observations of DAKAR (SENEGAL), OUAGADOUGOU (BURKINA FASO) and LANNION (FRANCE), and with magnetograms from BANGUI (CENTRE-AFRICAN Republic and from M'BOUR (SENEGAL). The perturbation events of the study were selected from the SAINT-SANTIN (FRANCE) incoherent scatter sounder data base (1966-1987) for large-scale electrodynamic processes (Regular ionospheric dynamo, ionospheric disturbance, magnetospheric convection).

Two magnetically quiet series of days have yielded seasonal variations and confirmed the large variability of the foF2 diurnal curves from one day to the next in the F region "equatorial trough" zone. The years of study are 1986 (minimum sunspot activity) and 1990 (high sunspot activity).

M. JULLIEN Fabrice presented his mission report for ENST engineer diploma (Ecole Nationale Supérieure des Télécommunications) on February 5. He described the hurried efforts for the start-up at KORHOGO during the early coordination phase. He presented the first ionogram records at KORHOGO which have revealed unexpected and rapidly-varying spread F levels. He presented and proposed coordinated studies of very high frequency ionospheric propagations and of telephonic systems for equatorial country people.

## LETTI RADAR (KORHOGO)

The final project for setting up the LETTI radar at KORHOGO is being completed. It could be submitted in early April to the Ministry of cooperation for financing. We are proposing an International Research Center associating Universities, Telecommunications Agencies and Research Laboratories.

## TEACHING

M. Michel MENVIELLE, Professor at Paris XI University, visited Ivory Coast from 7 to 13 February. Michel MENVIELLE is in joint charge of teaching for the IEEY/CAMPUS project together with M. Antoine ACHY SEKA, Professor of the ABIDJAN University. During this stay, the work done by students since their last stage in FRANCE (last spring) was evaluated. Orientations for the work have been decided in order to prepare the results which will be presented during the next scientific Assembly of IAGA at BUENOS AIRES (August, 1993).

## FUNDING

MRT (Ministère de la Recherche et de la Technologie) gave a financial support to ORSTOM. Financing is still missing for :

- 1) IEEY scientific secretary ;
- 2) computer equipment at ABIDJAN ;
- 3) operation expenses.

## INTERFEROMETER/UCL (UNIVERSITY COLLEGE OF LONDON)

The instrument has been delivered at KORHOGO in December but could not be started because of computer failure and of the lack of cooling system. This will necessitate a special mission which is hoped for March or April.

## DATA BASE

40 scientists have answered for the Database questionnaire. The manual for building catalogues (one per longitude sector) has been mailed to all. Interested people should be reminded that the first catalogues, containing the data from the end of 1992 and the first quarter of 1993 should be edited by April 1993 (see Newsletter N°4 for the data base organization).