Form E-1
Page 1 of 5

On-board Lead Project Scientist Checklist

DATE 10 SEP 81 AIRCRAFT 43 FLT 810910I

A. Participants

| Function | Participant | Function | Participant |
|---|---|---|---|
| Lead Proj. Sci. | WILLOUGHBY | Gust Probe | |
| Cloud Physics | WIGGERT | Omegasonde | |
| AXBT | | Sys Eng | |
| Hot Film | | Data Tech | PATADLS |
| Radar | GRIFFIN/SQUIRE | El Tech | GOLDSTEIN |
| Flt Dir/Met | HAYDU | Other PILOTS | GUNNOE/GENSLINGER |
| | | NAV | NELSON |
| Take Off 101936Z | Location MIA | Landing | Location |

B. Past and Forecast Storm Position

| Date | Time | Latitude | Longitude | MSLP |
|---|---|---|---|---|
| 10 | 0908 | 22°-58' | 74°-29' | ~1004 |
| ↓ | 1230 | 23°-28' | 74°-20' | |
| ↓ | 1456 | 24-01 | 74-30° | 1000 |
| | | | | |
| | | | | |

C. Mission Briefing

FLY MINIMUM OF 2 ⛛ EET 18,21,00Z FIXES AT 5000FT

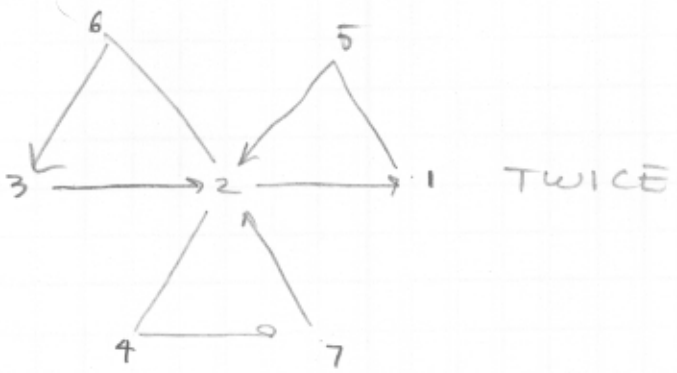
RETURN MIA

D. Equipment Status

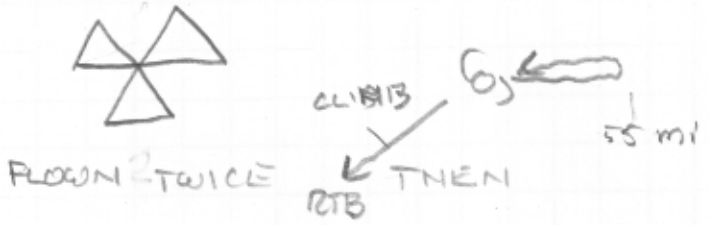
| Equipment | Pre Flt | In Flt | Post Flt | Reports Collected |
|---|---|---|---|---|
| Aircraft | ↑ | ↑ | | |
| Radar | ↑ | ↑ TAIL ↓ | TAIL ↓ | |
| Cloud Physics | ↑ | ↑ | ↑ | |
| Data Sys | ↑ | ↑ | ↑ | |
| Omegasondes | NOT | | | |
| AXBT | NOT | | | |
| Gust Probe | NOT | | | |
| Hot Film | NOT | | | |
| Photography | ↑ | ↑ | ↑ | |
| | | | | |
| | | | | |

REMARKS AZ DRIVE ON TAIL RADAR DOWN
ASDL ↓ EARLY IN FLIGHT
DEWPOINTER BAD, TD HIGH INTERMITTENTLY

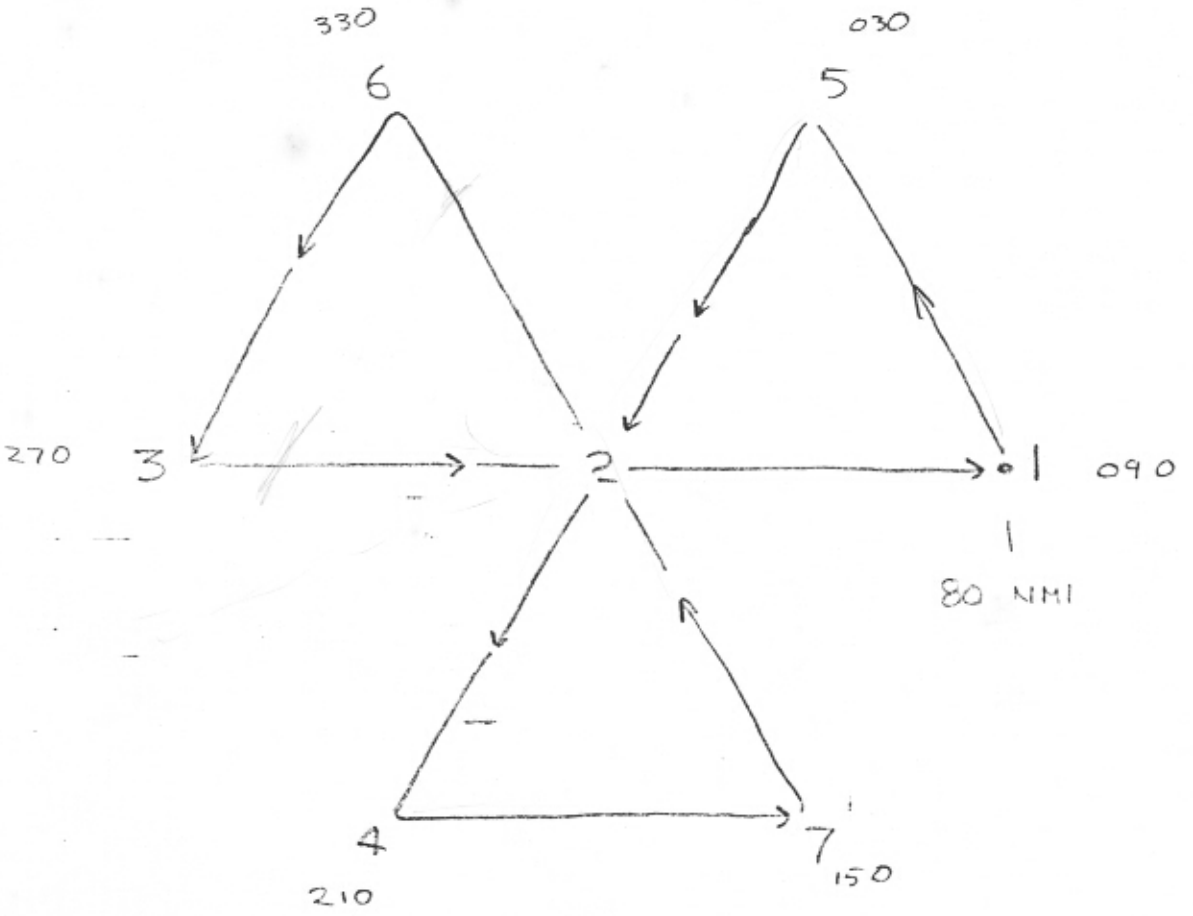
E. Proposed and Actual Flight Patterns




ACTUAL



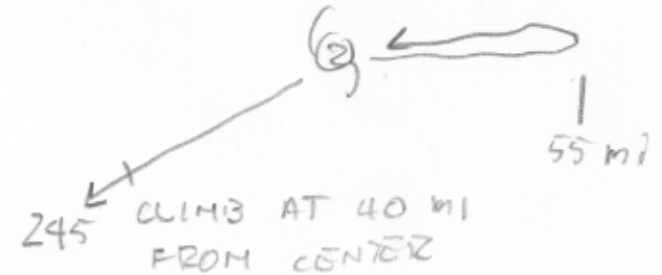
LONG-TERM MONITORING EXP




FOR P-3 REQUIRES 3 HR

FLEW PATTERN TWICE 80 mi. LEGS

THEN



DATE 10 SEP 81 FLIGHT 910910I LPS WILLOUGHBY

18.4/1556 997/996

Lead Project Scientist Event Log

| EVENT | TIME* | POSITION | COMMENTS** |
|---|---|---|---|
| AIRBORNE | 1936 | MIA | |
| BEFORE CAL | 1958 | 25.70<br>79.17 | WINDS 295/3.9<br>HDNG 87.8 |
| CAL | 2002 | 25.72<br>78.94 | WIND 170/1.2<br>HDNG 045 |
| ↓ | 2005 | 25.87<br>78.79 | WIND 182/2.5, 227/2.2<br>HDNG 135 |
| ↓ | 2010 | 25.66<br>78.46 | WIND 212/1.2, 250/2.4<br>HDNG 045 |
| STEADY ON COURSE | 2012 | 25.80<br>78.17 | WINDS 255/2.1 \| WIND LOOKS OK<br>HDNG 091 |
| | 2043 | | ASDL ↓<br>AZIMUTH DRIVE IN TAIL RAD ↓ |
| STORM ON RADAR | 2050 | 25.57<br>75.16 | DIST TO EYE 70 nmi<br>POINT 3 WND 247/6.8 |
| (3) POINT 2 | 2103 | 25.34<br>74.10 | MIN SLP 850/1403 |
| POINT 1 | 2123 | 25.64<br>74.78 | TURN 330<br>HDNG FOR PT 5 |
| POINT 5 | 2139 | | TURN BACK TO 2<br>TRACK 210 |
| POINT 2 | 2155 | 25.79<br>74.09 | TRACK TOWARD PT 4<br>993 MIN SLP |
| POINT 4 | 2216 | 24.67<br>74.75 | TURN FOR PT 7<br>DESEND TO 1500 FOR LASER RUN |
| CLIMB TO 5000 FT | 2229 | | HAD 3 WINDS DURING LASER RUN |
| POINT 7 | 2237 | 24.70<br>73.13 | TURN FOR POINT 2 |
| POINT 2 | 2302 | 25 10<br>74 02 | HEAD FOR 6<br>997 MB MIN SLP |
| POINT 6 | ~2320 | | HEAD FOR 3<br>START 1500' LASER RUN |
| CLIMB FL 50 | 2333 | | |
| POINT 3 | 2338 | 26-40<br>75-39 | HEAD FOR (2) |
| POINT (2) | 23-50 | 26-45<br>73-85 | LIGHTNING IN E EYE WALL<br>995 HDNG FOR 1 |

*Log times of all significant altitude changes, turns, and eye fixes
**New altitude, heading, center position, etc.

DATE 10 SEP 81 FLIGHT 810910 LPS WILLOUGHBY

## Lead Project Scientist Event Log

| EVENT | TIME* | POSITION | COMMENTS** |
|---|---|---|---|
| PT 1 | 110021 | 26.47<br>72.16 | TURN NW FOR POINT 5 |
| PT 5 | 0043 | | TURN SW FOR POINT (2) |
| | 0051 | 27.37<br>73.38 | SECONDARY WIND MAX 35 nm FROM (5) |
| PT (2) | 0102 | 26.73<br>73.76 | MIN SLP 995 HDNG FOR 4 MAX WND 55 KT |
| PT 4 | 0121 | | HDNG FOR 7 |
| PT 7 | 0140 | 25.60<br>72.80 | TURN FOR (2) |
| PT (2) | 0203 | 26.96<br>73.67 | HDNG FOR 6<br>75 KT 995 |
| PT 6 | 0225 | 28.21<br>74.45 | |
| PT 3 | 0244 | | |
| PT 2 | 0303 | 27.23<br>73.50 | HDNG FOR 1<br>994 MIN SLP |
| PT 1 52 nm FROM (5) | 0315 | | TURN BACK TO (2) |
| PT (2) | 0327 | 27.31<br>73.44 | DEPART STORM<br>TRACK OUT 246 AT 5000 |
| START CLIMB | 0337 | 27.03<br>74.18 | |
| BEFORE CAL | 0349 | | 247/8.4 TK 246 |
| TURN TO 289 | 0350 | | WIND 268/8.9 TK 290 |
| TURN TO 200 | 0353 | | WIND 250/6.8 TK 200 |
| TURN TO 290 | 0359 | | WIND 255/8.2 |
| STEADY AFTER CALL ON 242 | 0403 | | WIND 230/3.9 |
| BIMINI | 0440 | 26.08<br>79.16 | INS ERROR<br>23' N, 7' E |
| LAND MIA | 110504 | 26-18<br>80-14 | TERM ERR<br>LAT -14.1 -23.7<br>+14.4 +9.7 |

*Log times of all significant altitude changes, turns, and eye fixes
**New altitude, heading, center position, etc.

## FLIGHT LOG

**Date:** 9/10/81

**Flight Identification:** 810910I

**Aircraft:** RFC 43

**Departed:** 1925Z

**Arrived:** 0504Z

**Purpose:** LONG TERM MONITORING EXPER.

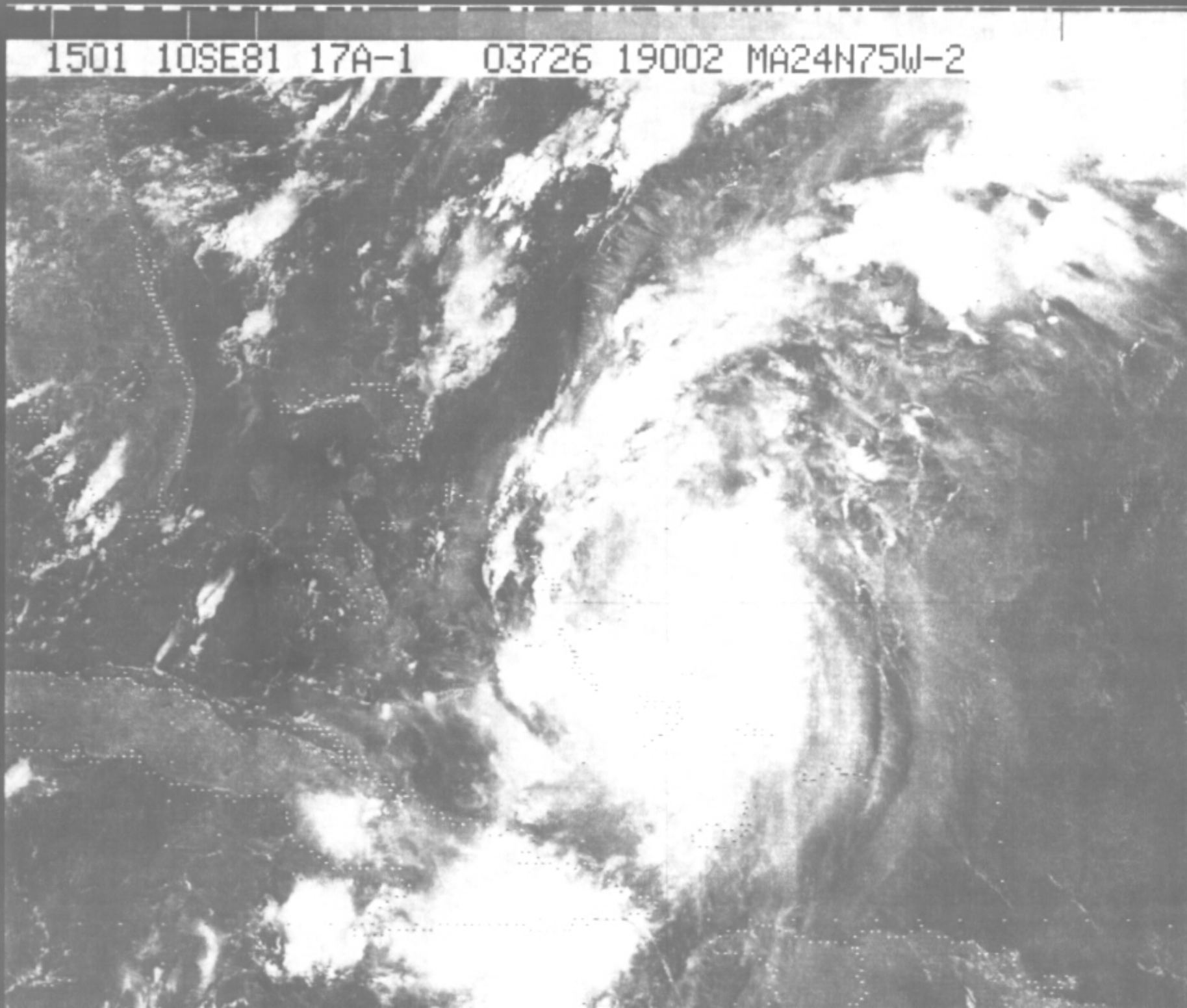
**Pattern:** COMPLETED BASIC PATTERN TWICE

## TAPE LOG

| TAPE TYPE | NUMBER | FROM [DAY/TIME (Z)] | TO [DAY/TIME (Z)] |
|---|---|---|---|
| RFC Standard | 1 | 1926 | 0504 |
| Original | 2 | 2220 | N/A |
| Knollenberg | 9 | 2116 | 0337 |
| OTHER | | | |
| VTR | 2 | 2055 | 0451 |
| RADAR | 2 | 2053 | 0427 |
| ORIGINAL SLOW | 1 | 1925 | 2904 |

## EQUIPMENT STATUS:

| SYSTEM | STATUS / | UP | DOWN | NOT USED | REMARKS |
|---|---|---|---|---|---|
| NAV | INE 1 | X | | | |
| | INE 2 | X | | | |
| | ONE | | | | |
| | DOPL | | | | |
| RADAR | NOSE | X | | | |
| | LF | | X | | |
| | TAIL | X | | | |
| | DATA SYSTEM | X | | | |
| RAMS | DATA SYSTEM | X | | | |
| | TOTAL TEMP. 1 | X | | | |
| | TOTAL TEMP. 2 | X | | | |
| | DEWPOINT | X | | | |
| | ATTACK ANGLE | X | | | |
| | SLIP ANGLE | X | | | |
| | ABS. PRESS. | X | | | |
| | DIFF. PRESS. | X | | | |
| | RADAR ALT. | X | | | |
| | J & W | X | | | |
| PMS | OAP 2DP | X | | | |
| | OAP 2DC | X | | | |
| | FSSP 100 | X | | | |
| | DATA SYSTEM | X | | | |
| IPC | | | X | | |
| FOIL | | | | X | |
| $CO_2$ RADIOMETER | | X | | | |
| MICROWAVE RADIOMETER | | X | | | |
| SFC. RADIOMETER | | X | | | |
| FORMWAR | | X | | | |
| PHOTOGRAPHY | FWD | X | | | |
| | LS | X | | | |
| | RS | X | | | |
| | DWN | X | | | |
| | RADAR | X | | | |
| AXBT | TUBES | | | X | |
| | RECEIVERS | | | X | |
| ODW | | | | X | |
| SEEDER | | | | X | |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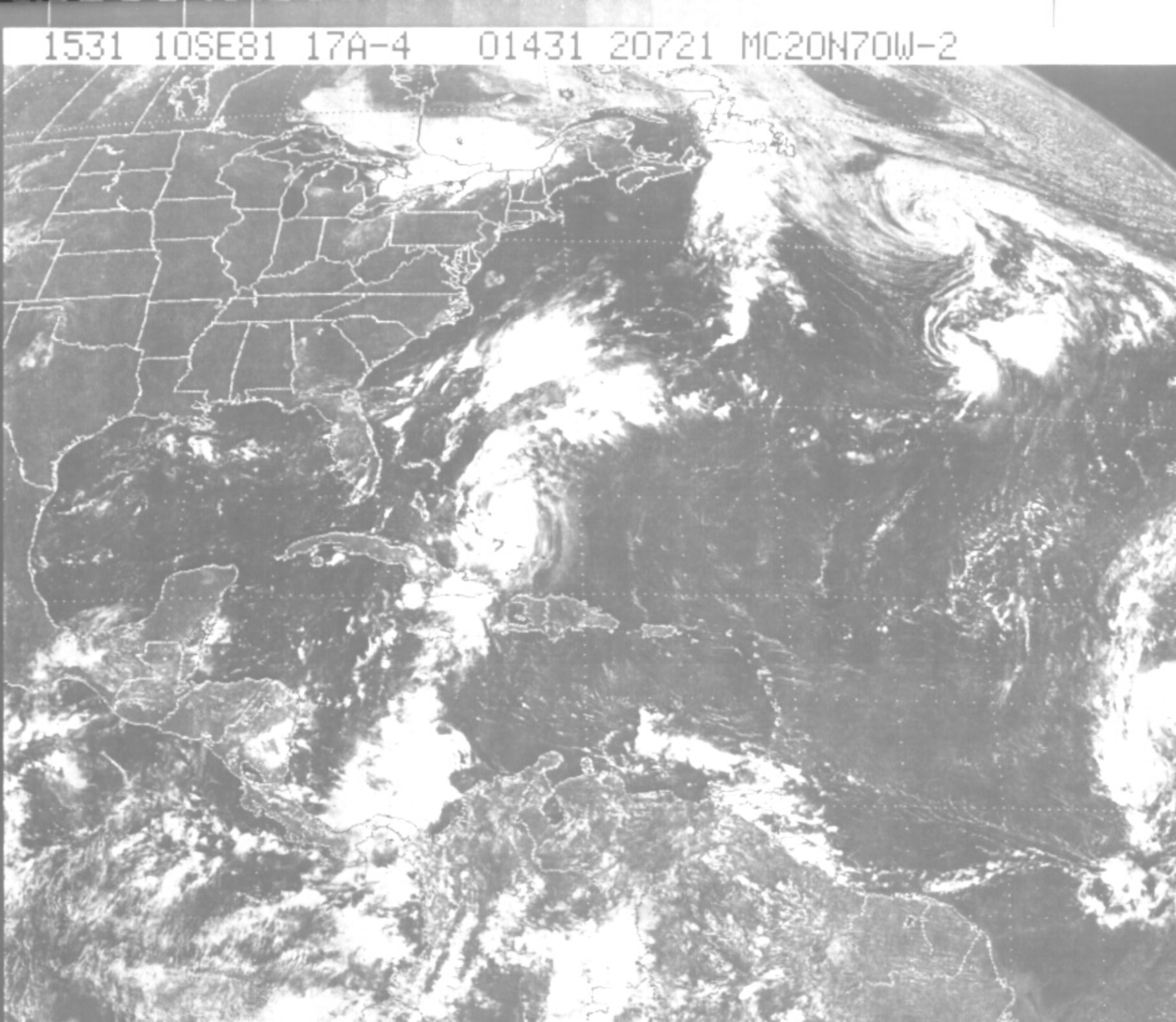
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