

Monthly and Seasonal Mean Analyses

**September, October, November
1983**

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Monthly and Seasonal Mean Analyses

**September, October, November
1983**

**Mean fields obtained from the
archive of operational analyses**

Met O 20 (Dynamical Climatology Branch)
Meteorological Office
London Road
Bracknell
Berkshire RG12 2SZ

February 1987

Note: Permission to quote from this document should be obtained from the Assistant Director of the above Meteorological Branch.

YRAS



Introduction

The archive of operational analyses contains a continuous record of global analyses every 12 hours (00 and 12 GMT) from May 1983 onwards. They are copies of the update analyses produced in the operational numerical weather prediction system using the 15-level model (Dickinson and Temperton 1984). This publication presents a selection of charts from the archive.

The publication covers a 3-month period and is divided into four sections. Sections 1, 2 and 3 contain charts of the monthly mean fields and section 4 contains charts of the seasonal mean fields for the 3-month period. Each section includes a mean-sea-level pressure chart and composite charts showing fields of height, wind vectors and isotachs for the 850, 500, 250 and 100 mb pressure levels. These charts, on polar stereographic projections, cover the extra-tropical regions of both hemispheres. For the tropical regions, wind vectors and isotachs are presented for the 850 and 250 mb pressure levels. These fields are shown in a series of charts, on a latitude-longitude projection encircling the globe in three sections, covering the longitudes 0°–120° E, 120° E–120° W and 120° W–0°. On all charts contours are depicted as solid lines, wind vectors as arrows and isotachs as dashed lines.

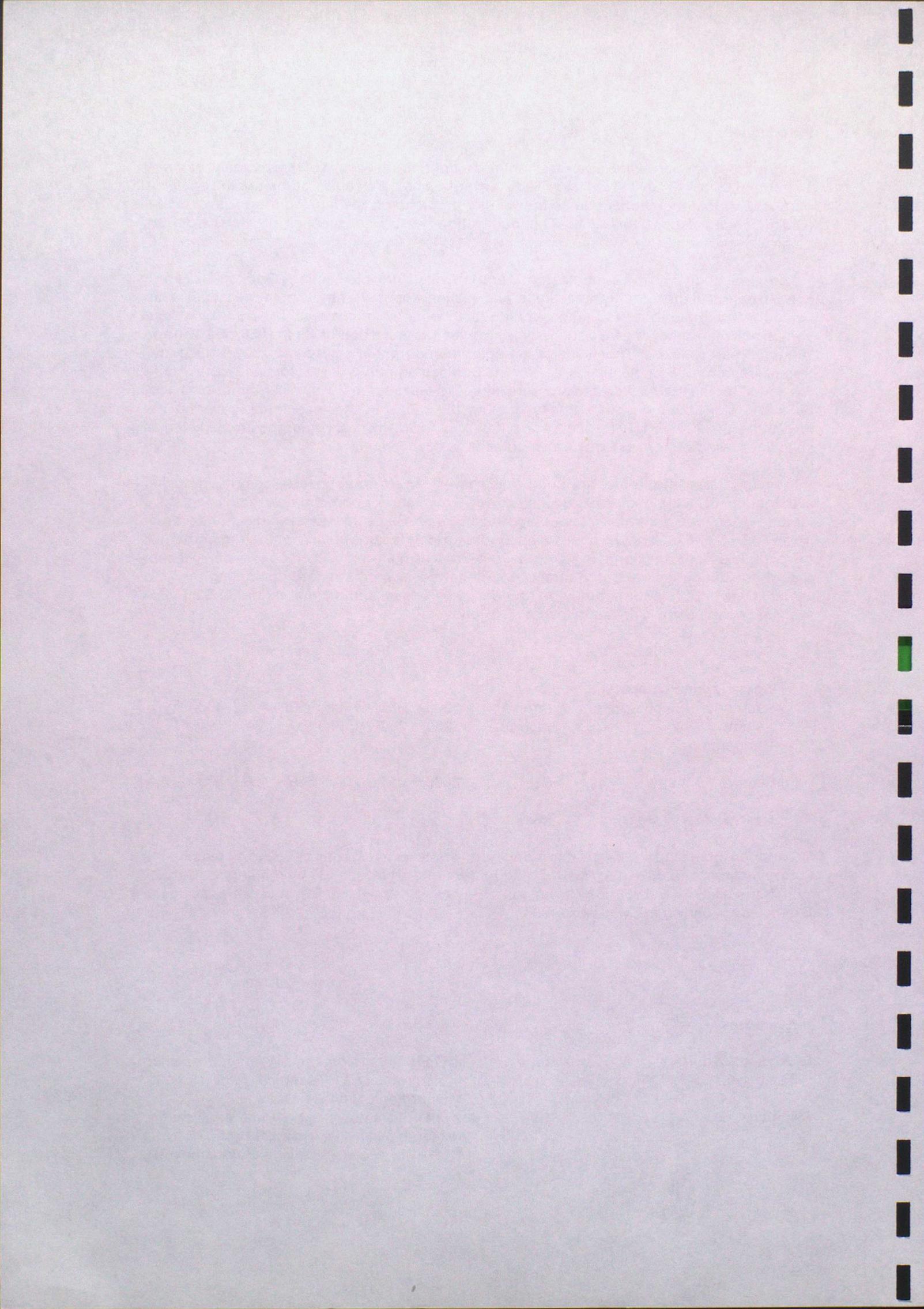
From the start of the archive the global fields have been stored as spectral coefficients using a triangular truncation of T40 (Swinbank 1984), which is approximately equivalent to a latitude-longitude grid with a resolution of 4.5° by 4.5°. Since the model analyses are written up on a 1.5° by 1.875° grid the conversion to spectral coefficients results in some smoothing of the data. The fields are stored in Met O 20 Post-Processing format which consists of a header record containing field and grid information followed by a data record containing the field values. Details of this format may be found in the PP-package manual in Met O 20. Fields available on the archive are as follows:

Field		Pressure level (mb)
Westerly wind component	(m/s)	
Southerly wind component	(m/s)	1000, 850, 700, 500, 400, 300,
Height	(dam)	250, 200, 150, 100, 70, 50
Temperature	(K)	
Relative humidity	(%)	1000, 850, 700, 500, 400, 300
Mean-sea-level pressure	(mb)	

The appropriate tape numbers, file numbers and dataset names can be found by reading the library members on 'M20.NARCHIND' and for recently archived data by reading the dataset 'M20.NARCHLST'. Subroutines from the PP-package are used for accessing the data. Examples are shown in Swinbank (1984).

References

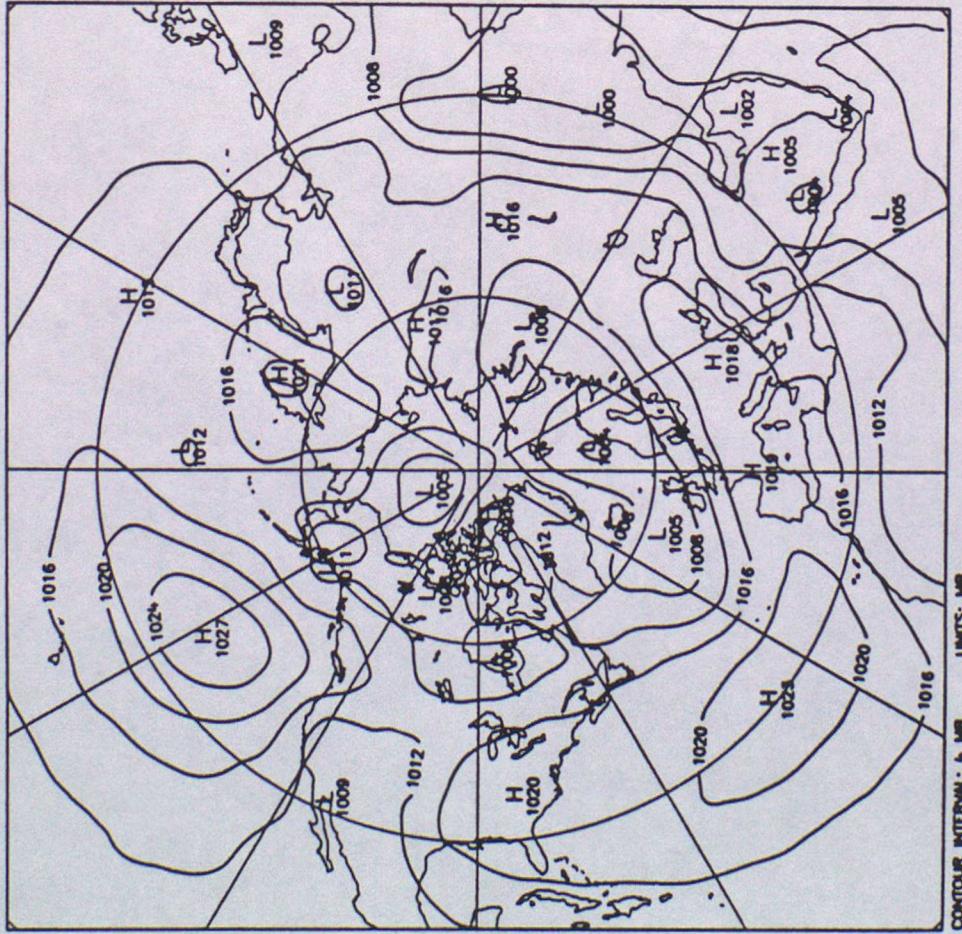
- Dickinson, A. and Temperton C. 1984 The Operational Numerical Weather Prediction Model. Met O 11 Technical Note No. 183. Meteorological Office, Bracknell.
- Swinbank, R. 1984 A system to archive operational analyses for research purposes. Met O 20 Technical Note No. II/218. Meteorological Office, Bracknell.



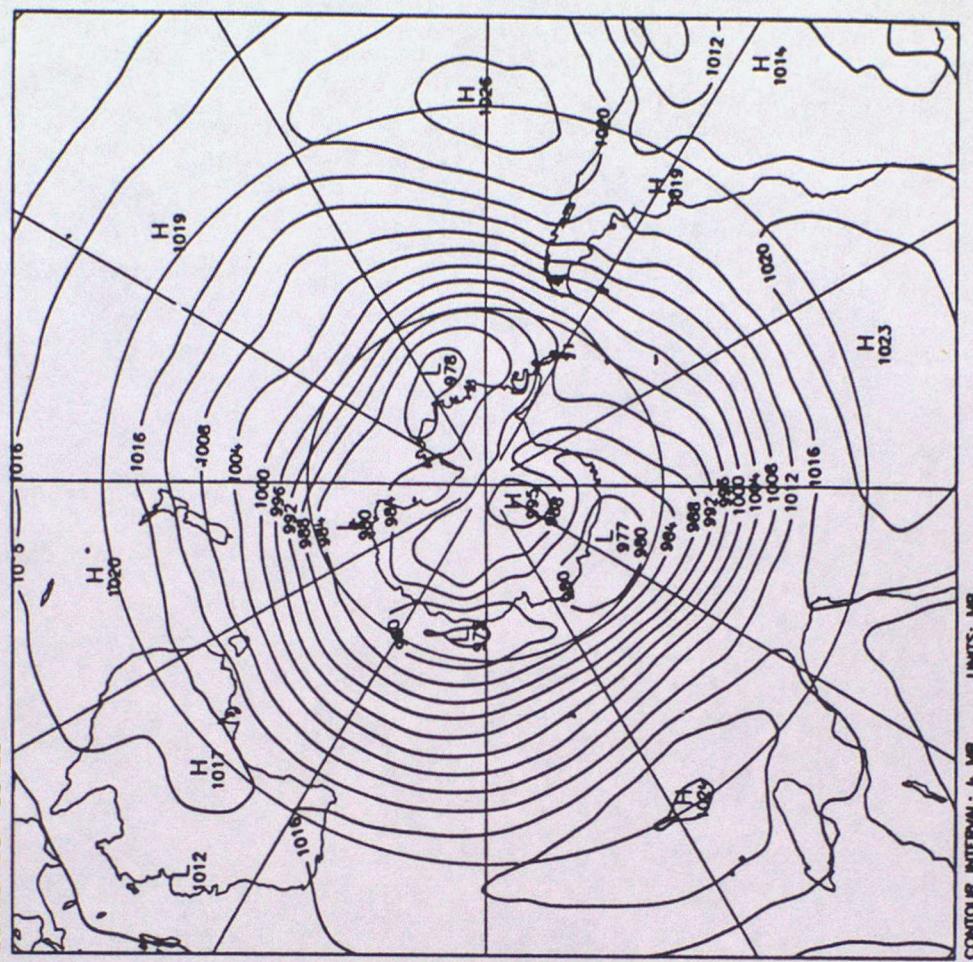
**SEPTEMBER
1983**

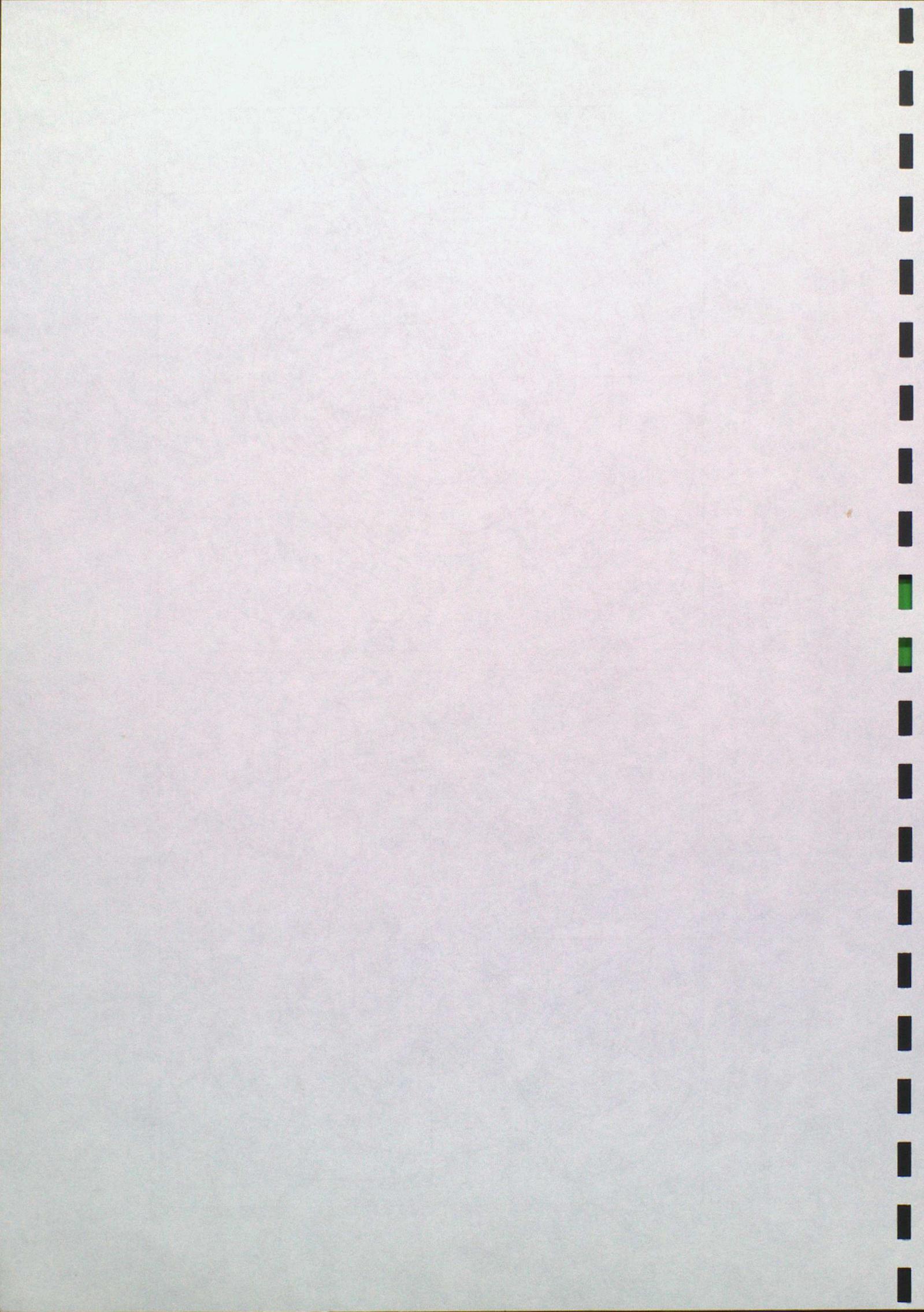


OPERATIONAL ARCHIVE MEANS. SEPTEMBER 1983
PMSL
AVERAGE FROM 02 ON 1/9/1983 DAY 244 TO 122 ON 30/9/1983 DAY 273
LEVEL: SEA LEVEL

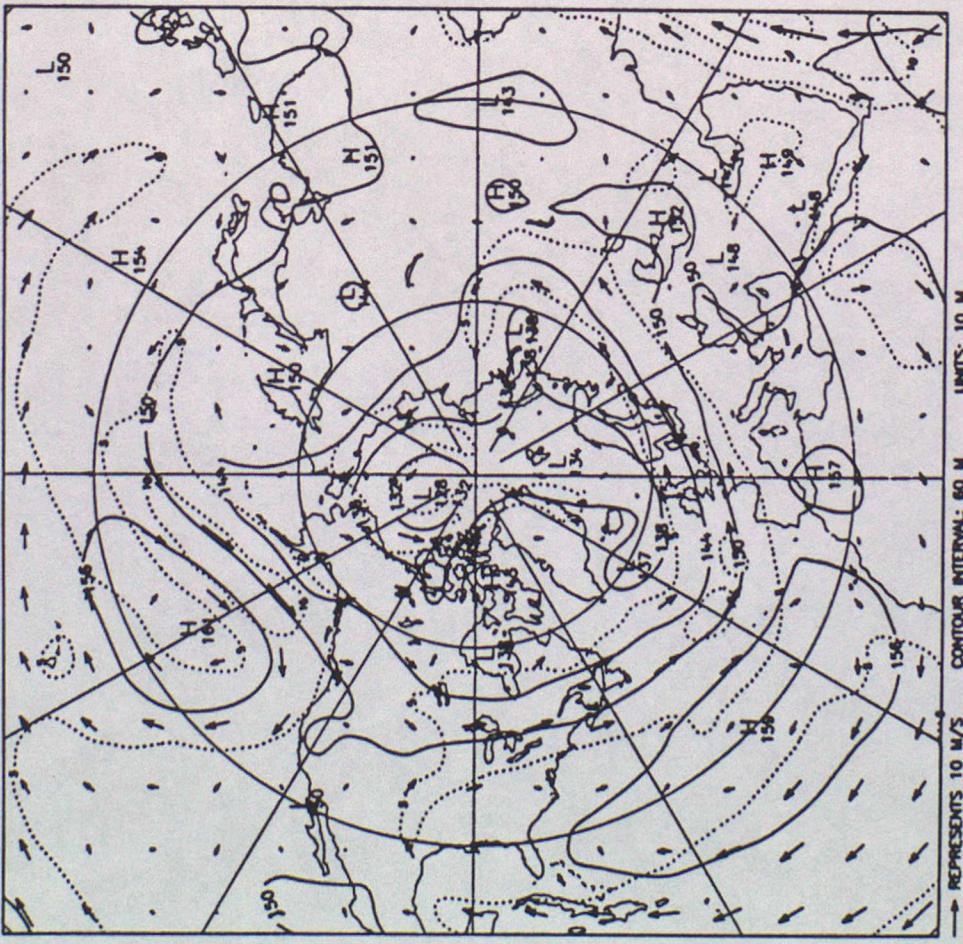


OPERATIONAL ARCHIVE MEANS. SEPTEMBER 1983
PMSL
AVERAGE FROM 02 ON 1/9/1983 DAY 244 TO 122 ON 30/9/1983 DAY 273
LEVEL: SEA LEVEL

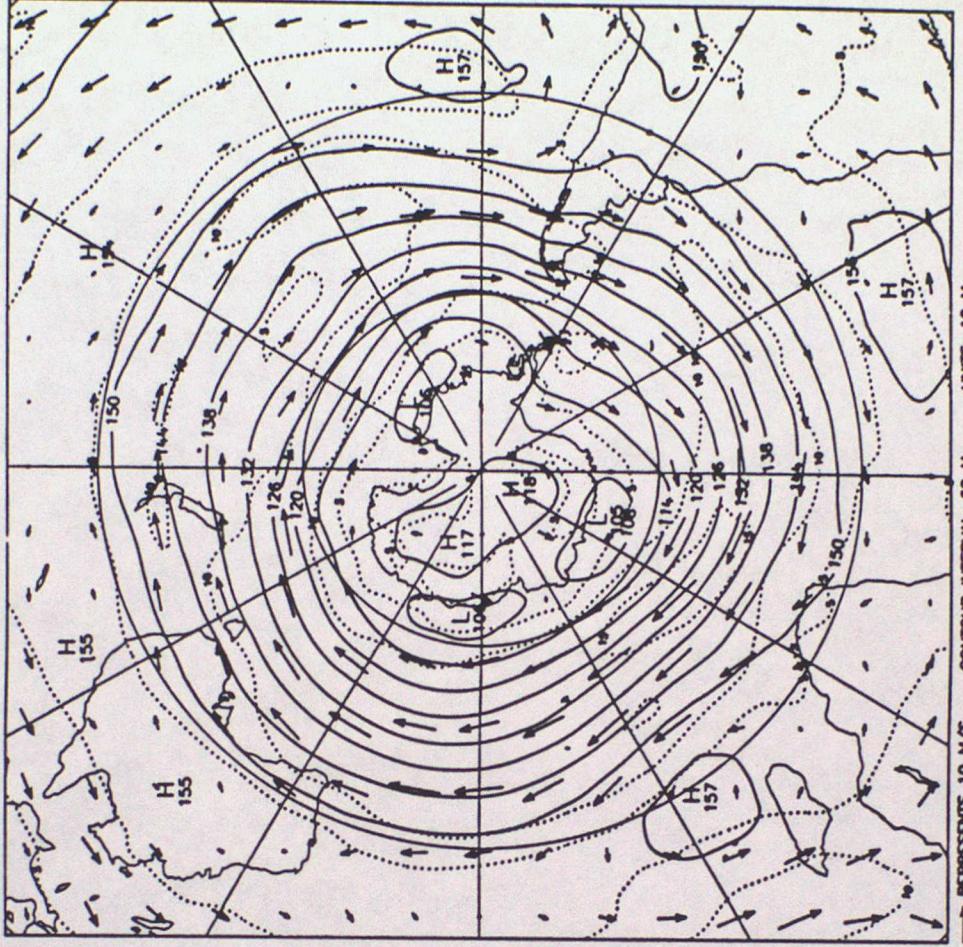


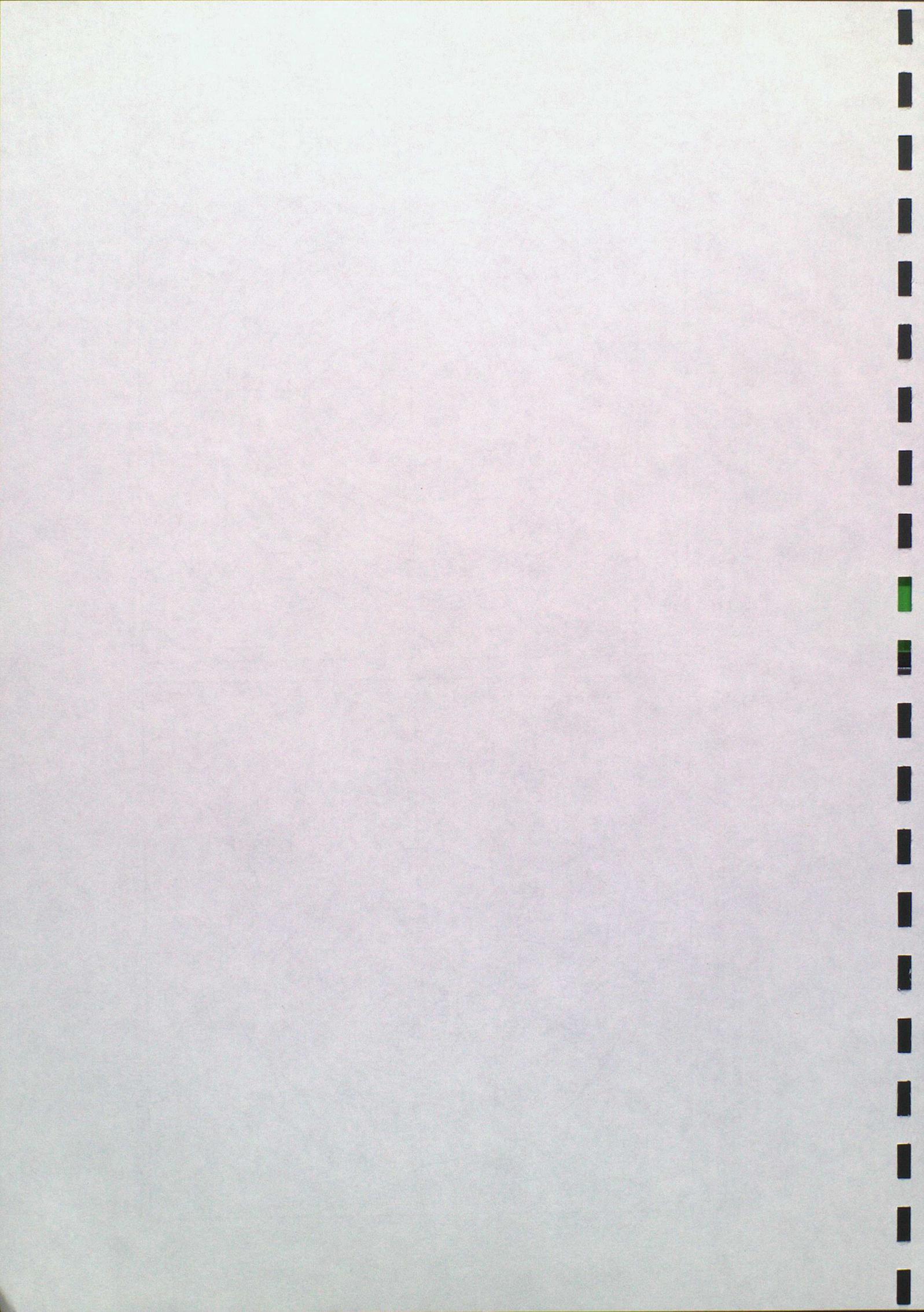


OPERATIONAL ARCHIVE MEANS. SEPTEMBER 1983
HEIGHTS, WIND ARROWS AND ISOTACHS.
AVERAGE FROM 02 ON 1/9/1983 DAY 244 TO 12Z ON 30/9/1983 DAY 273
LEVEL: 850 MB

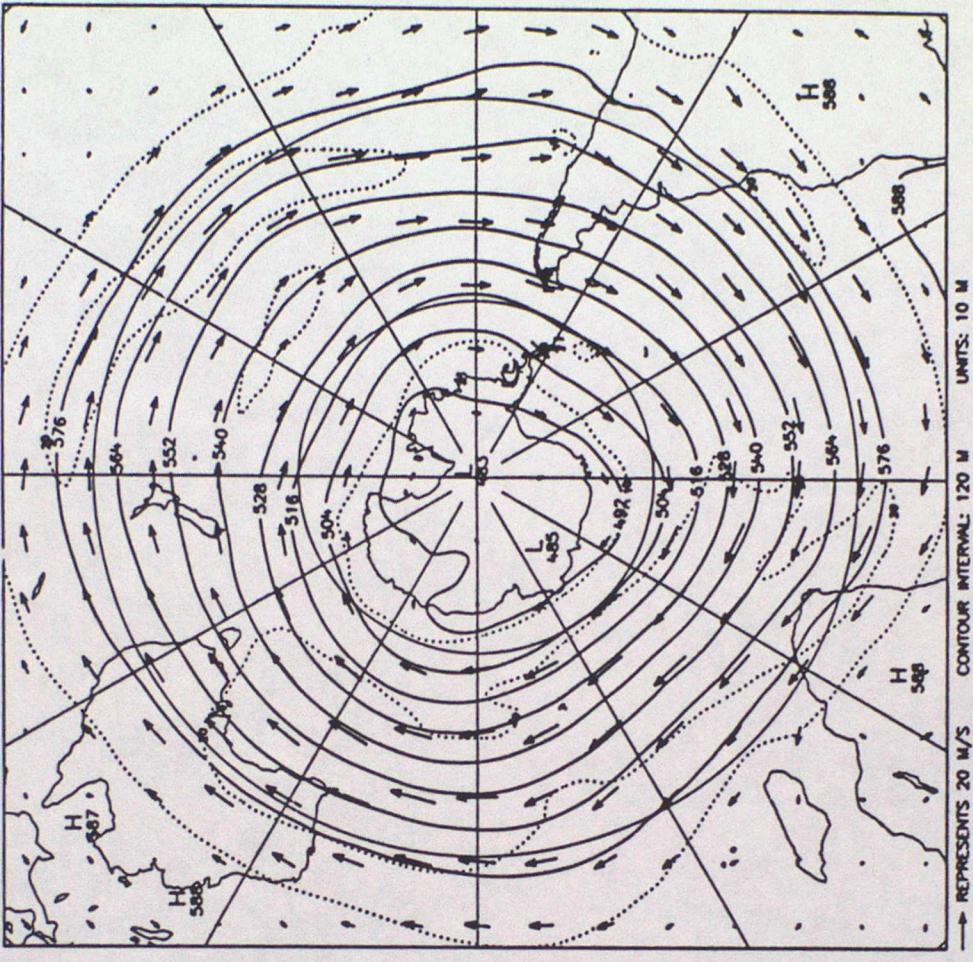


OPERATIONAL ARCHIVE MEANS. SEPTEMBER 1983
HEIGHTS, WIND ARROWS AND ISOTACHS.
AVERAGE FROM 02 ON 1/9/1983 DAY 244 TO 12Z ON 30/9/1983 DAY 273
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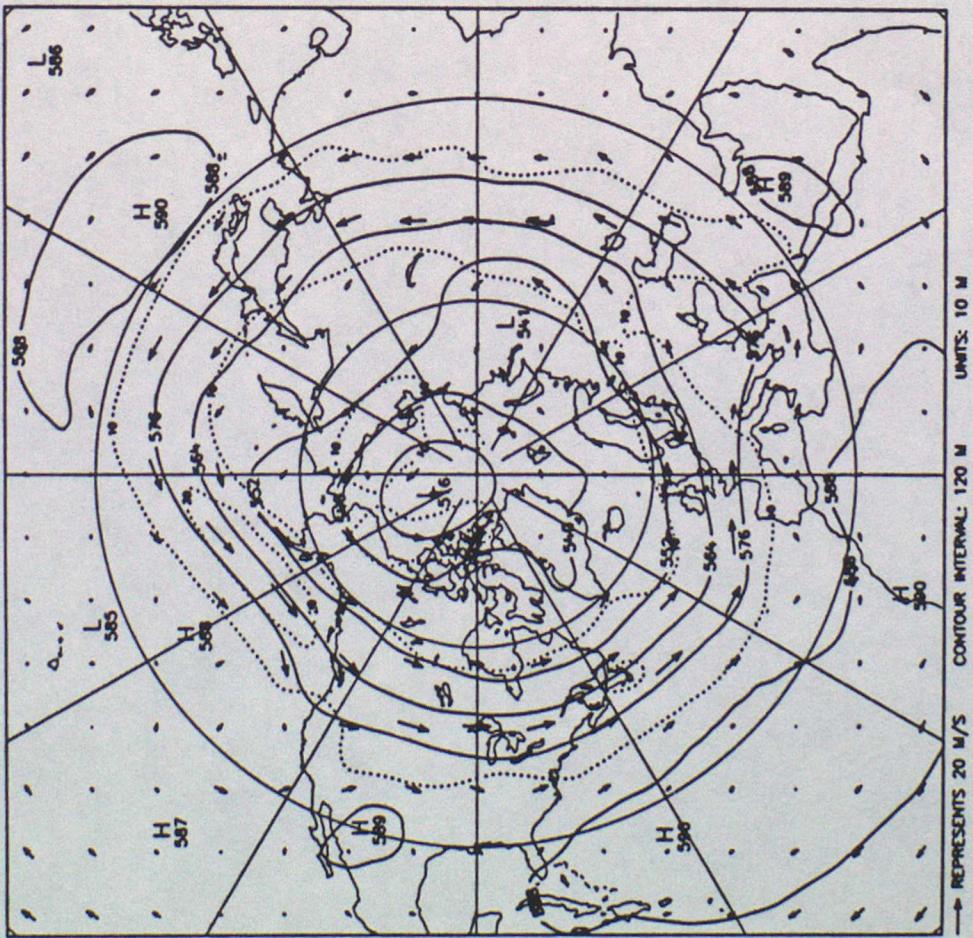


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HEIGHTS, WIND ARROWS AND ISOTACHS.
AVERAGE FROM 02 ON 1/9/1983 DAY 244 TO 122 ON 30/9/1983 DAY 273
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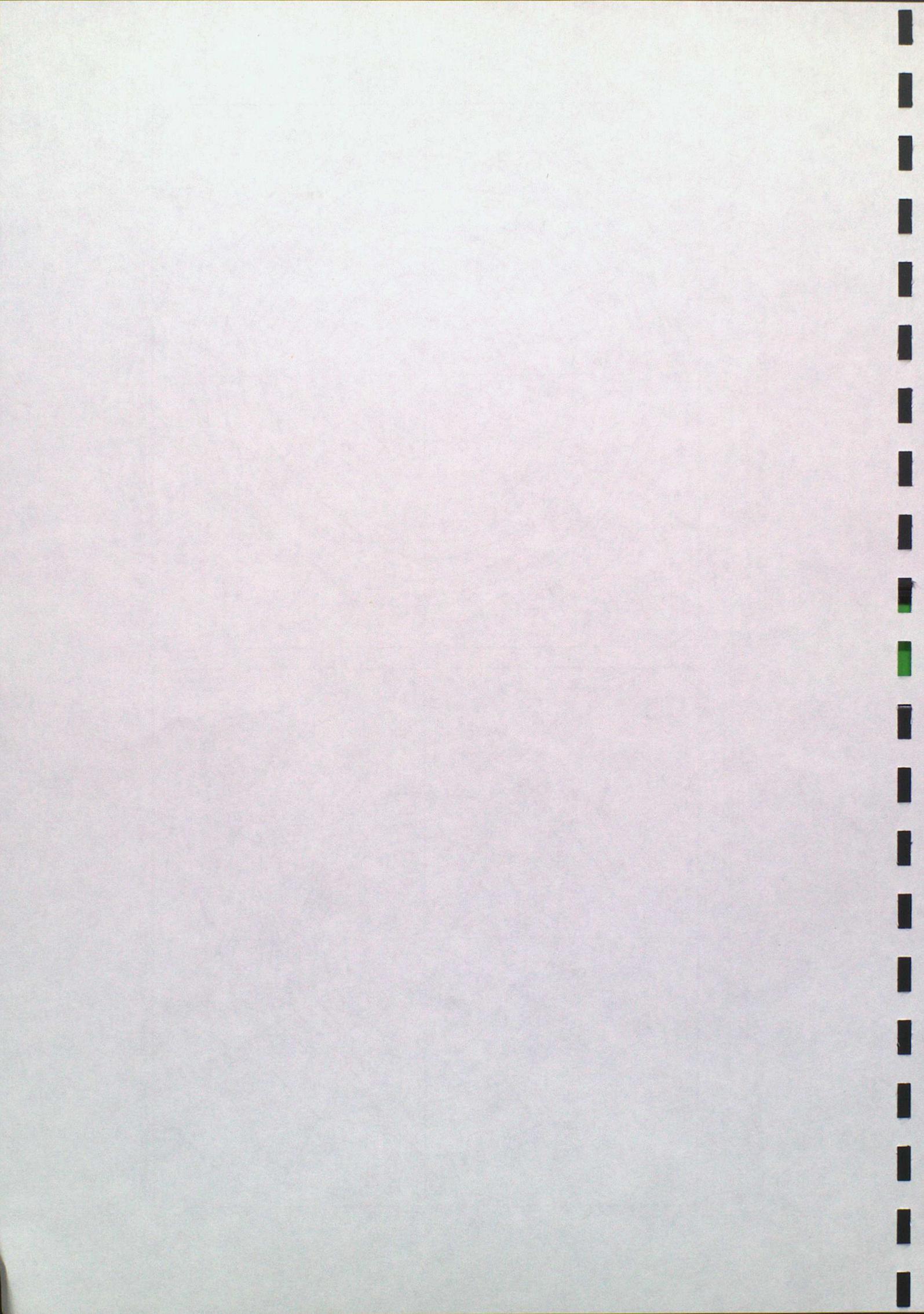


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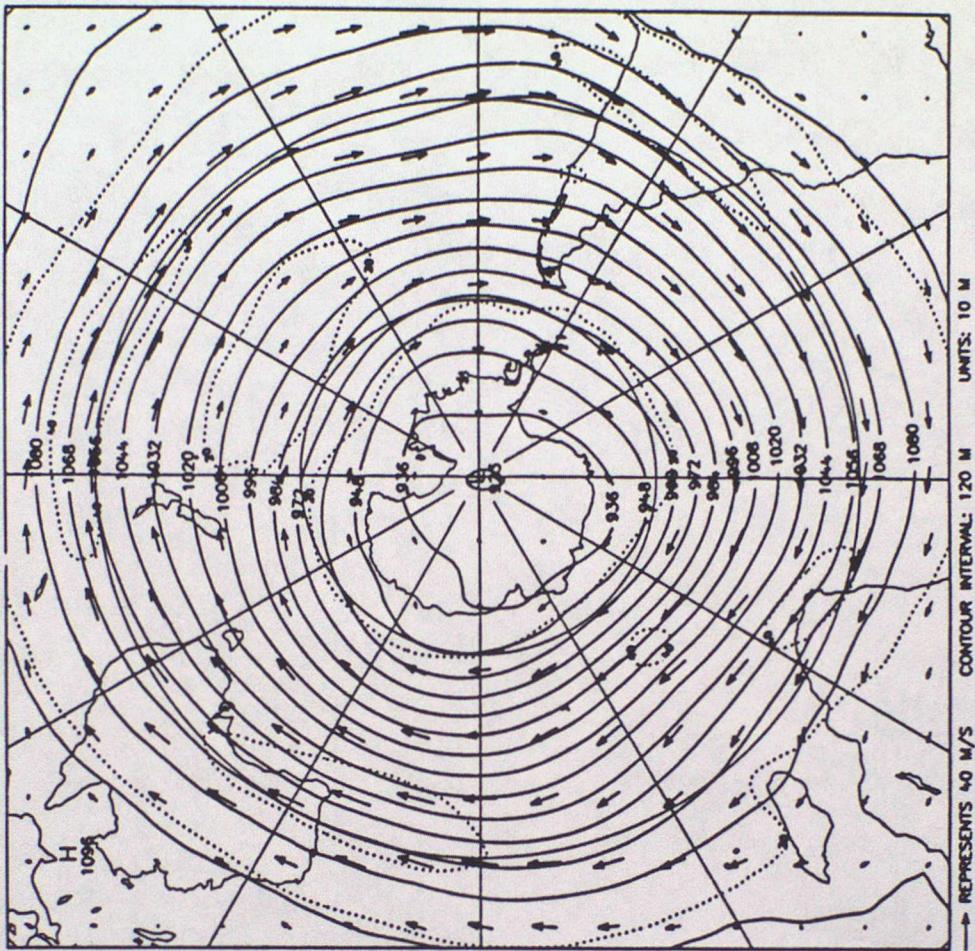
OPERATIONAL ARCHIVE MEANS. SEPTEMBER 1983
HEIGHTS, WIND ARROWS AND ISOTACHS.
AVERAGE FROM 02 ON 1/9/1983 DAY 244 TO 122 ON 30/9/1983 DAY 273
LEVEL: 500 MB

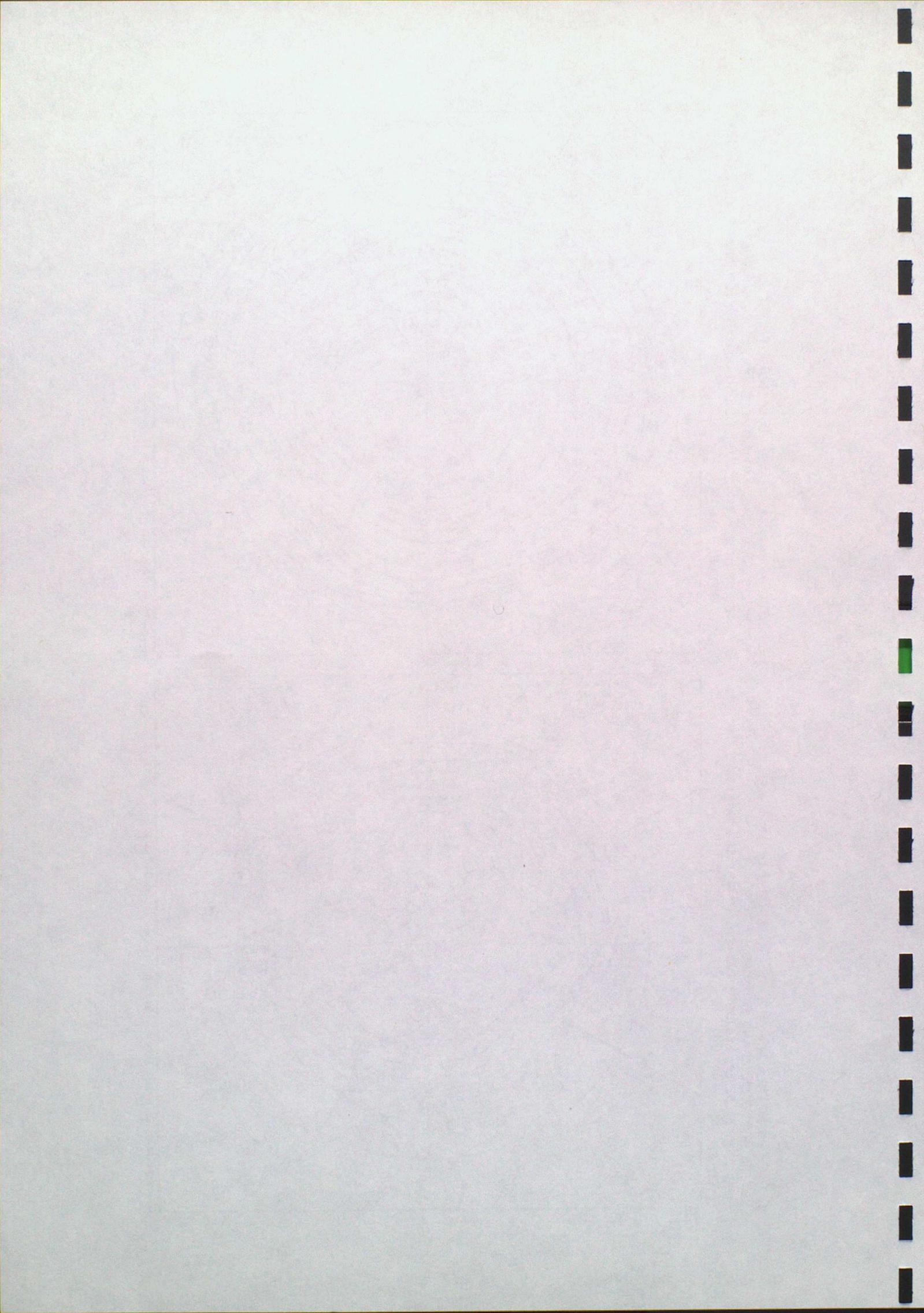


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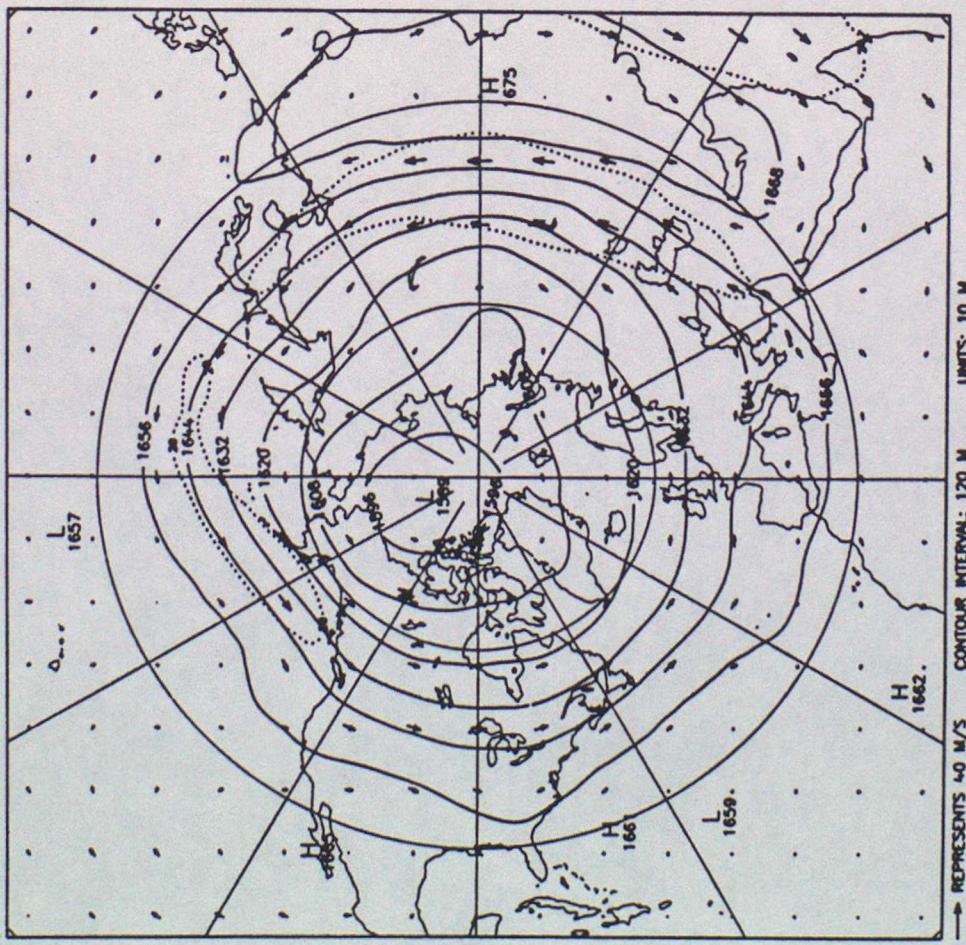


OPERATIONAL ARCHIVE MEANS. SEPTEMBER 1983
HEIGHTS, WIND ARROWS AND ISOTACHS.
AVERAGE FROM 02 ON 1/9/1983 DAY 244 TO 12Z ON 30/9/1983 DAY 273
LEVEL: 250 MB

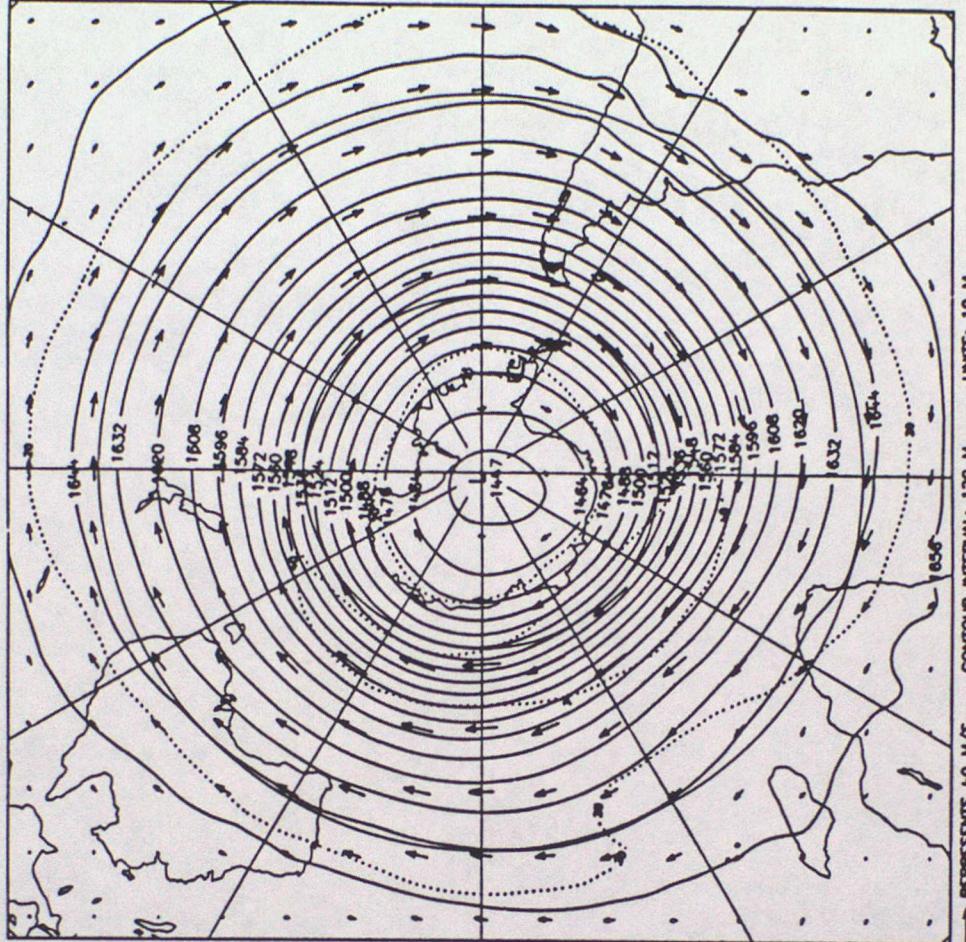


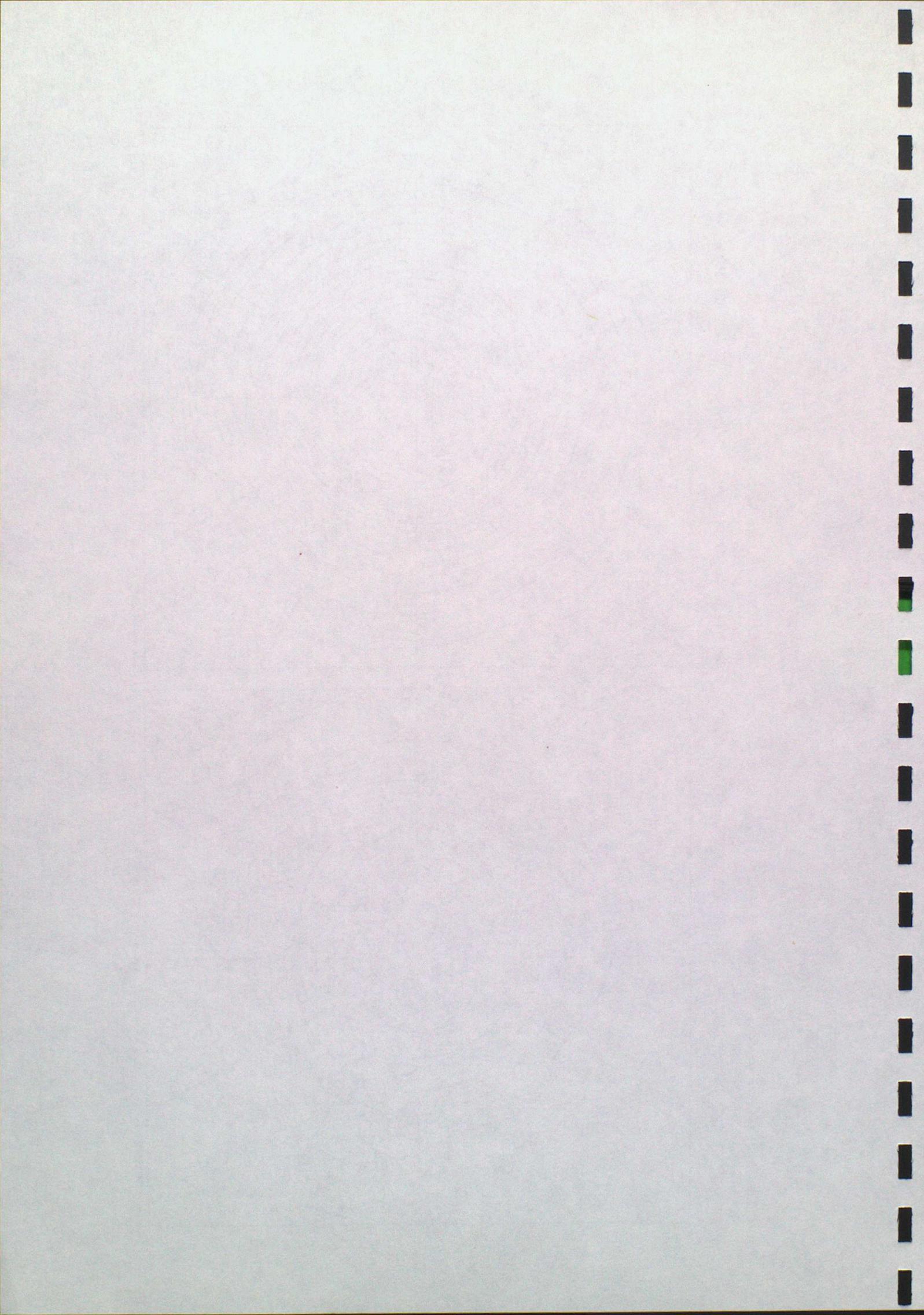


OPERATIONAL ARCHIVE MEANS. SEPTEMBER 1983
HEIGHTS, WIND ARROWS AND ISOTACHS.
AVERAGE FROM 0Z ON 1/9/1983 DAY 244 TO 12Z ON 30/9/1983 DAY 273
LEVEL: 100 MB

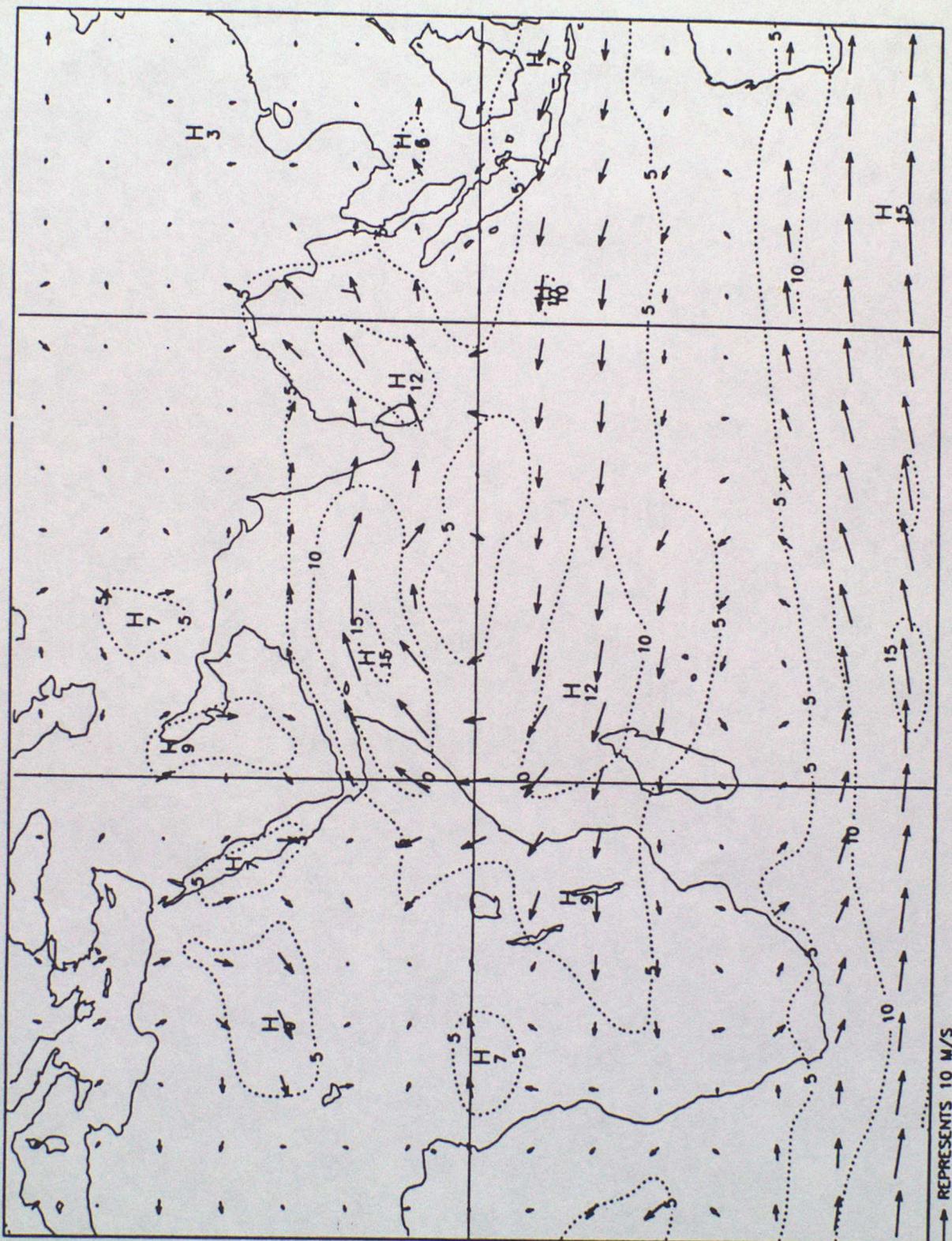


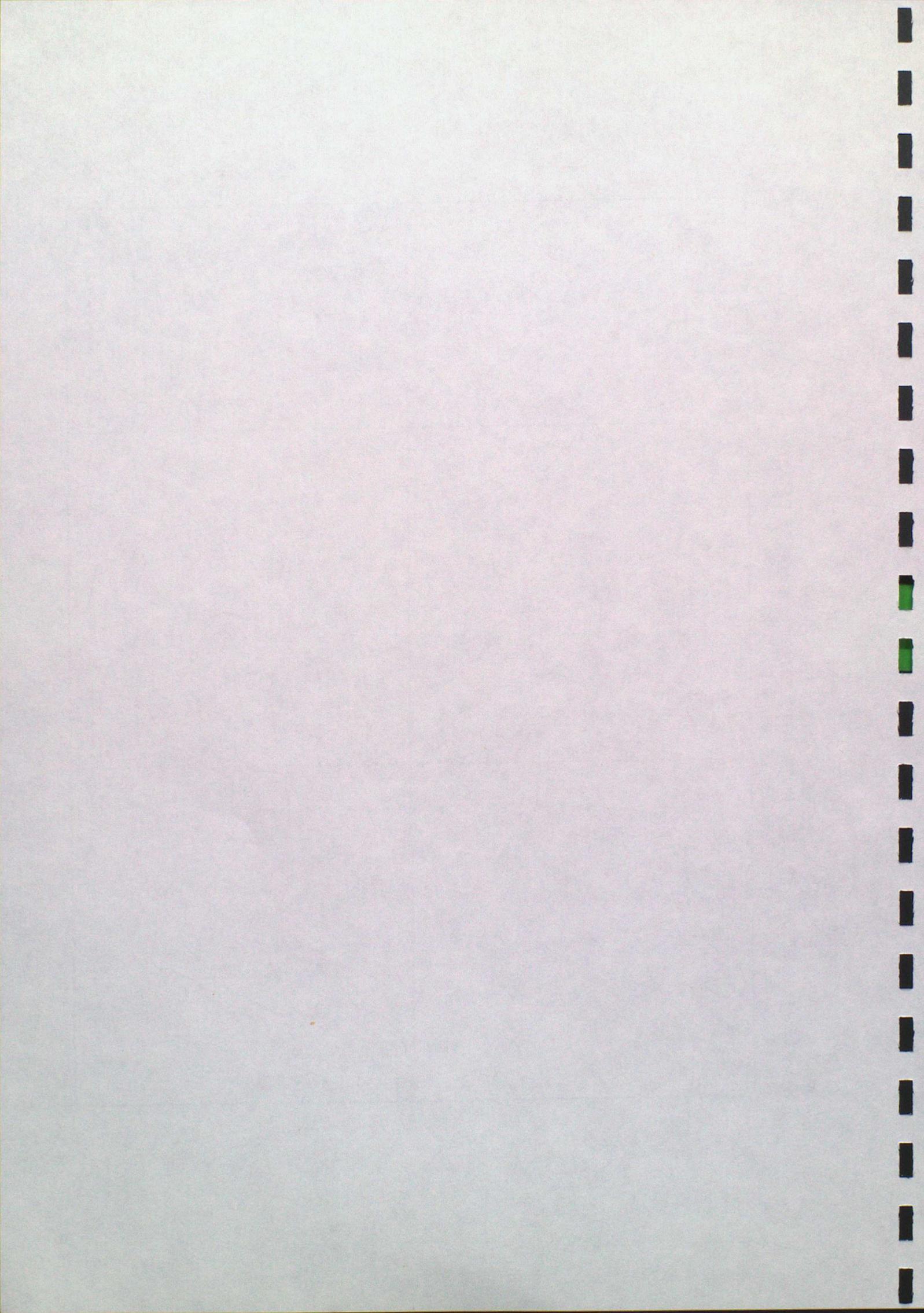
OPERATIONAL ARCHIVE MEANS. SEPTEMBER 1983
HEIGHTS, WIND ARROWS AND ISOTACHS.
AVERAGE FROM 0Z ON 1/9/1983 DAY 244 TO 12Z ON 30/9/1983 DAY 273
LEVEL: 100 MB



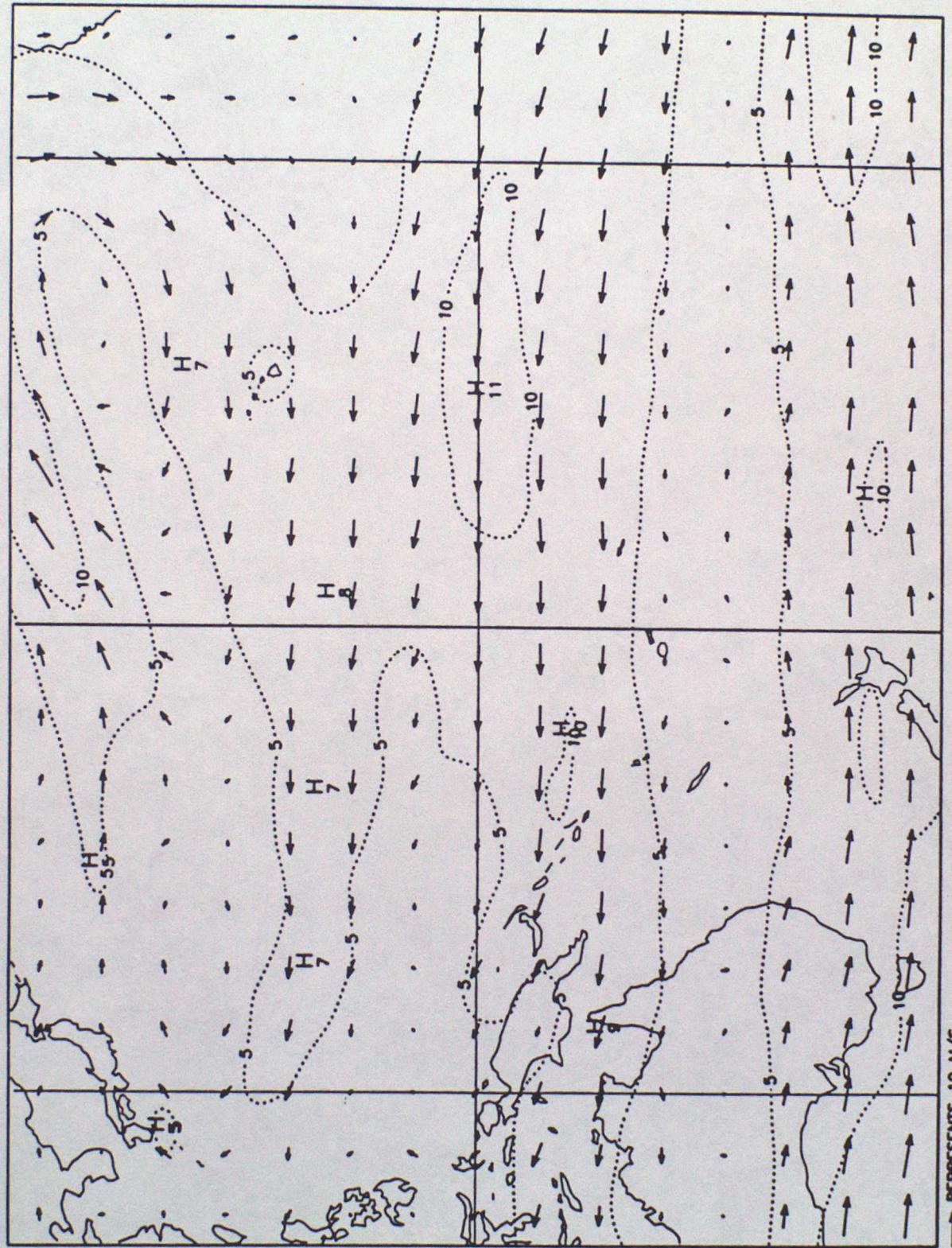


OPERATIONAL ARCHIVE MEANS. SEPTEMBER 1983
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
AVERAGE FROM 02 ON 1/9/1983 DAY 244 TO 12Z ON 30/9/1983 DAY 273
BETWEEN LONGS. 0 E - 120 E
850 MBS.

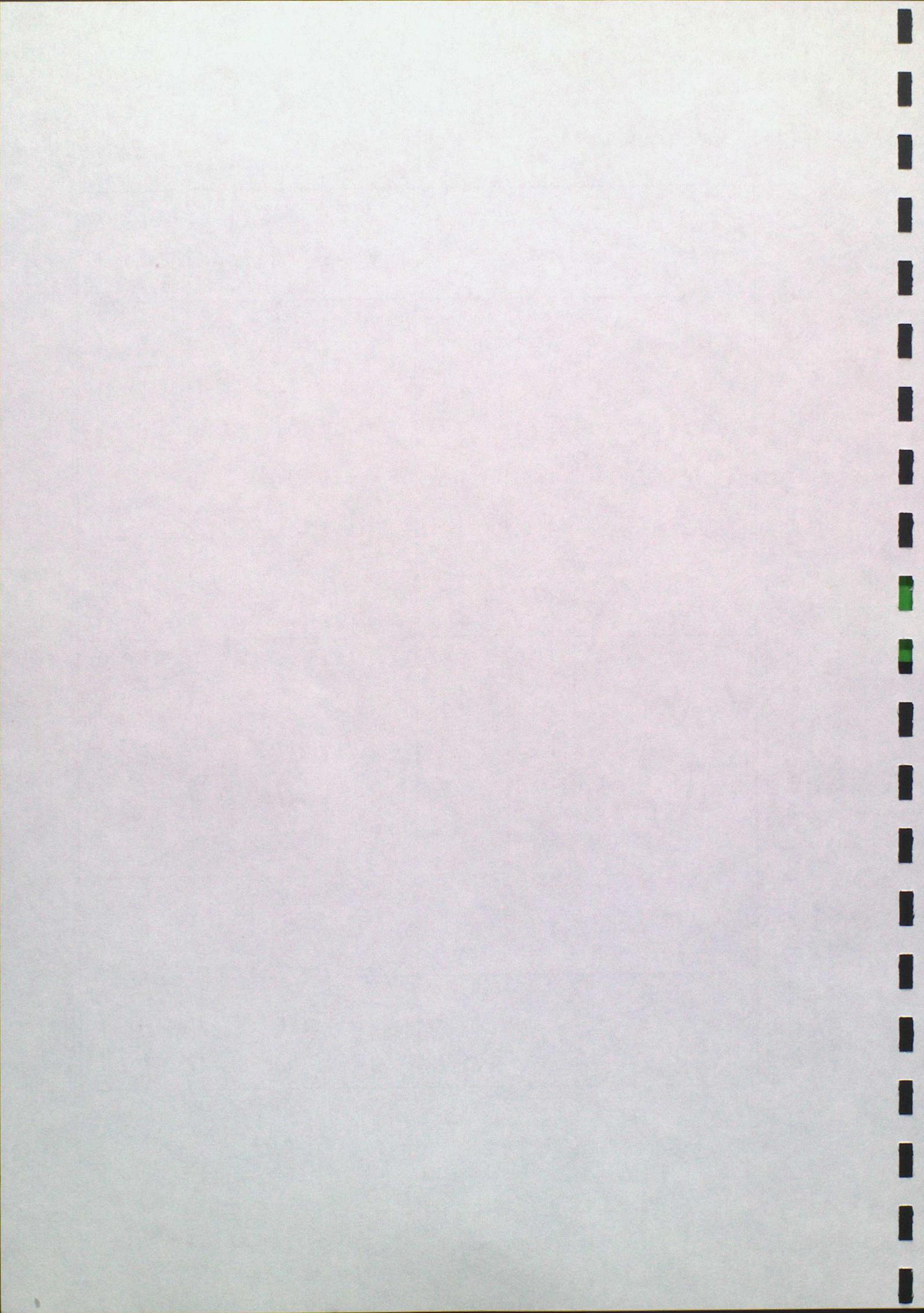




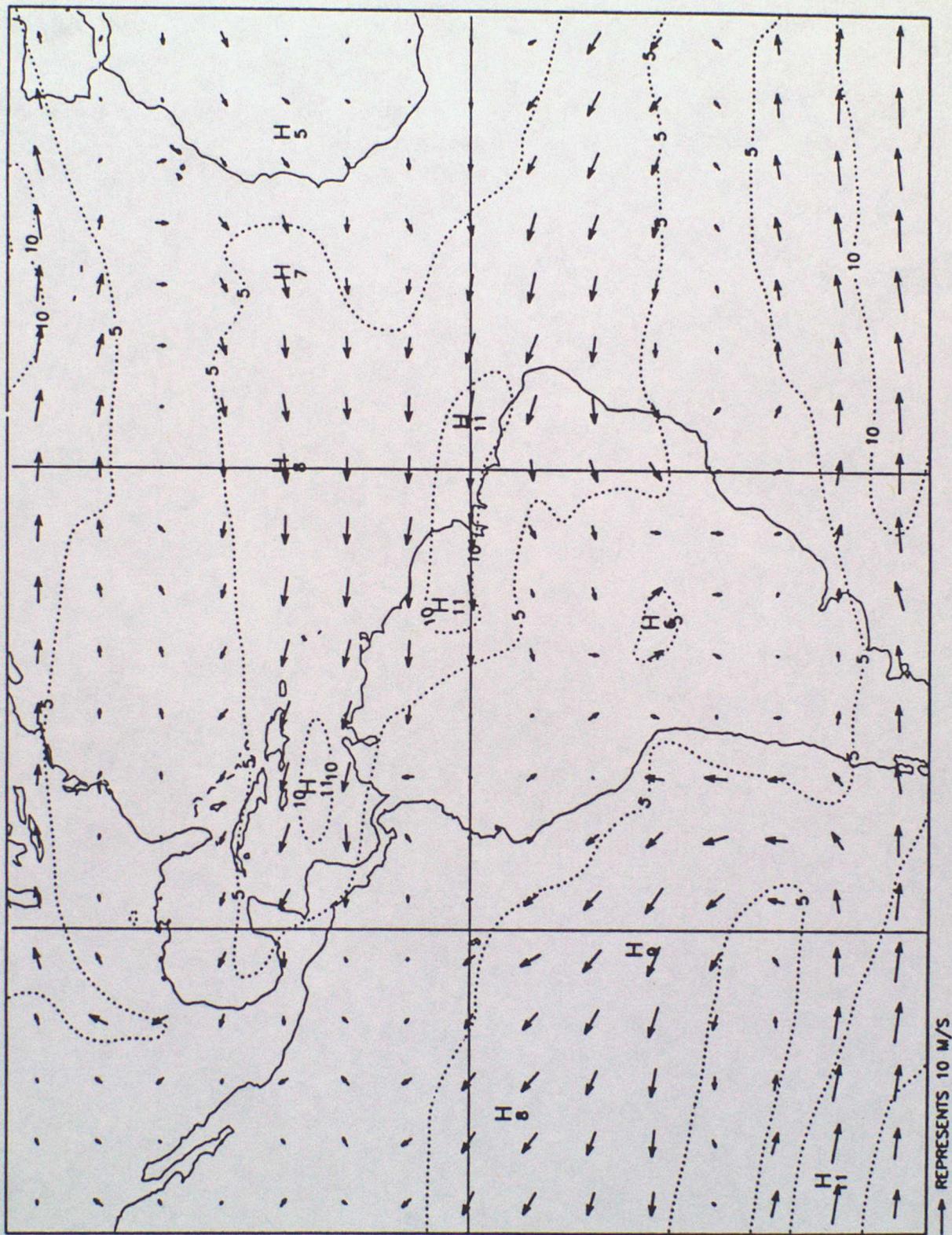
OPERATIONAL ARCHIVE MEANS. SEPTEMBER 1983
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
AVERAGE FROM 0Z ON 1/9/1983 DAY 244 TO 12Z ON 30/9/1983 DAY 273
850 MBS. BETWEEN LONGS. 120 E - 120 W



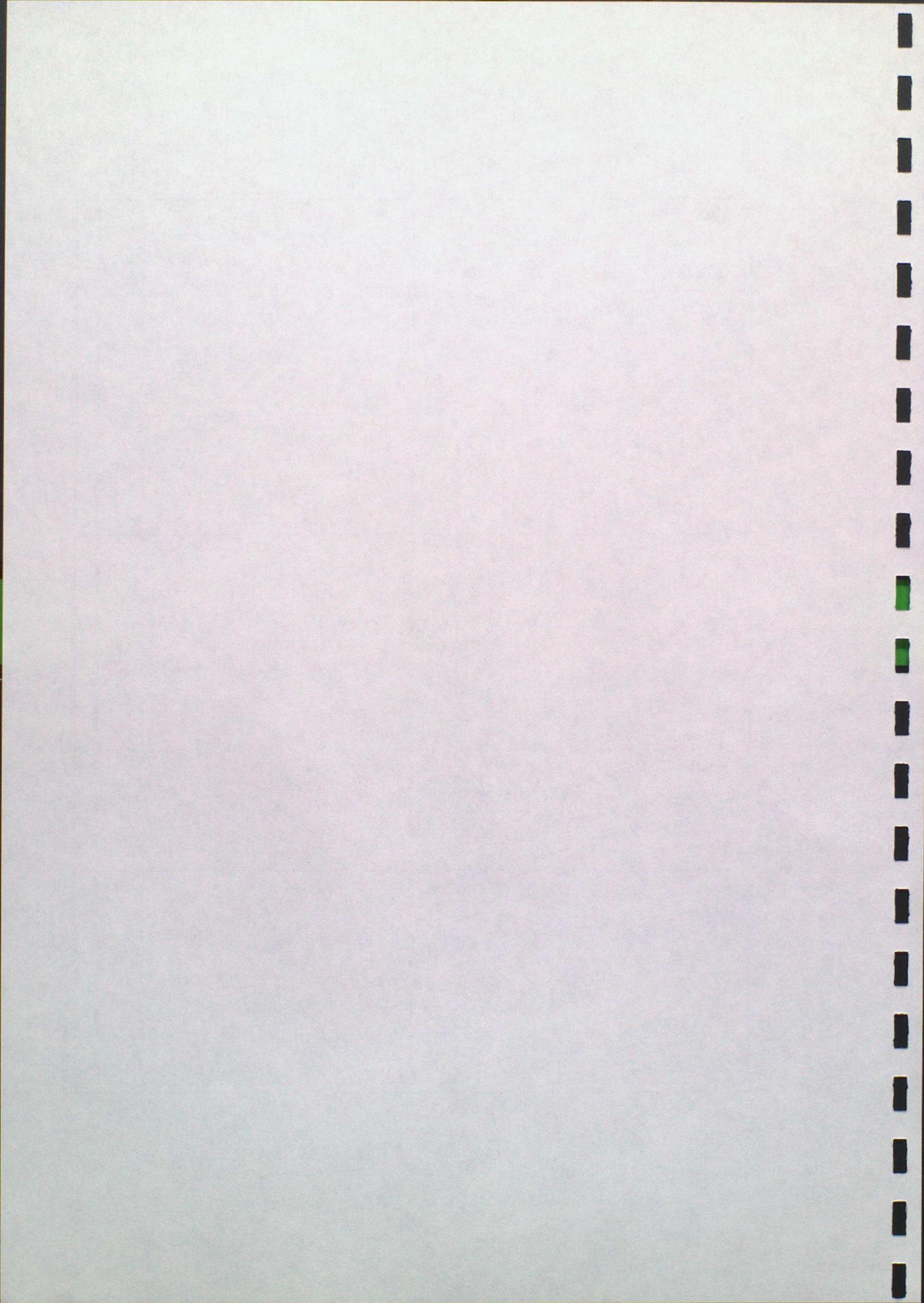
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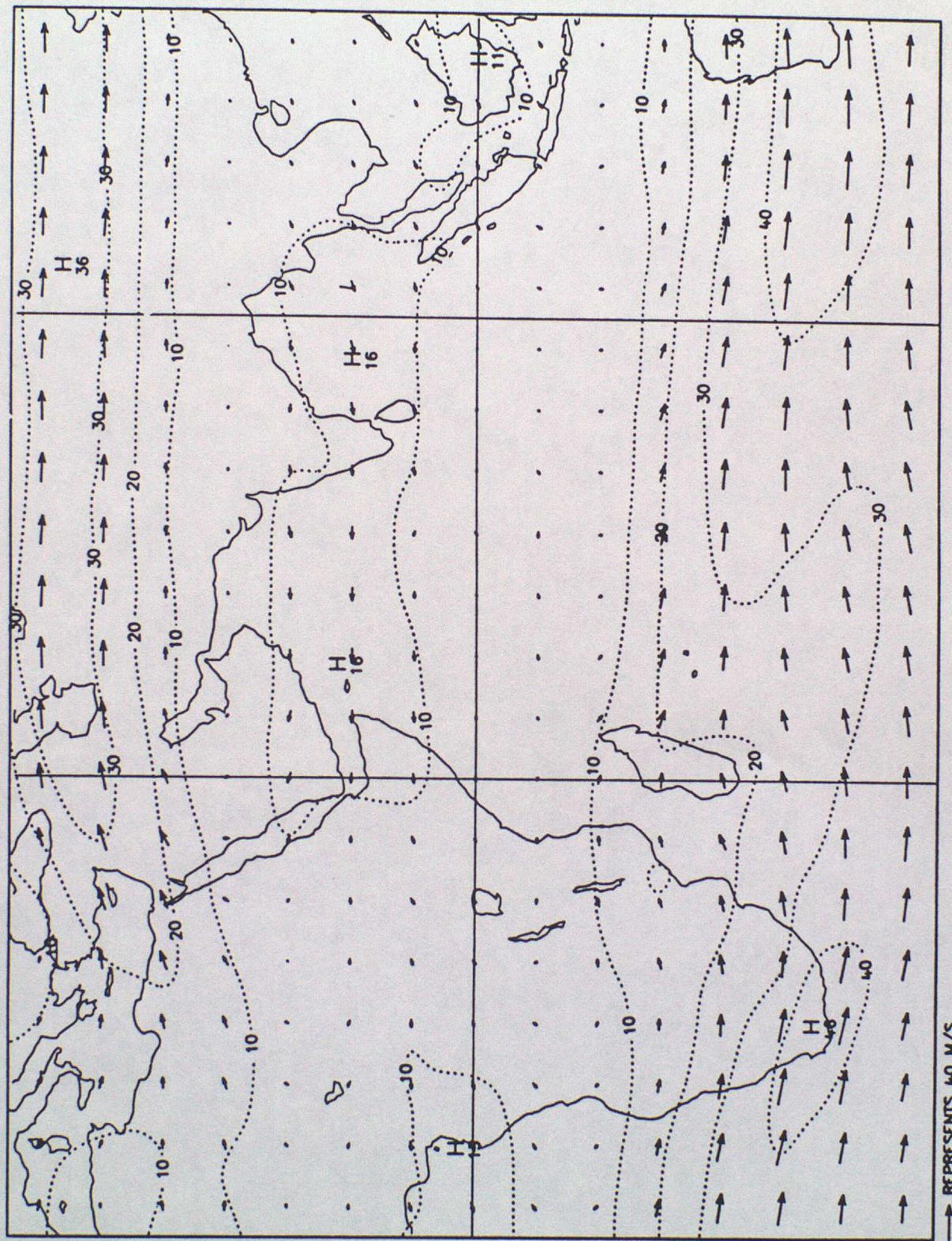
OPERATIONAL ARCHIVE MEANS. SEPTEMBER 1983
WIND ARROWS AND ISOTACHS. BETWEEN LATS. 45 N - 45 S.
AVERAGE FROM 0Z ON 1/9/1983 DAY 244 TO 12Z ON 30/9/1983 DAY 273
850 MBS. 120 W - 0 W



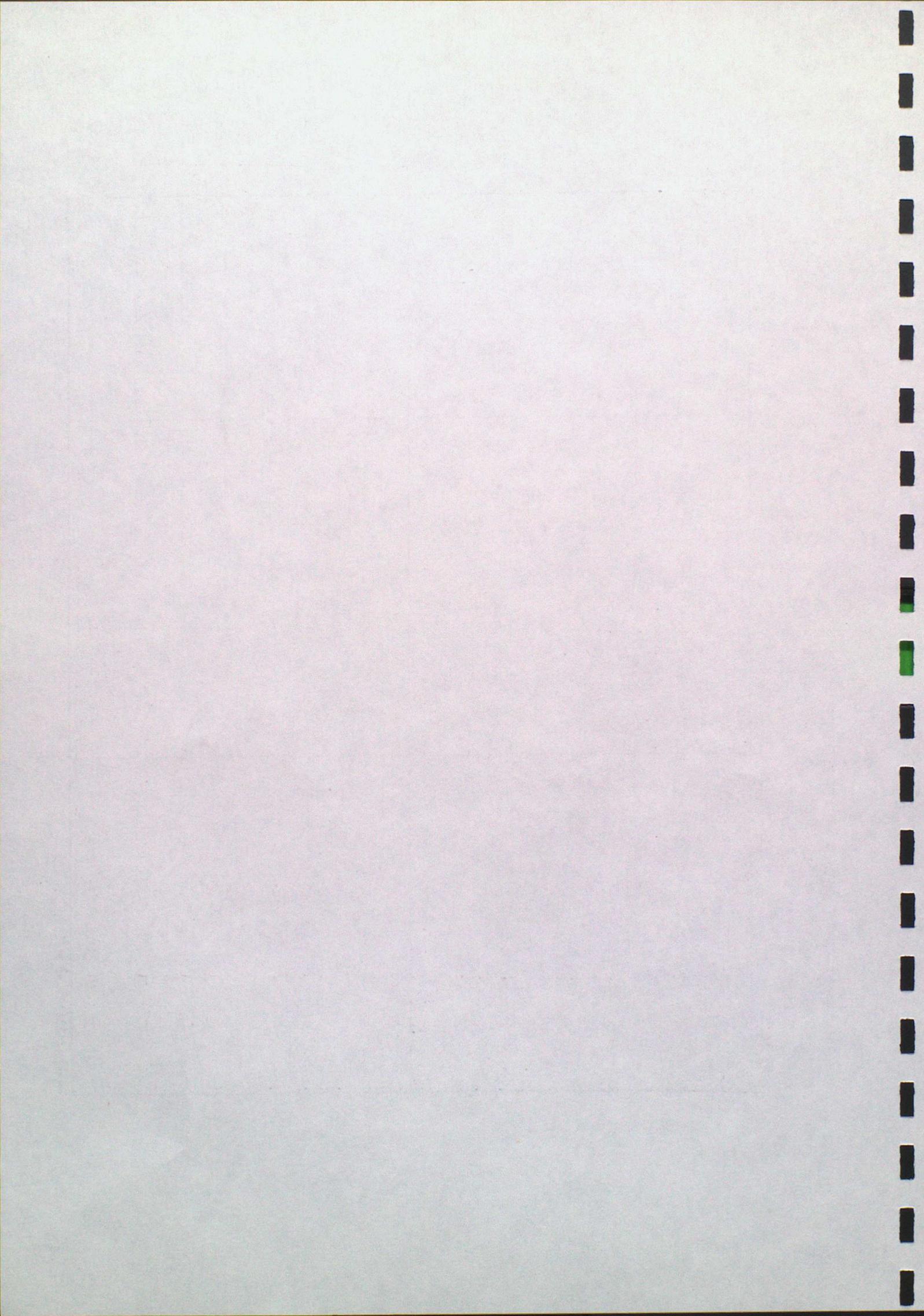
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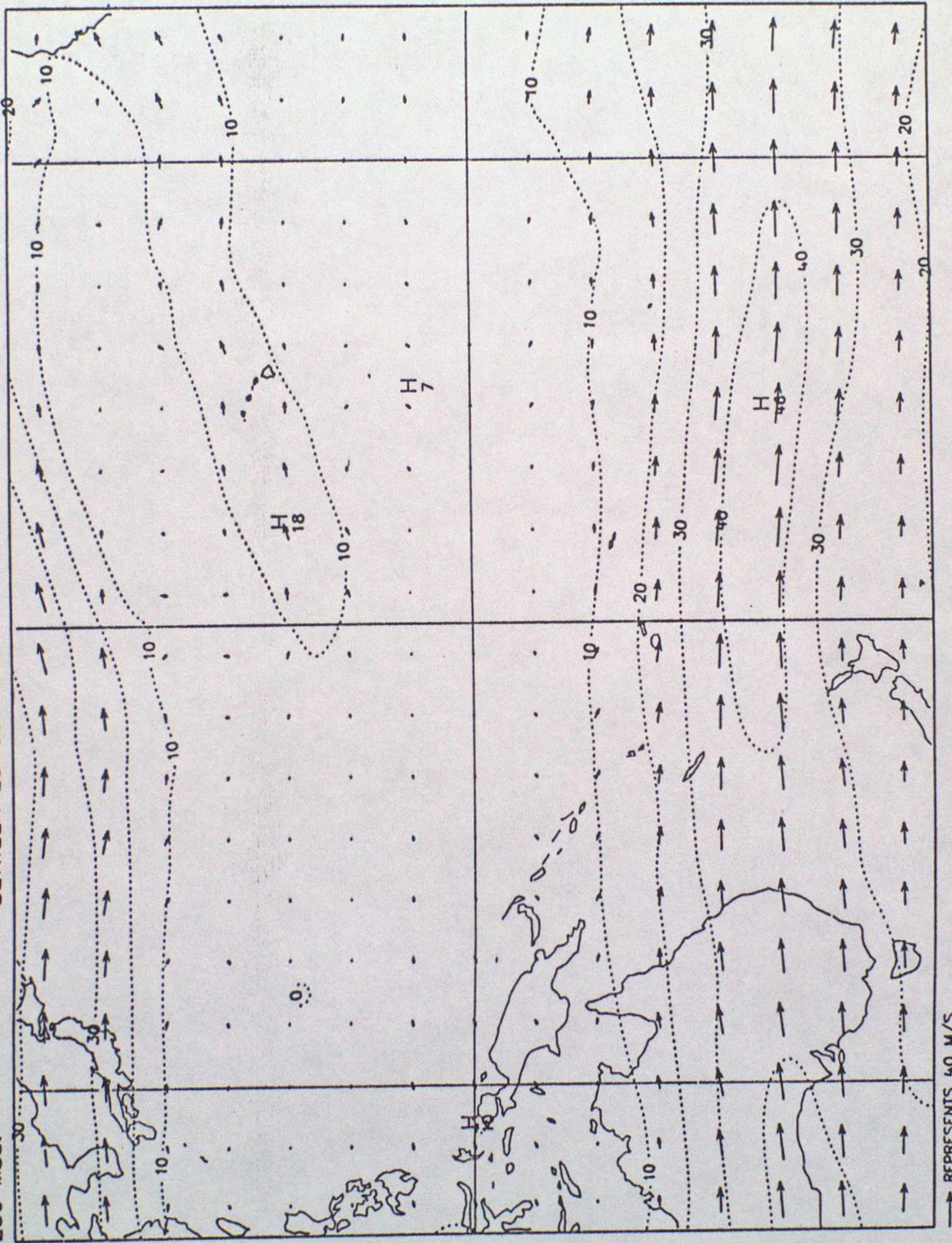
OPERATIONAL ARCHIVE MEANS. SEPTEMBER 1983
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
AVERAGE FROM 0Z ON 1/9/1983 DAY 244 TO 12Z ON 30/9/1983 DAY 273
250 MBS. 0 E - 120 E

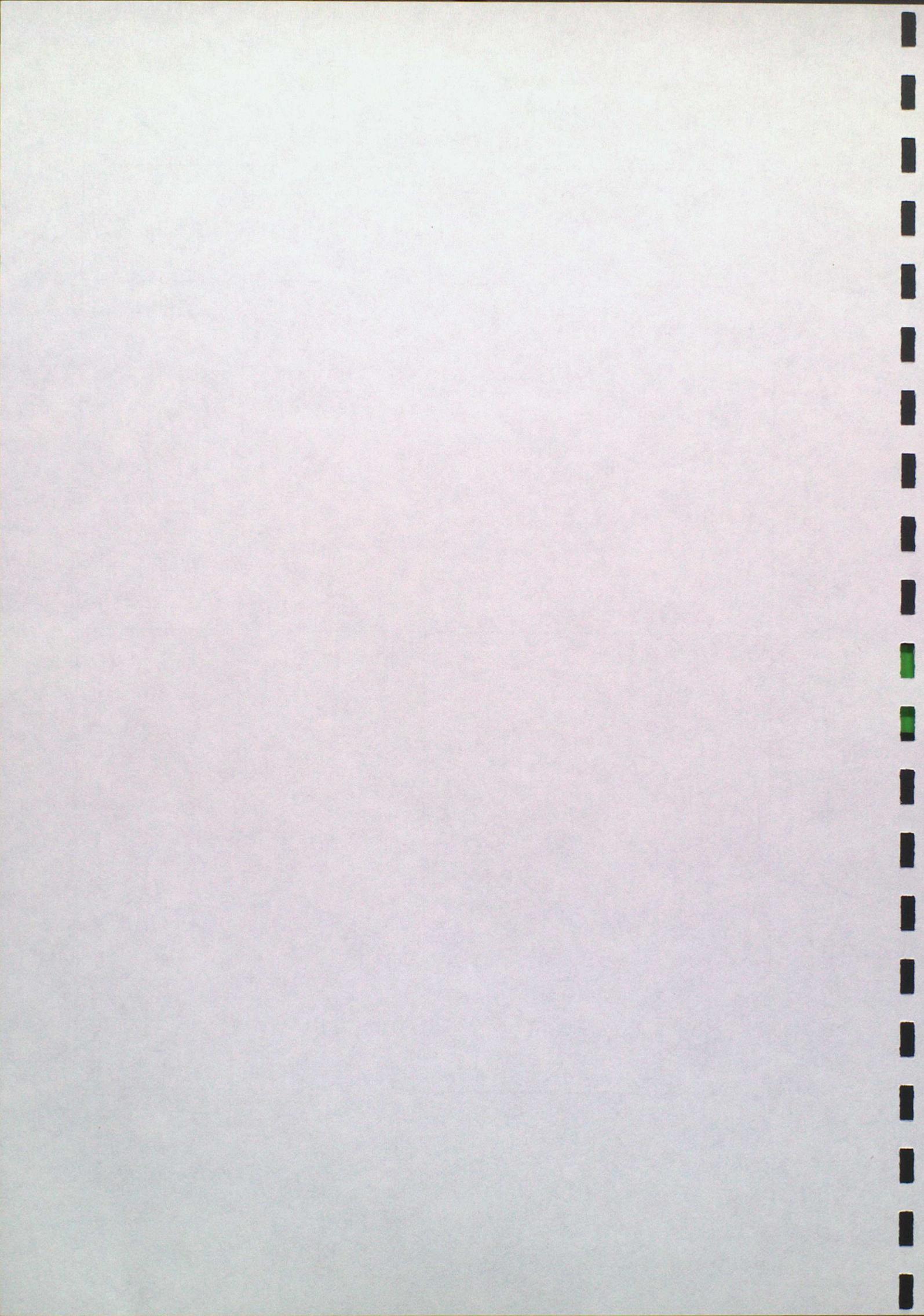


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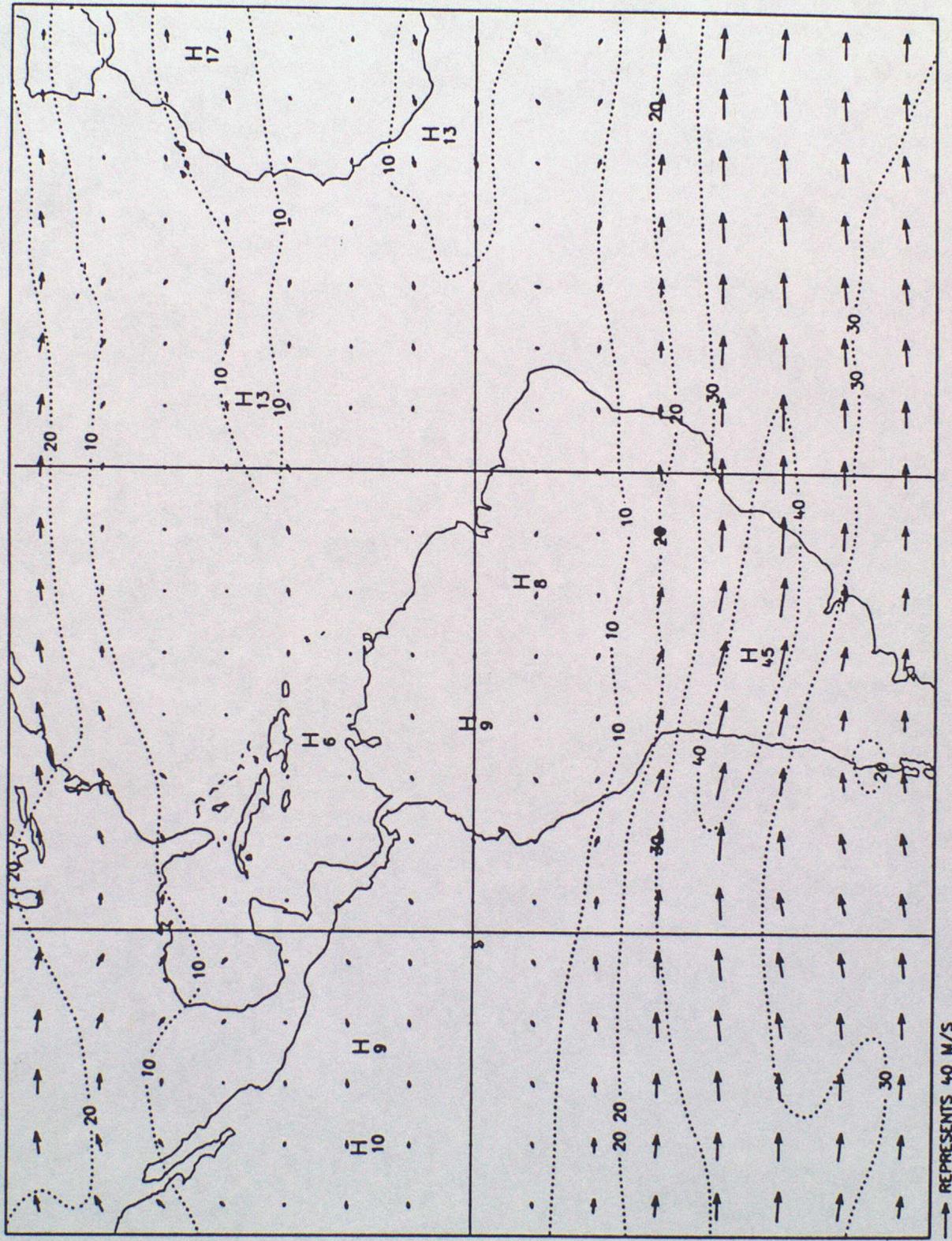


OPERATIONAL ARCHIVE MEANS. SEPTEMBER 1983
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
AVERAGE FROM 0Z ON 1/9/1983 DAY 244 TO 12Z ON 30/9/1983 DAY 273
BETWEEN LONGS. 120 E - 120 W
250 MBS.

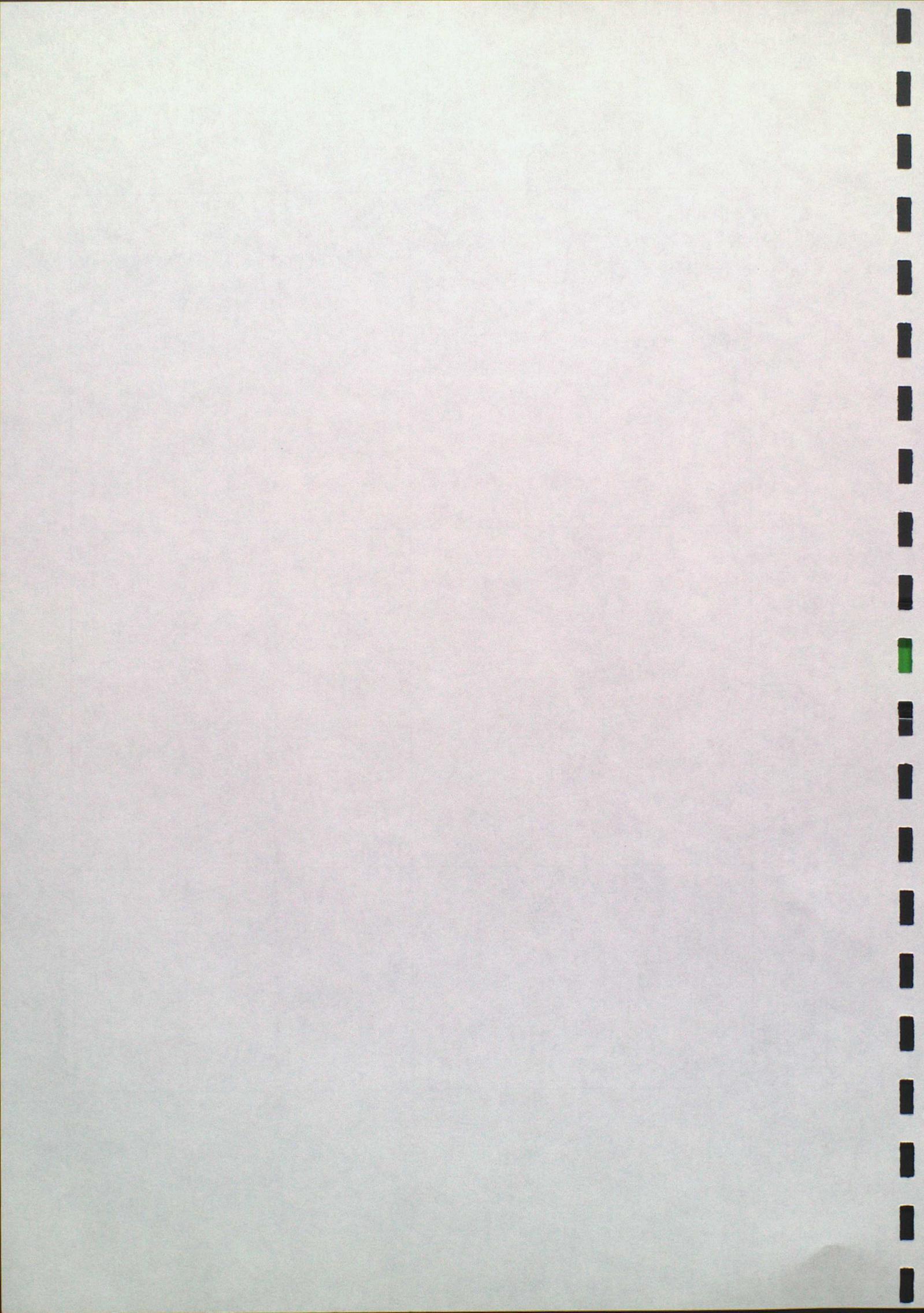




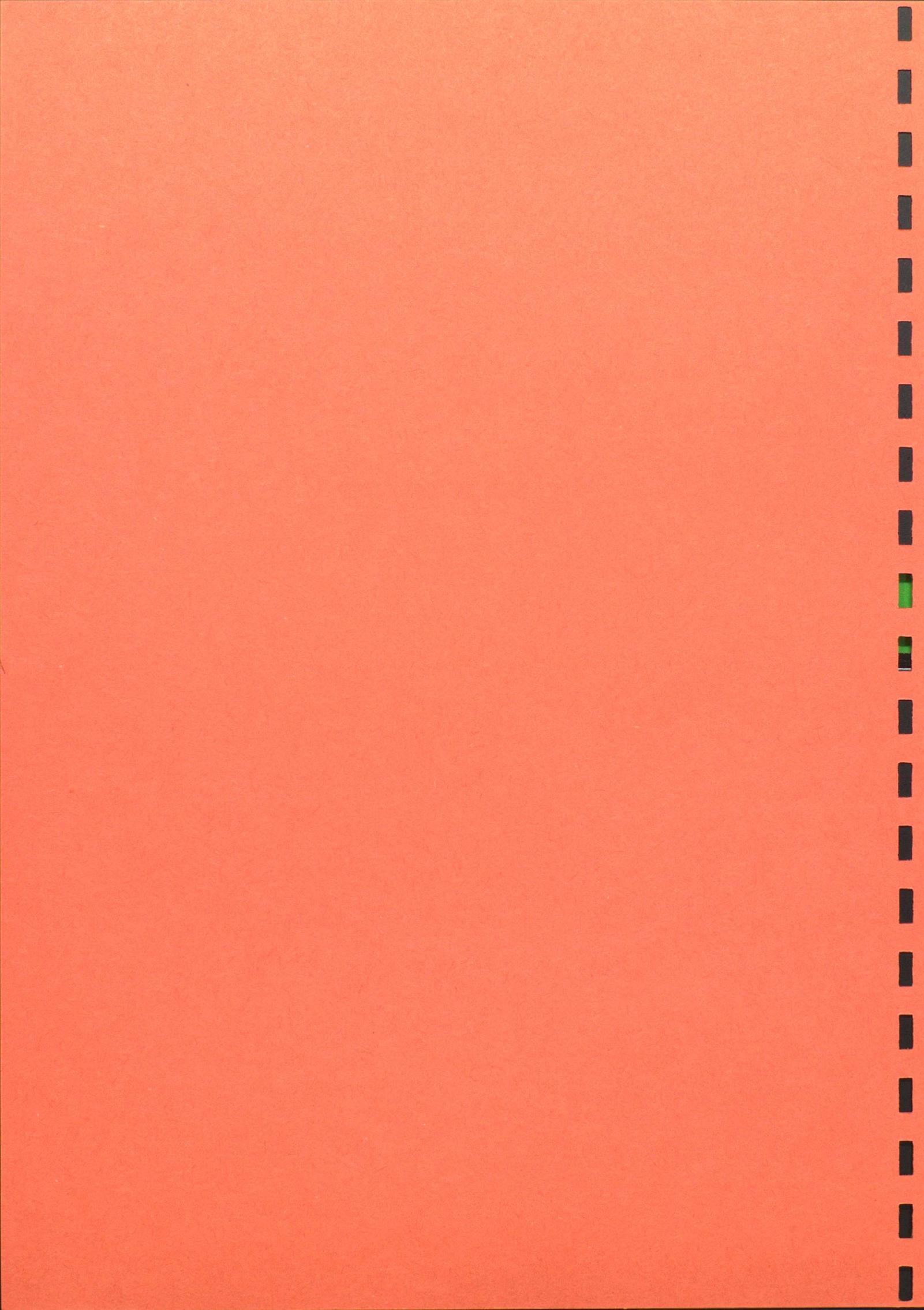
OPERATIONAL ARCHIVE MEANS. SEPTEMBER 1983
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
AVERAGE FROM 0Z ON 1/9/1983 DAY 244 TO 12Z ON 30/9/1983 DAY 273
250 MBS. 120 W - 0 W



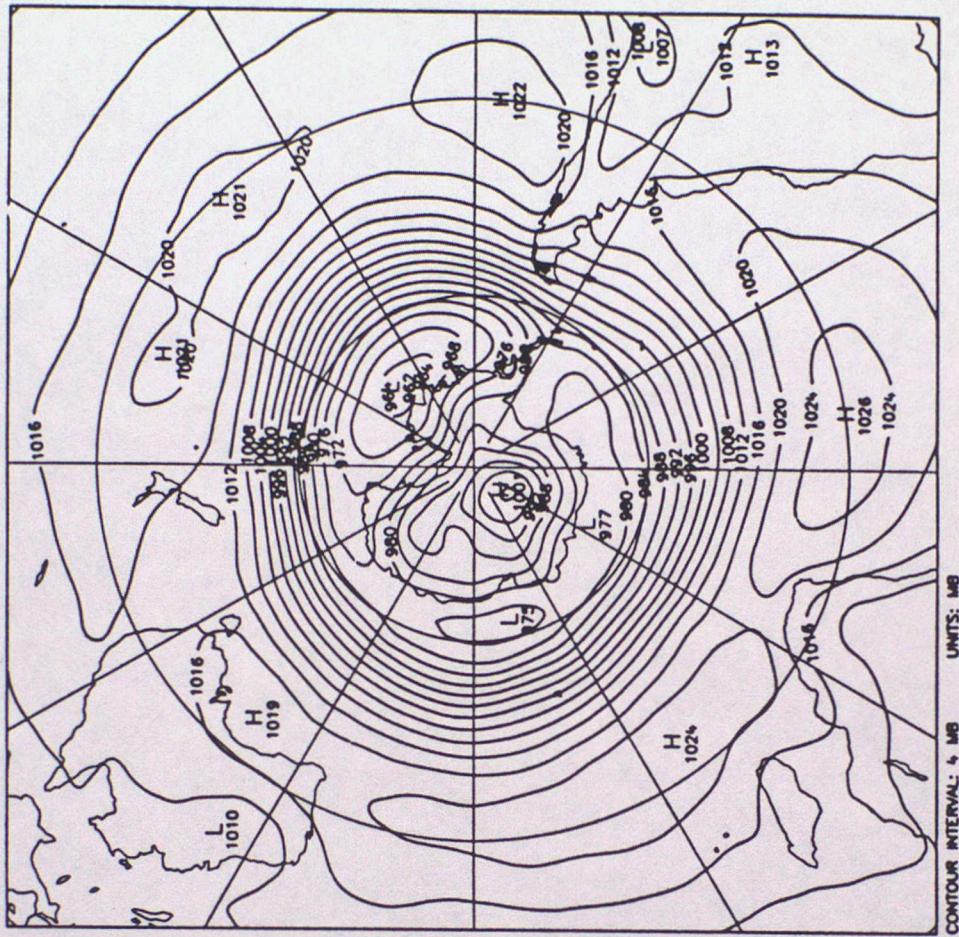
REPRESENTS 40 M/S



**OCTOBER
1983**

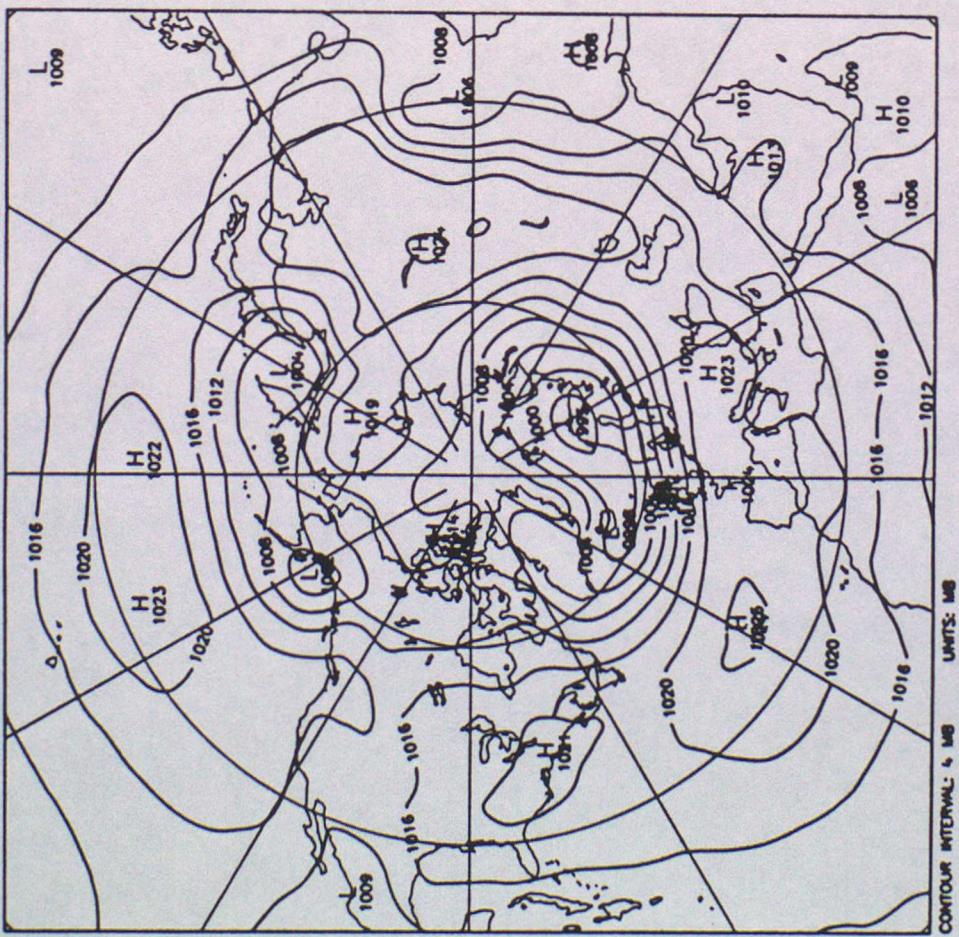


OPERATIONAL ARCHIVE MEANS. OCTOBER 1983
PMSL
AVERAGE FROM 0Z ON 1/10/1983 DAY 274 TO 12Z ON 31/10/1983 DAY 304
LEVEL: SEA LEVEL

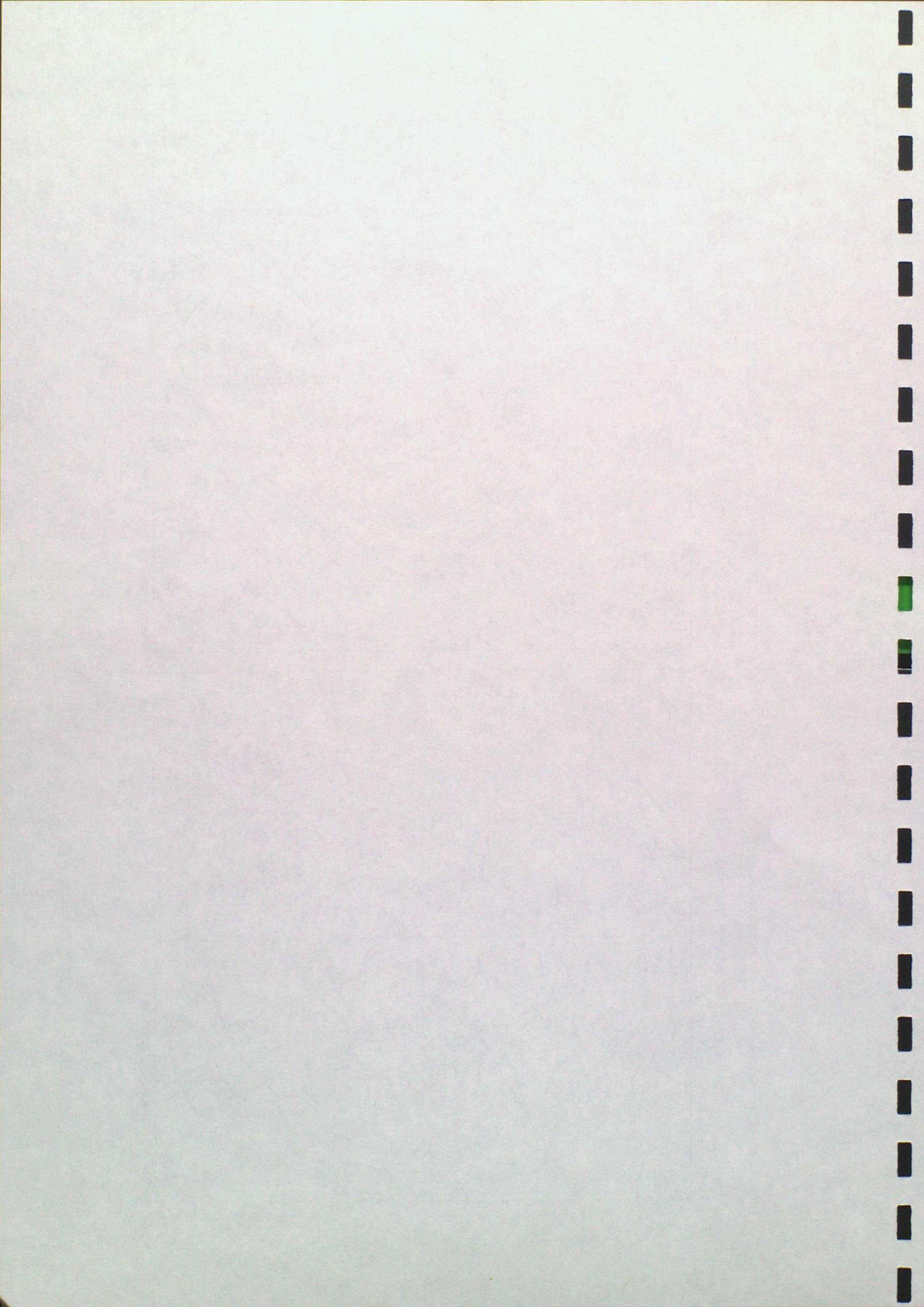


CONTOUR INTERVAL: 4 mb UNITS: mb

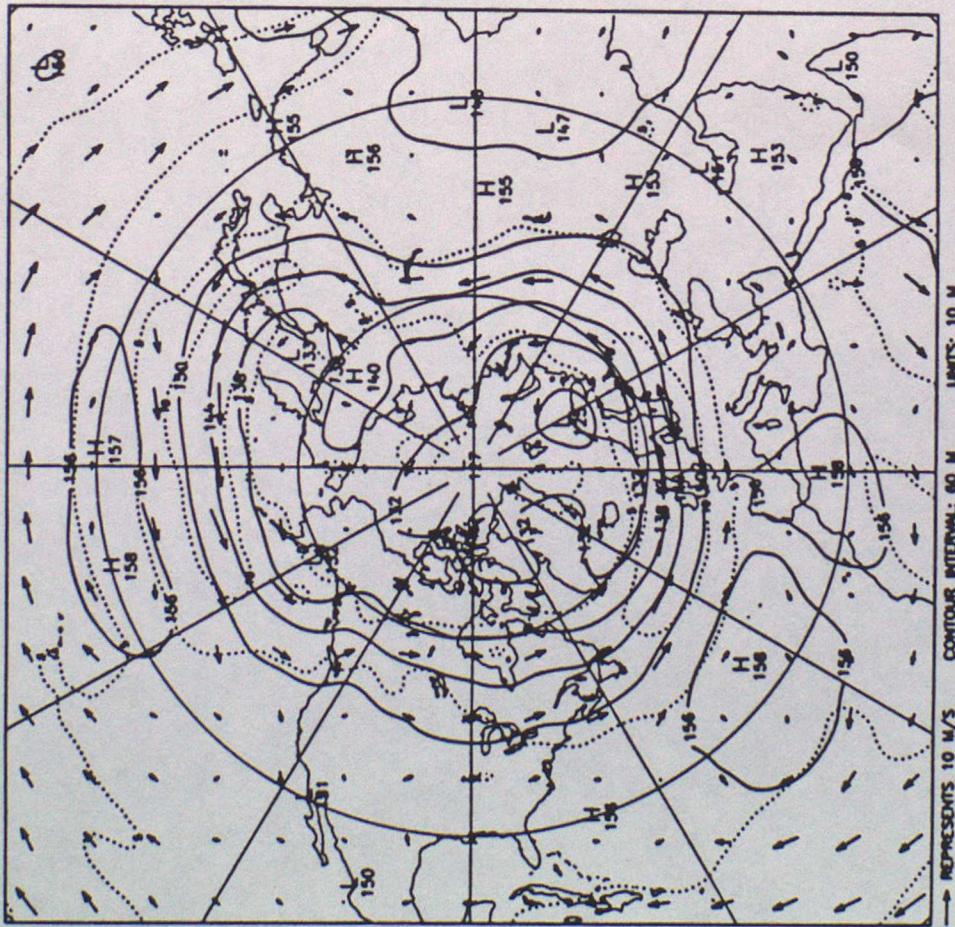
OPERATIONAL ARCHIVE MEANS. OCTOBER 1983
PMSL
AVERAGE FROM 0Z ON 1/10/1983 DAY 274 TO 12Z ON 31/10/1983 DAY 304
LEVEL: SEA LEVEL



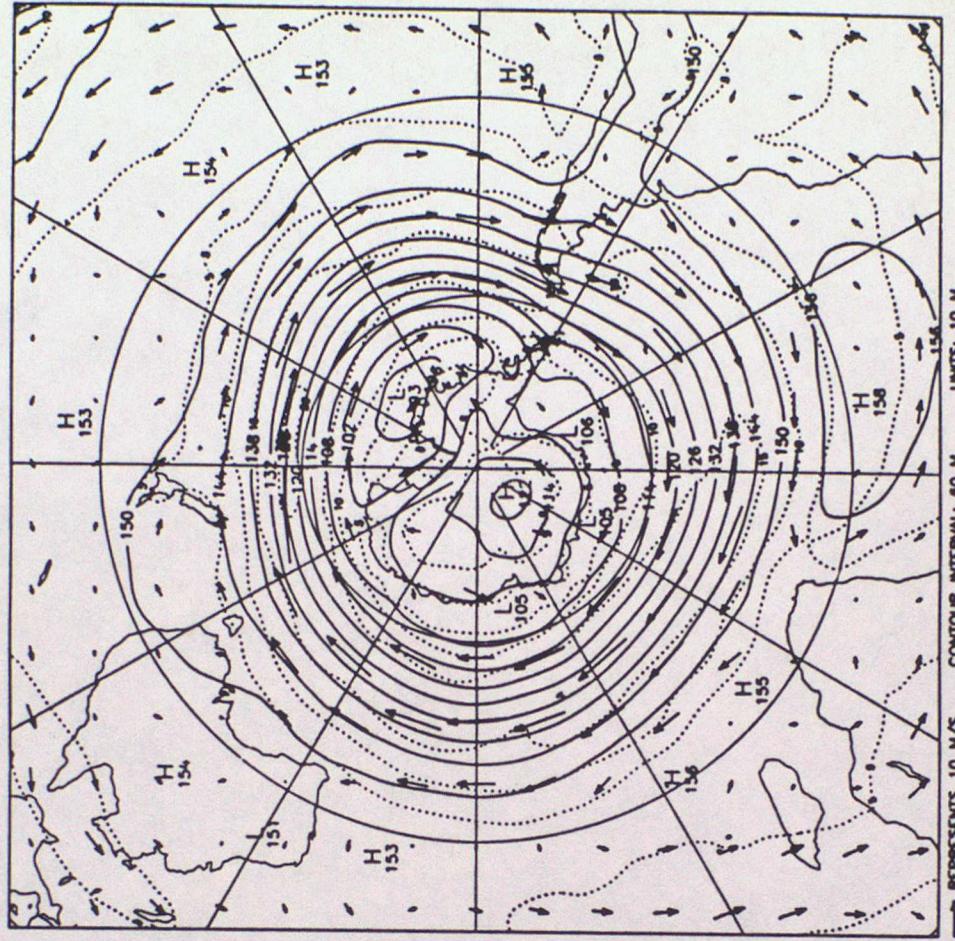
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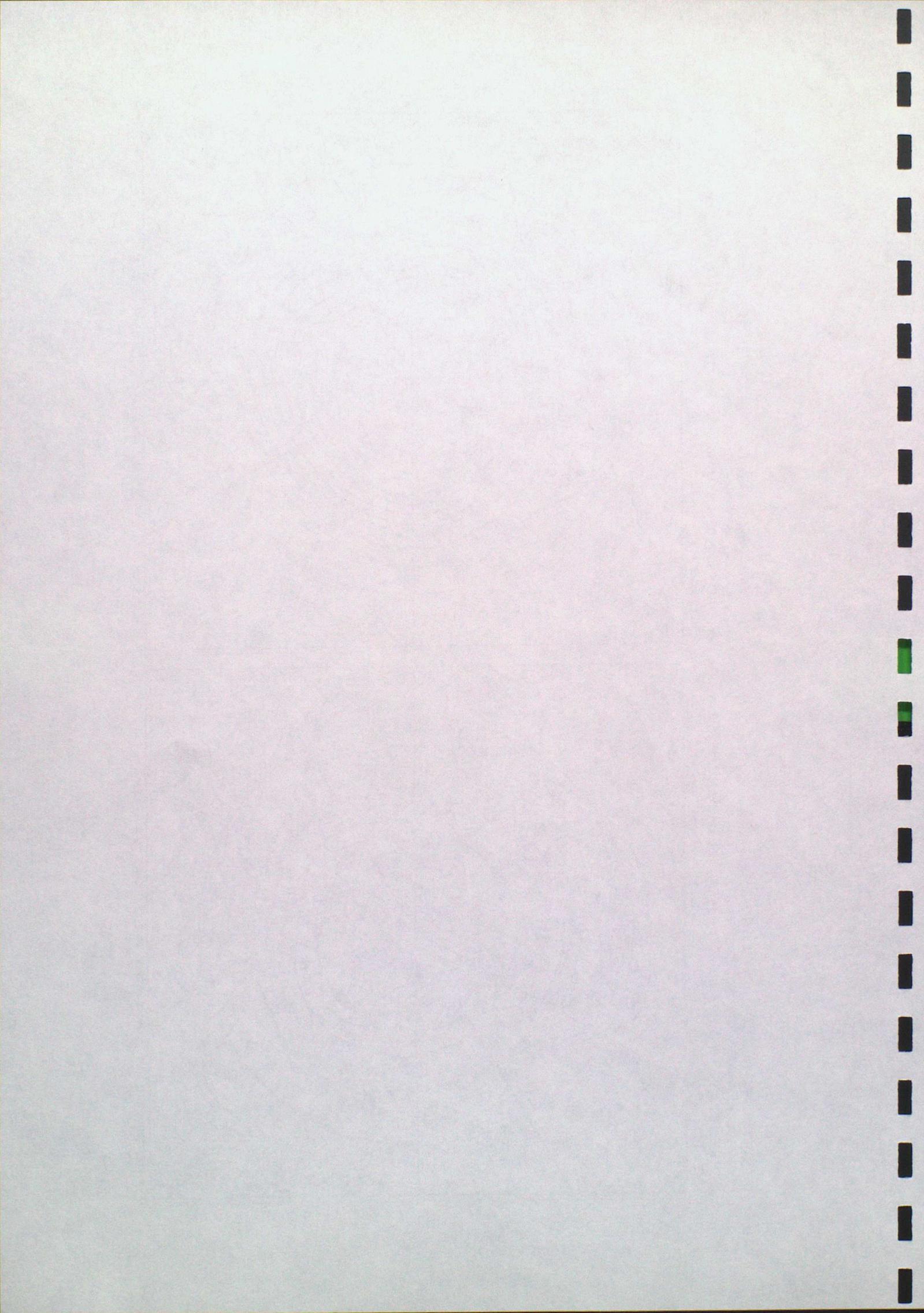


OPERATIONAL ARCHIVE MEANS. OCTOBER 1983
HEIGHTS, WIND ARROWS AND ISOTACHS.
AVERAGE FROM 02 ON 1/10/1983 DAY 274 TO 122 ON 31/10/1983 DAY 304
LEVEL: 850 MB

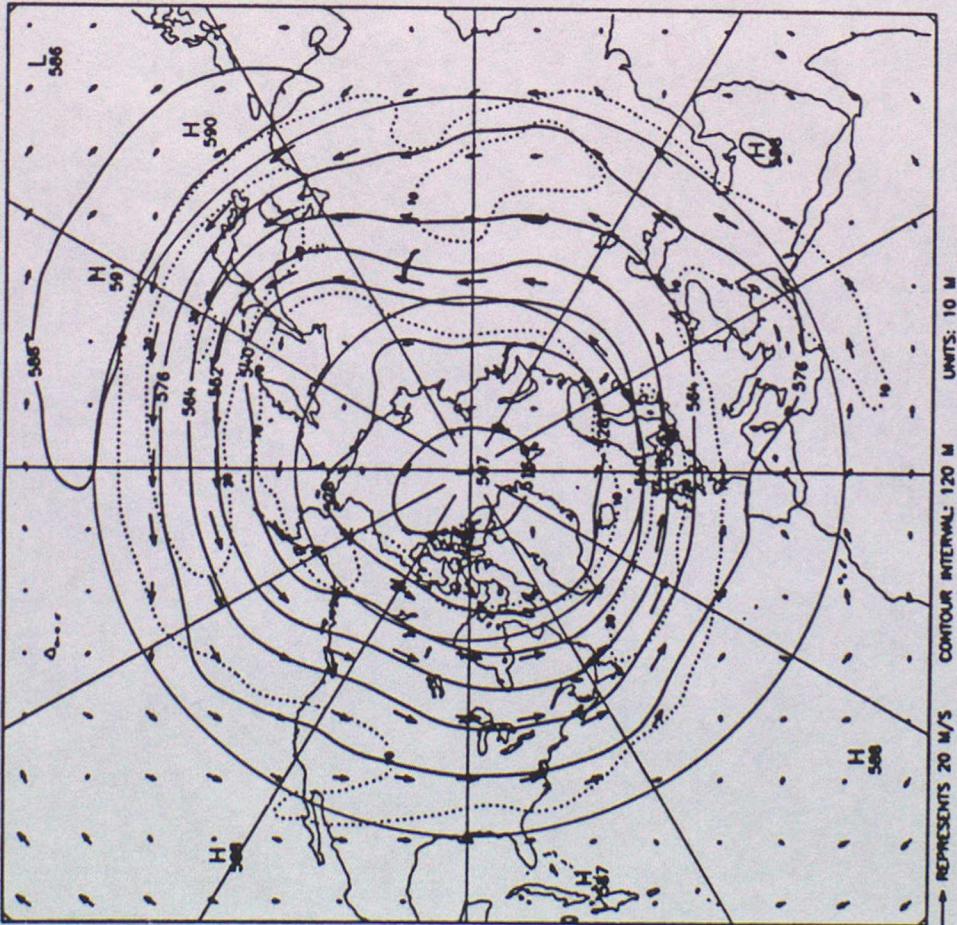


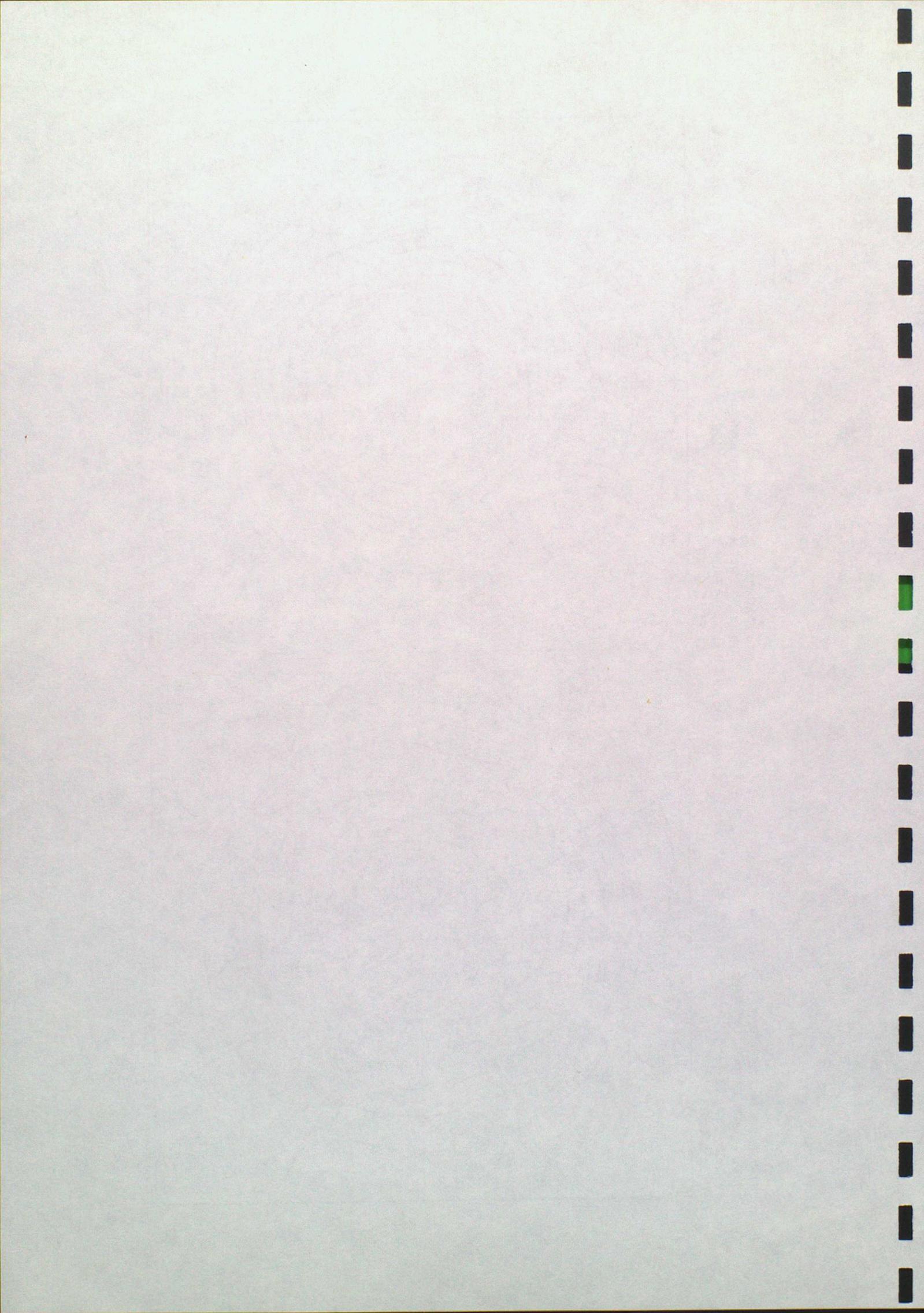
OPERATIONAL ARCHIVE MEANS. OCTOBER 1983
HEIGHTS, WIND ARROWS AND ISOTACHS.
AVERAGE FROM 02 ON 1/10/1983 DAY 274 TO 122 ON 31/10/1983 DAY 304
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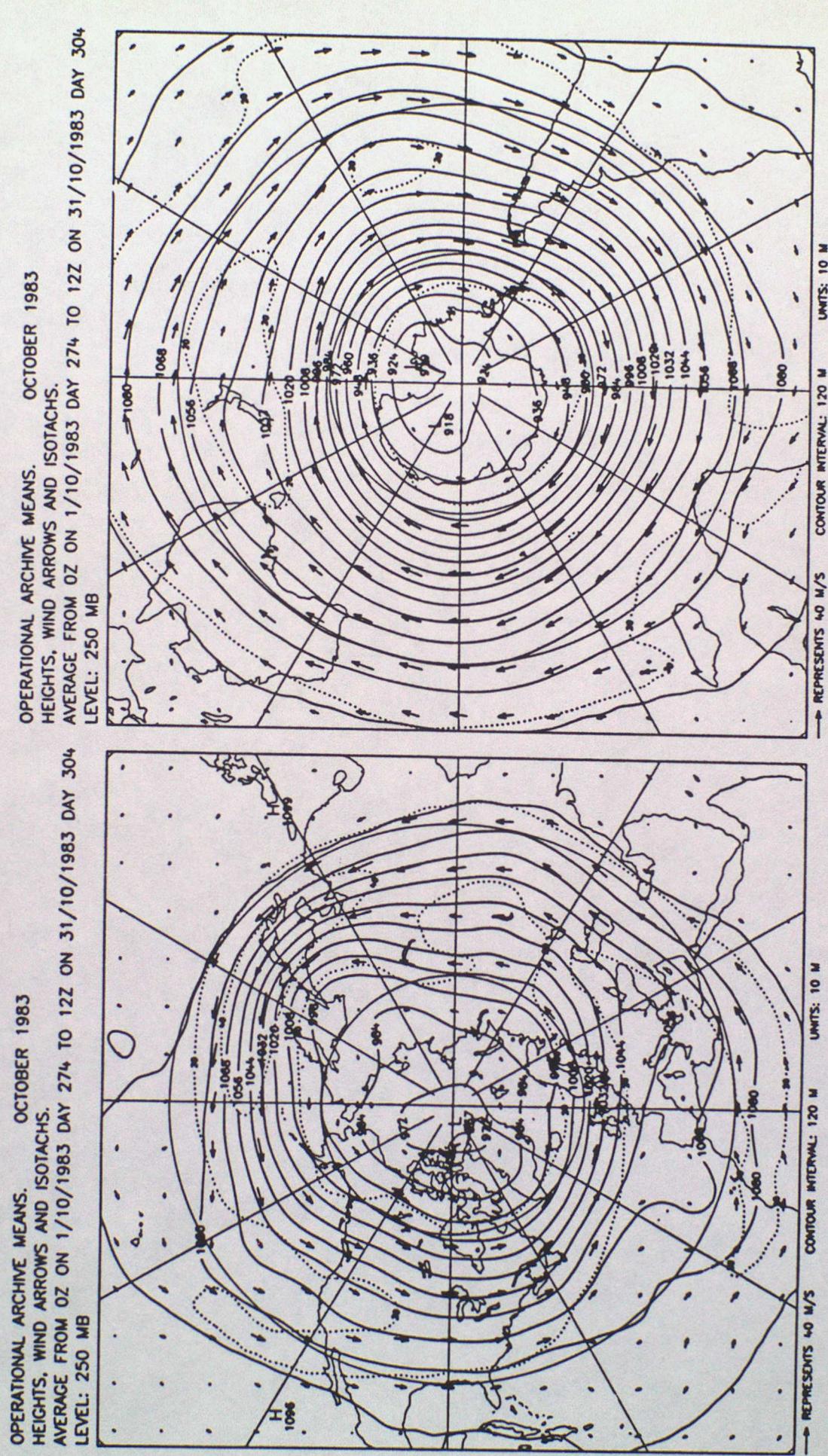


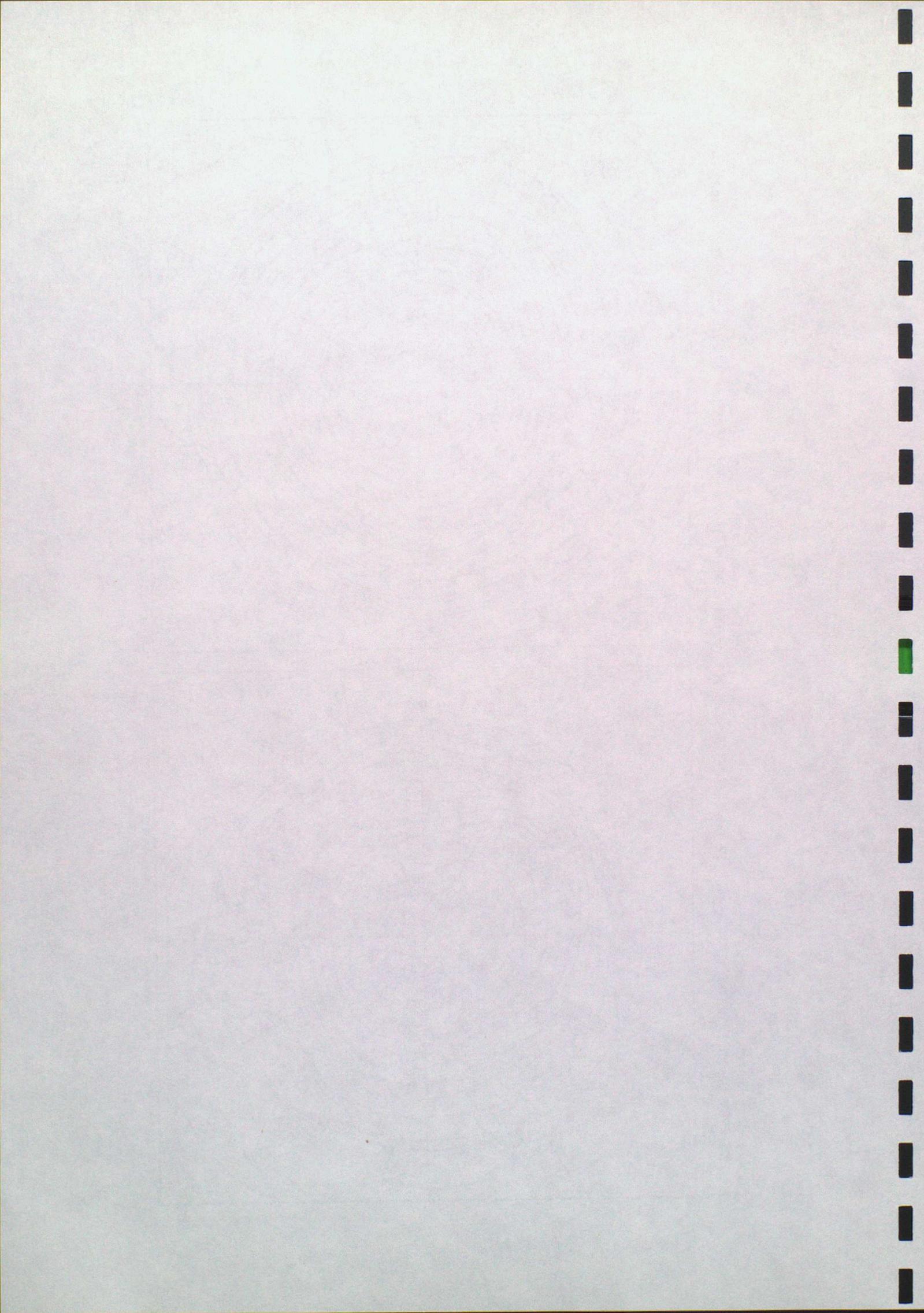


OPERATIONAL ARCHIVE MEANS. OCTOBER 1983
HEIGHTS, WIND ARROWS AND ISOTACHS.
AVERAGE FROM 02 ON 1/10/1983 DAY 274 TO 12Z ON 31/10/1983 DAY 304
LEVEL: 500 MB

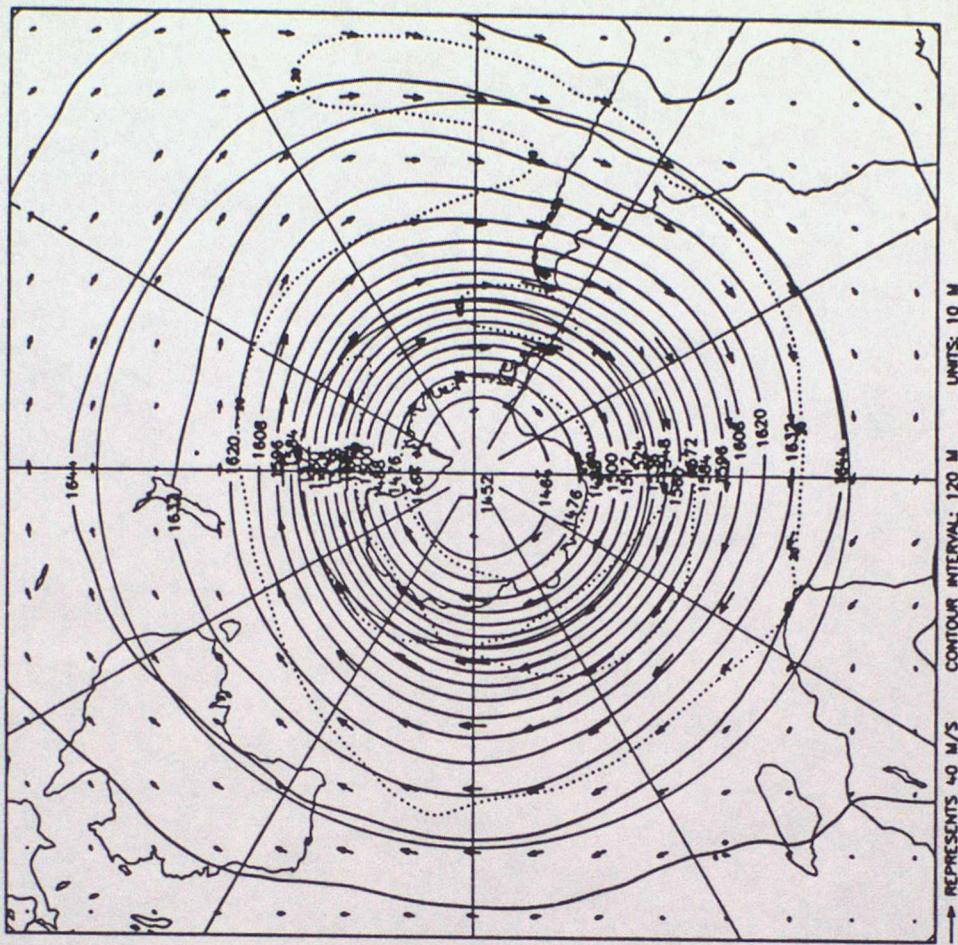


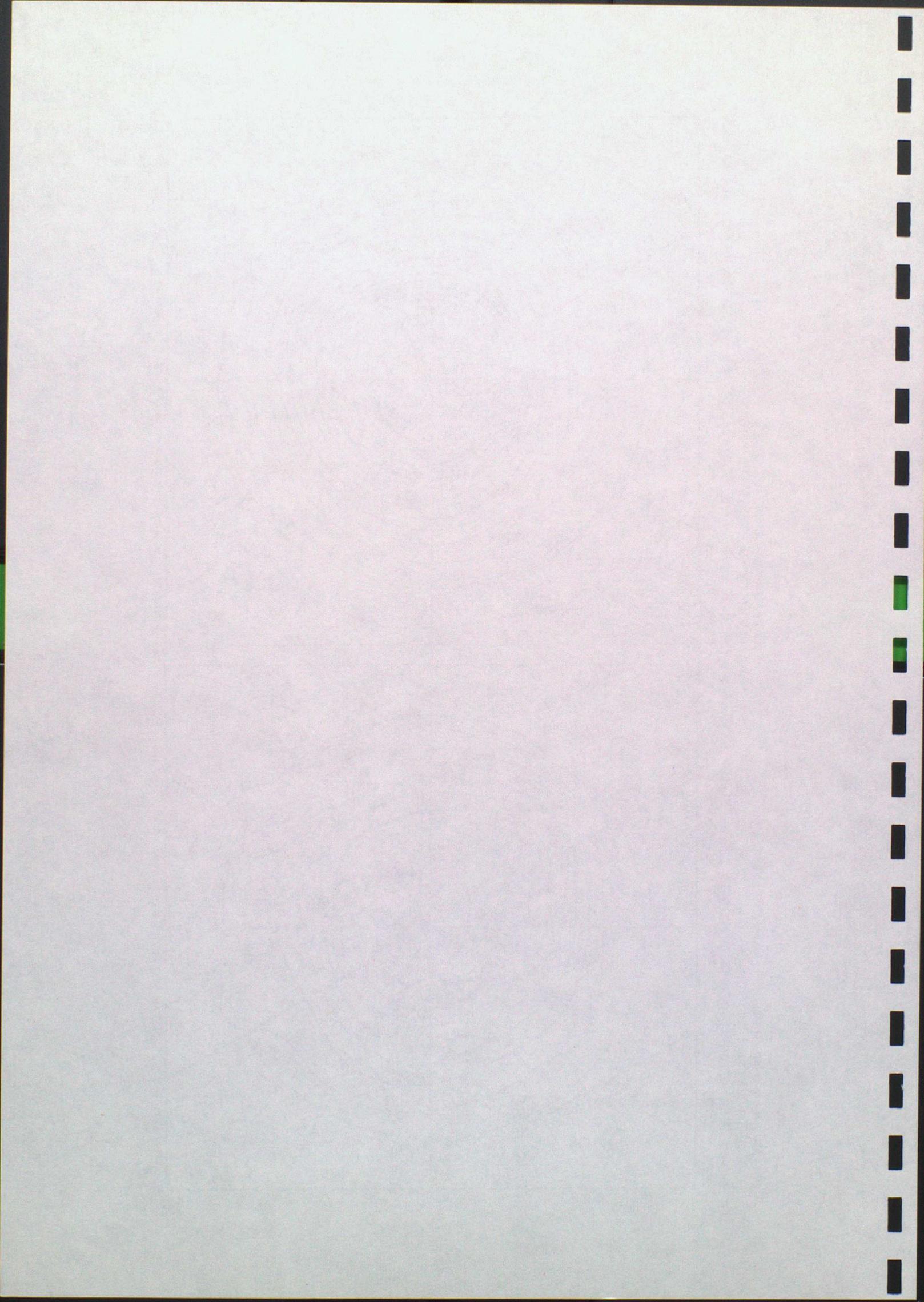




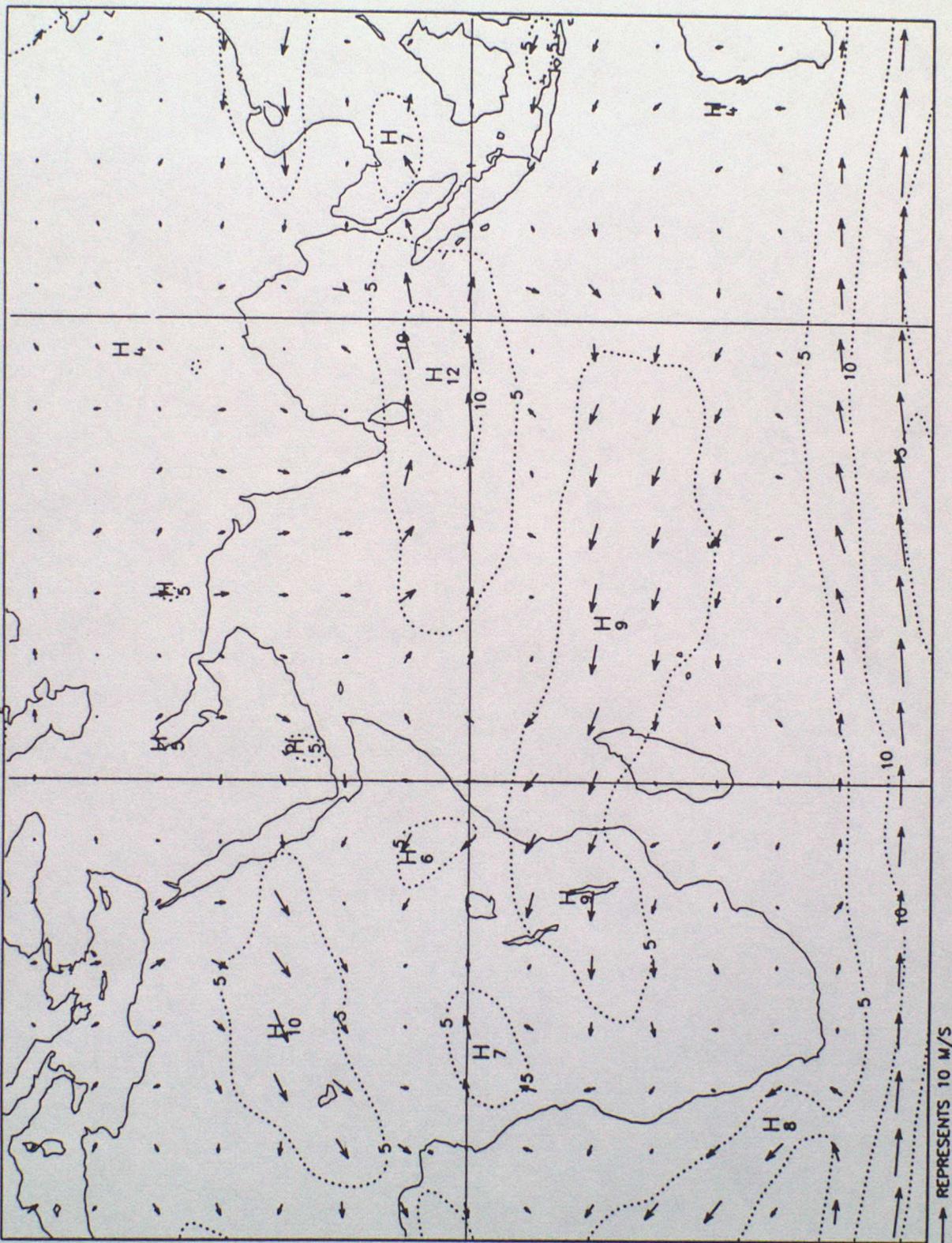


OPERATIONAL ARCHIVE MEANS. OCTOBER 1983
HEIGHTS, WIND ARROWS AND ISOTACHS.
AVERAGE FROM 02 ON 1/10/1983 DAY 274 TO 122 ON 31/10/1983 DAY 304
LEVEL: 100 MB

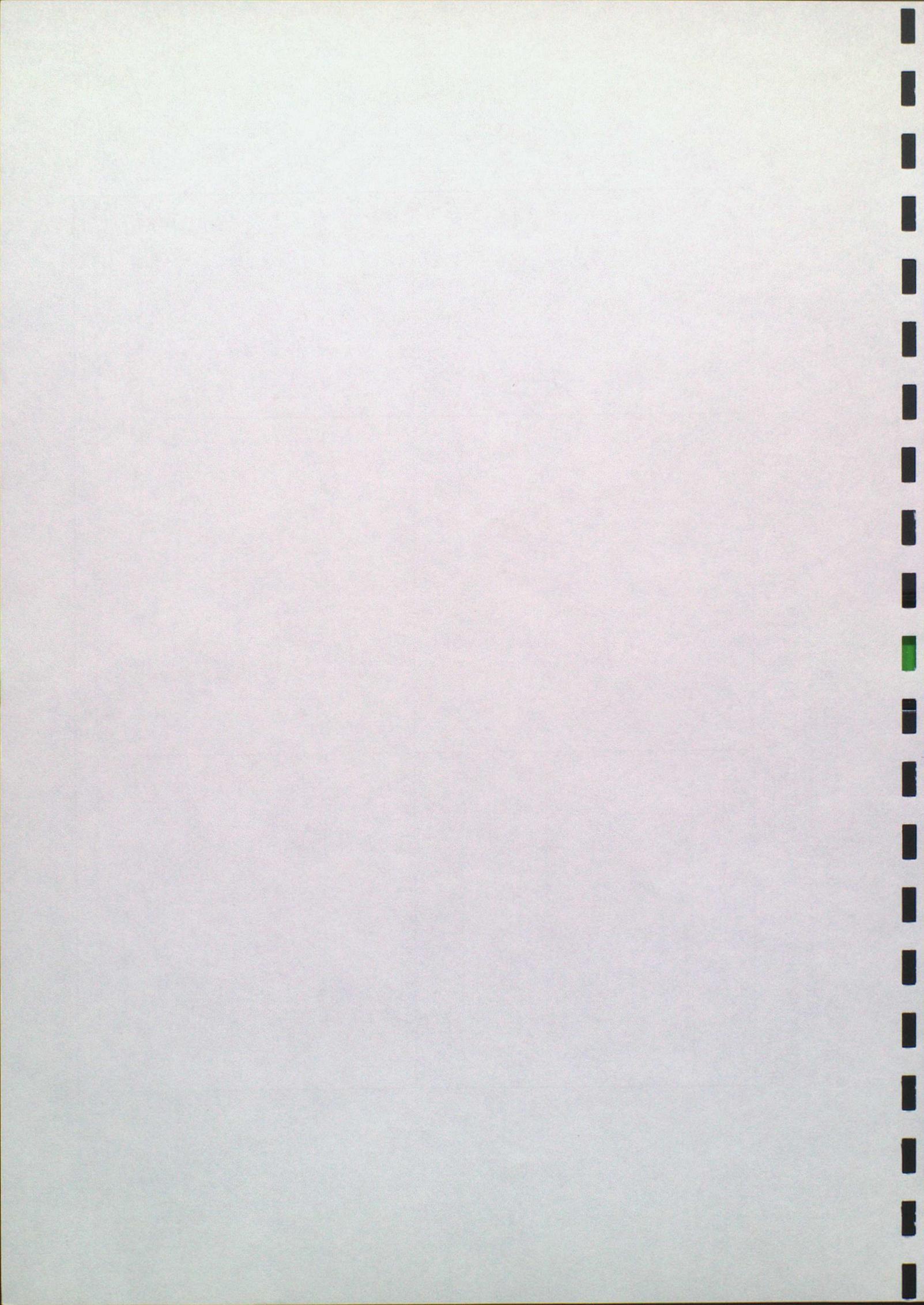




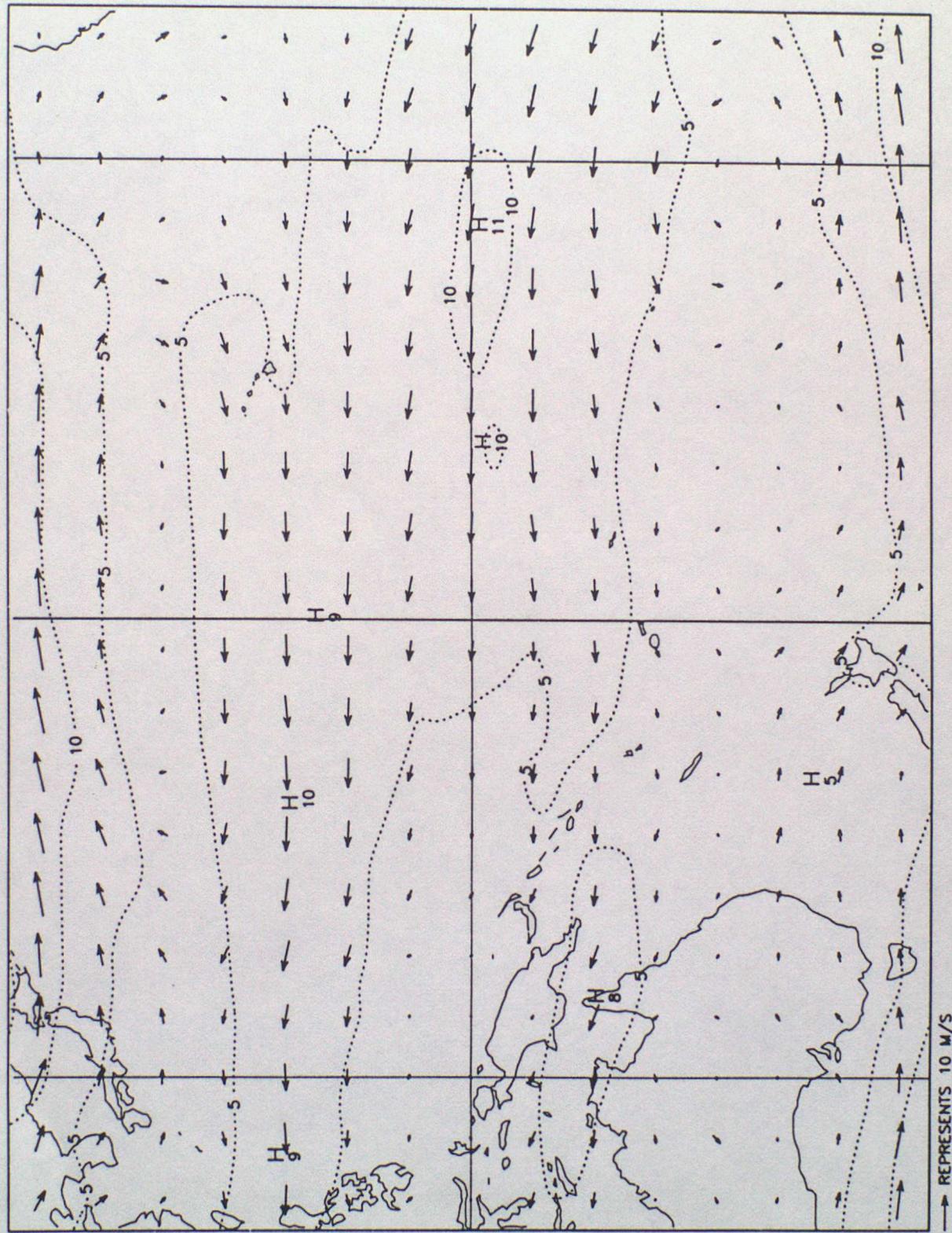
OPERATIONAL ARCHIVE MEANS.
WIND ARROWS AND ISOTACHS. BETWEEN LATS. 45 N - 45 S.
AVERAGE FROM OZ ON 1/10/1983 DAY 274 TO 12Z ON 31/10/1983 DAY 304
850 MBS.

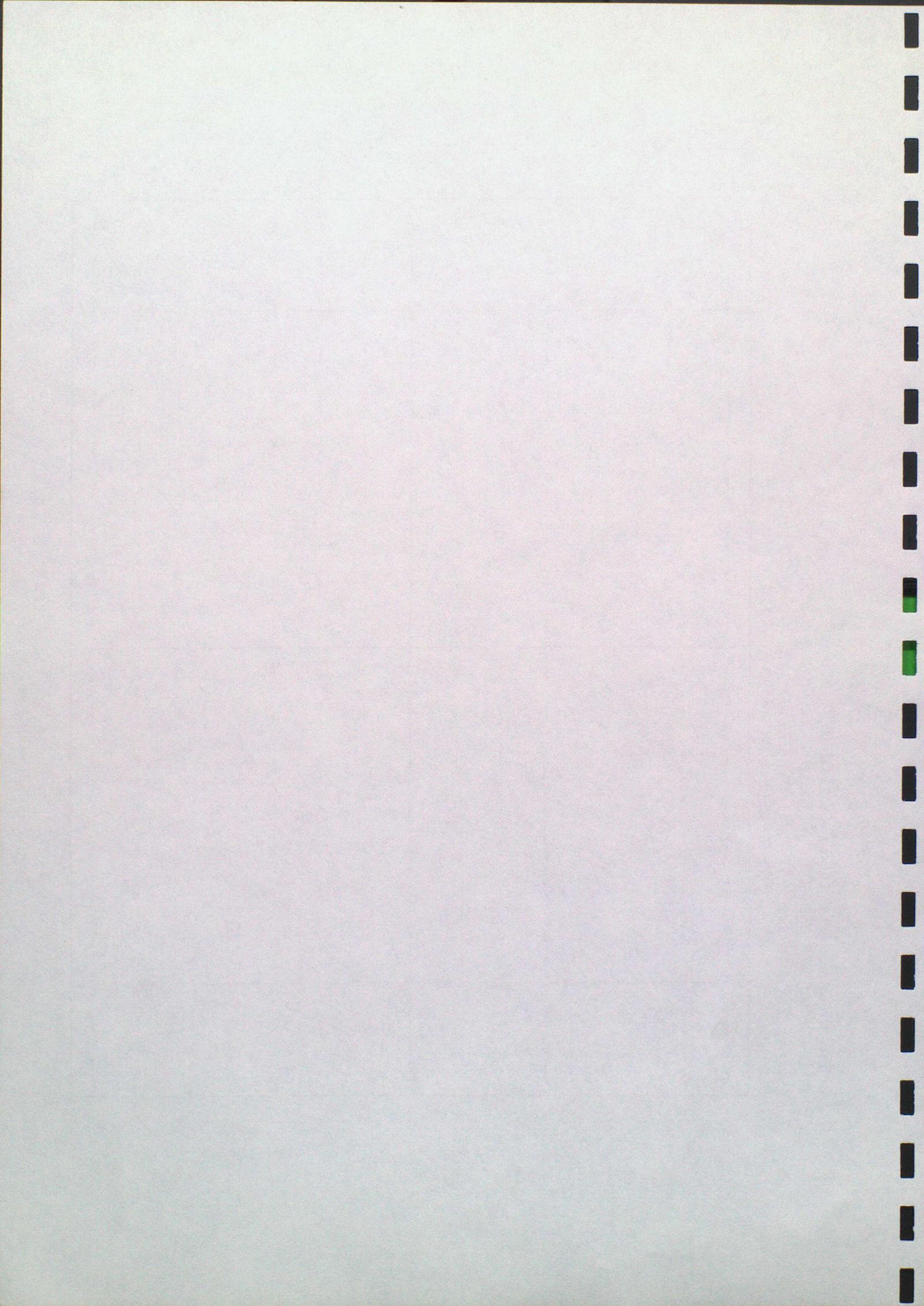


REPRESENTS 10 M/S

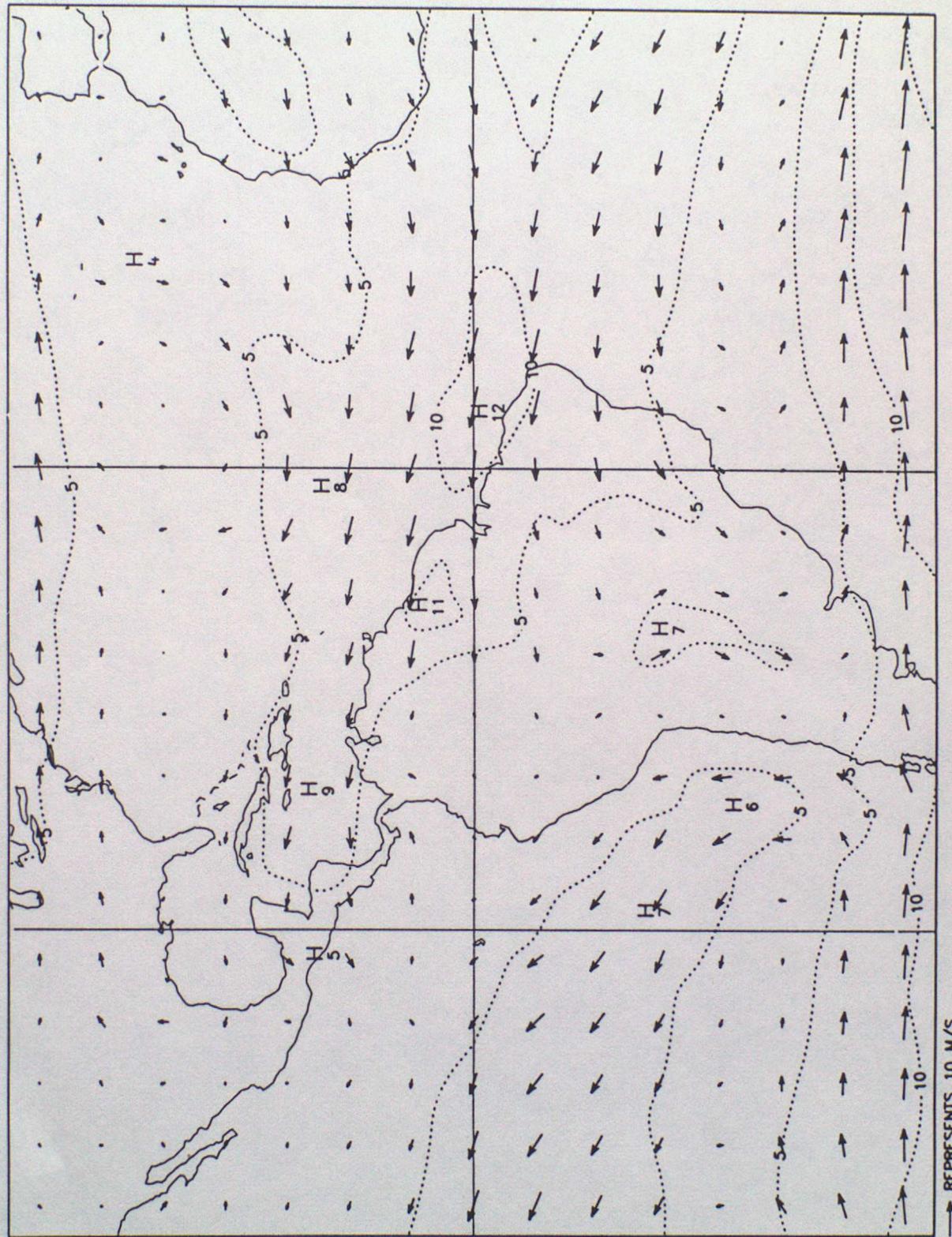


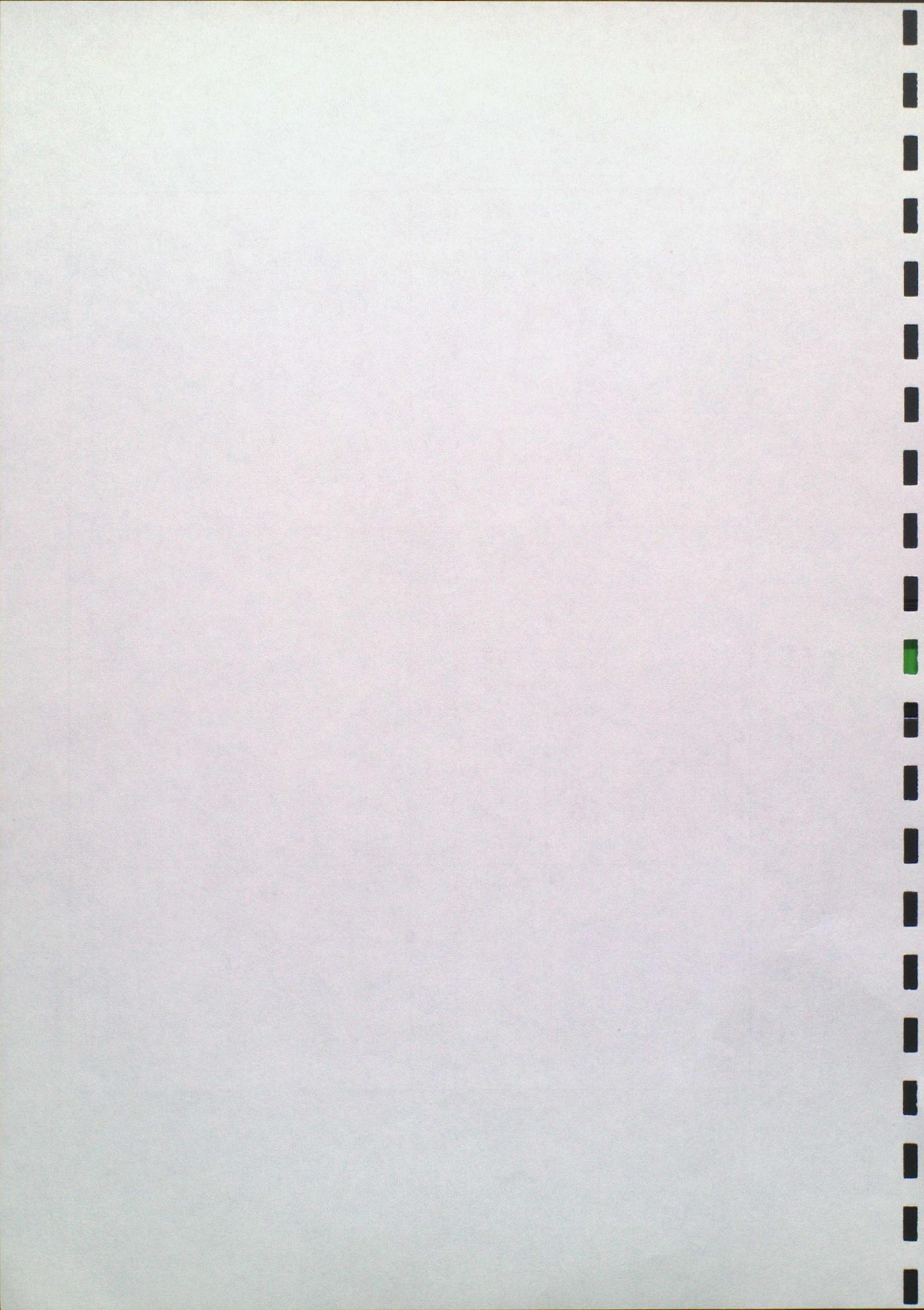
OPERATIONAL ARCHIVE MEANS.
OCTOBER 1983
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
AVERAGE FROM OZ ON 1/10/1983 DAY 274 TO 12Z ON 31/10/1983 DAY 304
BETWEEN LONGS. 120 E - 120 W
850 MBS.



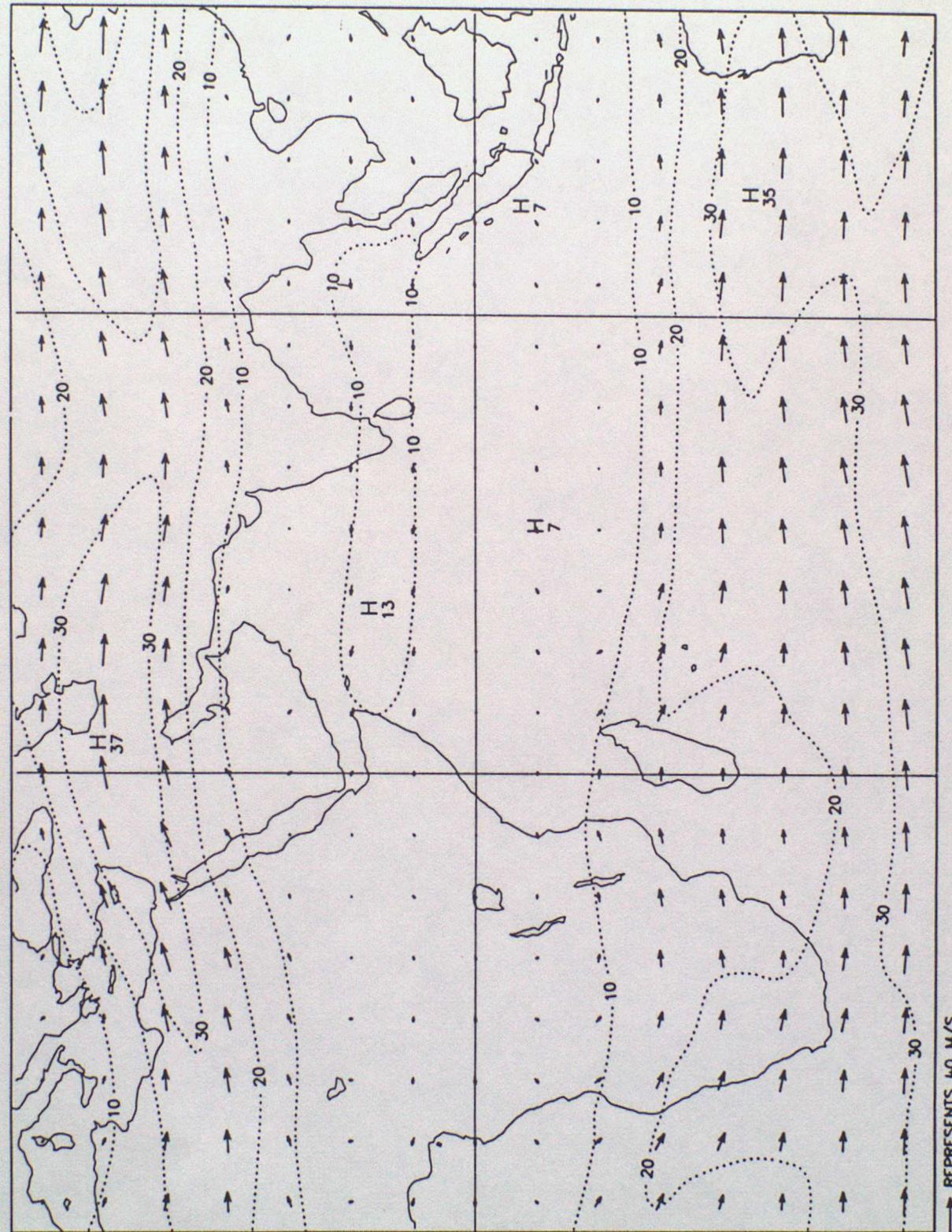


OPERATIONAL ARCHIVE MEANS.
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
AVERAGE FROM 0Z ON 1/10/1983 DAY 274 TO 12Z ON 31/10/1983 DAY 304
850 MBS. 120 W - 0 W

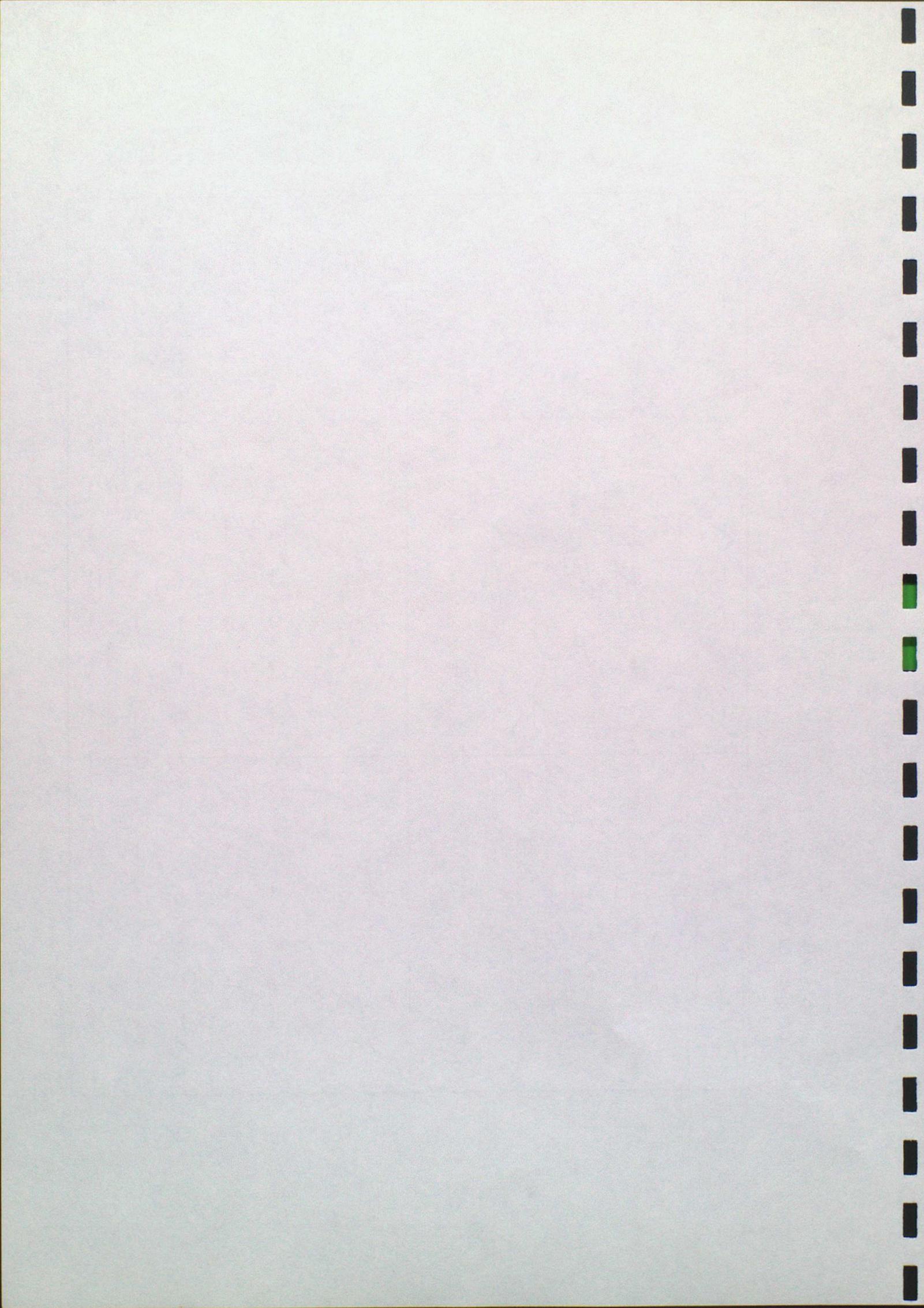




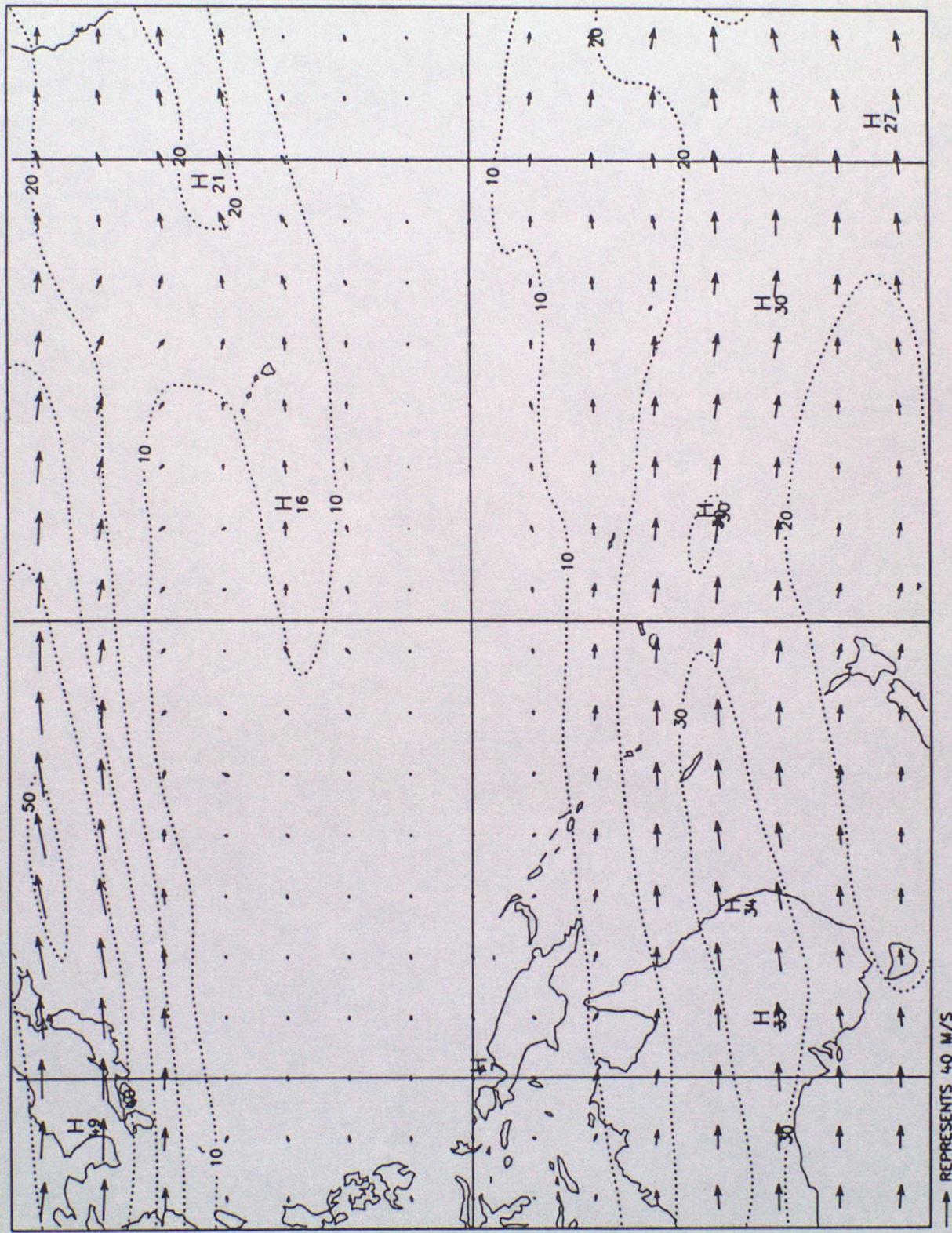
OPERATIONAL ARCHIVE MEANS.
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
AVERAGE FROM 0Z ON 1/10/1983 DAY 274 TO 12Z ON 31/10/1983 DAY 304
BETWEEN LONGS. 0 E - 120 E
250 MBS.

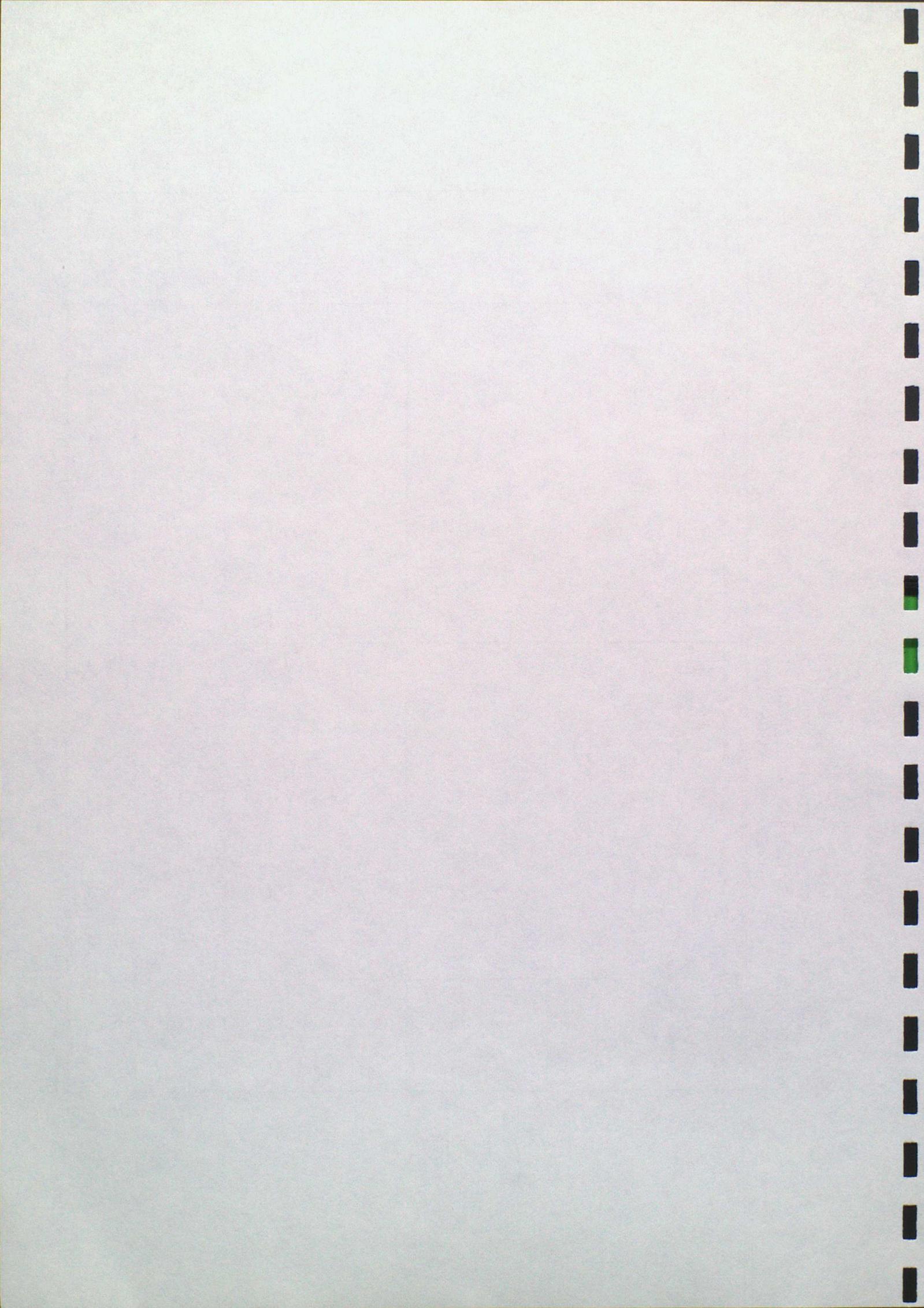


REPRESENTS 40 M/S

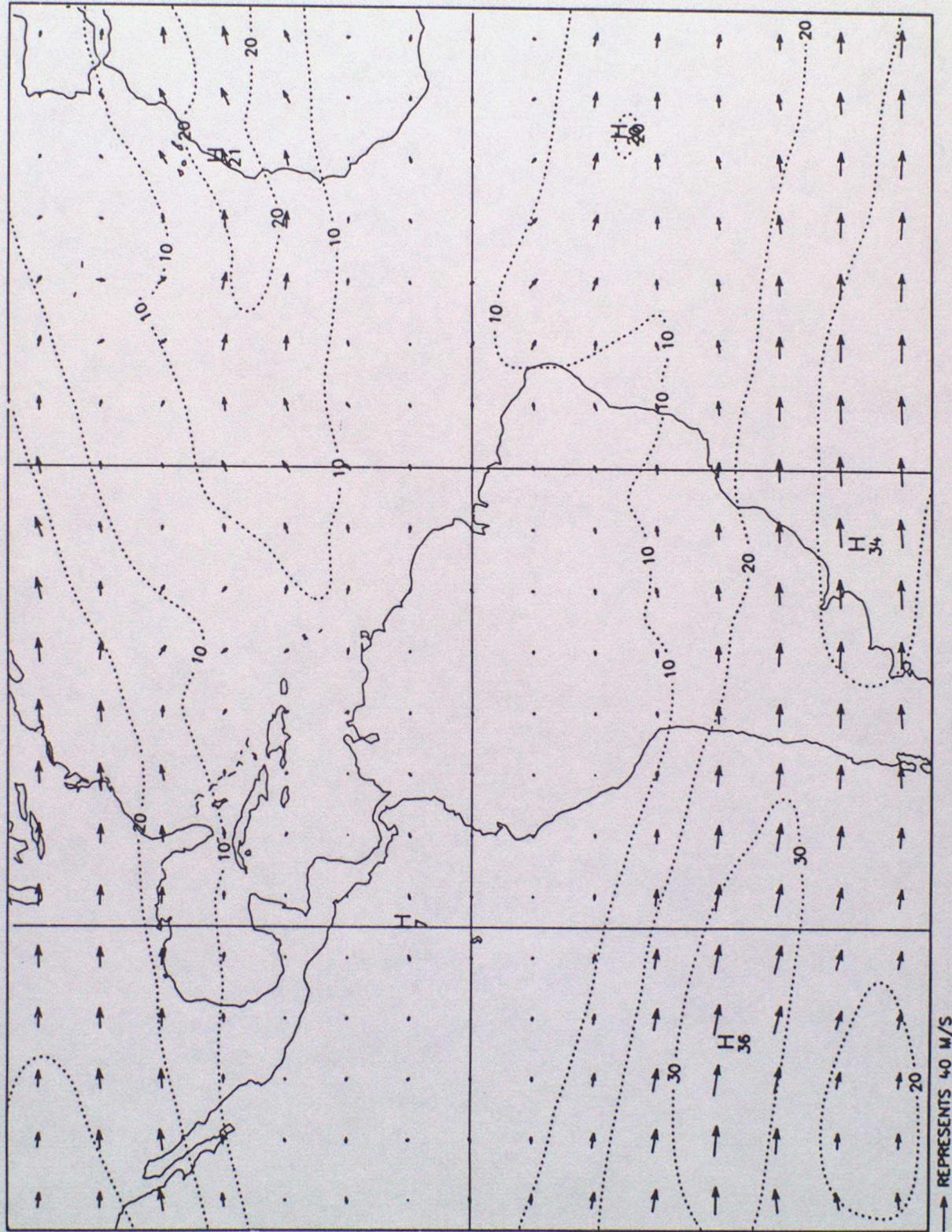


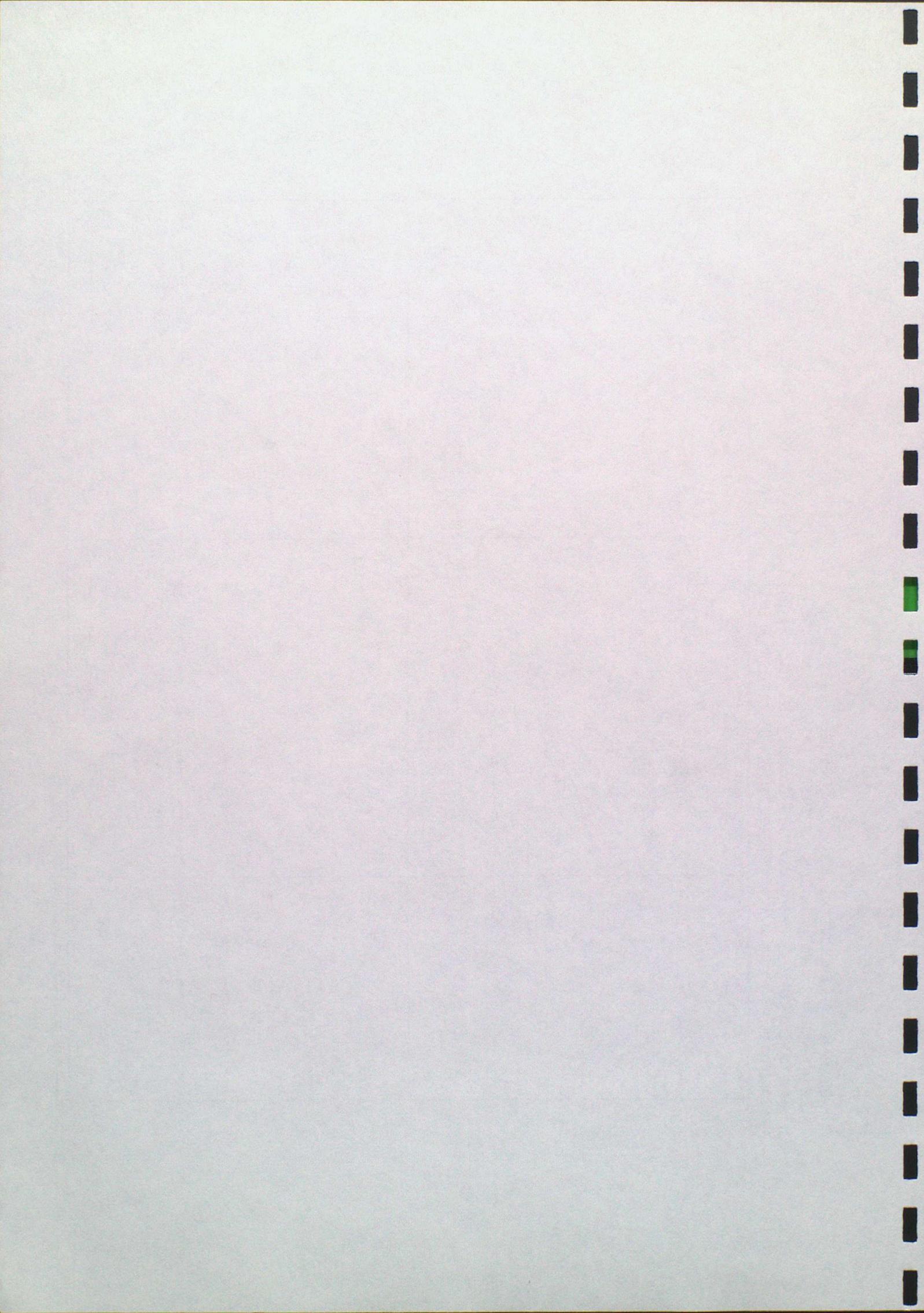
OPERATIONAL ARCHIVE MEANS.
WIND ARROWS AND ISOTACHS
AVERAGE FROM OZ ON 1/10/1983 DAY 274 TO 12Z ON 31/10/1983 DAY 304
BETWEEN LATS. 45 N - 45 S.
BETWEEN LONGS. 120 E - 120 W
250 MBS.





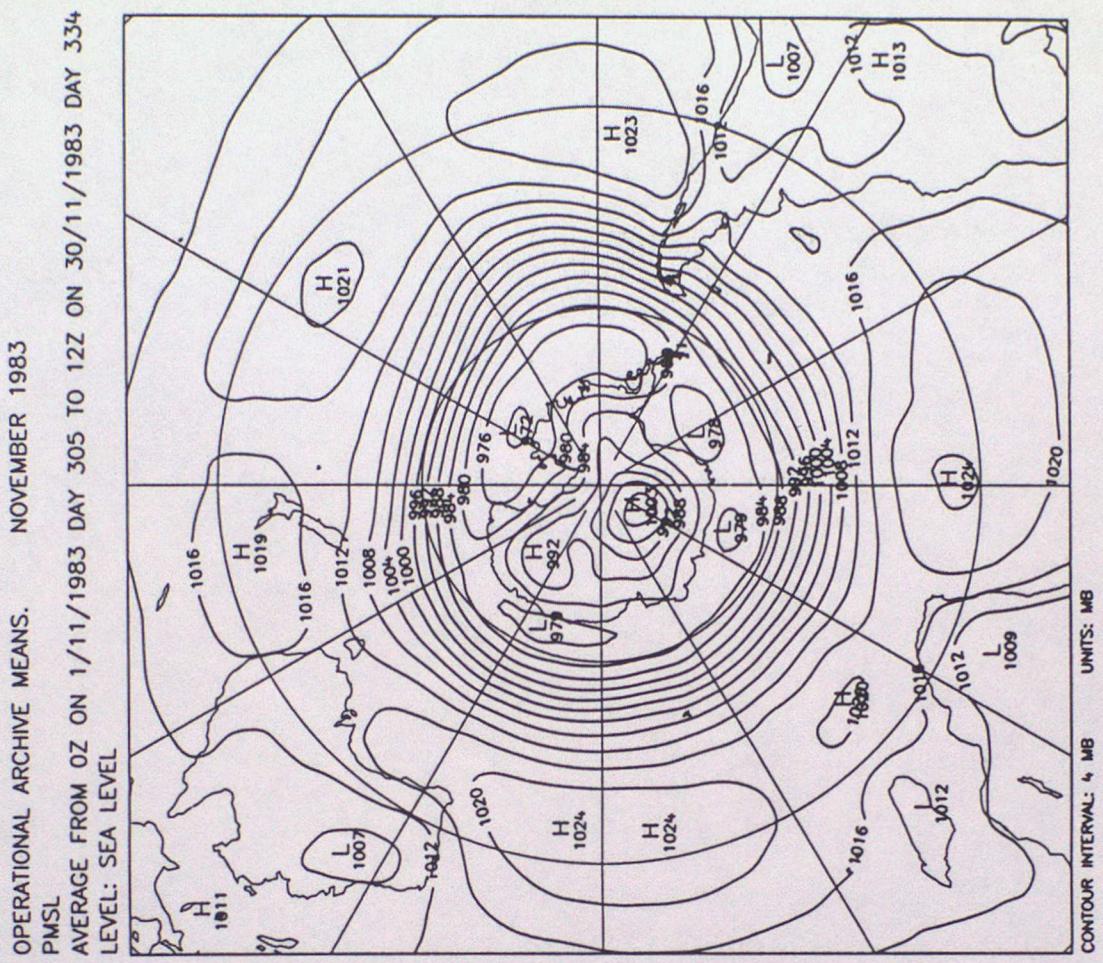
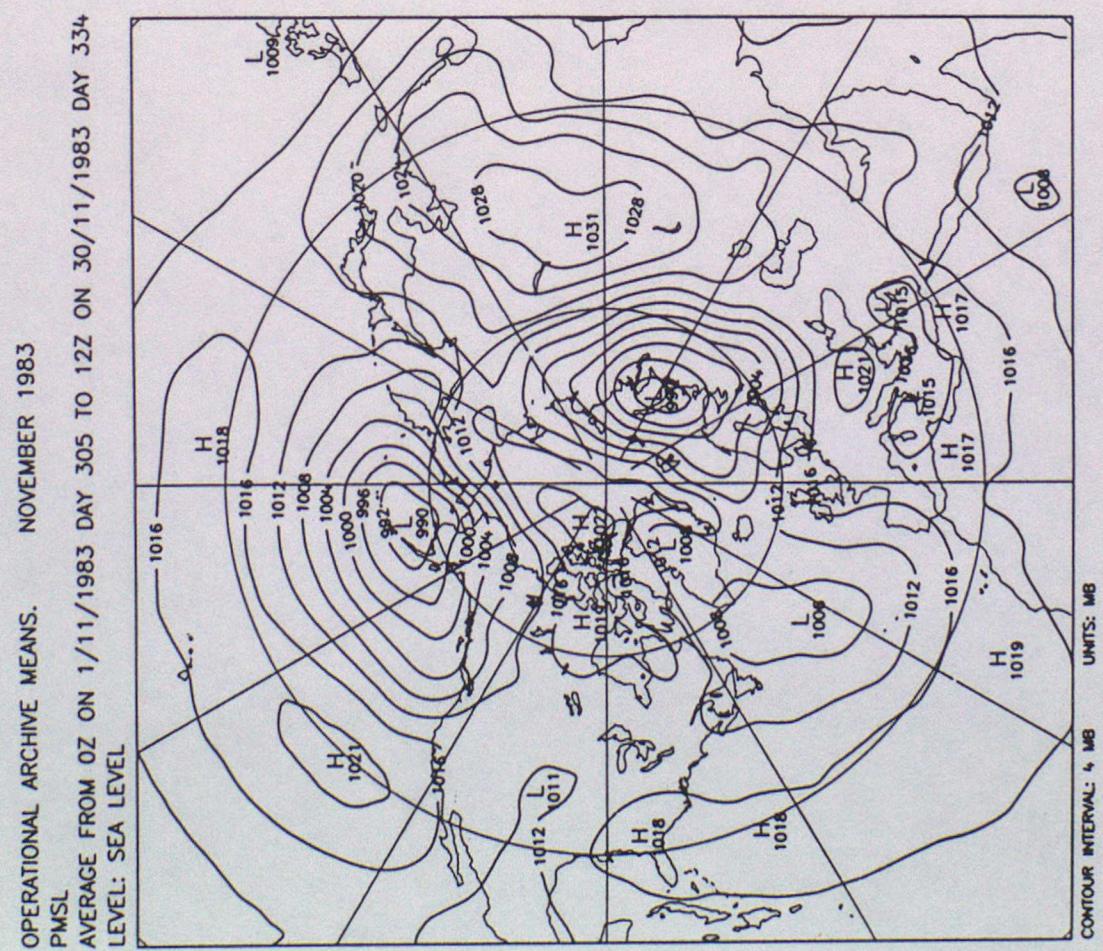
OPERATIONAL ARCHIVE MEANS. OCTOBER 1983
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
AVERAGE FROM 0Z ON 1/10/1983 DAY 274 TO 12Z ON 31/10/1983 DAY 304
BETWEEN LONGS. 120 W - 0 W
250 MBS.

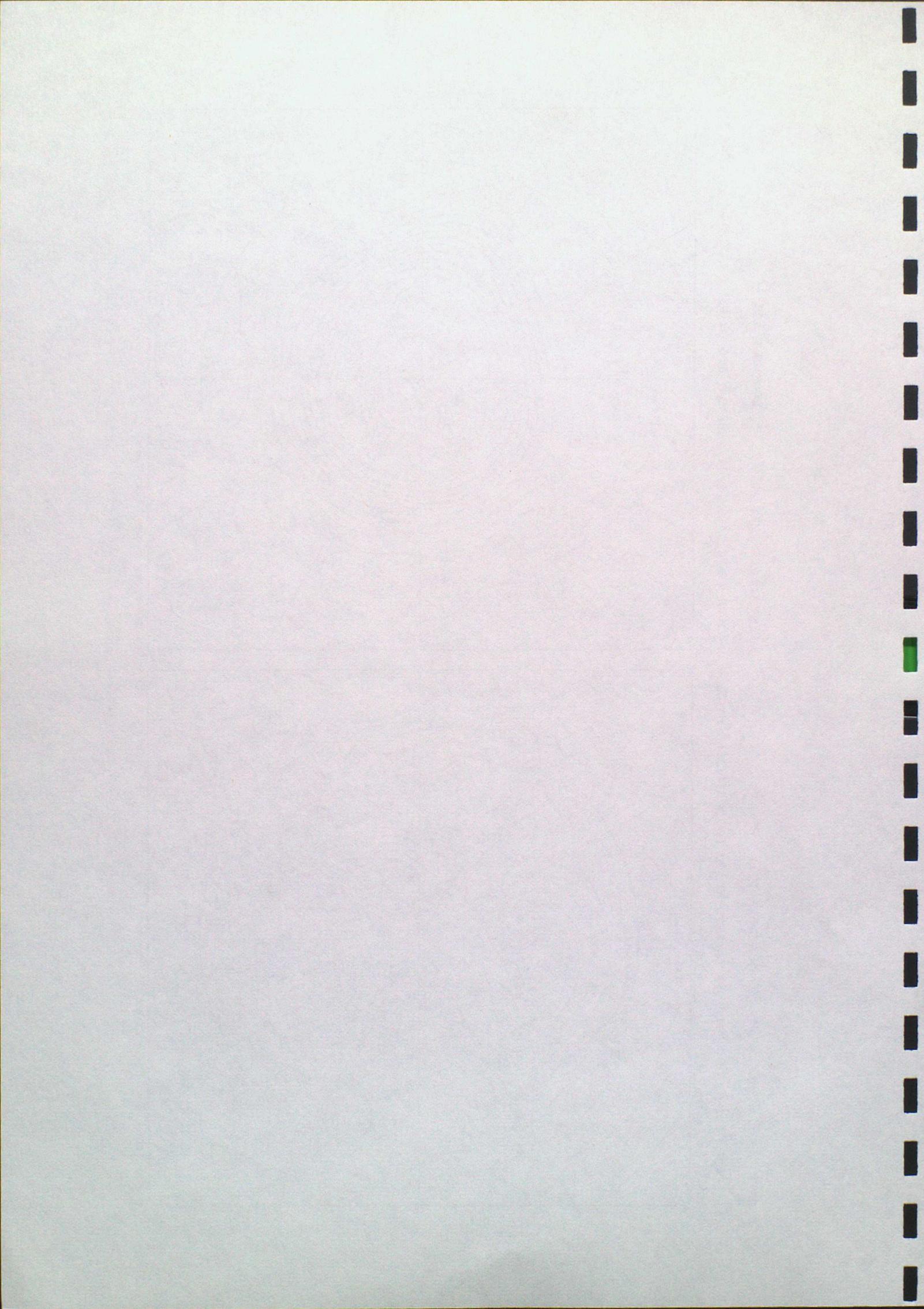




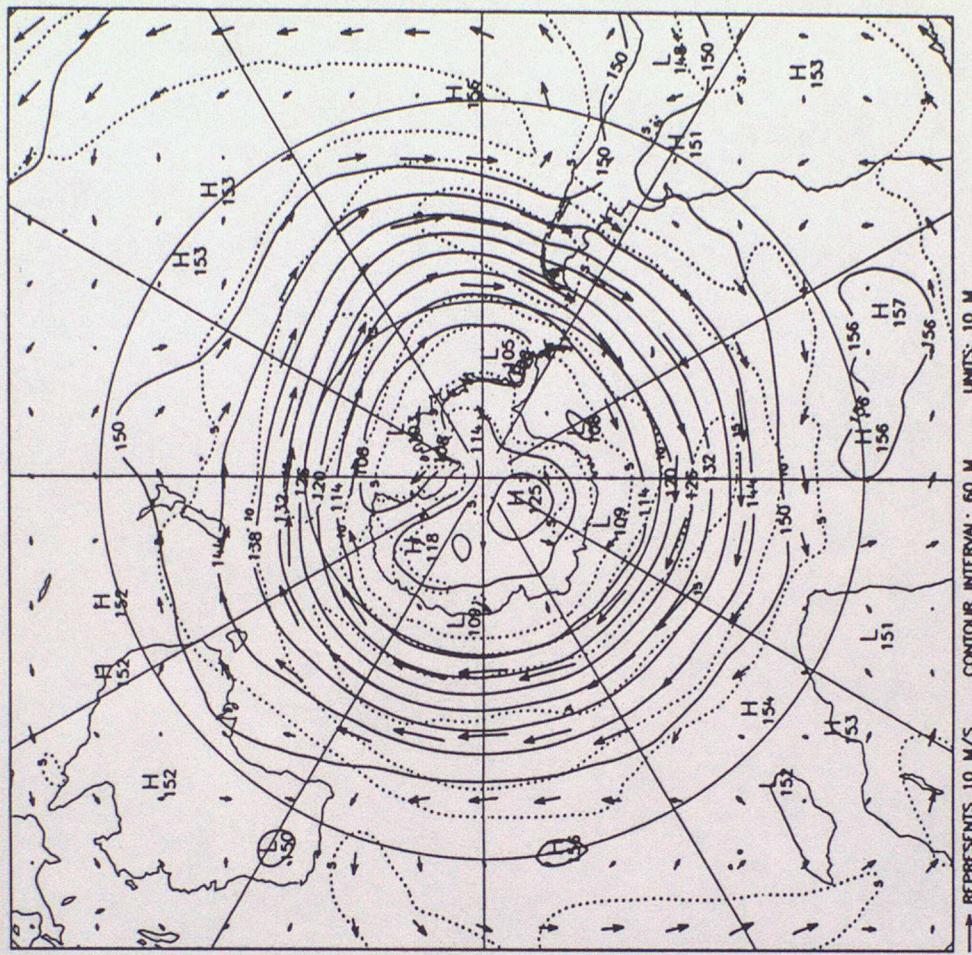
**NOVEMBER
1983**





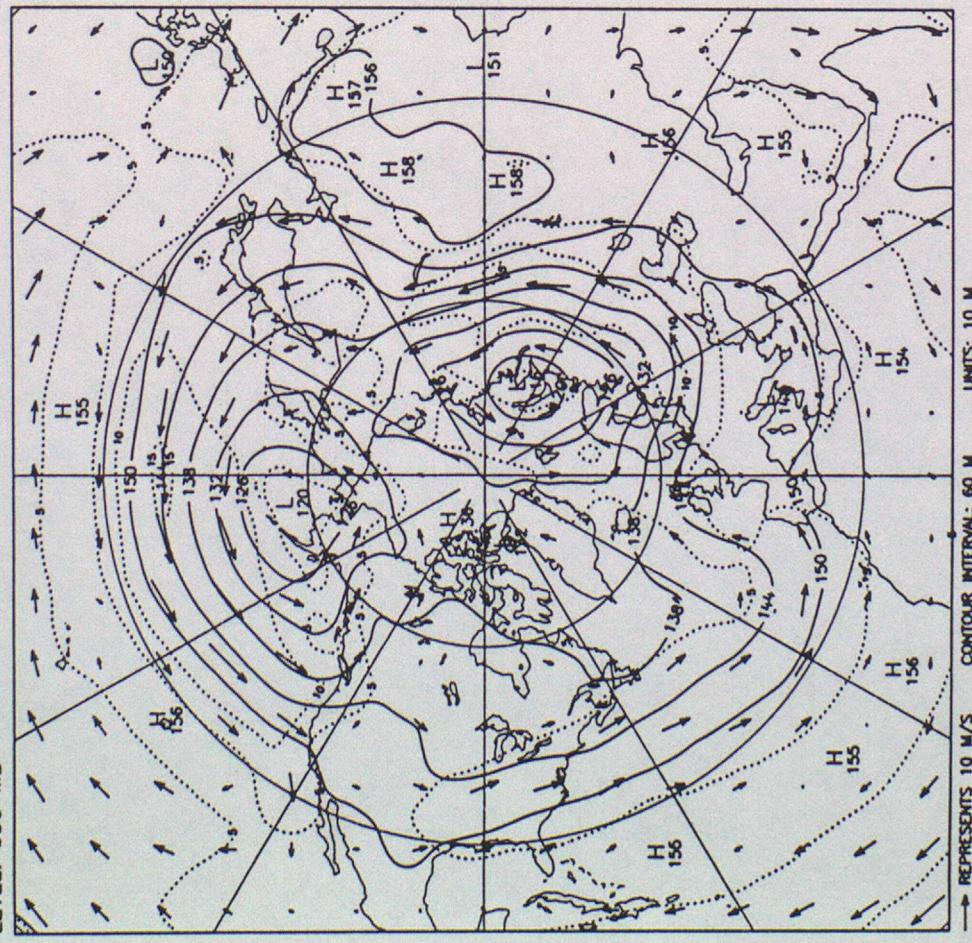


OPERATIONAL ARCHIVE MEANS. NOVEMBER 1983
HEIGHTS, WIND ARROWS AND ISOTACHS.
AVERAGE FROM 0Z ON 1/11/1983 DAY 305 TO 12Z ON 30/11/1983 DAY 334
LEVEL: 850 MB

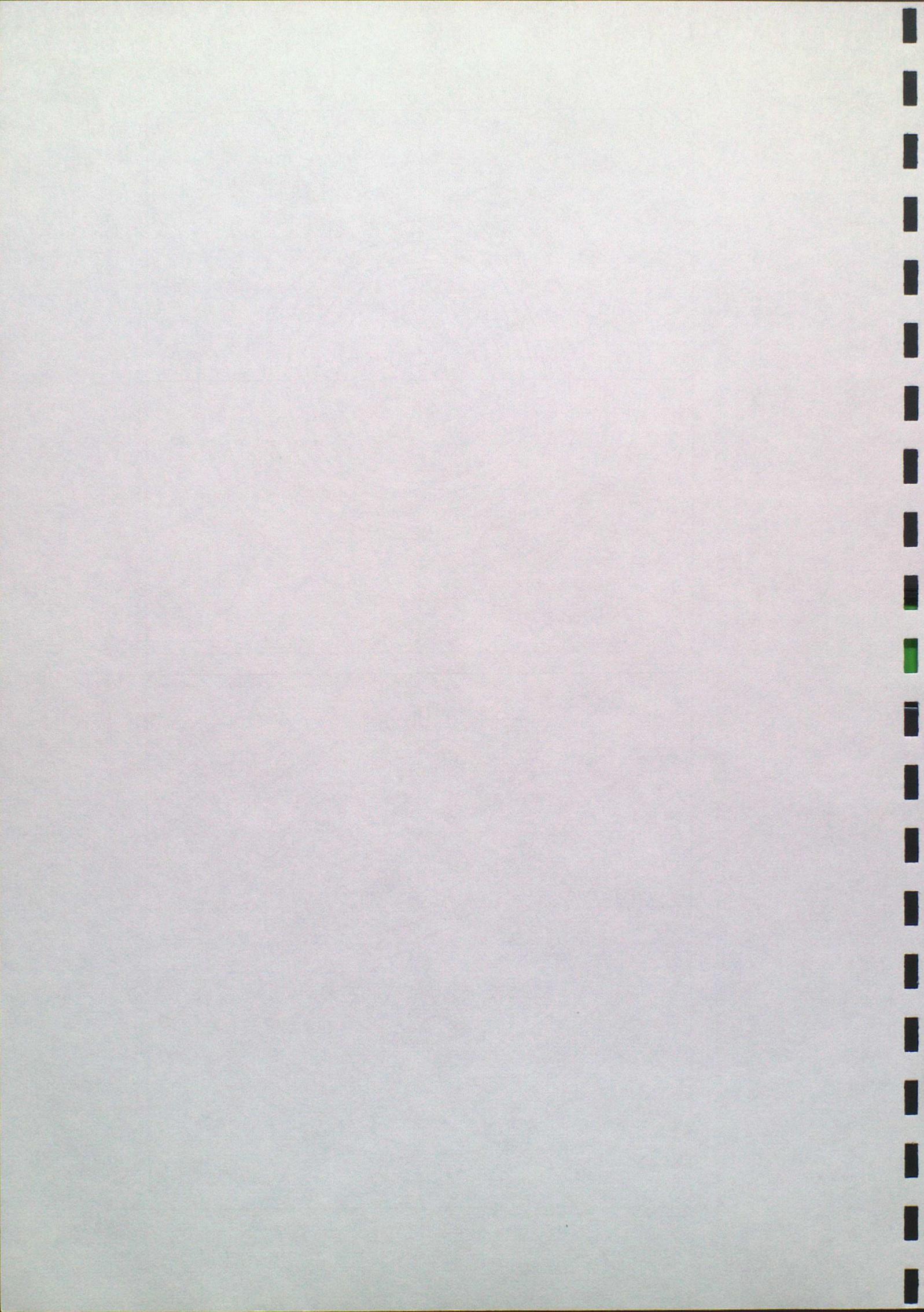


→ REPRESENTS 10 M/S CONTOUR INTERVAL: 60 M UNITS: 10 M

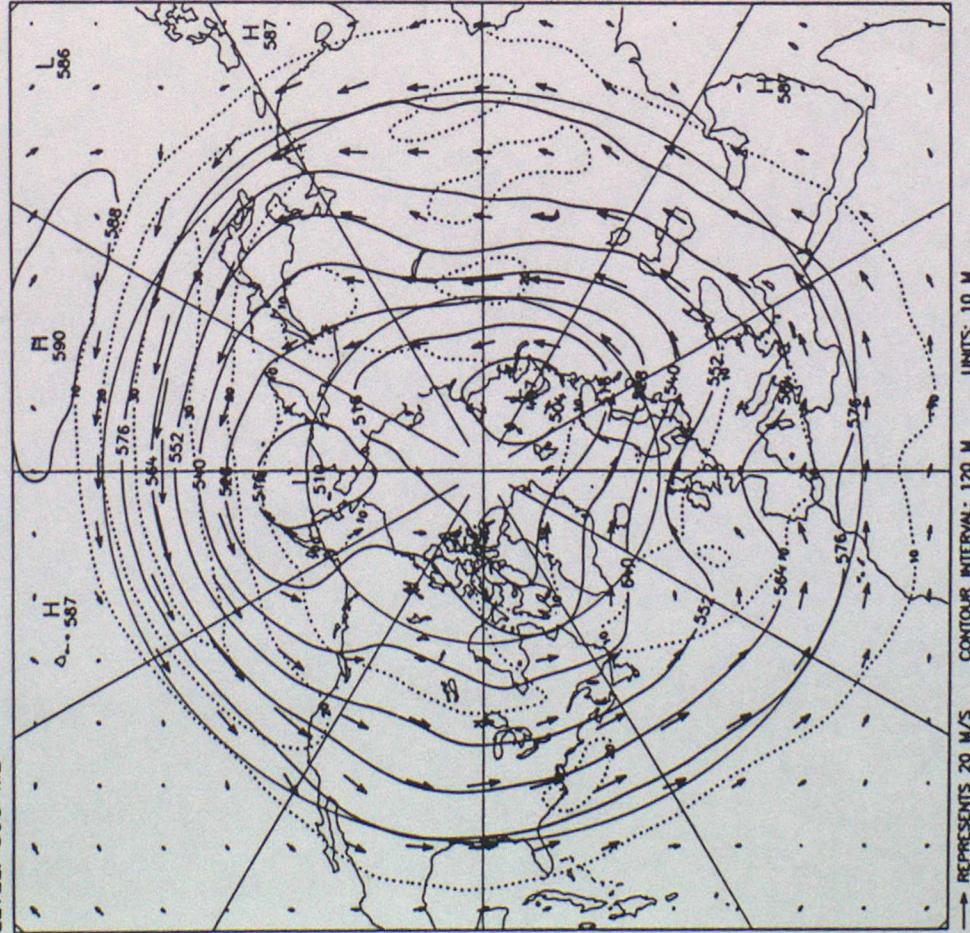
OPERATIONAL ARCHIVE MEANS. NOVEMBER 1983
HEIGHTS, WIND ARROWS AND ISOTACHS.
AVERAGE FROM 0Z ON 1/11/1983 DAY 305 TO 12Z ON 30/11/1983 DAY 334
LEVEL: 850 MB



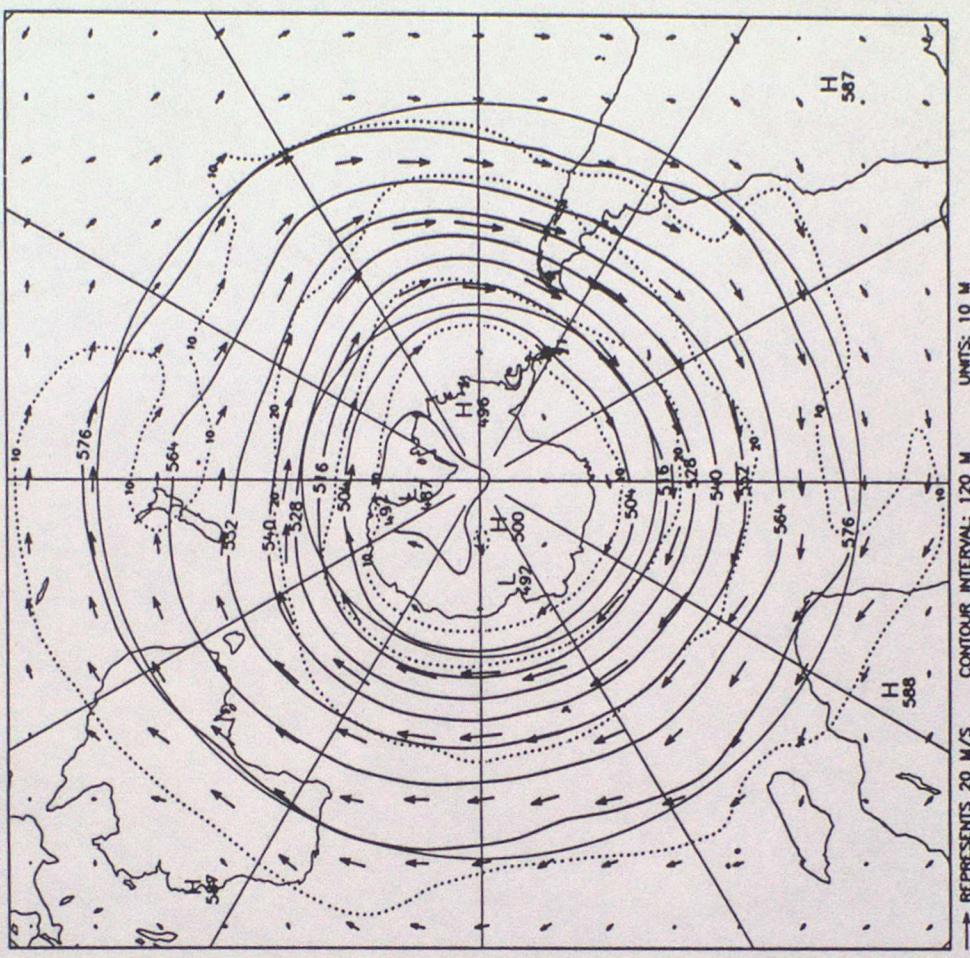
→ REPRESENTS 10 M/S CONTOUR INTERVAL: 60 M UNITS: 10 M

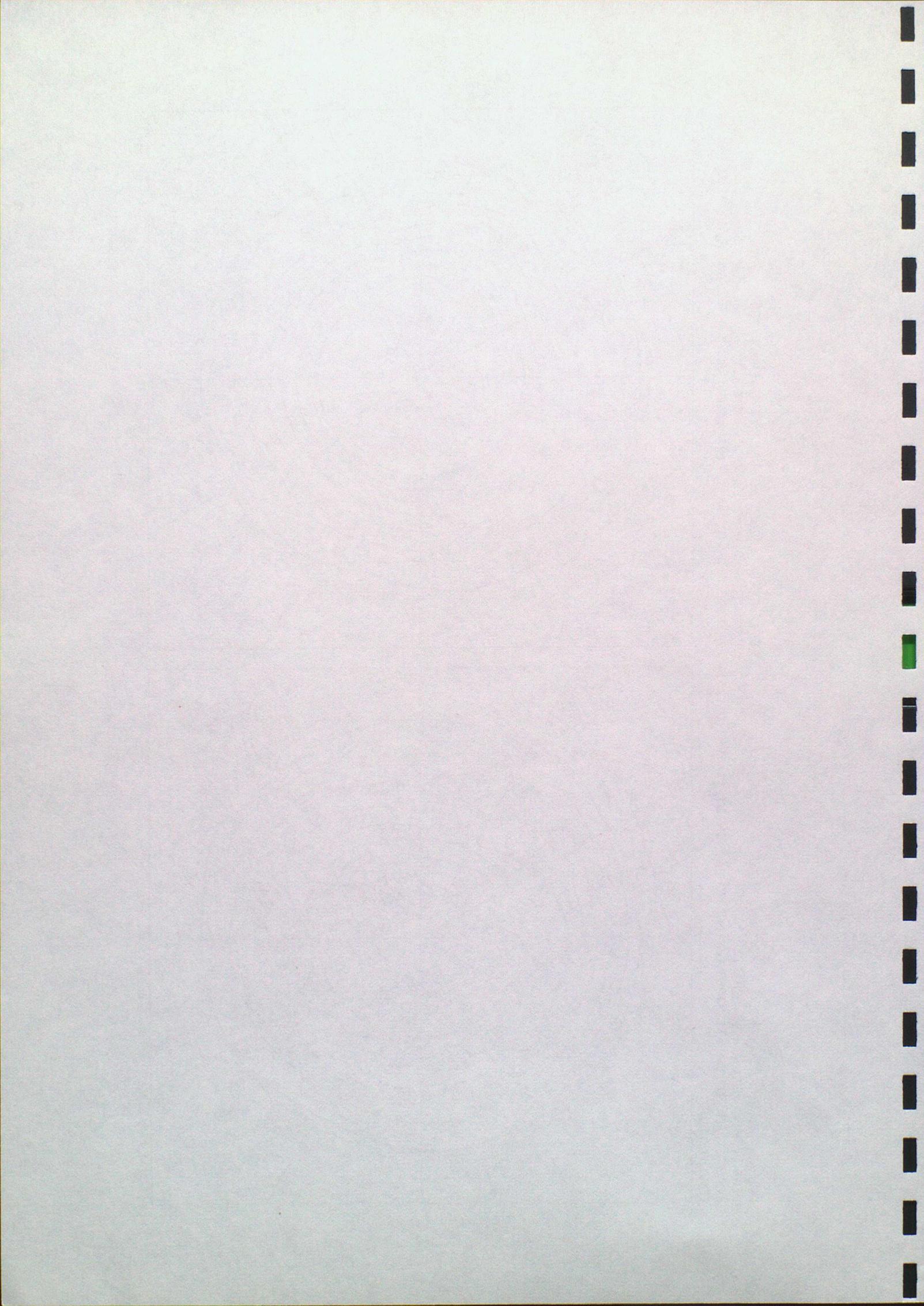


OPERATIONAL ARCHIVE MEANS. NOVEMBER 1983
HEIGHTS, WIND ARROWS AND ISOTACHS.
AVERAGE FROM 0Z ON 1/11/1983 DAY 305 TO 12Z ON 30/11/1983 DAY 334
LEVEL: 500 MB

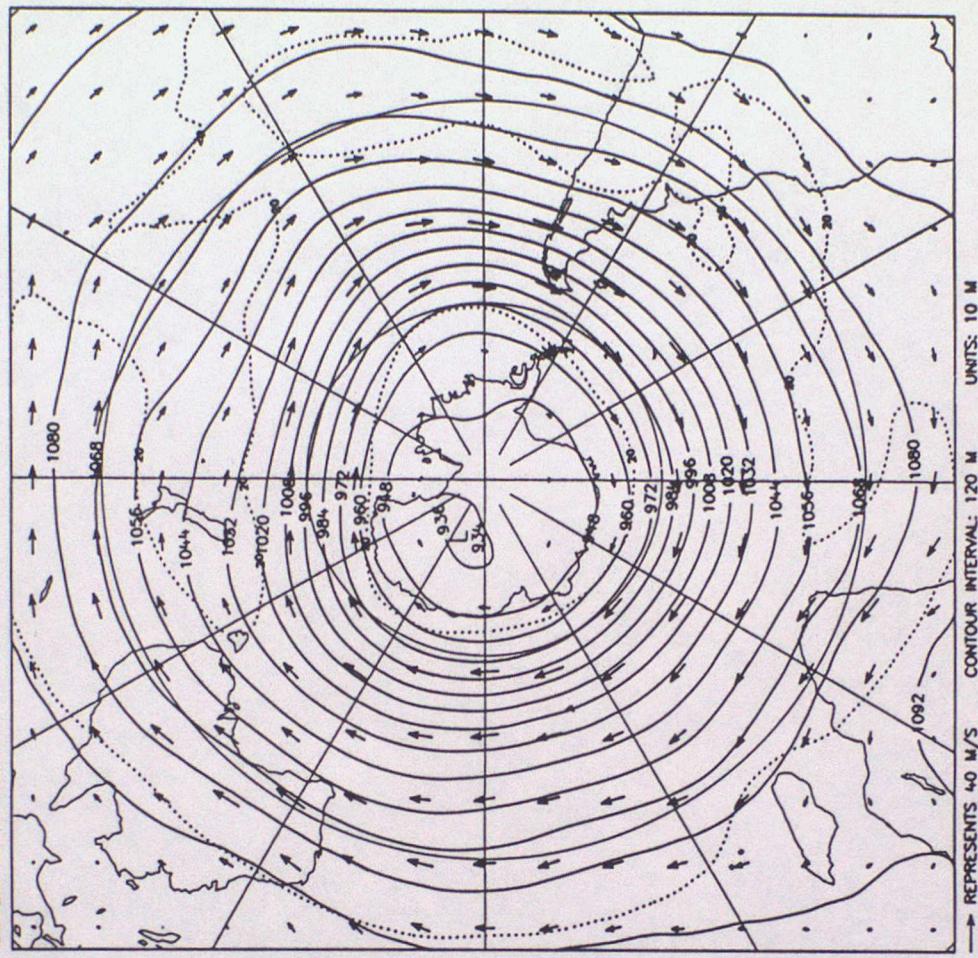


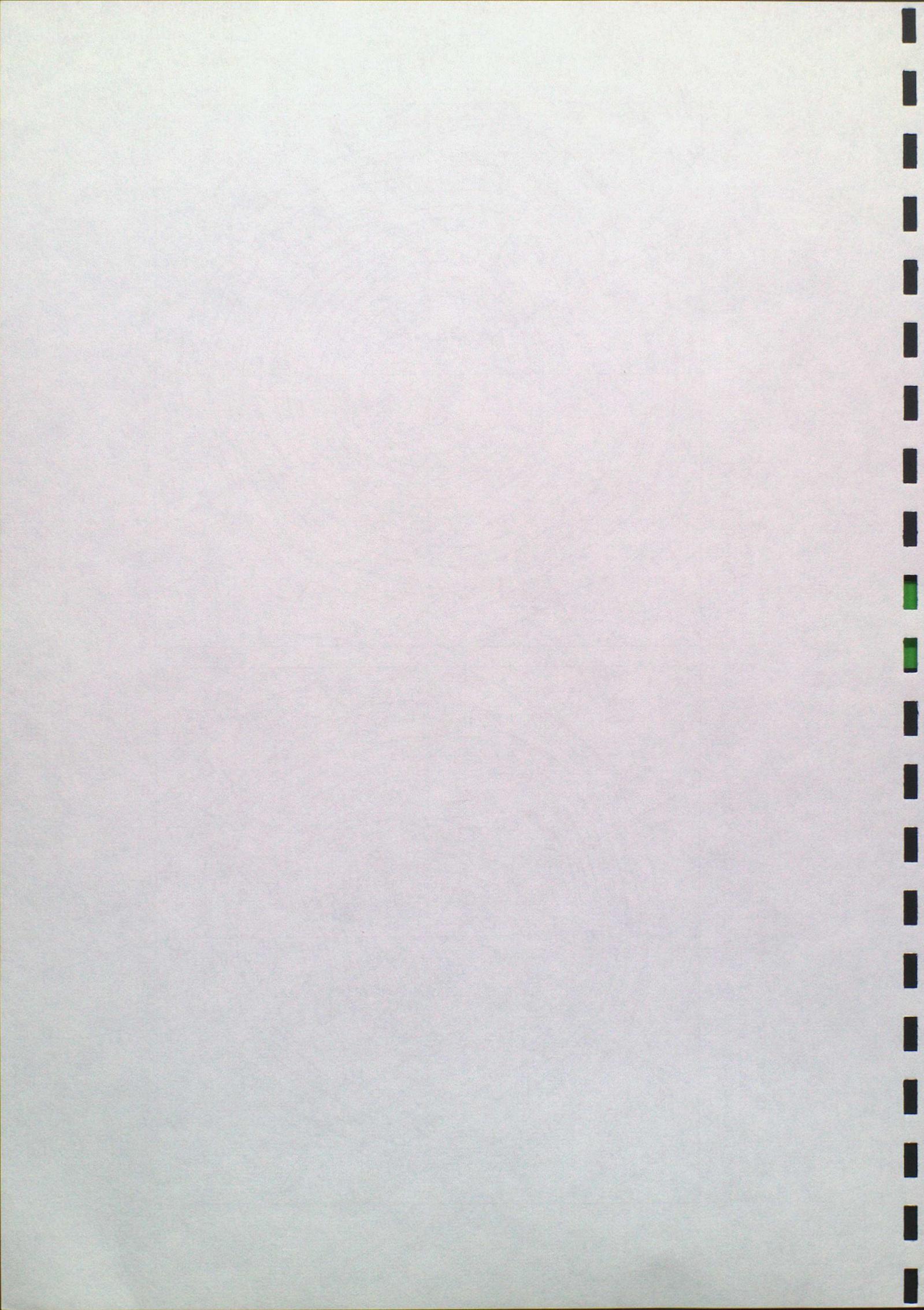
OPERATIONAL ARCHIVE MEANS. NOVEMBER 1983
HEIGHTS, WIND ARROWS AND ISOTACHS.
AVERAGE FROM 0Z ON 1/11/1983 DAY 305 TO 12Z ON 30/11/1983 DAY 334
LEVEL: 500 MB



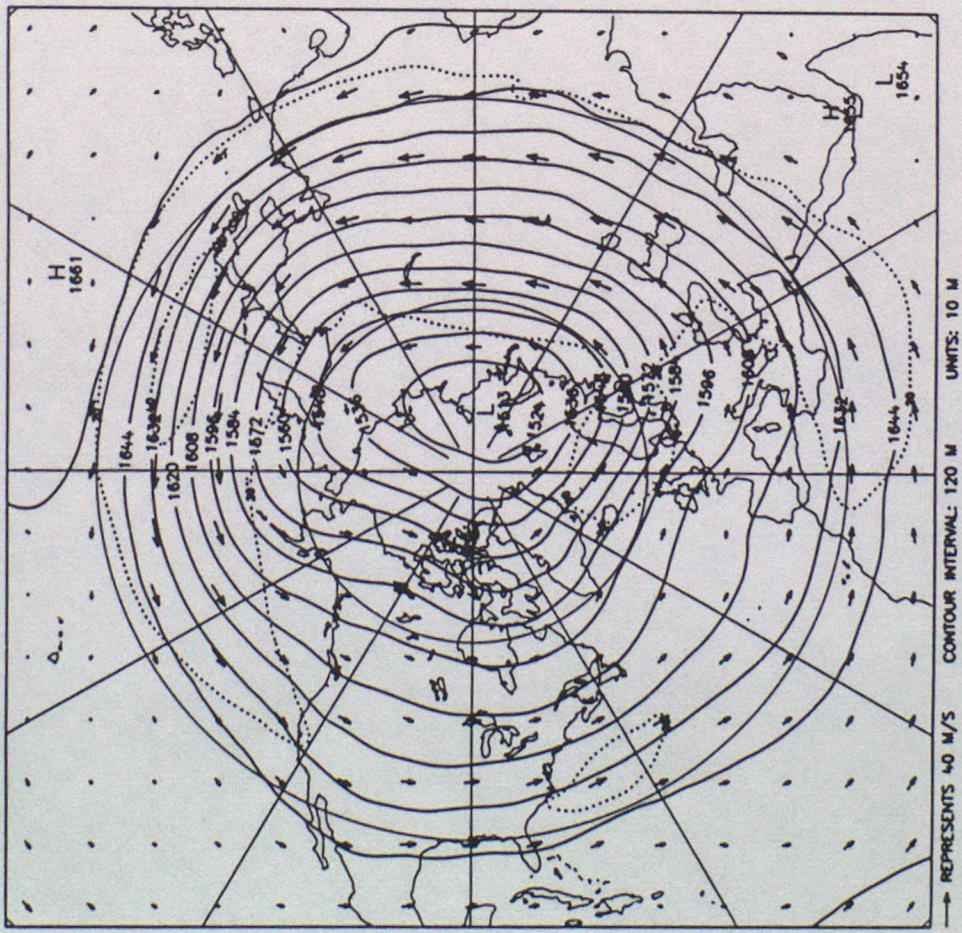
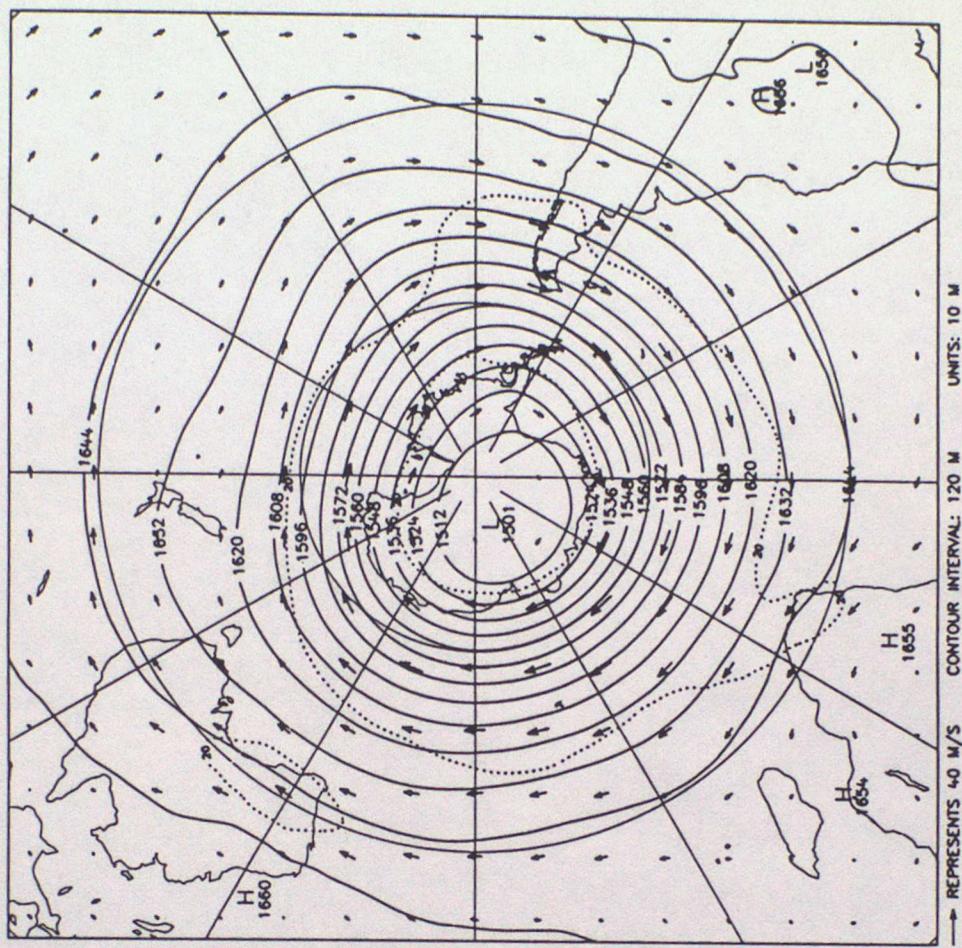


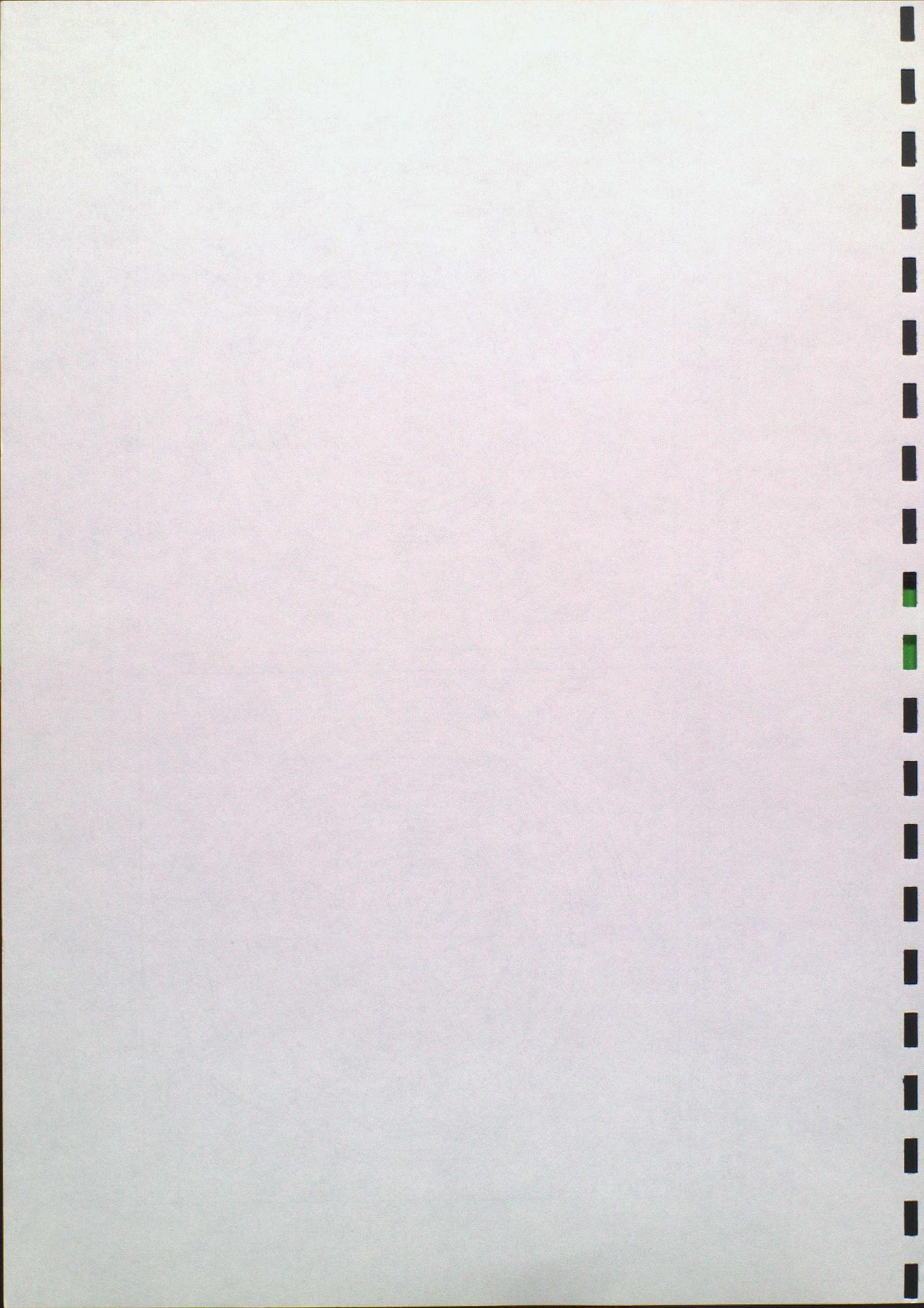
OPERATIONAL ARCHIVE MEANS. NOVEMBER 1983
HEIGHTS, WIND ARROWS AND ISOTACHS.
AVERAGE FROM 02 ON 1/11/1983 DAY 305 TO 12Z ON 30/11/1983 DAY 334
LEVEL: 250 MB



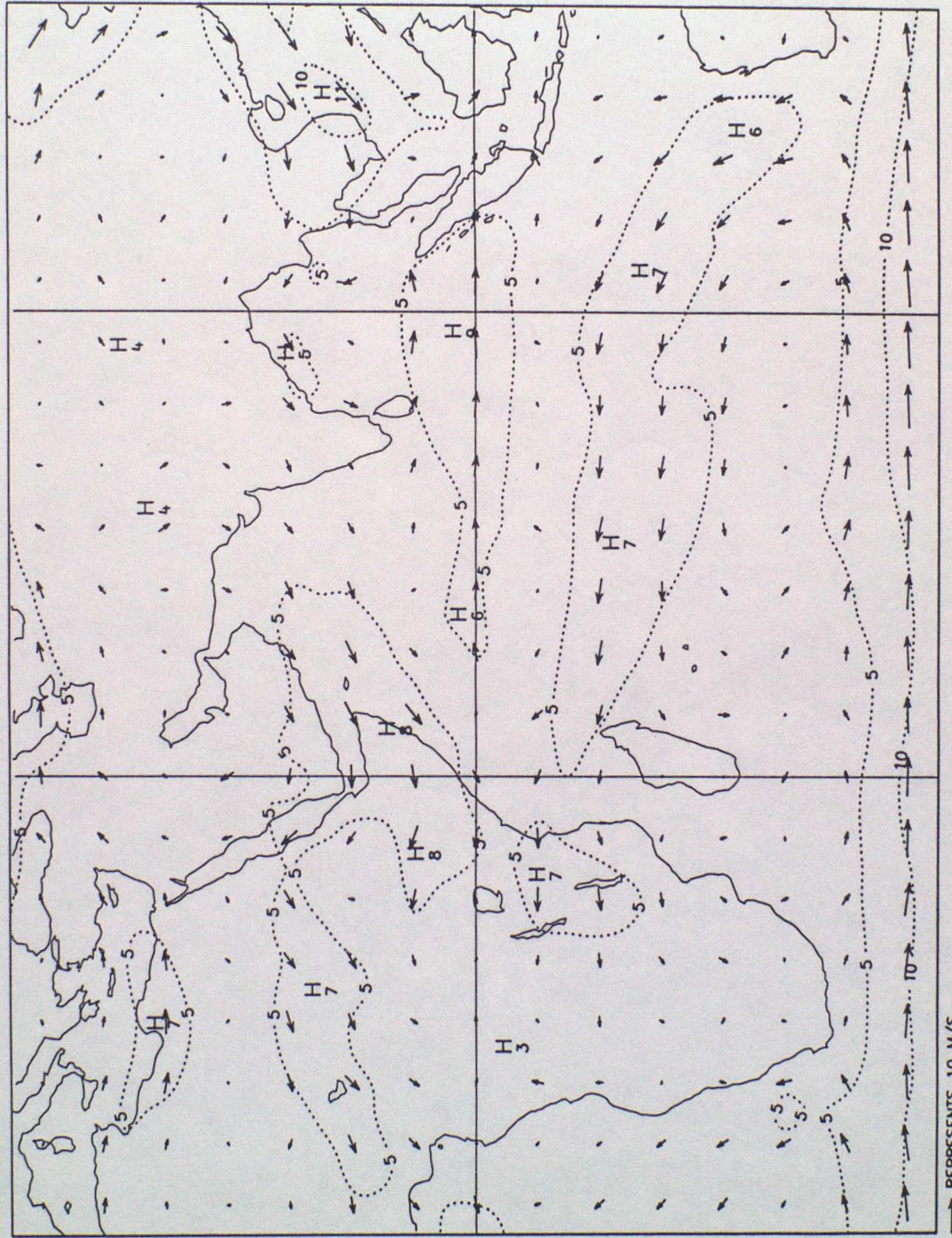


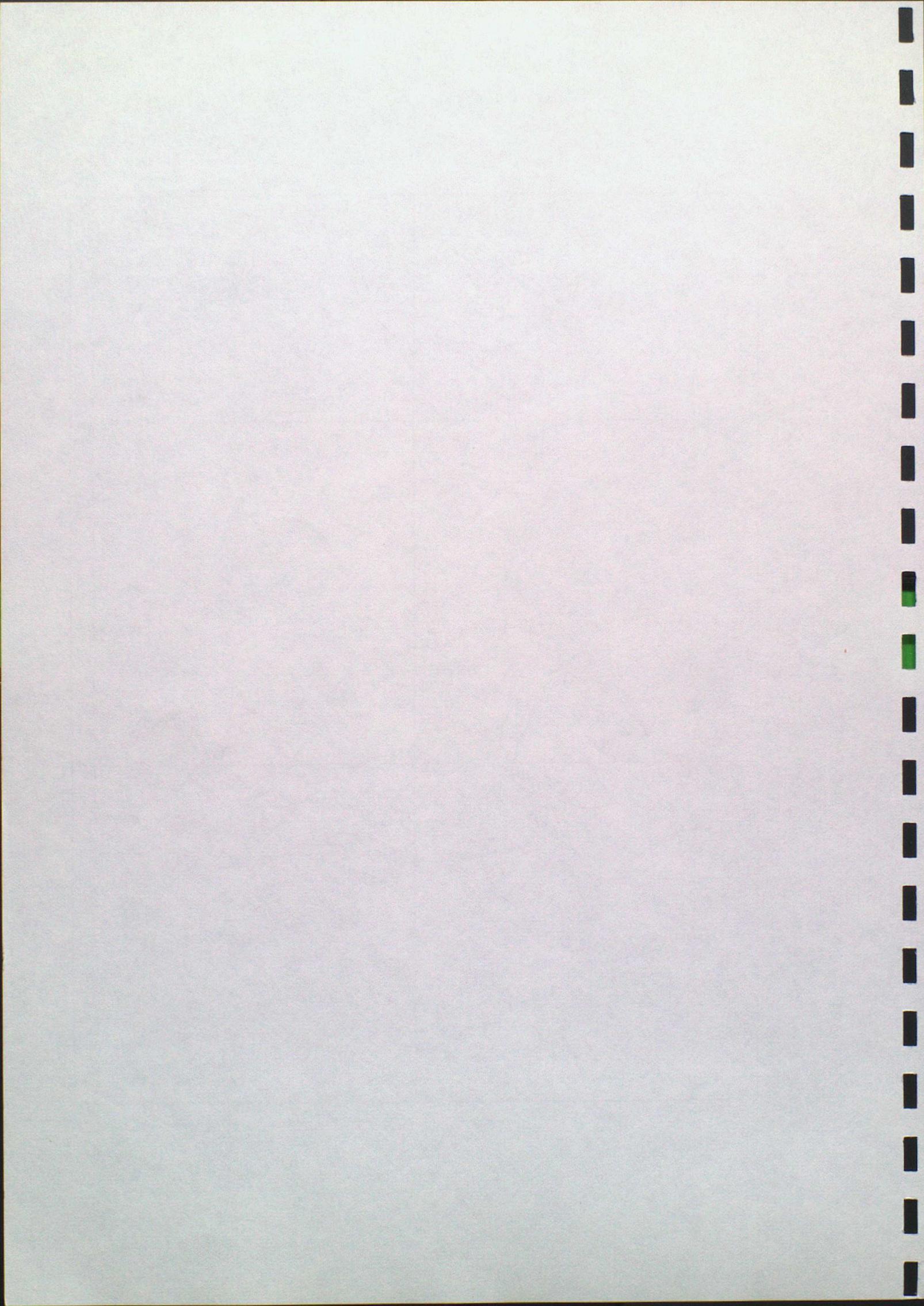
OPERATIONAL ARCHIVE MEANS. NOVEMBER 1983
HEIGHTS, WIND ARROWS AND ISOTACHS.
AVERAGE FROM 0Z ON 1/11/1983 DAY 305 TO 12Z ON 30/11/1983 DAY 334
LEVEL: 100 MB



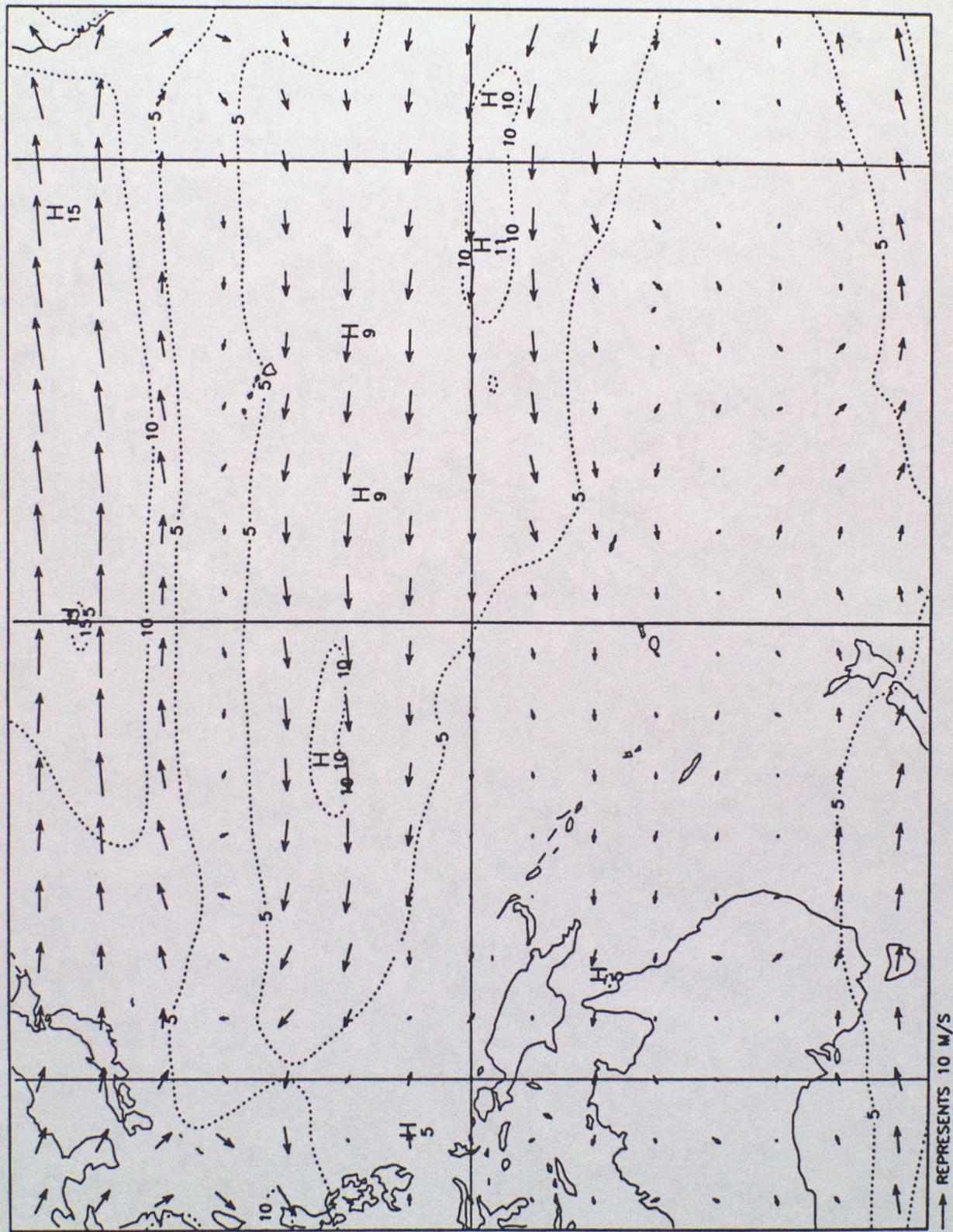


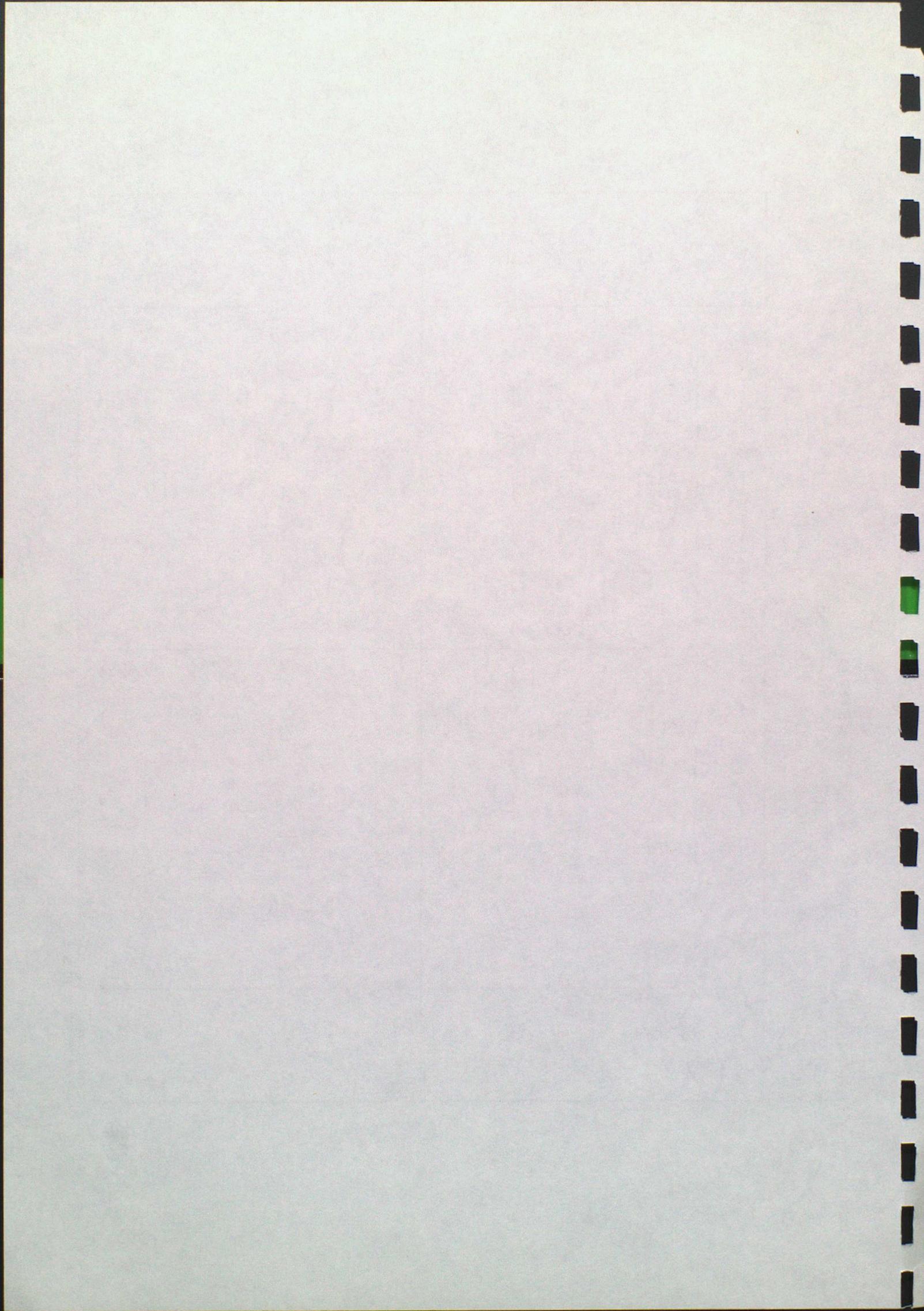
OPERATIONAL ARCHIVE MEANS. NOVEMBER 1983
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
AVERAGE FROM 0Z ON 1/11/1983 DAY 305 TO 12Z ON 30/11/1983 DAY 334
BETWEEN LONGS. 0 E - 120 E
850 MBS.



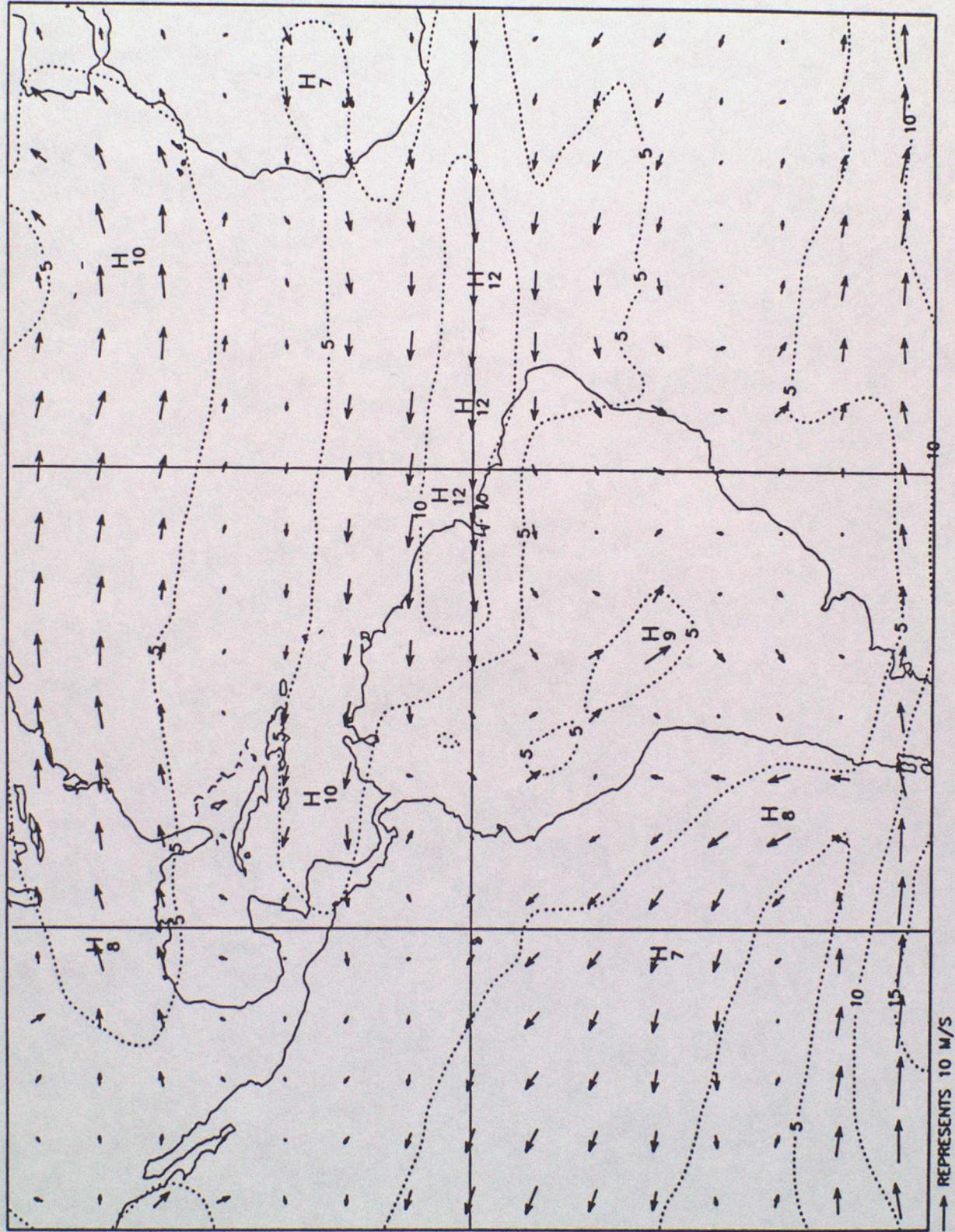


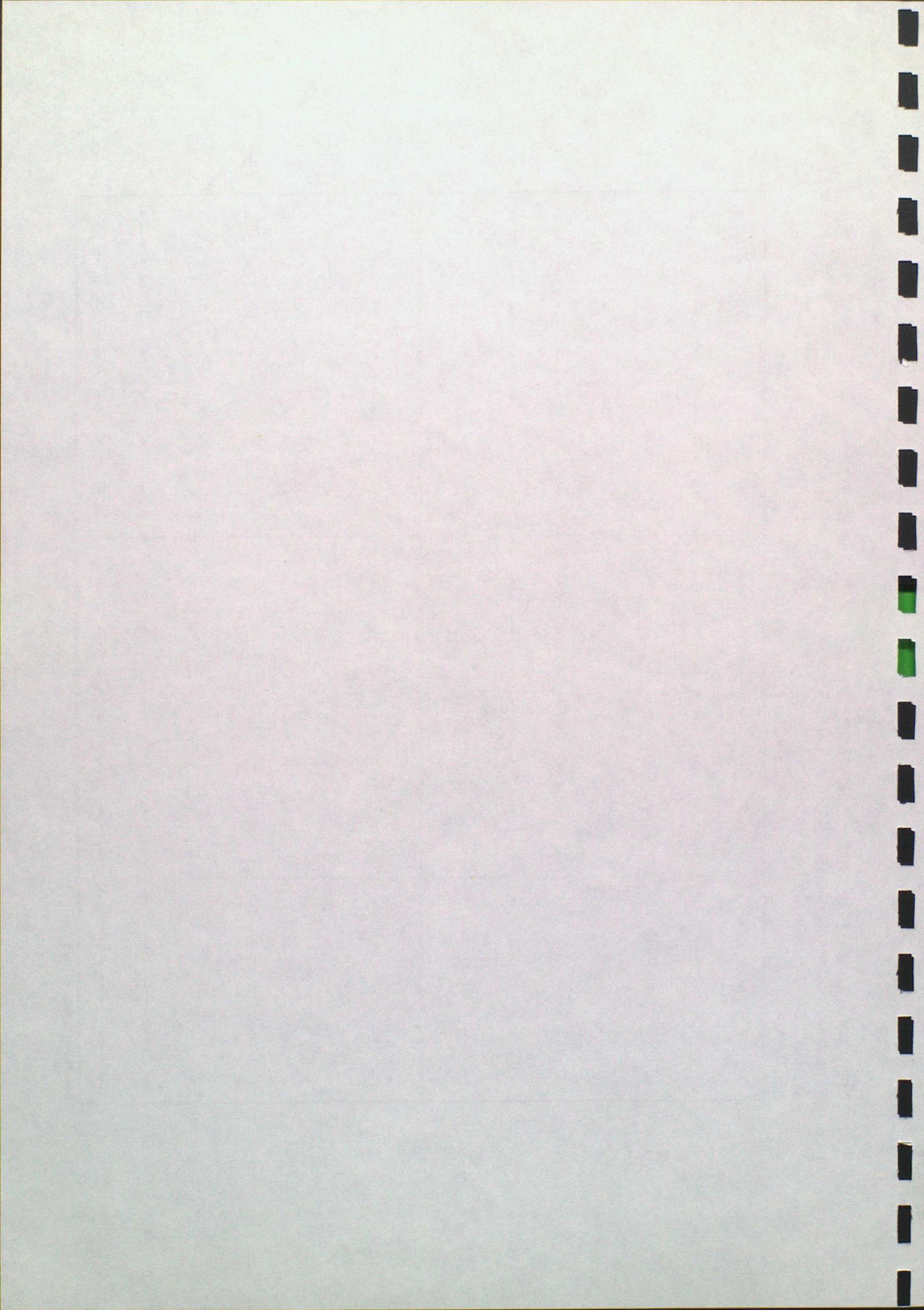
OPERATIONAL ARCHIVE MEANS. NOVEMBER 1983
 WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
 AVERAGE FROM 0Z ON 1/11/1983 DAY 305 TO 12Z ON 30/11/1983 DAY 334
 850 MBS.



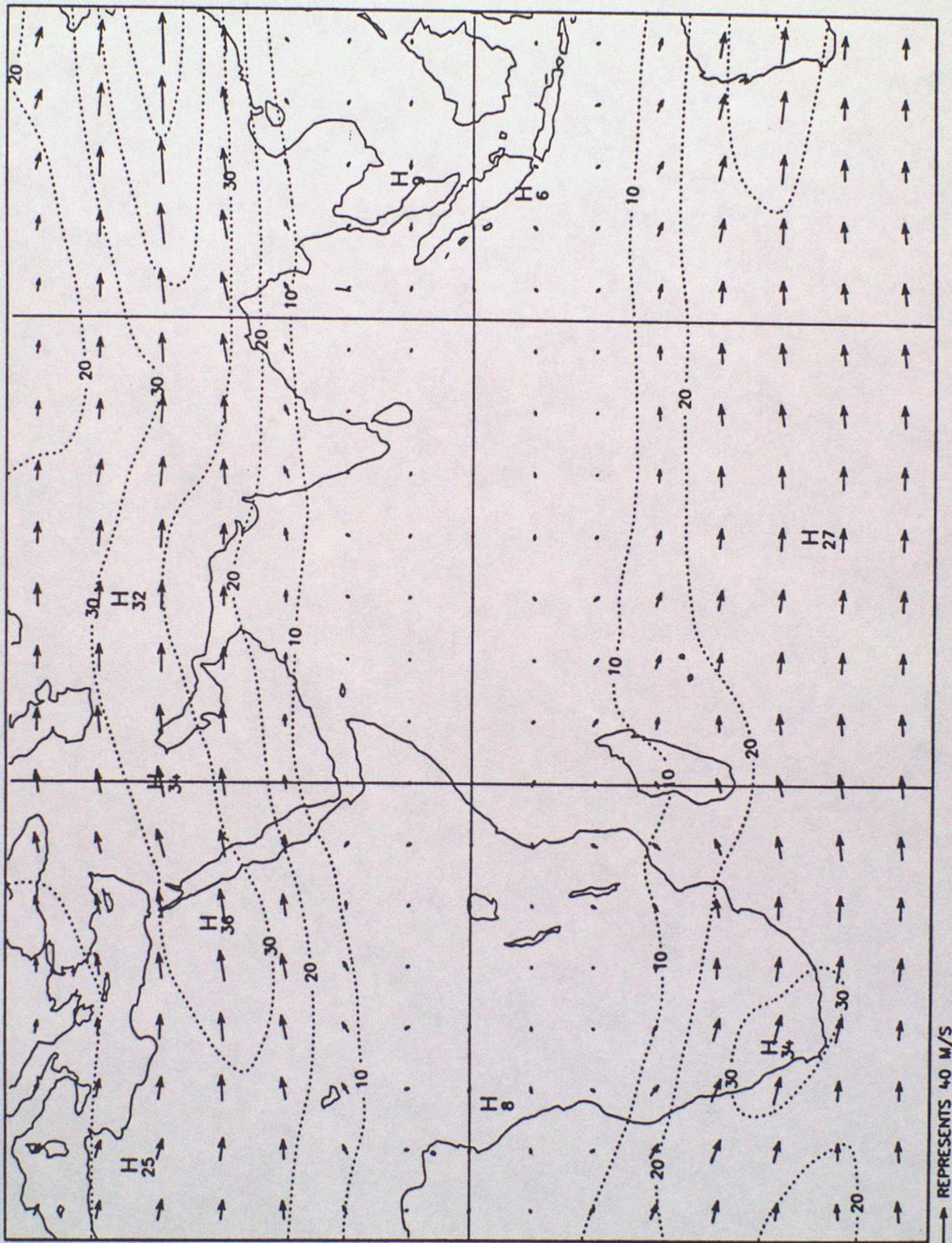


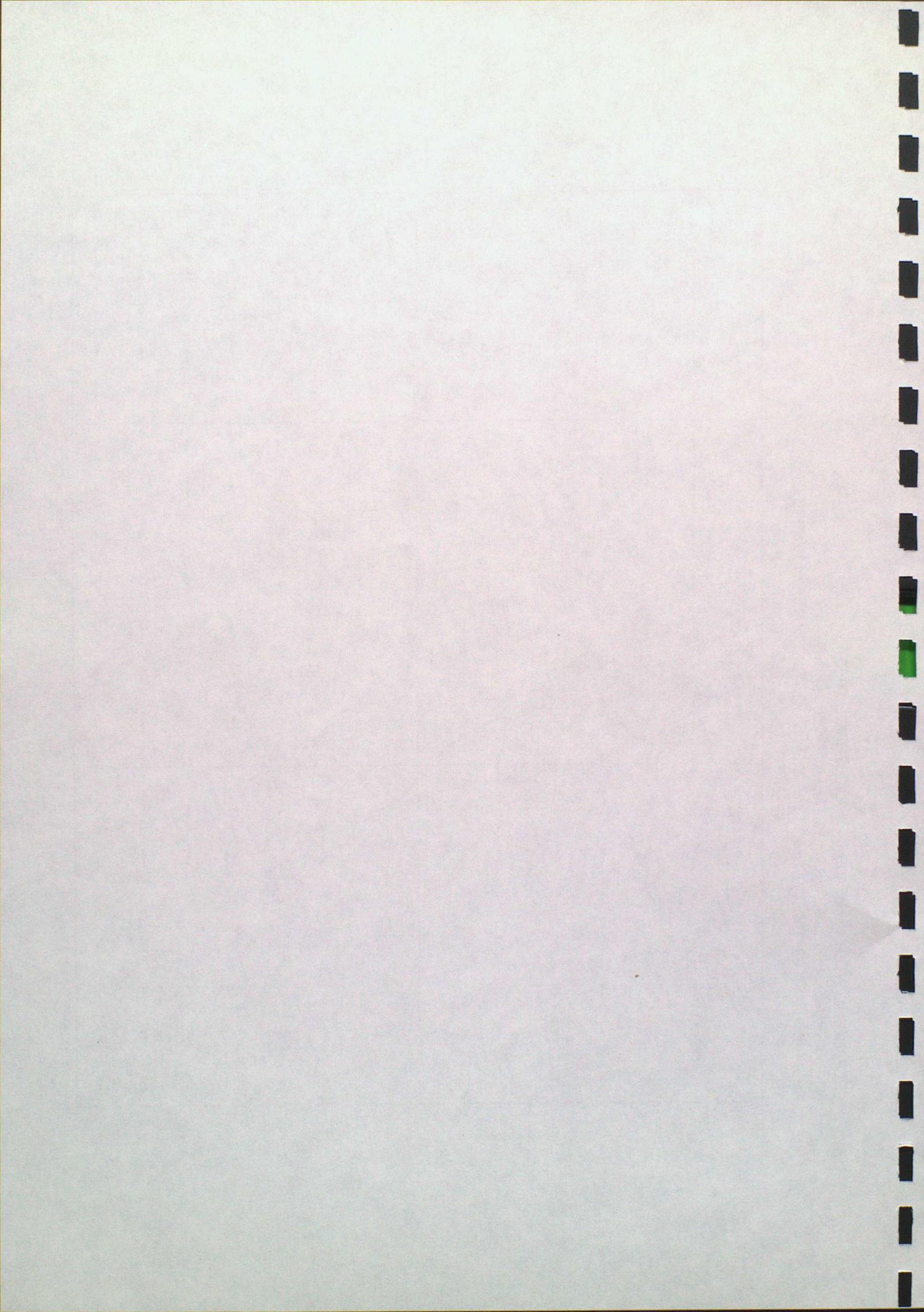
OPERATIONAL ARCHIVE MEANS. NOVEMBER 1983
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
AVERAGE FROM 0Z ON 1/11/1983 DAY 305 TO 12Z ON 30/11/1983 DAY 334
850 MBS. 120 W - 0 W



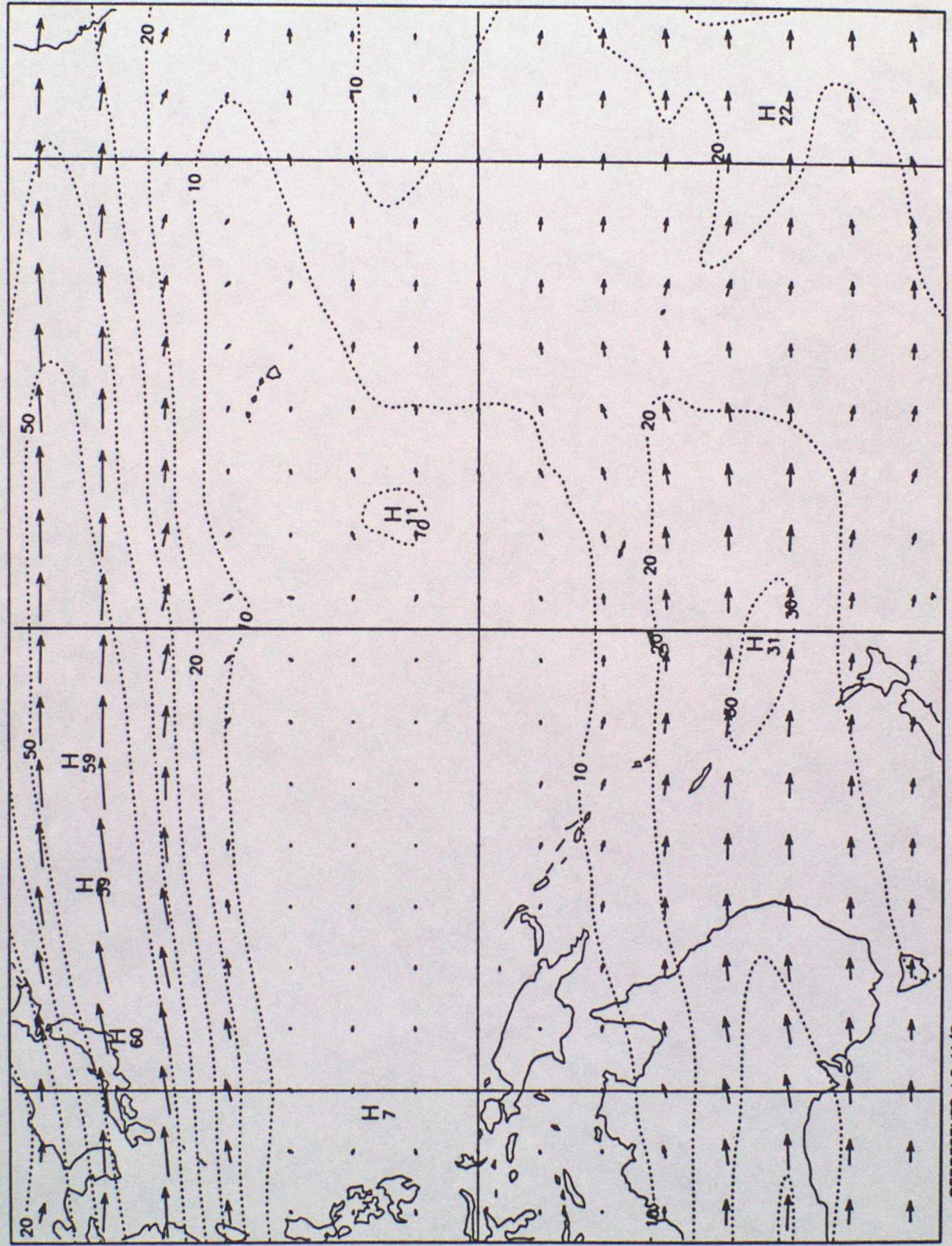


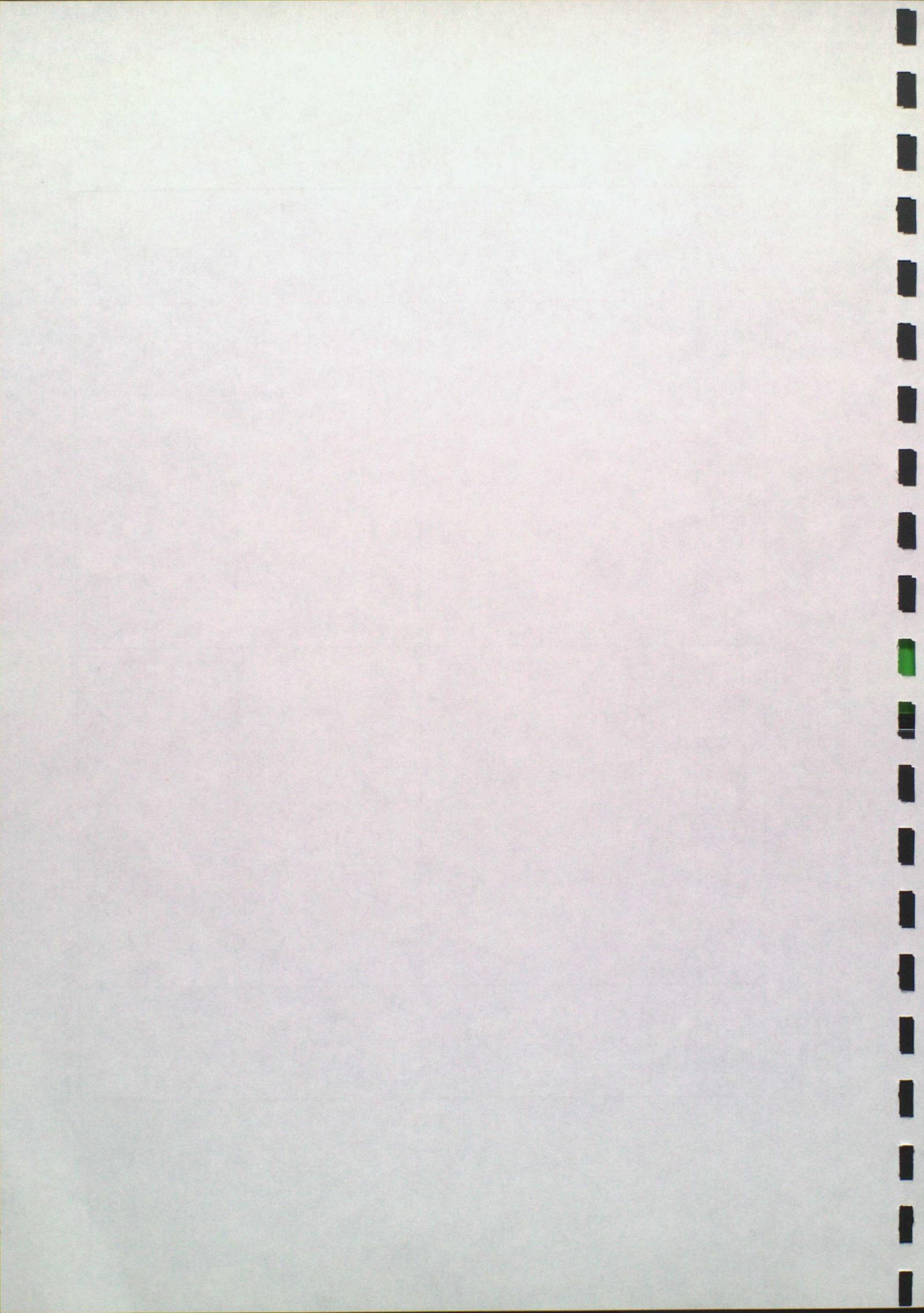
OPERATIONAL ARCHIVE MEANS. NOVEMBER 1983
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
AVERAGE FROM 0Z ON 1/11/1983 DAY 305 TO 12Z ON 30/11/1983 DAY 334
250 MBS. 0 E - 120 E



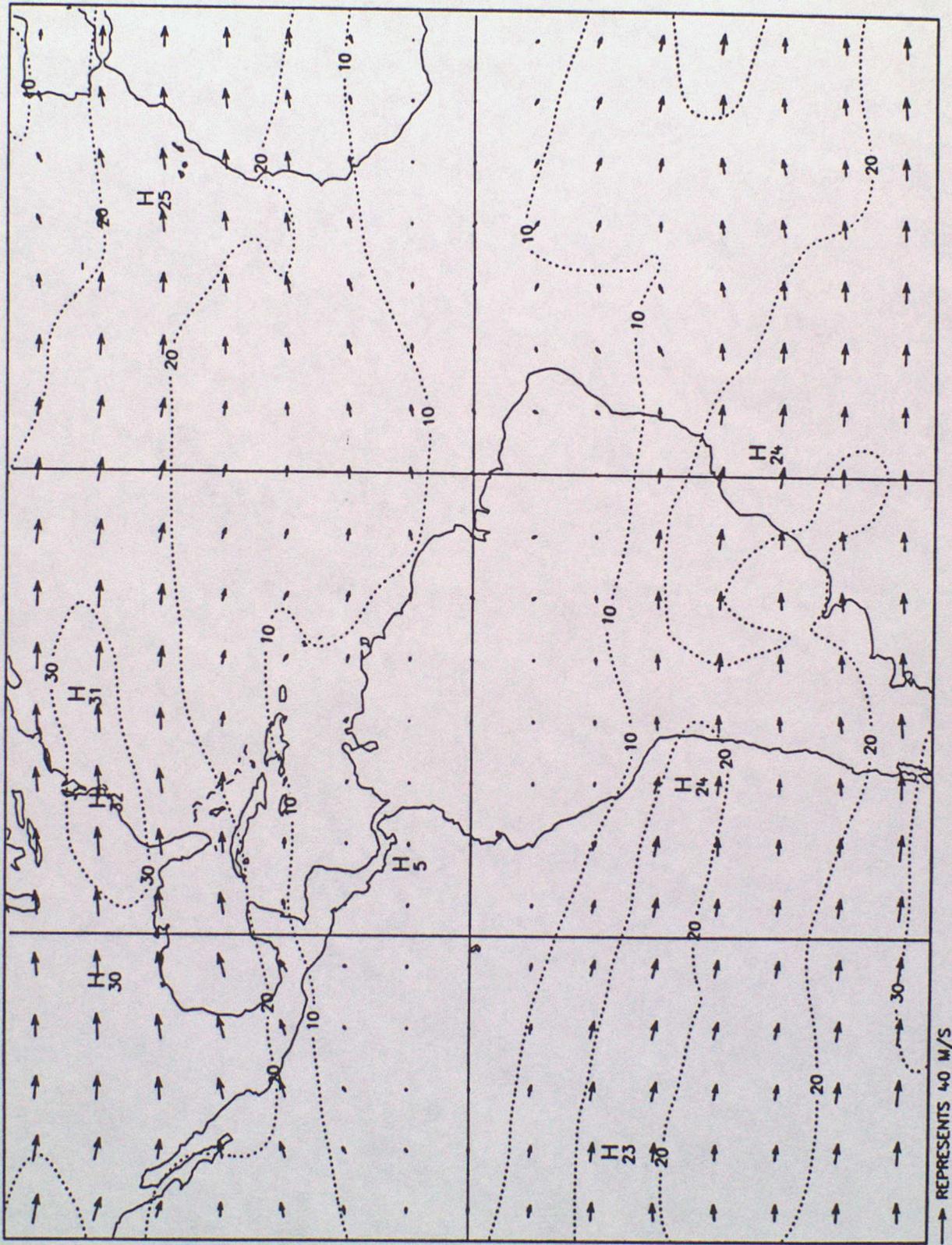


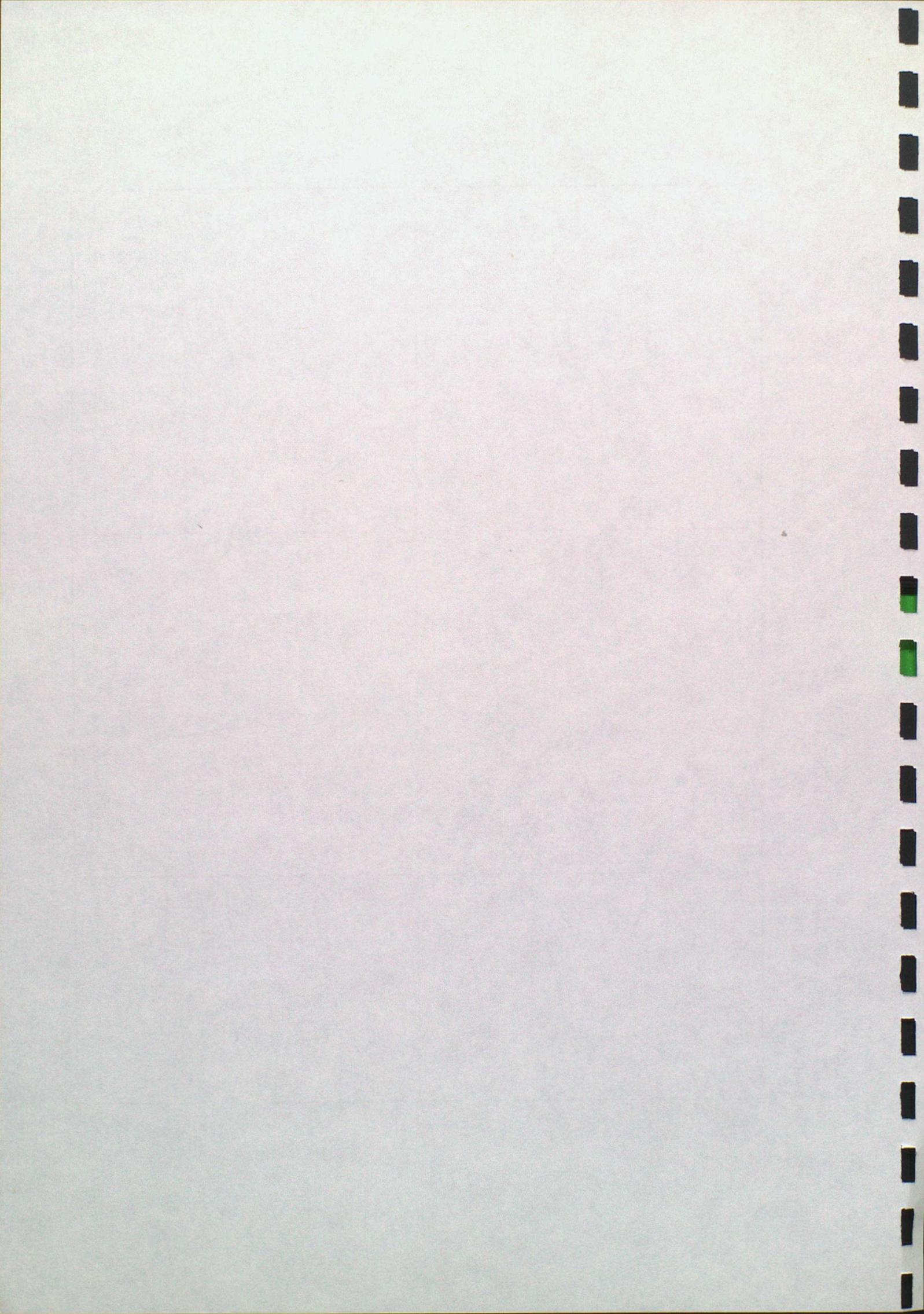
OPERATIONAL ARCHIVE MEANS. NOVEMBER 1983
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
AVERAGE FROM 0Z ON 1/11/1983 DAY 305 TO 12Z ON 30/11/1983 DAY 334
BETWEEN LONGS. 120 E - 120 W
250 MBS.





OPERATIONAL ARCHIVE MEANS. NOVEMBER 1983
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
AVERAGE FROM 0Z ON 1/11/1983 DAY 305 TO 12Z ON 30/11/1983 DAY 334
BETWEEN LONGS. 120 W - 0 W
250 MBS.

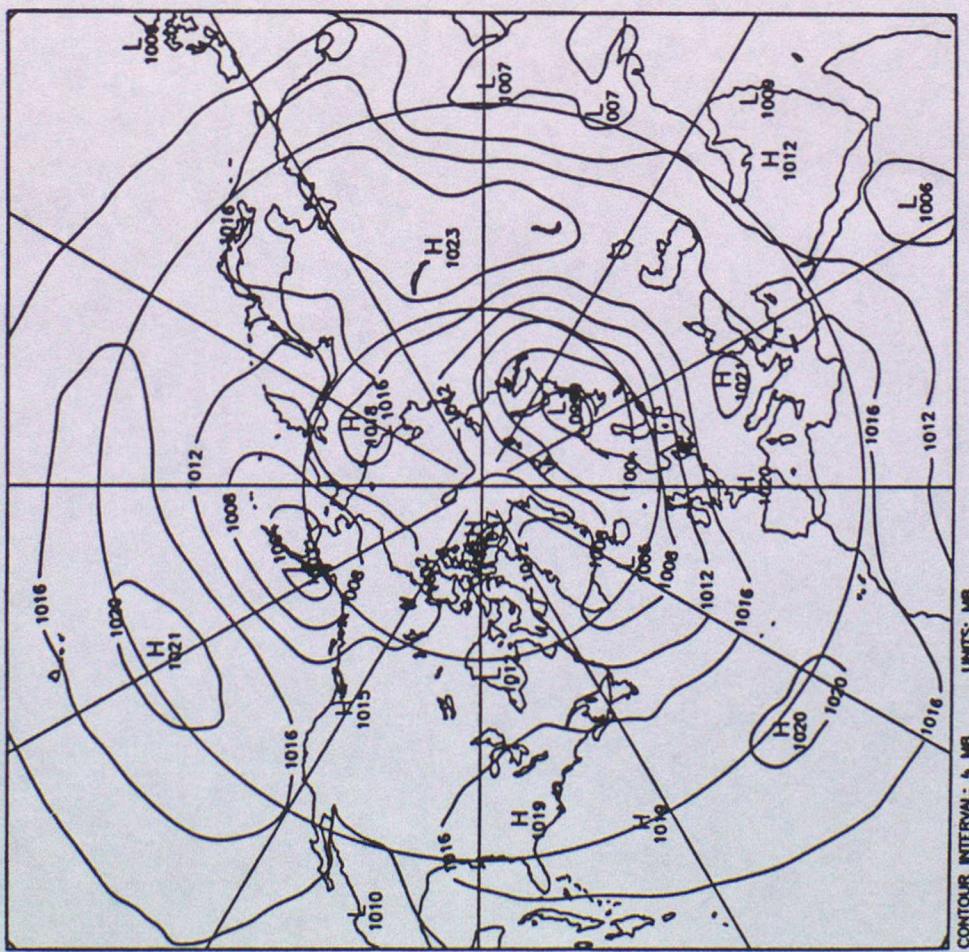




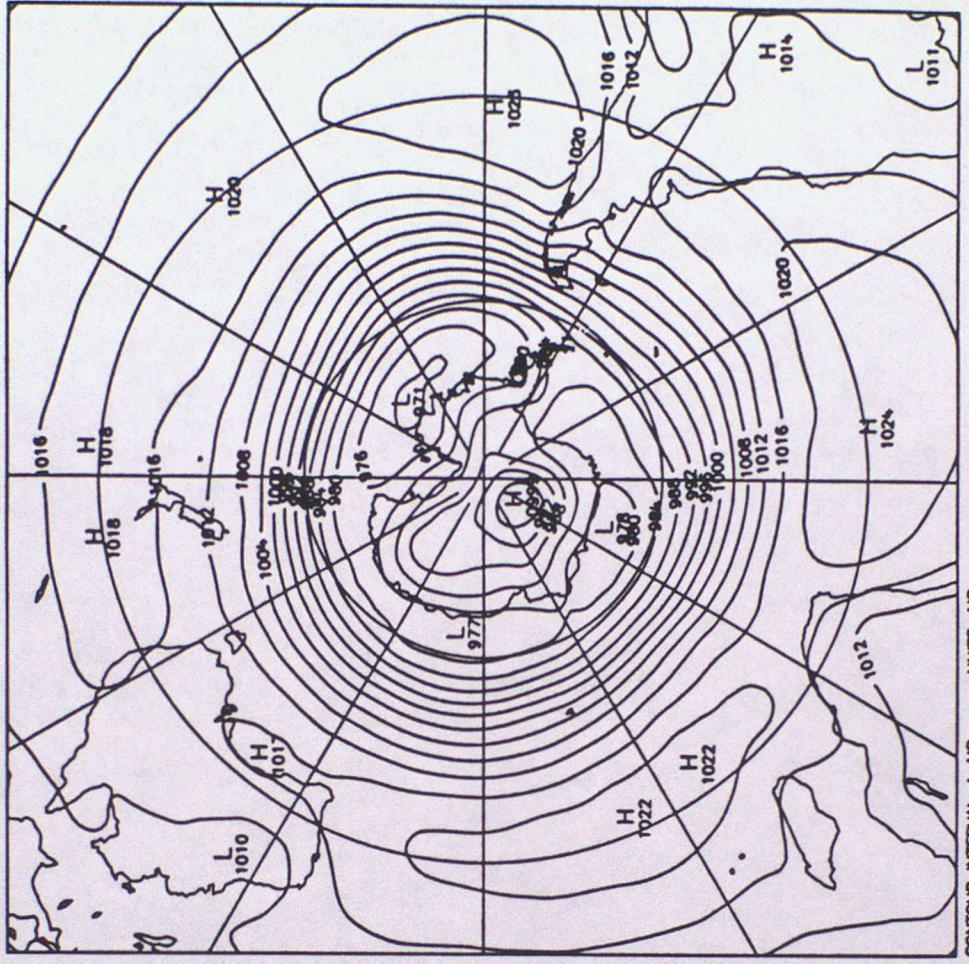
**SEPTEMBER/OCTOBER/NOVEMBER
1983**



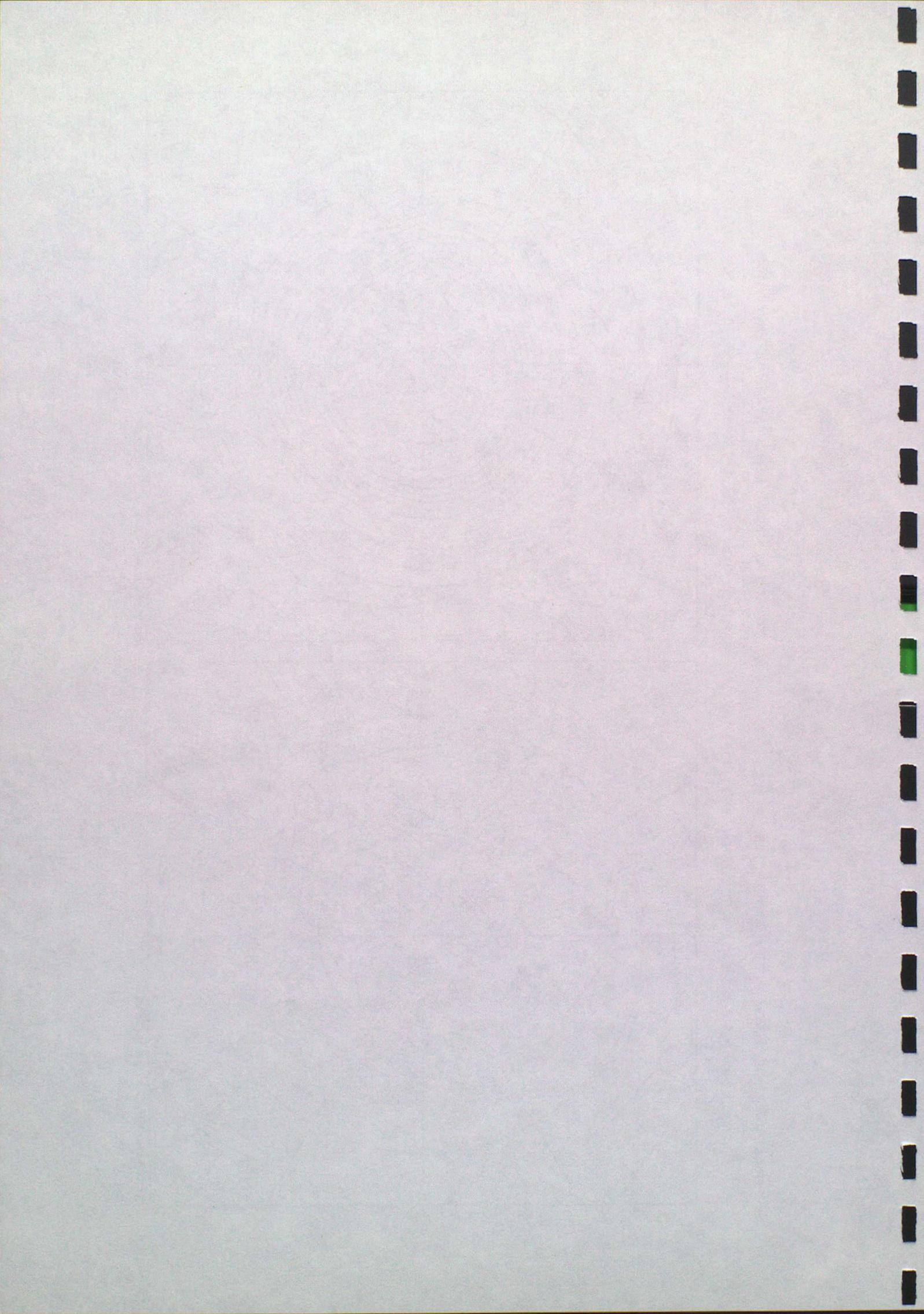
OPERATIONAL ARCHIVE MEANS. SEP/OCT/NOV 1983
PMSL AVERAGE FROM 02 ON 1/9/1983 DAY 244 TO 12Z ON 30/11/1983 DAY 334
LEVEL: SEA LEVEL

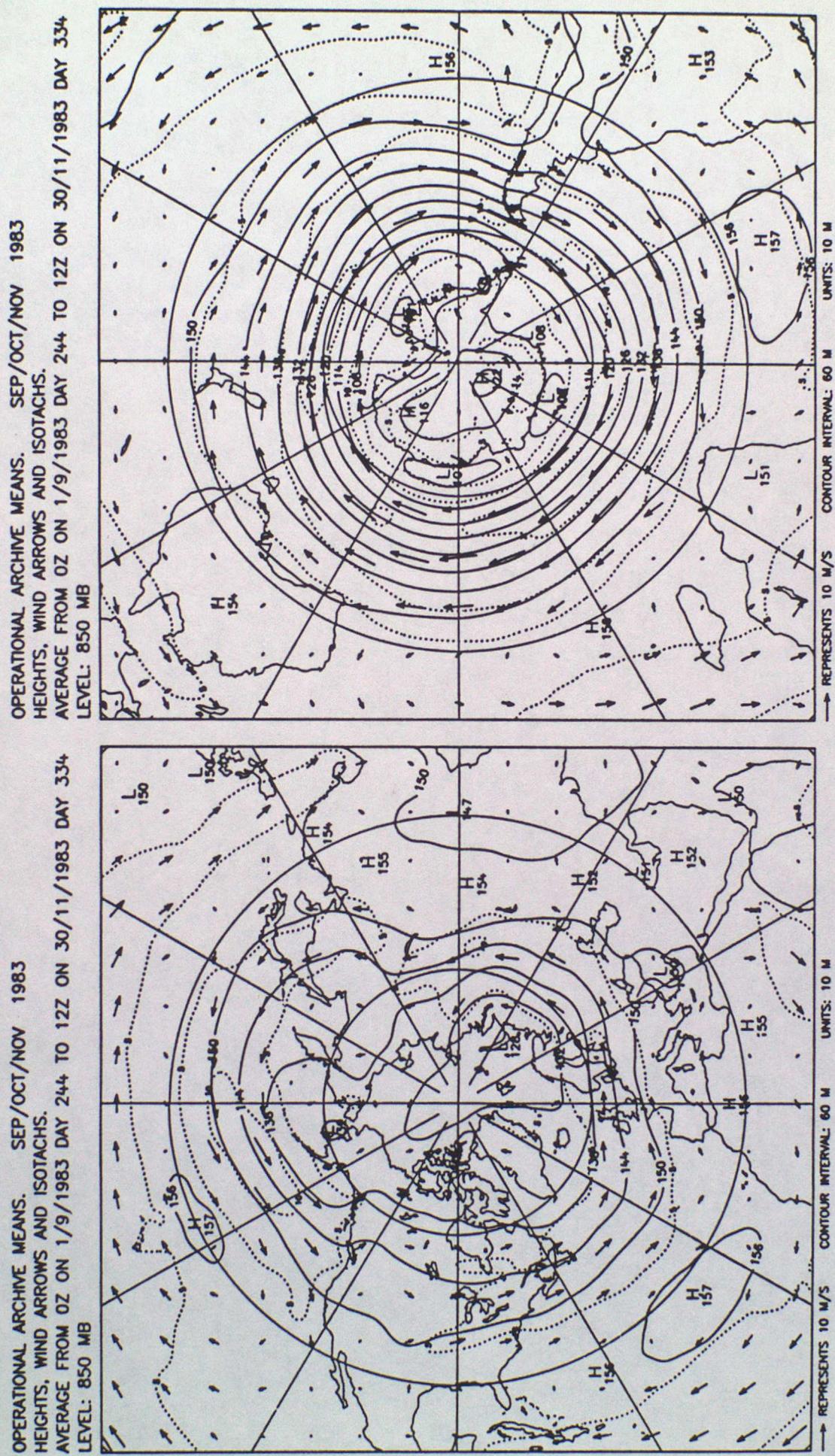


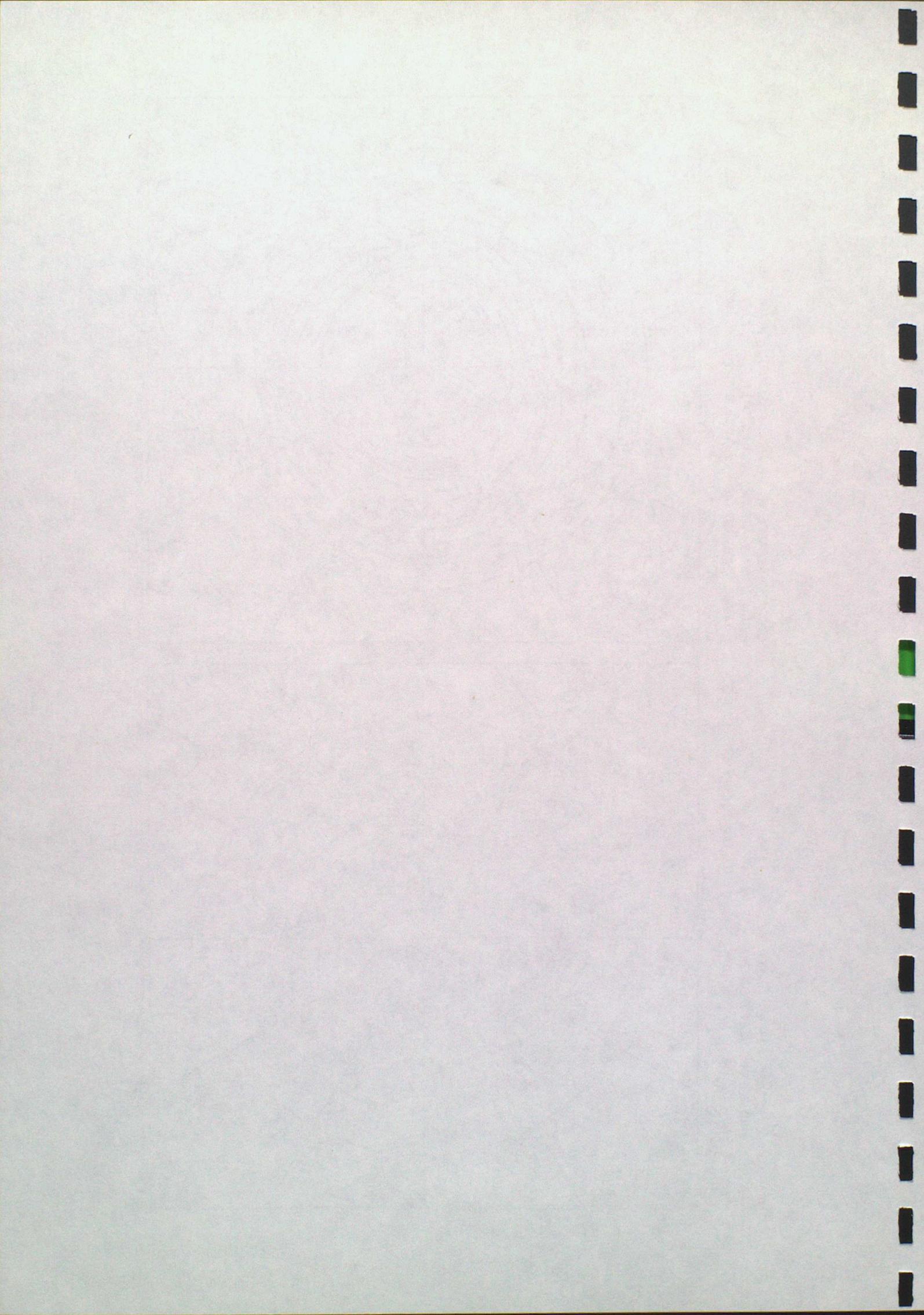
OPERATIONAL ARCHIVE MEANS. SEP/OCT/NOV 1983
PMSL AVERAGE FROM 02 ON 1/9/1983 DAY 244 TO 12Z ON 30/11/1983 DAY 334
LEVEL: SEA LEVEL

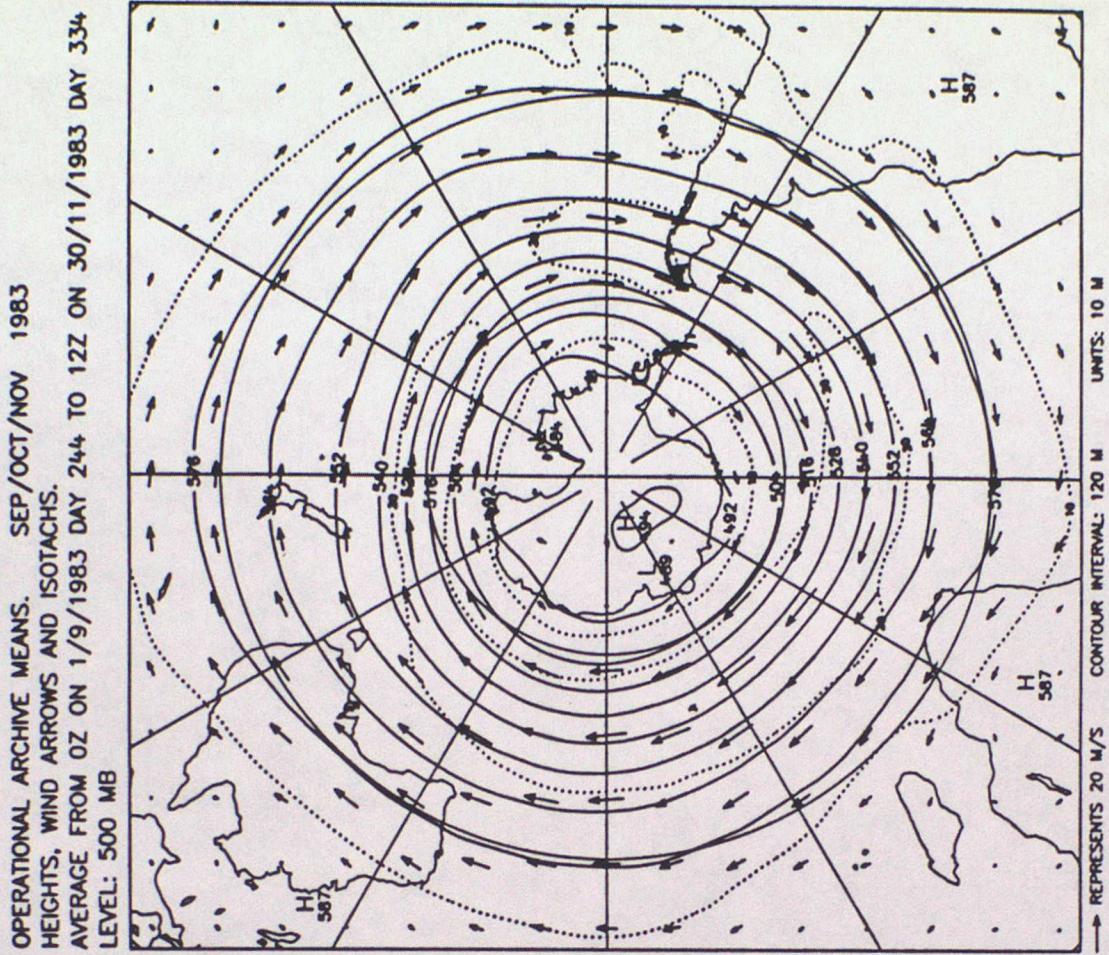
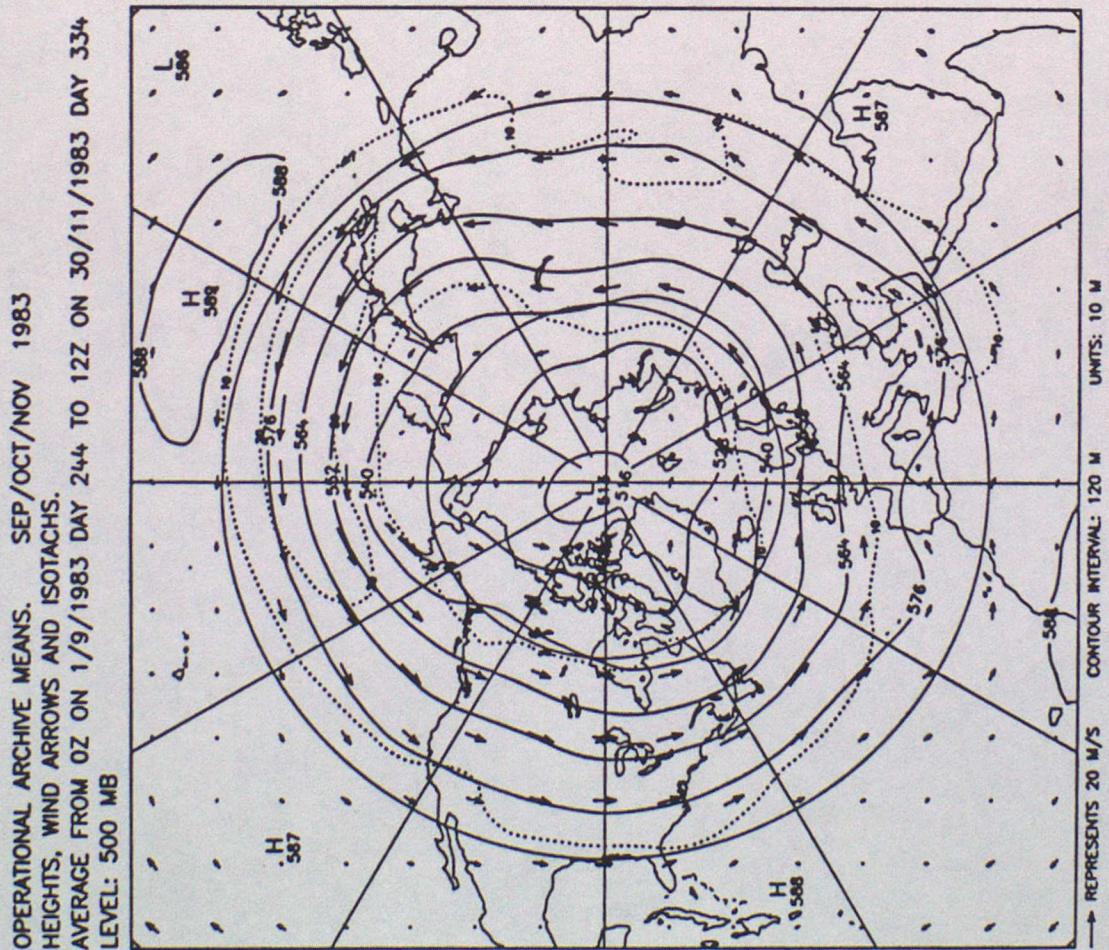


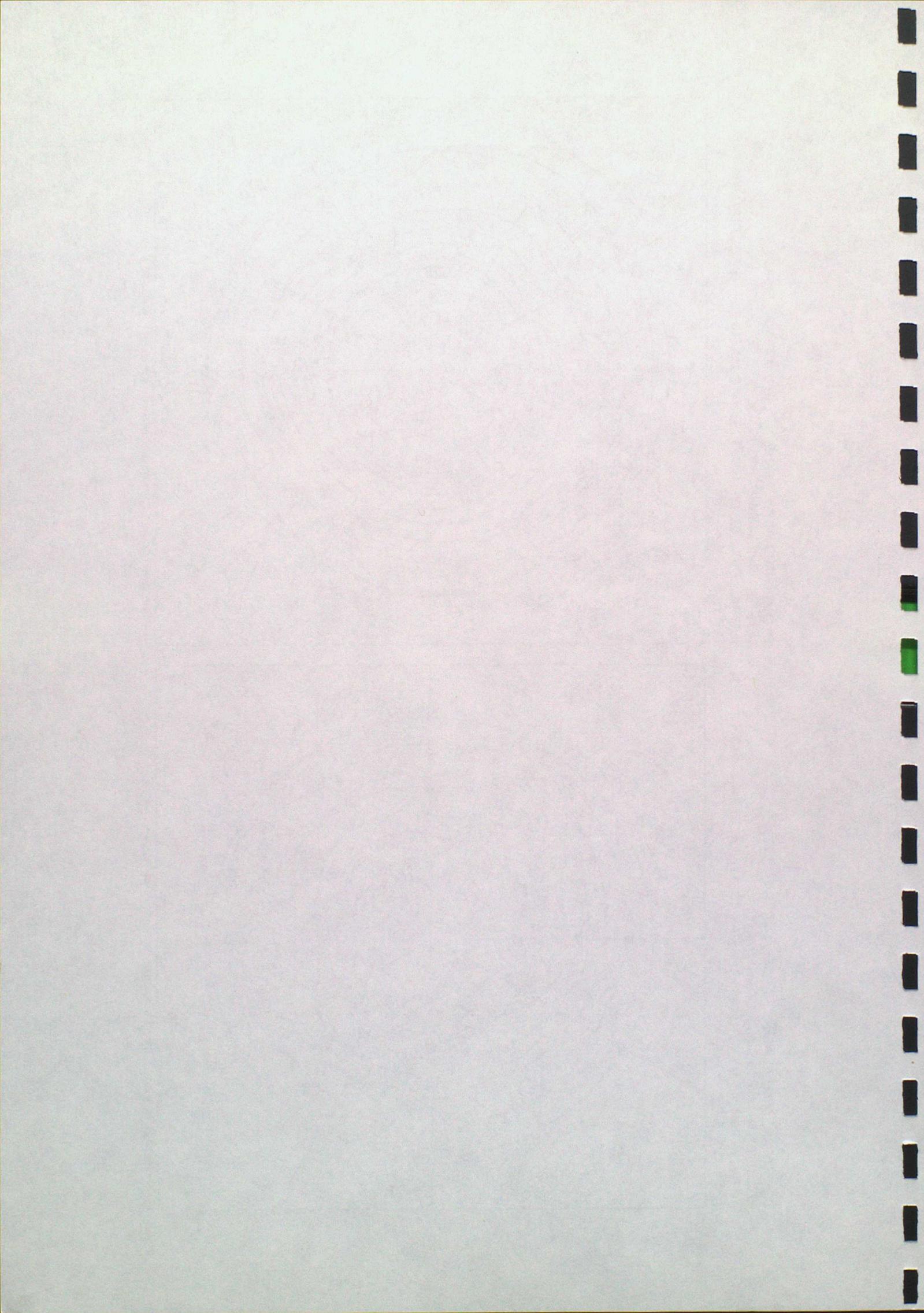
CONTOUR INTERVAL: 4 mb UNITS: mb



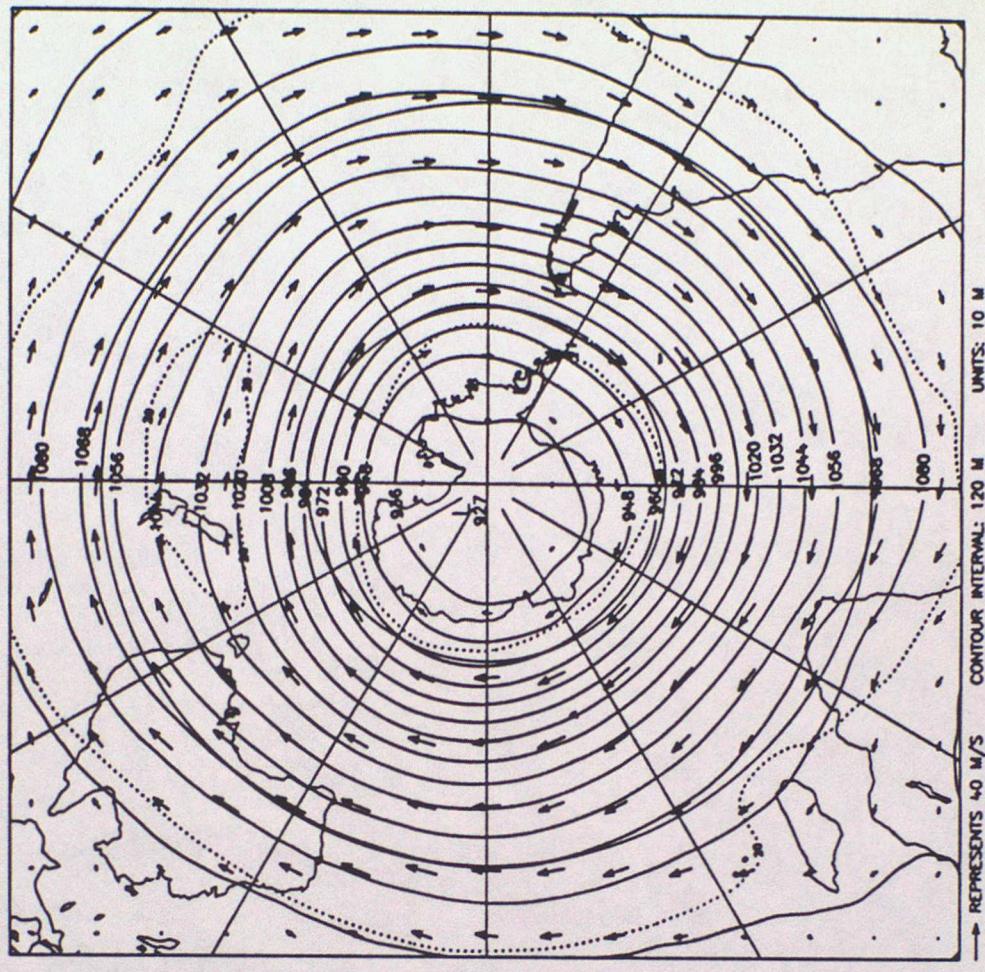




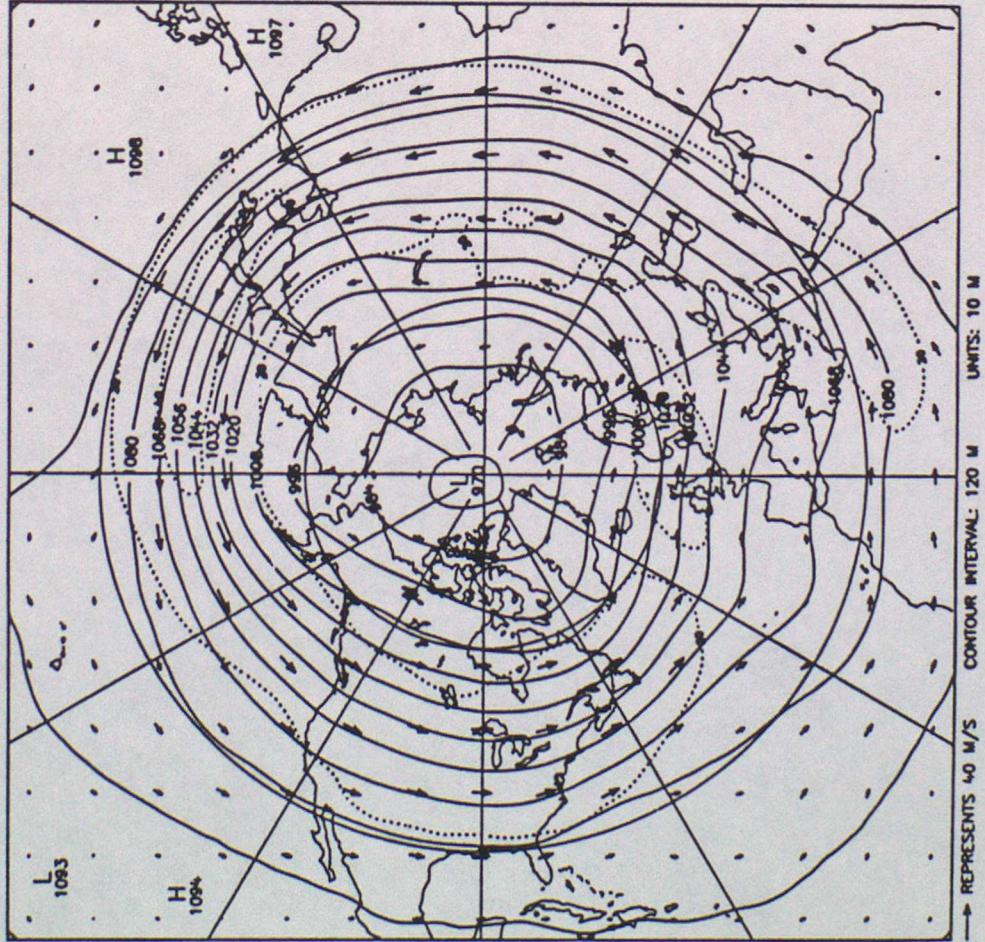


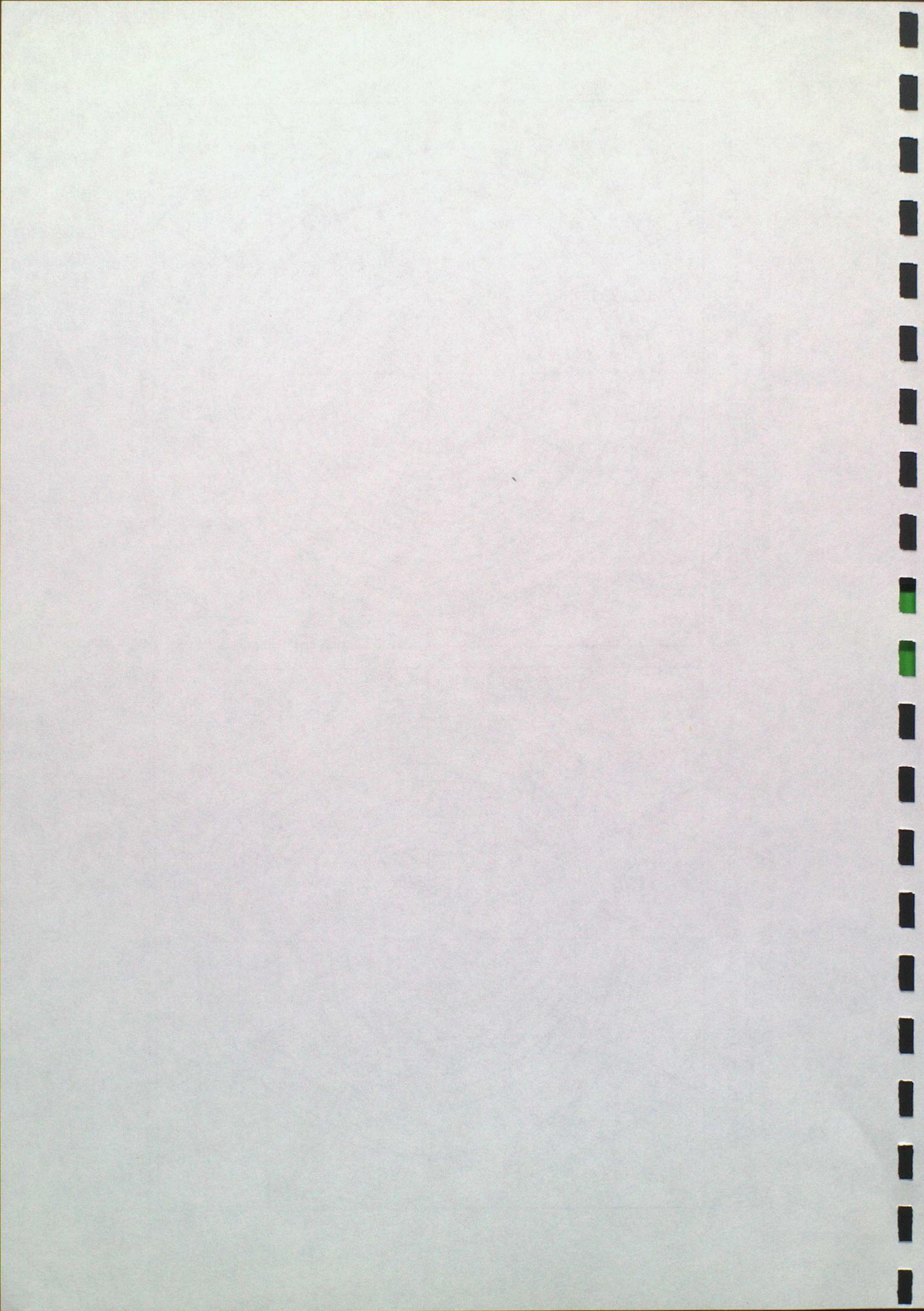


OPERATIONAL ARCHIVE MEANS. SEP/OCT/NOV 1983
HEIGHTS, WIND ARROWS AND ISOTACHS.
AVERAGE FROM 0Z ON 1/9/1983 DAY 244 TO 12Z ON 30/11/1983 DAY 334
LEVEL: 250 MB

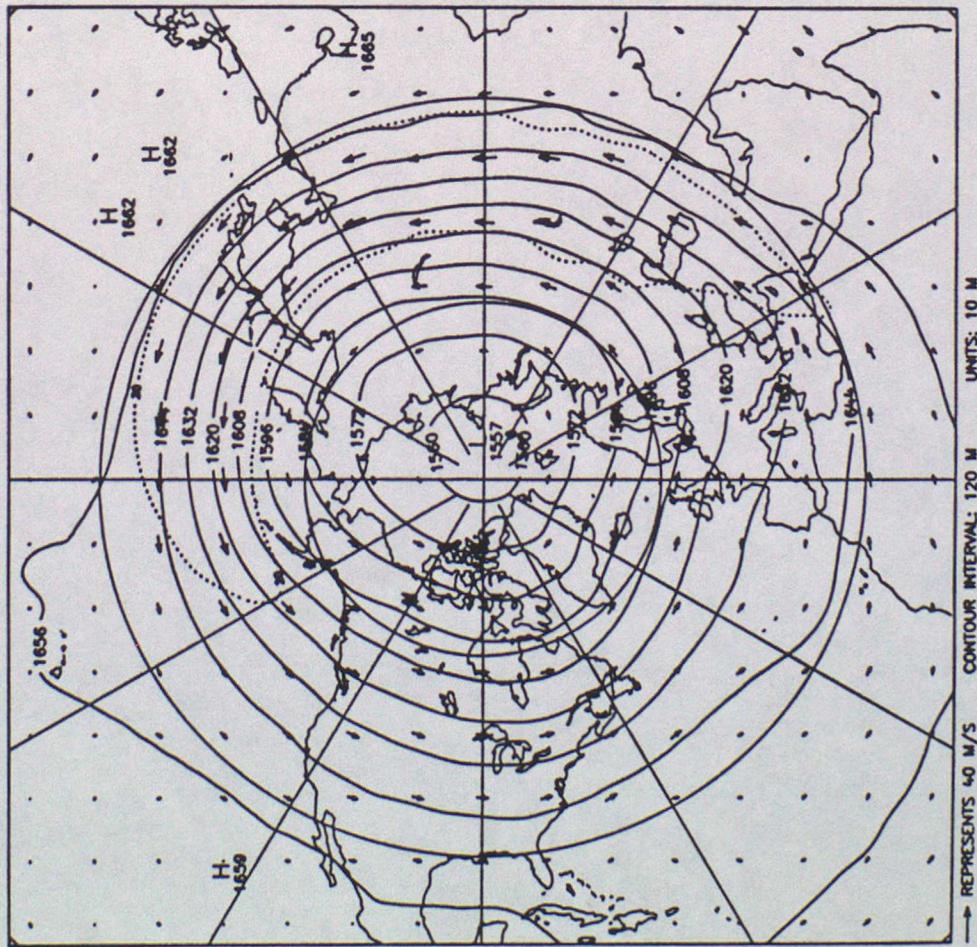


OPERATIONAL ARCHIVE MEANS. SEP/OCT/NOV 1983
HEIGHTS, WIND ARROWS AND ISOTACHS.
AVERAGE FROM 0Z ON 1/9/1983 DAY 244 TO 12Z ON 30/11/1983 DAY 334
LEVEL: 250 MB

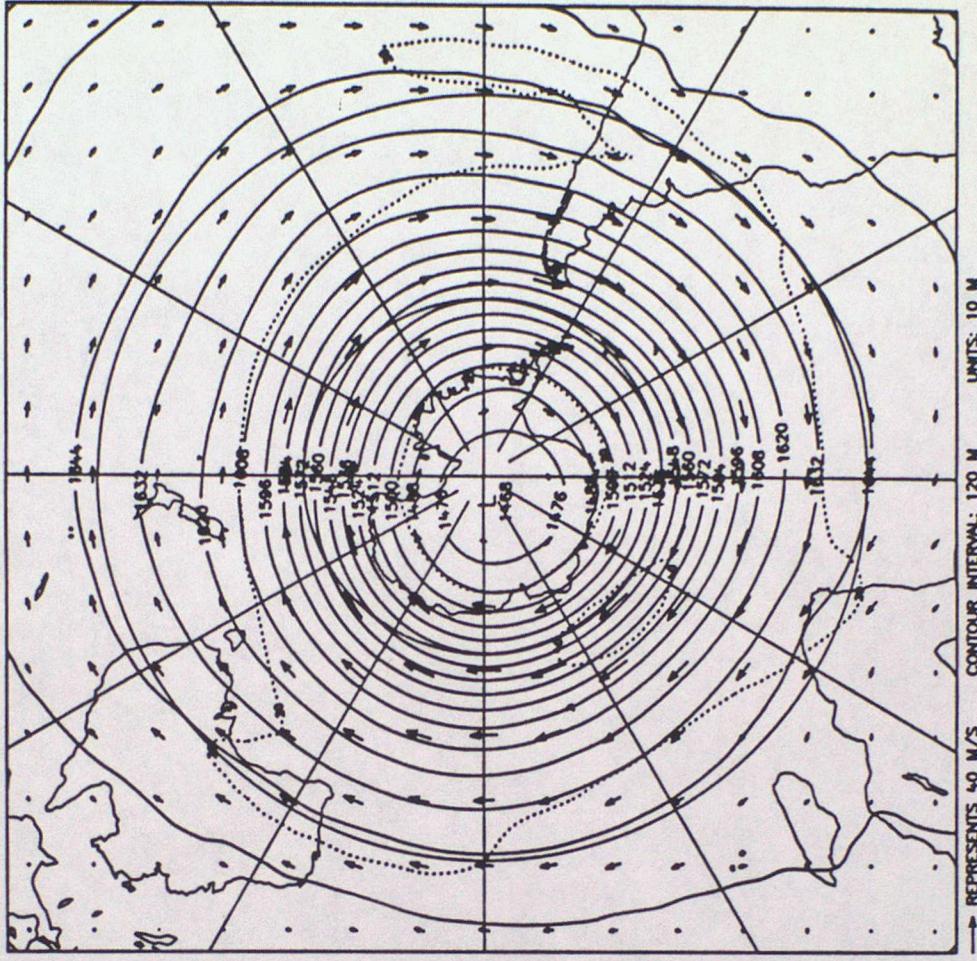


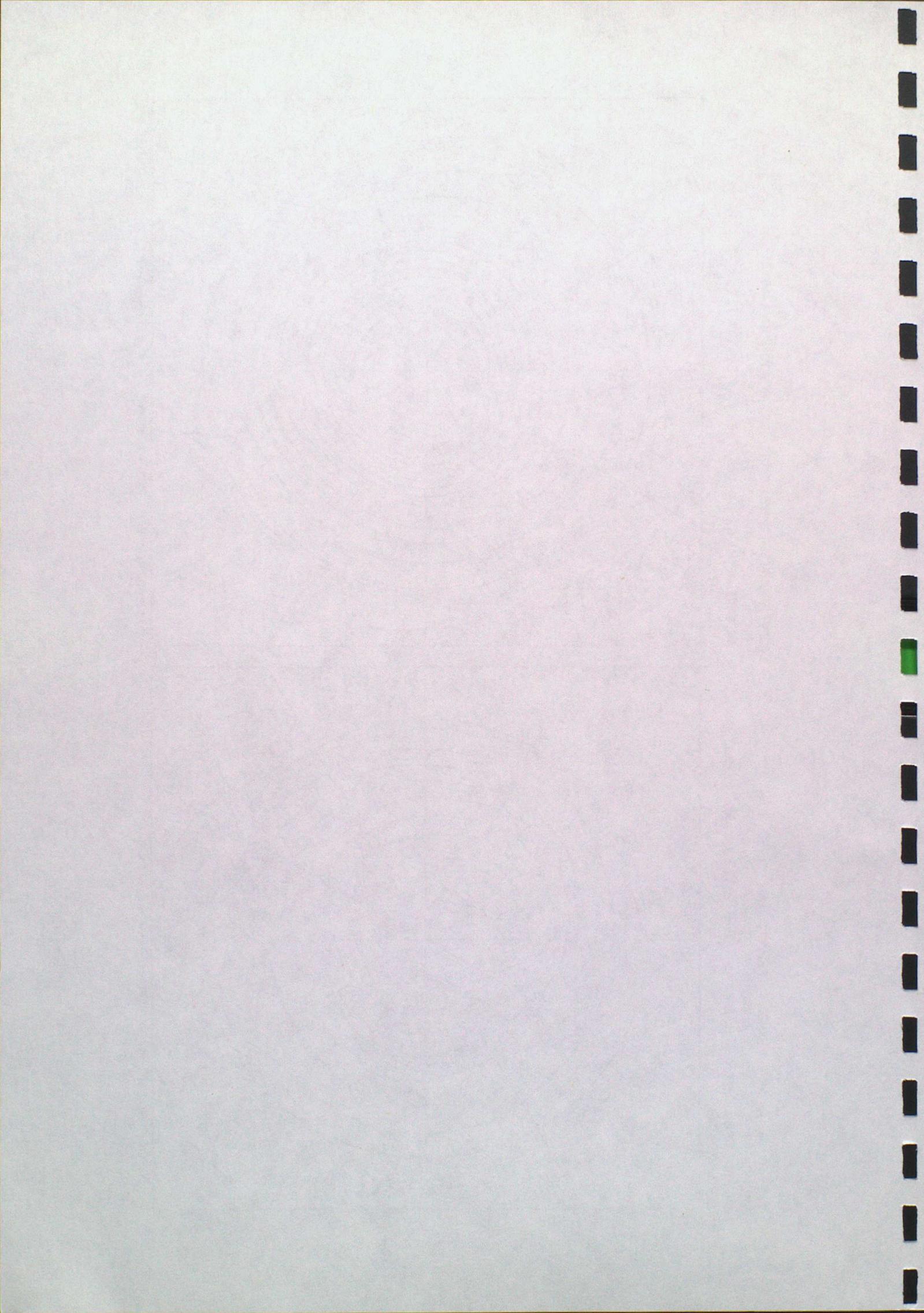


OPERATIONAL ARCHIVE MEANS. SEP/OCT/NOV 1983
HEIGHTS, WIND ARROWS AND ISOTACHS.
AVERAGE FROM 0Z ON 1/9/1983 DAY 244 TO 12Z ON 30/11/1983 DAY 334
LEVEL: 100 MB

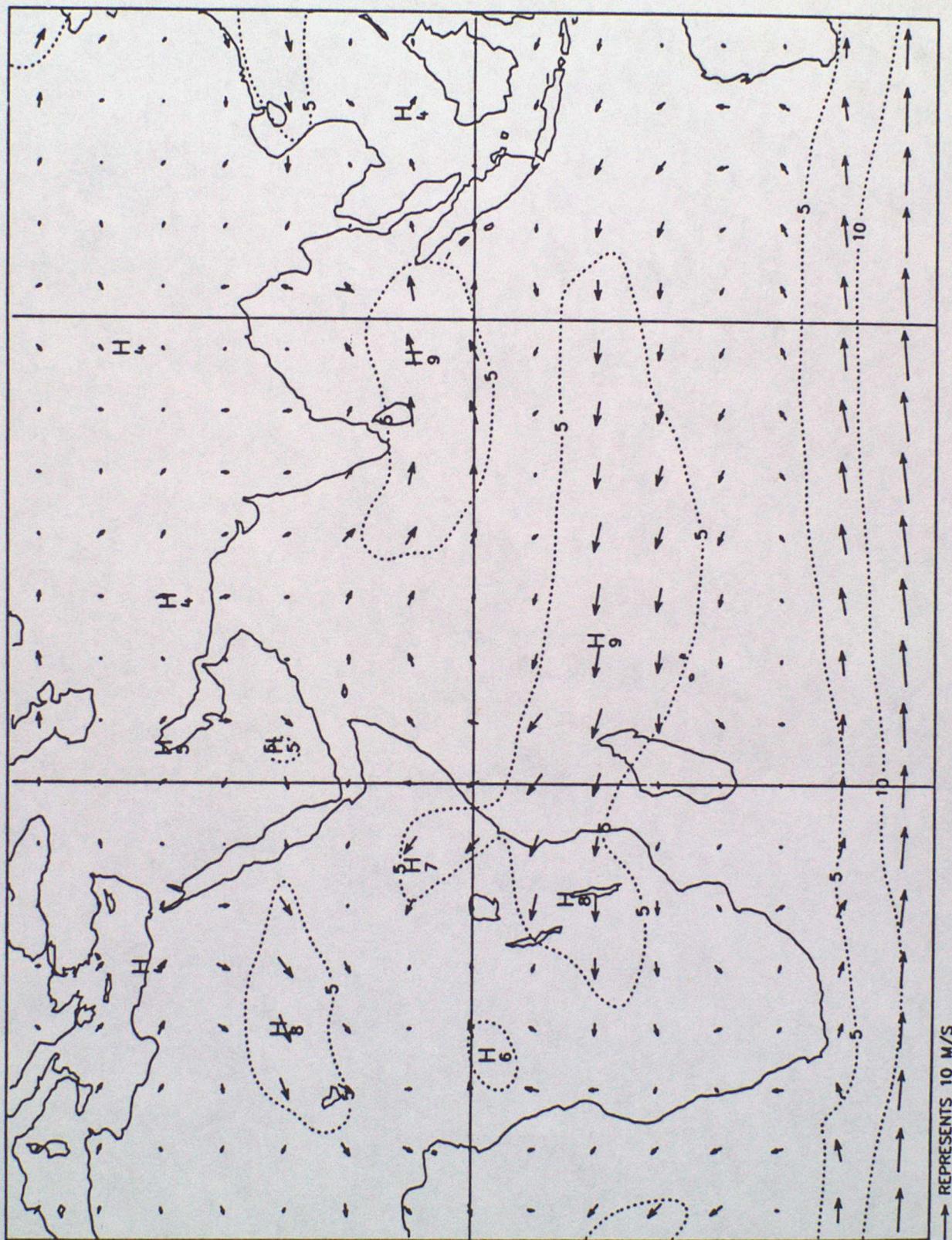


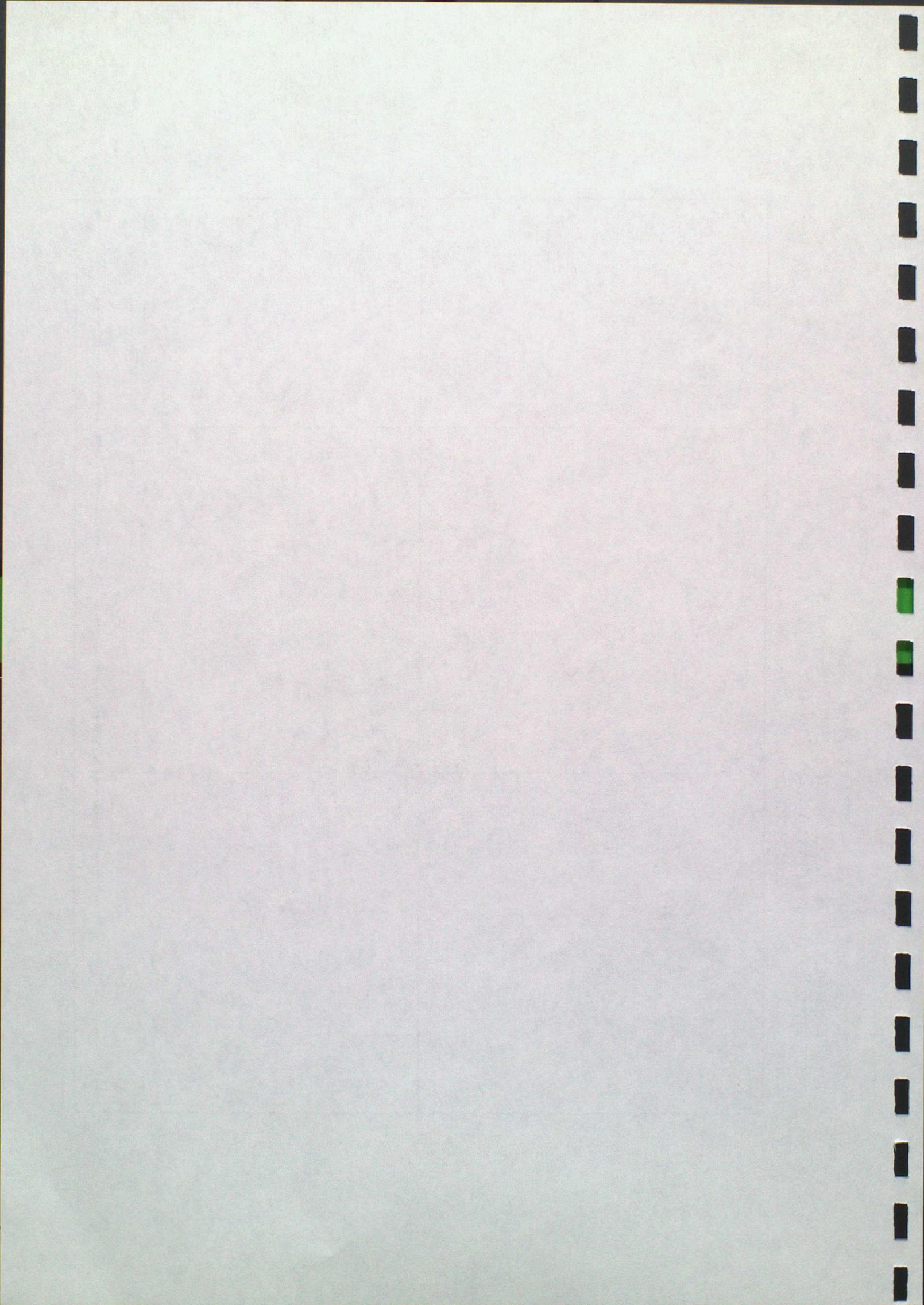
OPERATIONAL ARCHIVE MEANS. SEP/OCT/NOV 1983
HEIGHTS, WIND ARROWS AND ISOTACHS.
AVERAGE FROM 0Z ON 1/9/1983 DAY 244 TO 12Z ON 30/11/1983 DAY 334
LEVEL: 100 MB



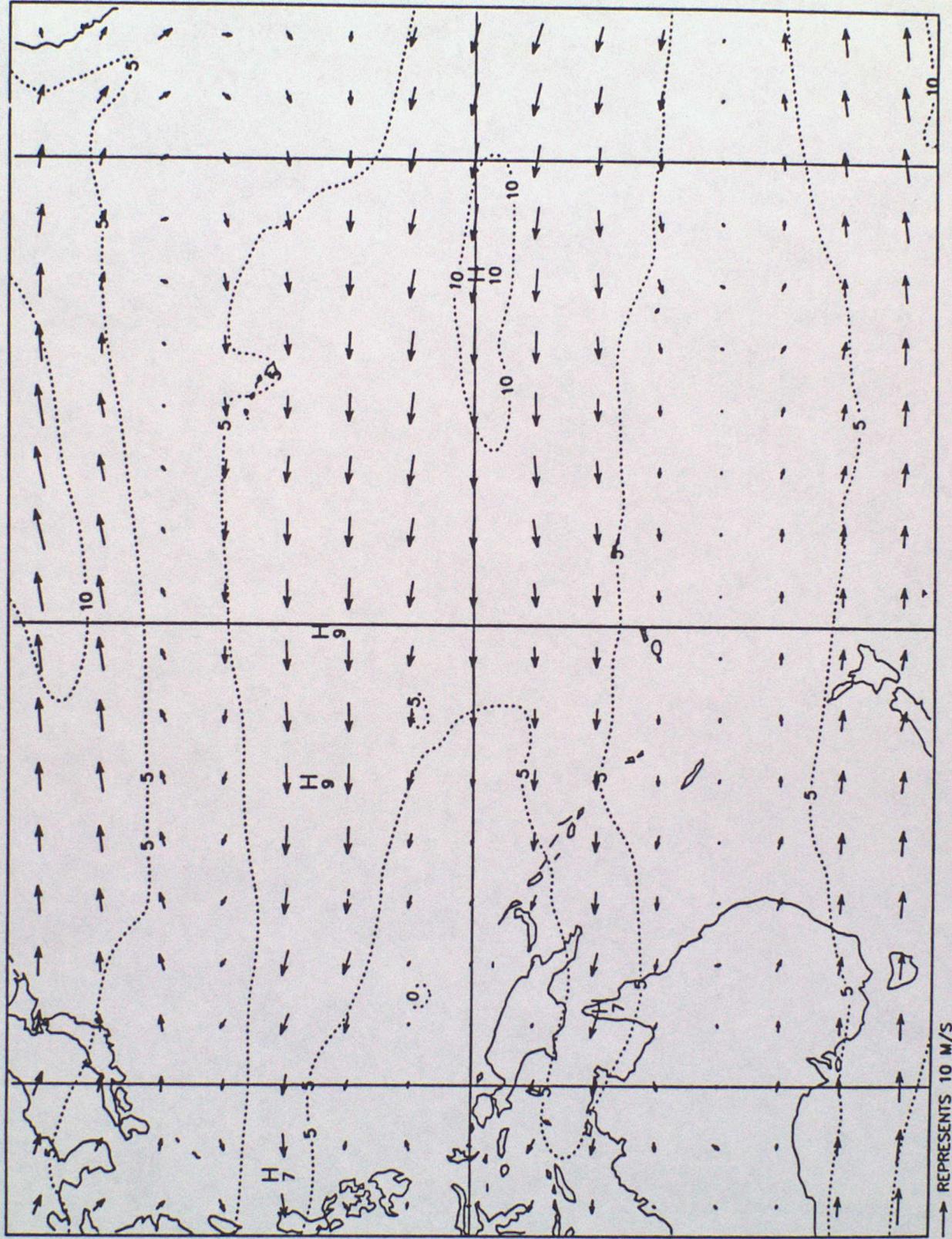


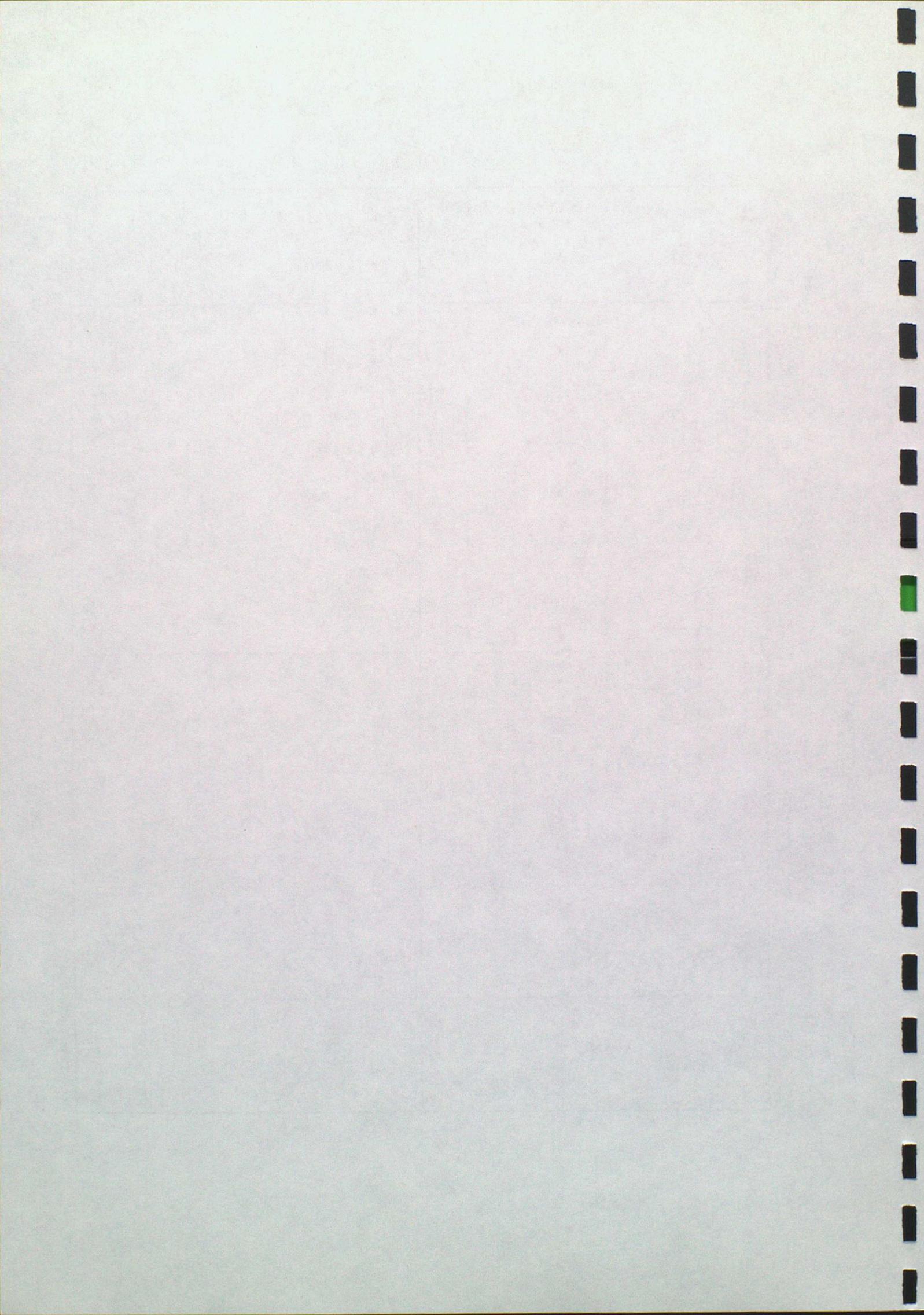
OPERATIONAL ARCHIVE MEANS. SEP/OCT/NOV 1983
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
AVERAGE FROM 0Z ON 1/9/1983 DAY 244 TO 12Z ON 30/11/1983 DAY 334
BETWEEN LONGS. 0 E - 120 E
850 MBS.



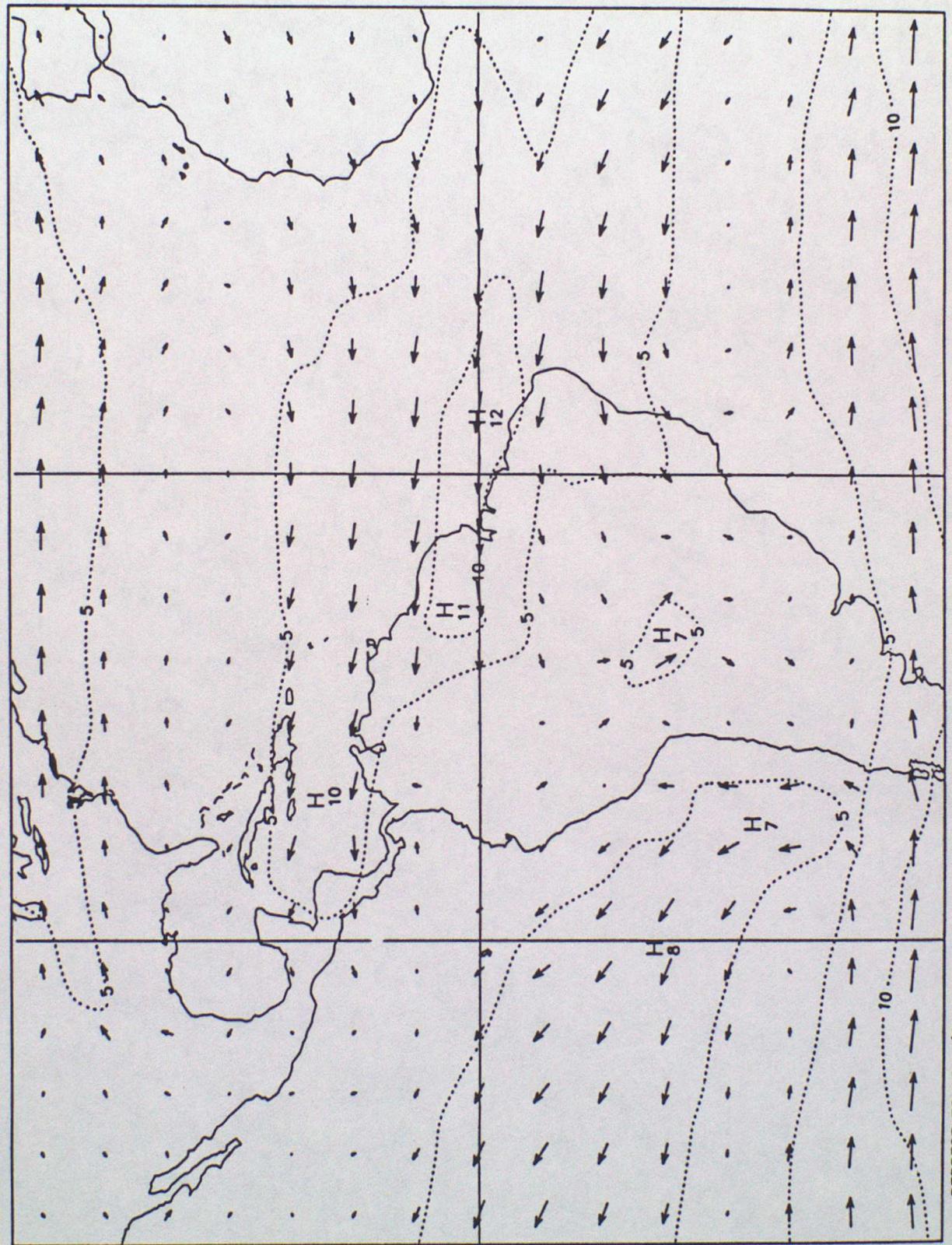


OPERATIONAL ARCHIVE MEANS.
SEP/OCT/NOV 1983
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
AVERAGE FROM 0Z ON 1/9/1983 DAY 244 TO 12Z ON 30/11/1983 DAY 334
850 MBS.

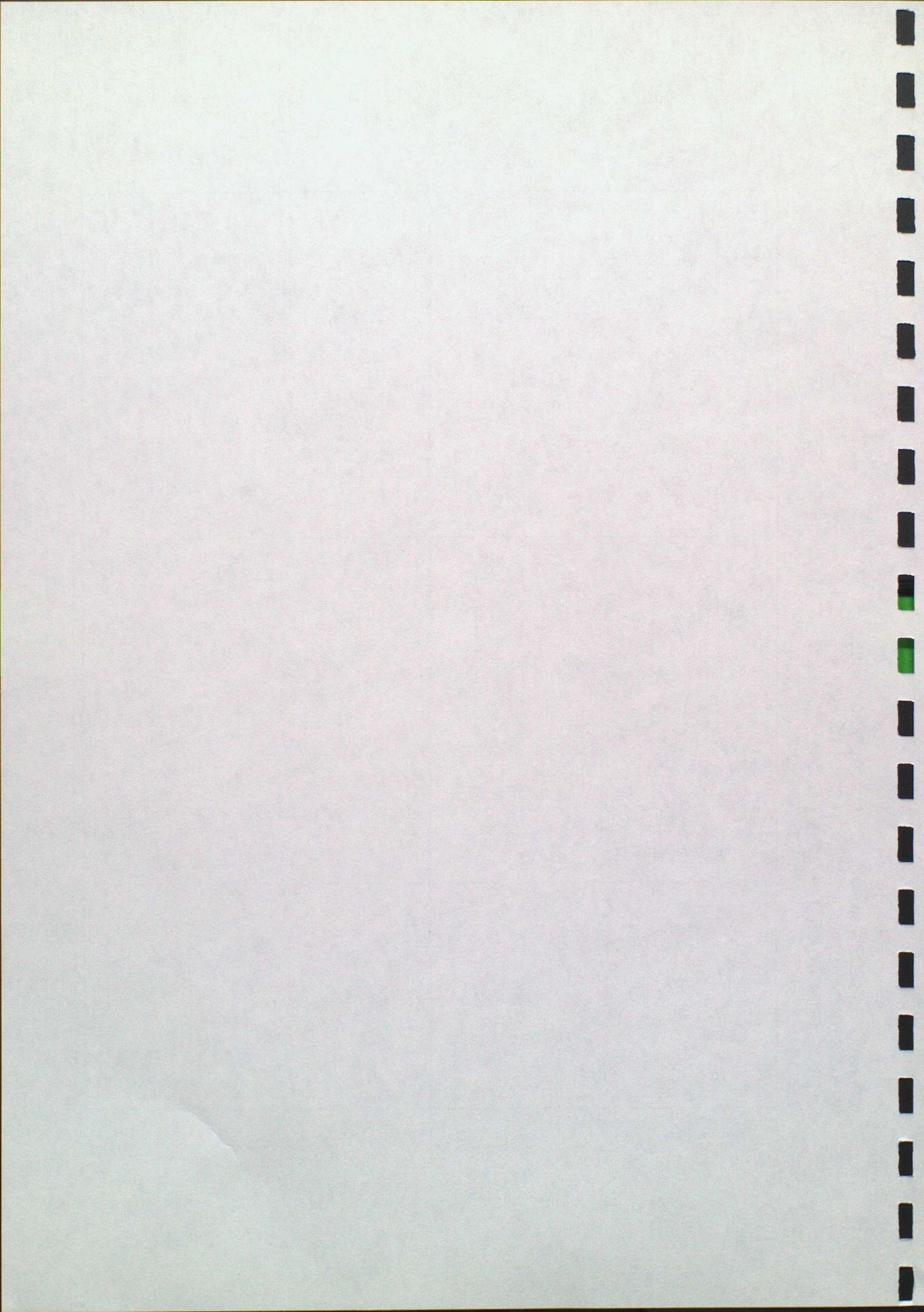




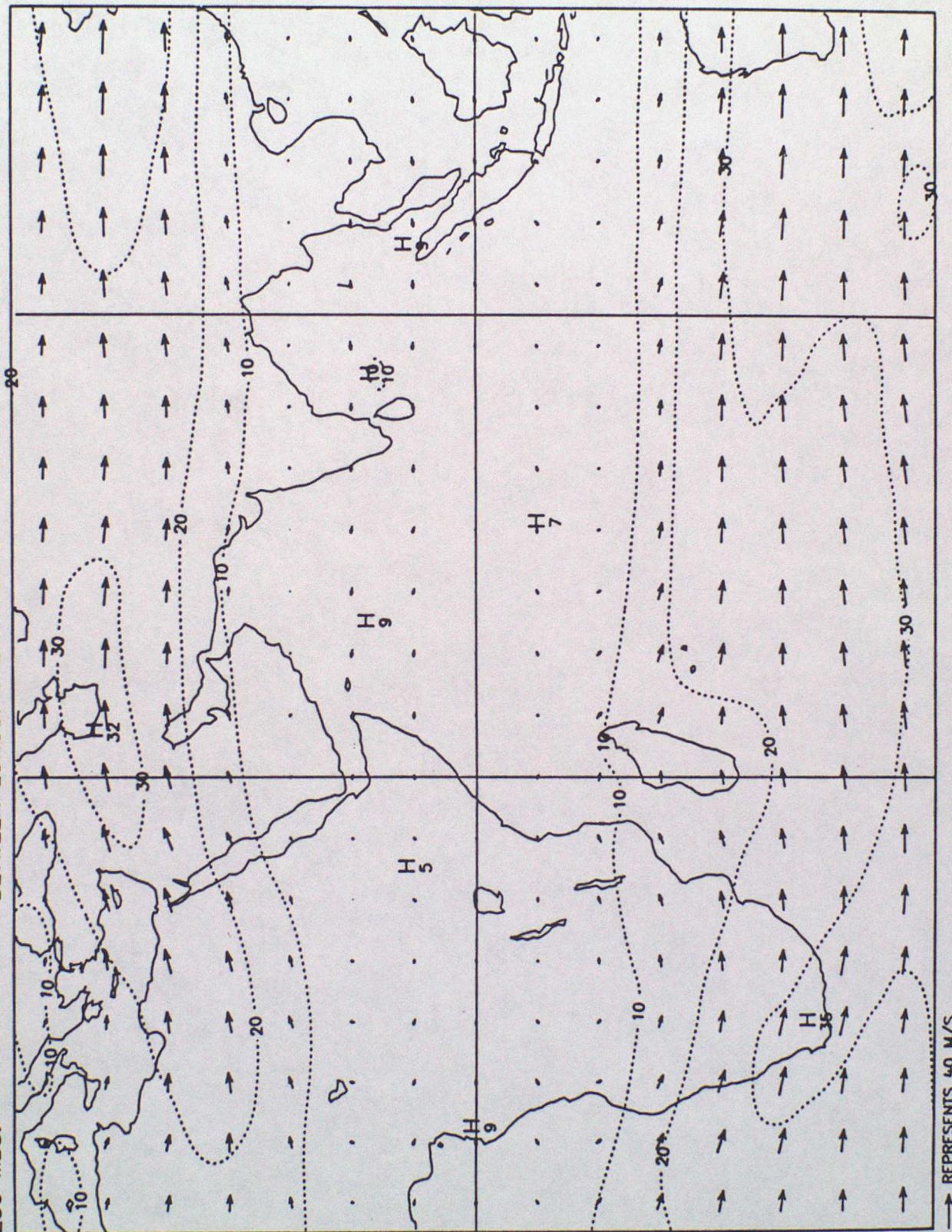
OPERATIONAL ARCHIVE MEANS.
SEP/OCT/NOV 1983
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
AVERAGE FROM 0Z ON 1/9/1983 DAY 244 TO 12Z ON 30/11/1983 DAY 334
BETWEEN LONGS. 120 W - 0 W
850 MBS.

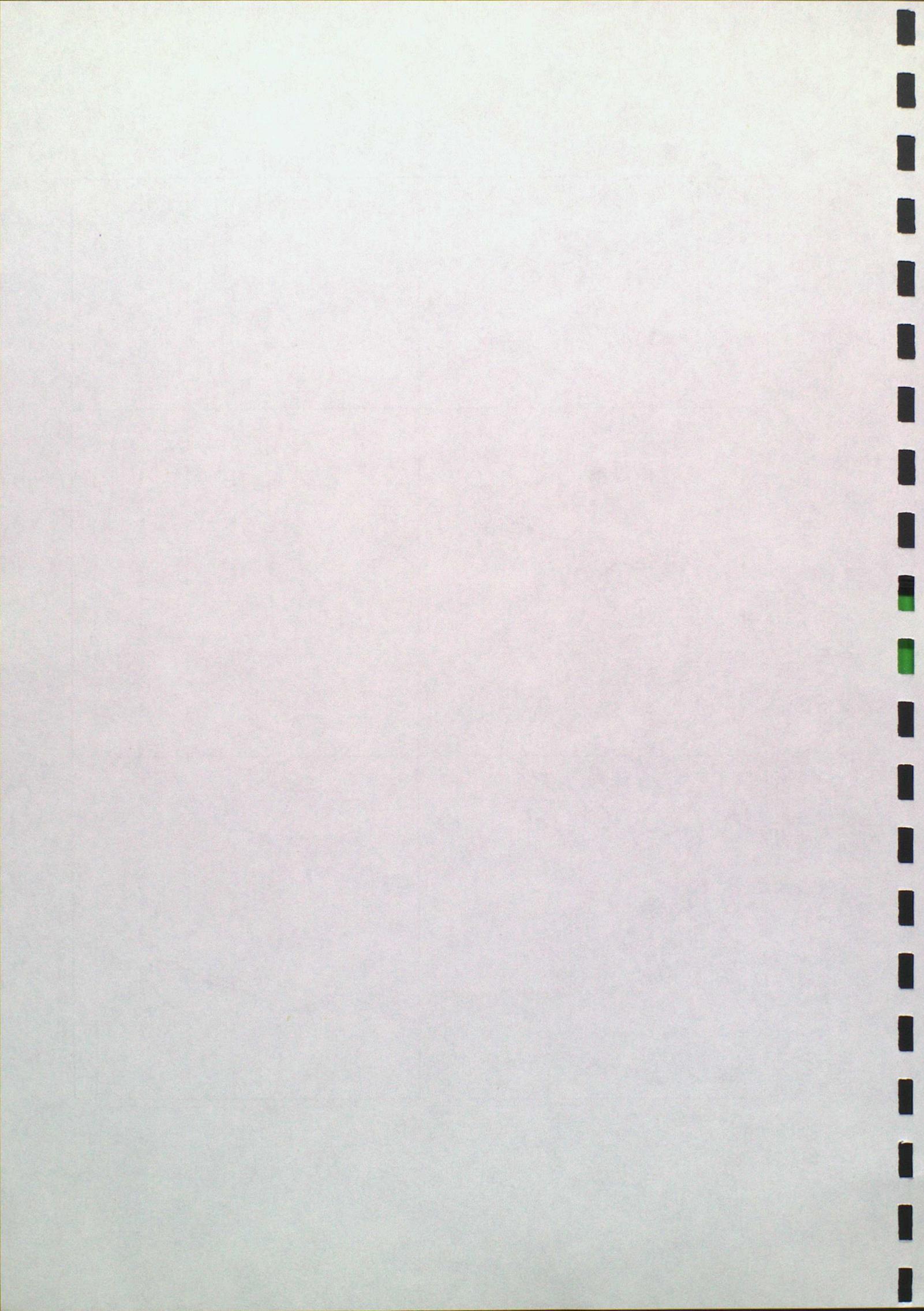


→ REPRESENTS 10 M/S

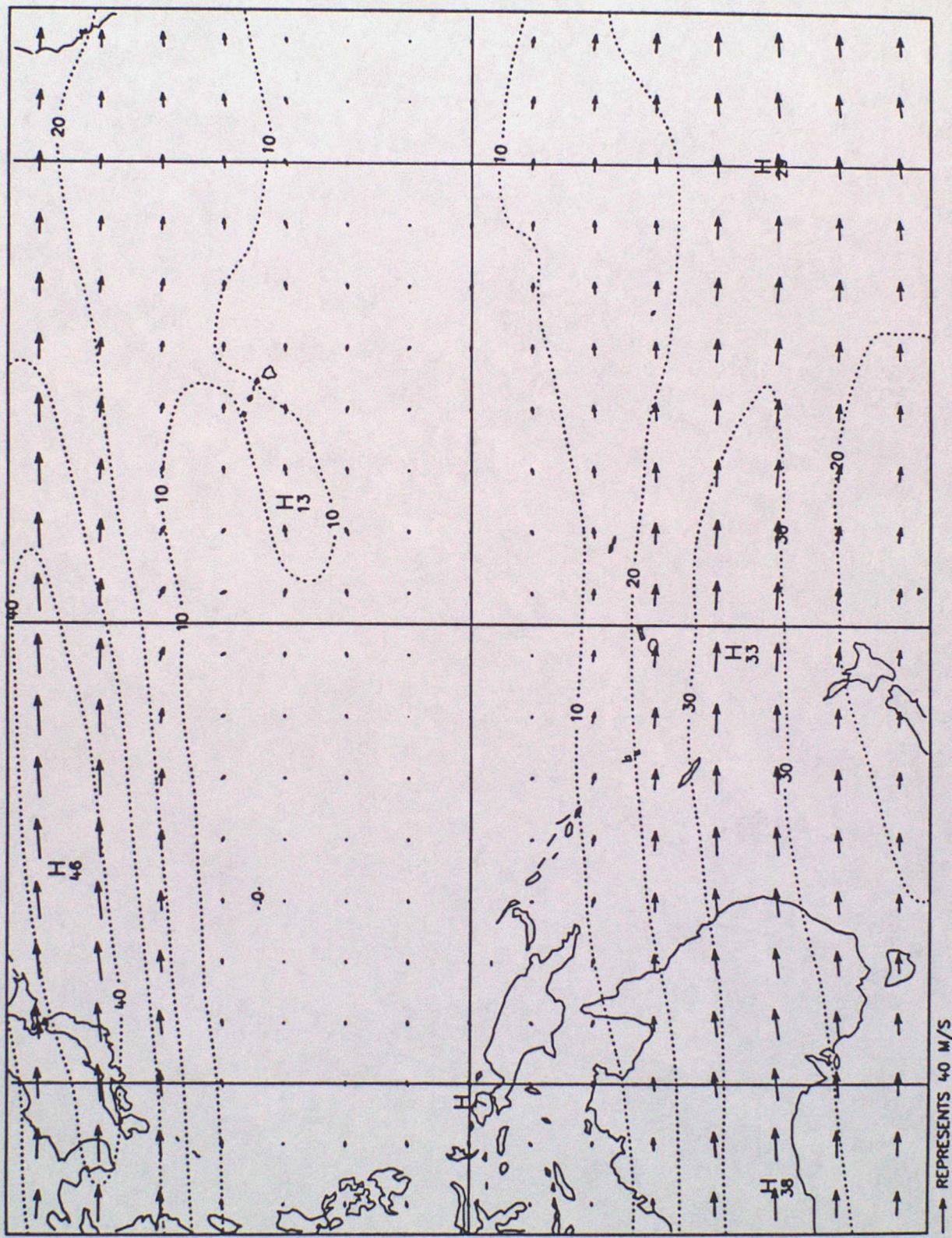


OPERATIONAL ARCHIVE MEANS. SEP/OCT/NOV 1983
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
AVERAGE FROM 0Z ON 1/9/1983 DAY 244 TO 12Z ON 30/11/1983 DAY 334
250 MBS.





OPERATIONAL ARCHIVE MEANS. SEP/OCT/NOV 1983
WIND ARROWS AND ISOTACHS BETWEEN LATS. 45 N - 45 S.
AVERAGE FROM 0Z ON 1/9/1983 DAY 244 TO 12Z ON 30/11/1983 DAY 334
250 MBS. BETWEEN LONGS. 120 E - 120 W



→ REPRESENTS 40 M/S



OPERATIONAL ARCHIVE MEANS.
WIND ARROWS AND ISOTACHS
AVERAGE FROM 0Z ON 1/9/1983 DAY 244 TO 12Z ON 30/11/1983 DAY 334
BETWEEN LONGS. 120 W - 0 W
250 MBS.

