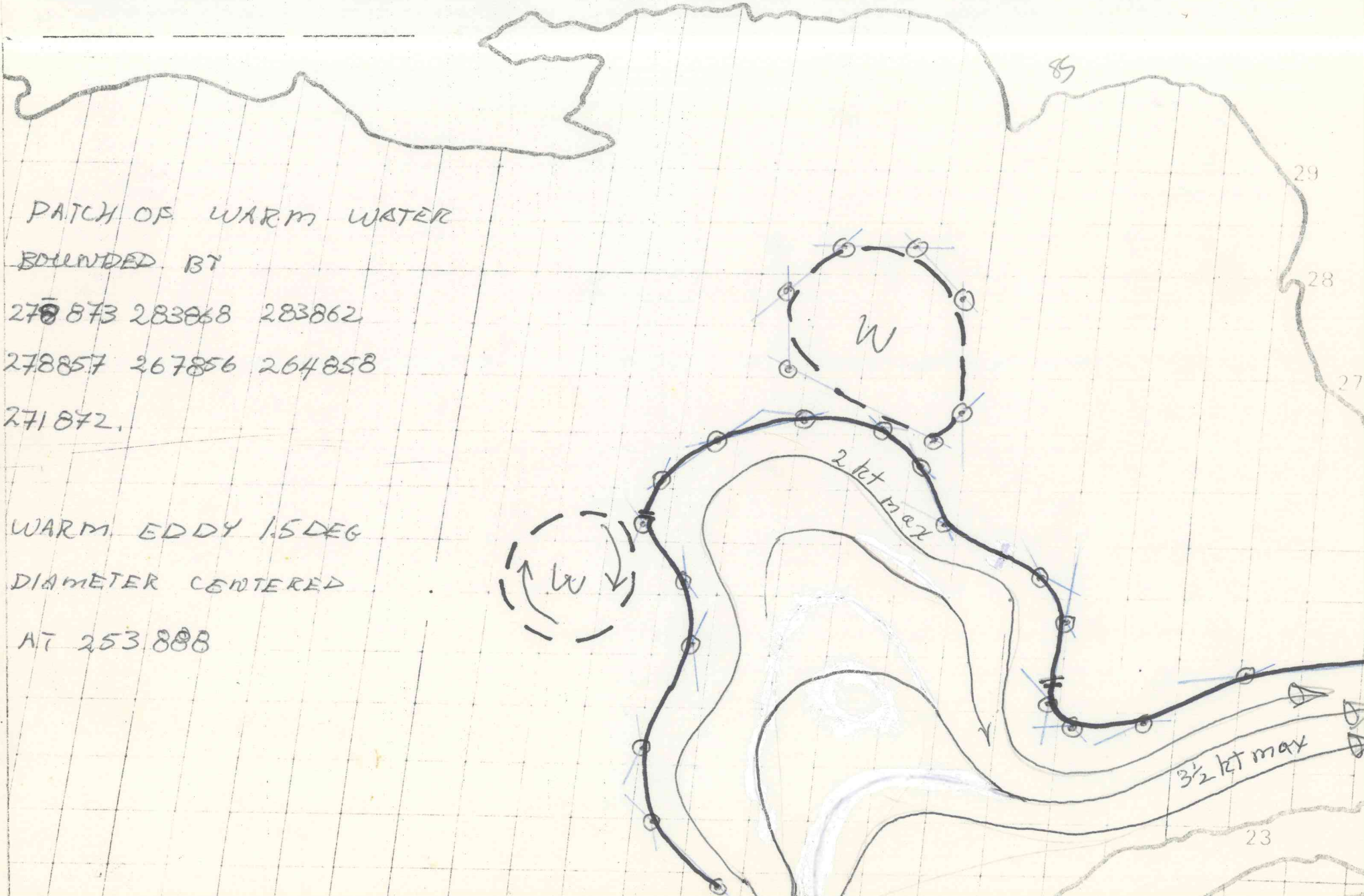


CODED POINTS GIVE LATITUDE/LONGITUDE ALONG THE COASTWARD EDGE OF THE WARMER WATER.

224872 230878 237880 246877 252878 257882 261881 264877 266869 265863  
263859 257856 252847 248845 241846 239844 239837 244829 245816



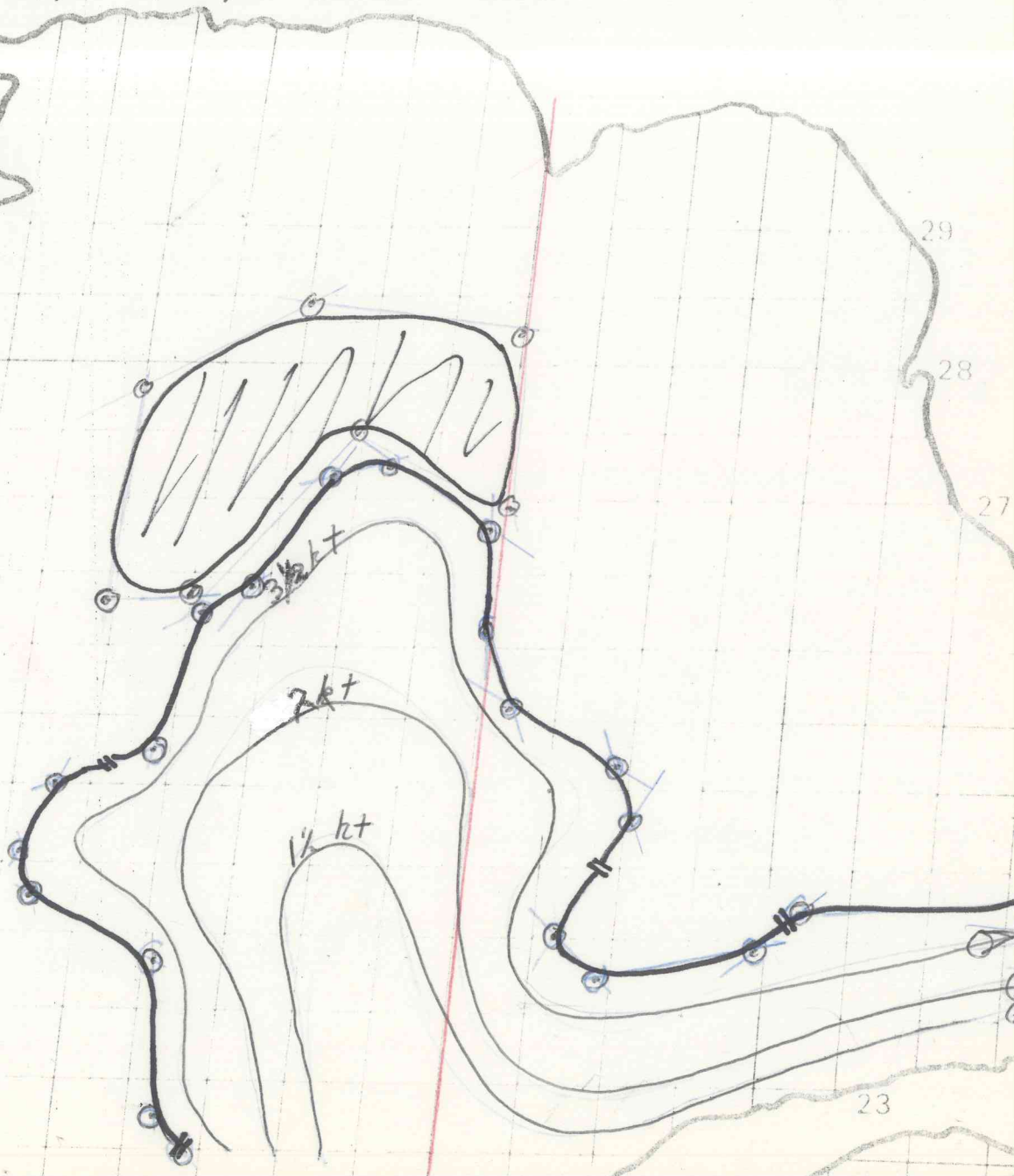
CODED POINTS GIVE LATITUDE/LONGITUDE ALONG THE COASTWARD EDGE OF THE WARMER WATER.

225871 228873 238874 242883 246884 250882 253876 262874 264871 272867  
 273863 268856 261855 256853 252846 248845 240848 237846 239836 242833  
 243816 //

PATCH OF WARM WATER  
 BOUNDED BY 264881 278880  
 284870 283855 270859 275865  
 264875 264881.

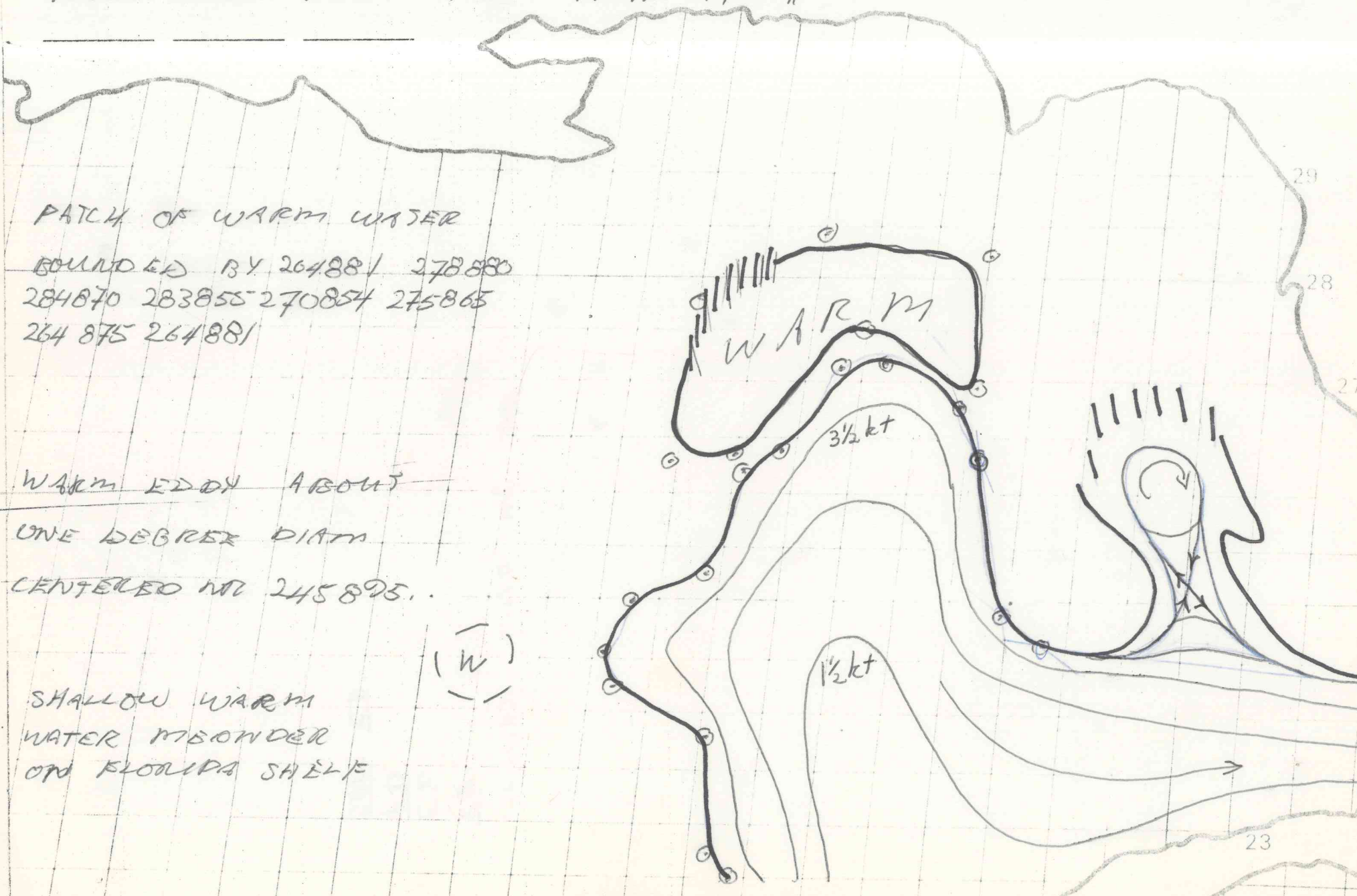
WARM EDDY ABOUT  
 ONE DEGREE DIAM.  
 CENTERED NR 245895..

(W)



CODED POINTS GIVE LATITUDE/LONGITUDE ALONG THE COASTWARD EDGE OF THE WARMER WATER.

225871 228873 238874 242883 246884 250882 253876 262874 264871 272867  
273863 268856 263854 249851 247849 247<sup>3</sup>817 // \_\_\_\_\_



PATCH OF WARM WATER  
 BOUNDED BY 264881 278880  
 284870 283855 270854 275865  
 264875 264881

WARM EDDY ABOUT  
 ONE DEGREE DIAM  
 CENTERED AT 245895.

SHALLOW WARM  
 WATER MEANDER  
 ON FLORIDA SHELF

(W)

WARM

3 1/2 kt

1 1/2 kt

29

28

27

23

GULF OF MEXICO LOOP CURRENT ANALYSIS

24 NOVEMBER 1976.

THE ONLY NEW DATA ON TODAY'S ANALYSIS IS THE EASTERN PORTION BETWEEN 24N AND 26N. THE REMAINDER OF THE DATA IS CARRIED FROM PREVIOUS ANALYSES. ~~THE WARM~~  
THE WARM EDDY CENTERED NEAR 254886 IS NOT SEEN BUT IS CARRIED BECAUSE RECENT AOML CRUISES THROUGH THIS AREA SHOW THAT THE FEATURE IS DEEP.

NORTH-EAST OF THE LOOP A DISSIPATING WARM FEATURE IS NOT SEEN AND IS PRESUMED TO HAVE DISAPPEARED.

26 NOVEMBER 1976.

DATA BETWEEN DOUBLE BREAK LINES WAS SEEN ON 25 NOV. THIS SHOWS A MAJOR SHIFT IN THE SHAPE OF THE UPPER PORTION OF THE LOOP.

THE WARM FEATURE TO THE NORTH-EAST OF THE LOOP WAS ALSO SEEN AGAIN.

THE WARM EDDY TO THE WEST OF THE LOOP WAS STILL NOT SEEN.

29 NOVEMBER 1976.

THE ONLY NEW DATA SHOWS A SMALL WAVE PROPAGATING THROUGH THE FLORIDA STRAITS. THIS HAS REDUCED THE SEAWARD BULGE OF COLD WATER SOUTH-~~EAST~~<sub>WEST</sub> OF ~~THE~~ KEYS WEST AND MOVED IT DOWNSTREAM.

01 DECEMBER 1976.

EXTENSIVE CLOUD COVER PREVENTS ANY ANALYSIS LATER THAN 29 NOV 76.

03 NOVEMBER 1976.

NEW DATA ALONG NORTHERN AND NORTHEASTERN EDGE OF LOOP SHOWS THAT EDGE WAVES CONTINUE TO PROPAGATE THROUGH THE SYSTEM. AS LOOP HAS NOT SHOWN RECENT SIGNS OF CLOSURE WE ARE RAISING THE EDGE SPEED AS WELL AS RE-ALIGNING THE STREAMLINES.

06 NOVEMBER 1976.

THE LARGE WAVE WITH ITS AXIS ALONG 86.5°W CONTINUES TO PROPAGATE DOWNSTREAM. A NEW WAVE APPEARS TO BE FORMING NEAR 24.5°N ALONG THE WESTERN SIDE OF THE LOOP. THE SMALL WARM EDDY IS BARELY SEEN IN TODAY'S DATA.

10 DECEMBER 1976.

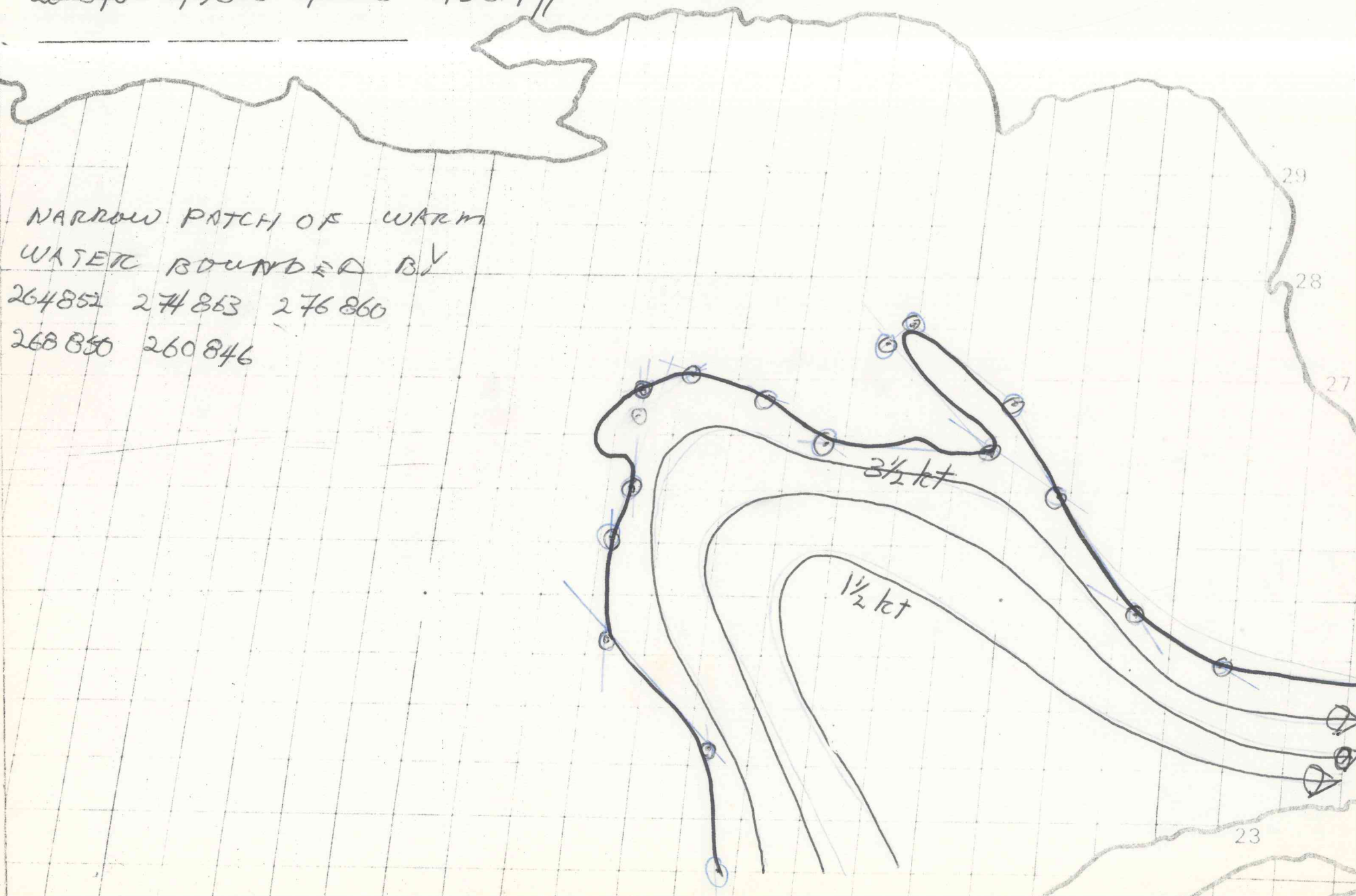
THE MAJOR NEW FEATURE OF THE PAST FOUR DAYS HAS BEEN THE CONFIRMATION OF A CUTOFF EDDY ON THE FLORIDA SHELF SOUTHEAST OF FORT MYERS. FORMATION OF THIS CUTOFF HAS RESULTED IN A NORTHWARD DISPLACEMENT OF THE GULF STREAM IN THE STRAIT OF FLORIDA, MOVING THE EDGE OF THE STREAM NEARLY ONTO THE KEYS.

13 DECEMBER 1976.

EXTENSIVE CLOUD COVER PREVENTS ANY ANALYSIS LATER THAN 10 DECEMBER.

CODED POINTS GIVE LATITUDE/LONGITUDE ALONG THE COASTWARD EDGE OF THE WARMER WATER.

225872 236873 246884 255884 260883 269883 270879 268872 264867 264852  
260846 249838 245830 243817 // \_\_\_\_\_



NARROW PATCH OF WARM  
 WATER BOUNDED BY

264852 274853 276860  
 268850 260846

3 1/2 kt

1 1/2 kt

29

28

27

23

GULF OF MEXICO LOOP CURRENT ANALYSIS

17 DECEMBER 1976.

NEW DATA THIS DATE NORTH OF 25°N SHOWS FLATTENING OF NORTHERN EXTENT OF LOOP. PATCH OF WARM WATER NORTHEAST OF LOOP MOSTLY DISSIPATED, LEAVING JUST A THIN FEEDER NOTED ON THE ANALYSIS. NO OTHER FEATURES NOTED.

20 DECEMBER 1976.

NO MAJOR CHANGES FROM 17 DECEMBER.

22 DECEMBER 1976.

EXTENSIVE CLOUD COVER PREVENTS ANY ANALYSIS LATER THAN 20 DEC.

27 DECEMBER 1976.

THE ONLY MAJOR CHANGE IS A WESTWARD TILT OF THE LOOP, PROBABLY PART OF A SLOW CYCLE OF WAVING THAT THE LOOP GOES THROUGH.

30 DECEMBER 1976.

OUTSTANDING DEPICTION OF LOOP 29-30 DEC PERMITS THE BEST ANALYSIS THIS YEAR. SEVERAL MEANDERS NOTED ALONG OUTSIDE EDGE OF LOOP. REMAINS OF PREVIOUS LOOP SEEN NEAR 26°N 92°W.

03 JANUARY 1977.

ONLY CHANGE FROM 30 DEC IS SHOREWARD MOVEMENT OF EDGE BETWEEN 24.5°N AND 26°N. REMAINS OF PREVIOUS LOOP NOT SEEN.

05 JANUARY 1977

CENTERS OF DETACHED MEANDERS REVOLVE CLOCKWISE AROUND EDGE OF LOOP CURRENT WITH WEAK INTERIOR CURRENTS. SOUTHEAST BLUGE BTWN 83.5W TO 84.8W REMAINS SOUTH NEAR 23N. MOST SIGNIFICANT MEANDER STRUCTURE CHANGE OCCURES IN FINGER TYPE DEVELOPEMENT WITH CNTR AT 25.2N 84.2W.

07 JANUARY 1977

ANALYSIS IS GOOD SOUTH OF 25.5N, ANALYSIS N OF THIS IS A PROG FROM OLD DATA. MOST SIGNIFICANT FEATURE OF ISOTHERM ANALYSIS IS THE MEANDER FORMING NR 23.2N 84.8W WHICH INDICATES FUTURE BREAKOFF OF LOOP AND GULF STREAM WATER ALONG THE COAST OF WESTERN CUBA.

09 JANUARY 1977.

LONG WAVES CONTINUE TO PROPAGATE AROUND EDGE OF LOOP. PROTRUSION BETWEEN CUBA AND FLORIDA KEYS CONTINUES TO GROW TO SOUTHWEST.

12 JANUARY 1977

MOST SIGNIFICANT DEVELOPEMENT IS THE BREAKOFF OF COLD EDDY CENTERED AT 226848 THAT HAS HALTED DEVELOPEMENT OF LOOP BREAKOFF. LONG WAVES CONTINUE TO PROPOGATE AROUND EDGE OF LOOP.

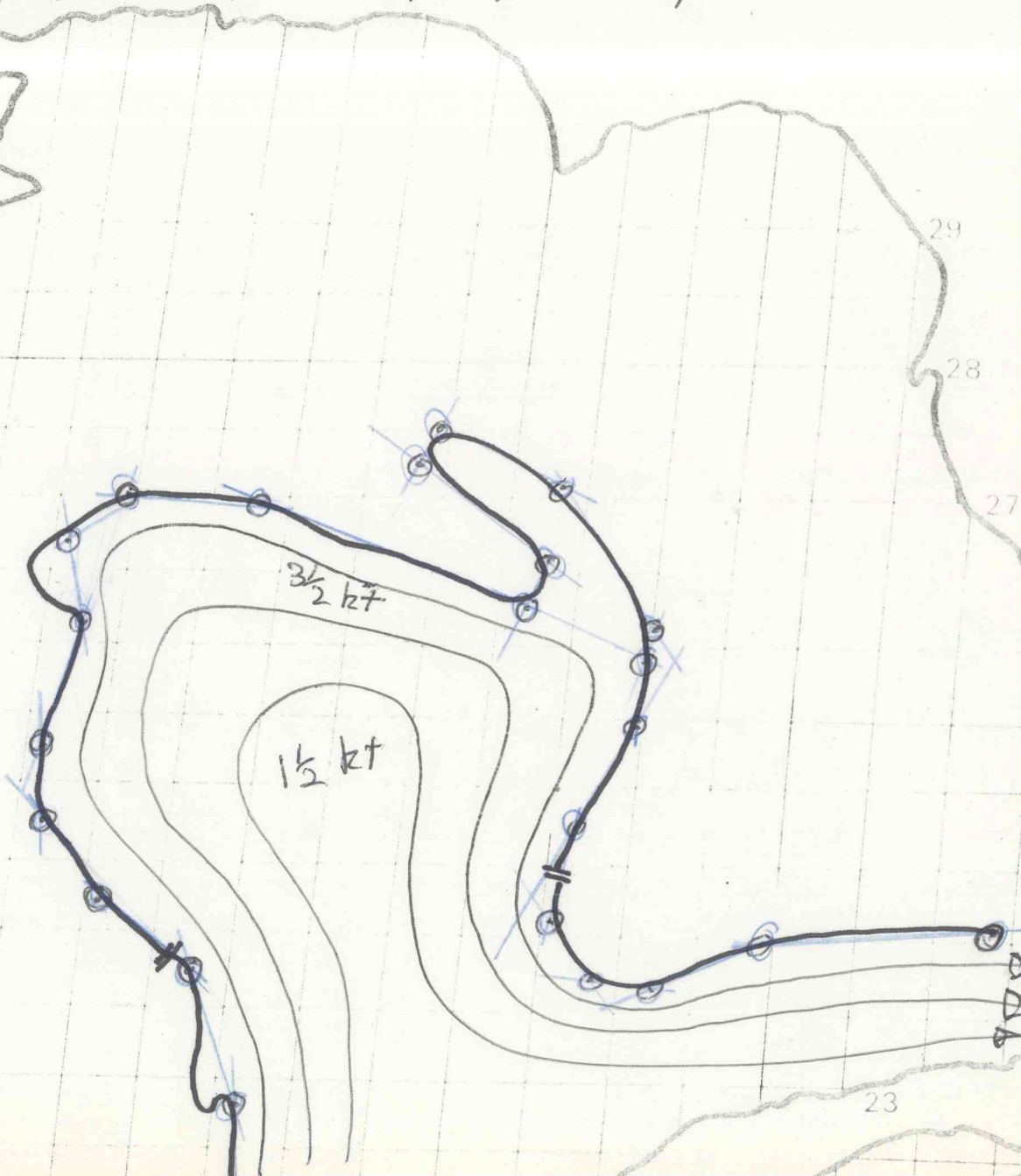
17 JANUARY 1977.

NO SIGNIFICANT CHANGES. LONG WAVES CONTINUE TO PROPAGATE AROUND LOOP. NO SIGN OF COLD EDDY BREAK-OFF ALONG CUBAN COAST. WARMER WATER SEEMS TO BE MOVING SOUTH TO A POSITION CLOSE TO CUBAN COAST.

CODED POINTS GIVE LATITUDE/LONGITUDE ALONG THE COASTWARD EDGE OF THE WARMER WATER.

222868 228868 238872 242879 248884 253884 262883 267884 270881 270872  
263853 259845 255845 243848 241849 237847 237842 240835 241821 \_\_\_\_\_

PATCH OF WARM  
 WATER BOUNDED BY  
265852 278862 275861  
271852 261845



CODED POINTS GIVE LATITUDE/LONGITUDE ALONG THE COASTWARD EDGE OF THE WARMER WATER.

221868 230870 236874 244888 267887 273883 274878 270870 270864 261851  
 251848 242849 237848 236845 240833 240821 //





CODED POINTS GIVE LATITUDE/LONGITUDE ALONG THE COASTWARD EDGE OF THE WARMER WATER.

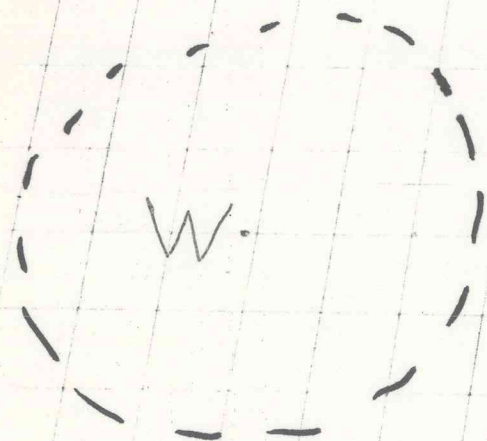
222867 235873 243889 266887 273884 274879 270870 270868 263847 256846  
242849 236852 234851 232846 239839 241825 237817 238815 //



CODED POINTS GIVE LATITUDE/LONGITUDE ALONG THE COASTWARD EDGE OF THE WARMER WATER.

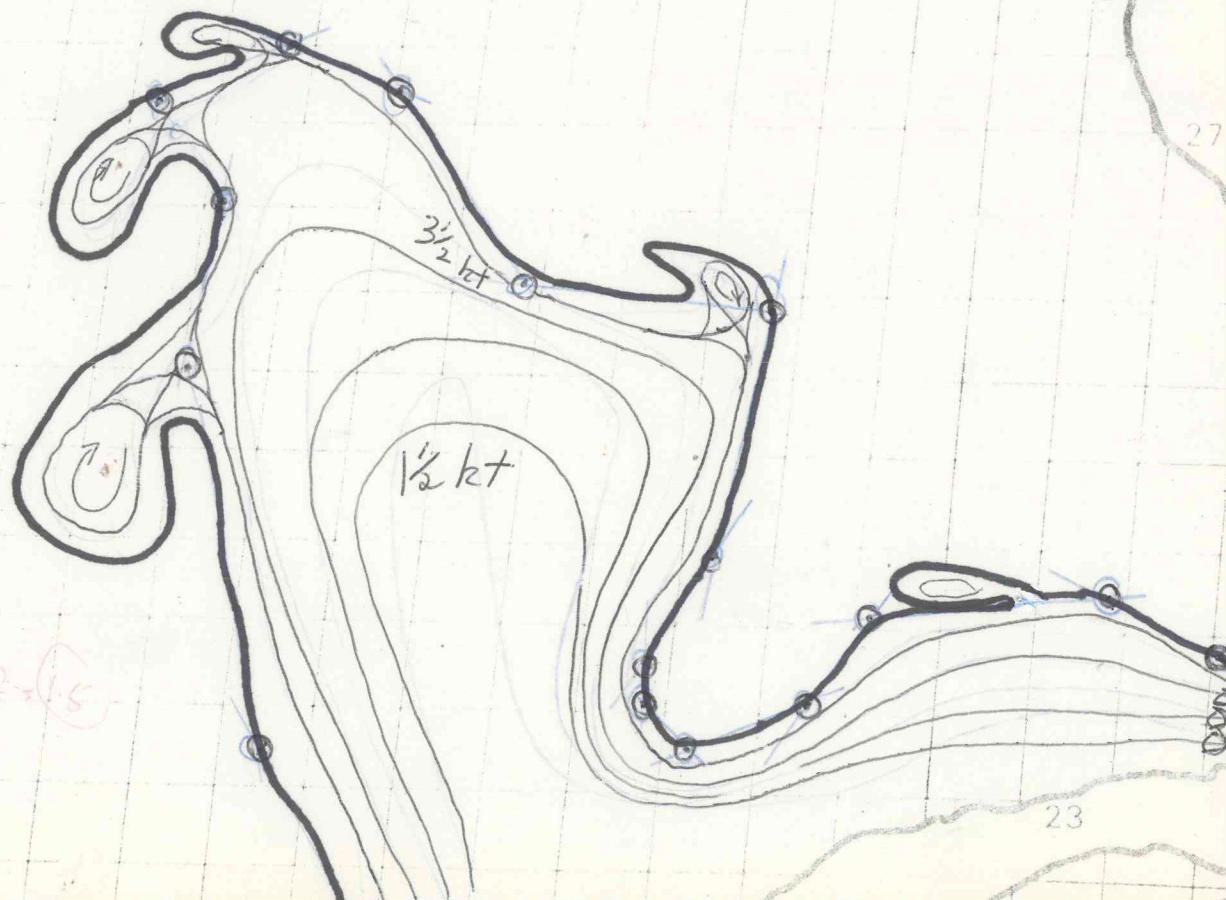
222867 233873 255880 265879 271884 275876 272870 260861 259846 244848  
 238852 235851 233849 236842 240839 242826 239820 238815 //

DETACHED  
 MEANDERS ALONG EDGE OF LOOP  
 ^ CENTERED AT 247883/266886/  
 275887/262851/243835//



3 DEG DIAMETER  
 WARM EDDY CENTERED  
 AT 260921 IS PROBABLY  
 REMAINS OF PREVIOUS  
 LOOP AFTER IT CUT OFF.

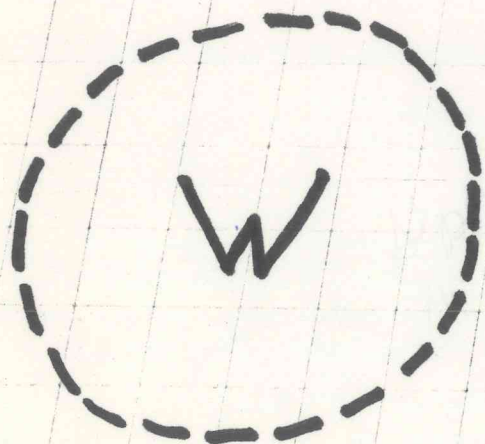
$\frac{60}{48} = 1.25$



CODED POINTS GIVE LATITUDE/LONGITUDE ALONG THE COASTWARD EDGE OF THE WARMER WATER.

222867 233873 255880 265879 272884 275876 272870 262862 259846 243848  
236851 233851 232849 235844 240839 242826 239820 238815 //

DETACHED  
MEANERS ALONG EDGE OF LOOP  
CENTERED AT 247883/266886/  
275887/262851/243835//



3 DEG DIAMETER  
WARM EDDY CENTERED  
AT 260921 IS PROBABLY  
REMAINS OF PREVIOUS  
LOOP AFTER IT CUT OFF.

