AD-A278 106

NTATION PAGE

Form Approved
OMB No. 0704-0188

Pub
mai
sug
222

1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and mation. Send comments regarding this burden estimate or any other aspect of this collection of information, including Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA n Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	March 1994	Professional Paper

4. TITLE AND SUBTITLE

DIURNAL, SEASONAL AND SOLAR ACTIVITY VARIATIONS OF F-REGION PARAMETERS

5. FUNDING NUMBERS

PR: ZW82
PE: 0601152N
WU: DN302243

6. AUTHOR(S)

A. K. Paul

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

Naval Command, Control and Ocean Surveillance Center (NCCOSC)
RDT&E Division
San Diego, CA 92152-5001

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

Office of Chief of Naval Research
OCNR-10P
Arlington, VA 22217-5000

10. SPONSORING/MONITORING AGENCY REPORT NUMBER

DTIC
ELECTE
APR 14 1994
S C D

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION/AVAILABILITY STATEMENT

Approved for public release; distribution is unlimited.

94-11323

13. ABSTRACT (Maximum 200 words)

This abstract describes a presentation at the Radio Science Meeting in Boulder, CO. The presentation was on diurnal, seasonal and solar activity variations of F-region parameters.

Published in *Radio Science Meeting Program*, January 1994.

14. SUBJECT TERMS

ionospheric variability
solar flare effects

15. NUMBER OF PAGES

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	SAME AS REPORT

94 4 13 056

21a. NAME OF RESPONSIBLE INDIVIDUAL	21b. TELEPHONE *(Include Area Code)*	21c. OFFICE SYMBOL
A. K. Paul	(303) 499 – 7008	Code 542

DIURNAL, SEASONAL AND SOLAR ACTIVITY VARIATIONS OF F-REGION PARAMETERS

Adolf K. Paul
7455 Brockway Dr.
Boulder, CO 80303
AND
R.A. Sprague
NCCOSC RDTE DIV, CODE 542
San Diego, CA 92152-5235

Digital ionosondes combined with high quality data processing methods permit the detection of relatively small, but significant changes of ionospheric parameters such as the critical frequency of the F-region, the height of the maximum, the half-thickness and the MUF(3000).

The results to be presented are mainly based on monthly median and upper and lower quartiles of the parameters mentioned above, derived from digital ionograms recorded at San Diego in five minute intervals since March 1992.

Submitted to Commission G.