

## U.S. Dept. of Commerce / NOAA / Aircraft Operations Center

AOCWFI

|                         |                             |                                              |
|-------------------------|-----------------------------|----------------------------------------------|
| Flt ID: <b>N051020</b>  | From: <b>KMCF</b>           | To: <b>KMCF</b>                              |
| Flt No: <b>06-05</b>    | Blk In: <b>1331Z</b>        | ATA: <b>1323Z</b>                            |
| ETD: <b>0530Z</b>       | Blk Out: <b>0535Z</b>       | ATD: <b>0545Z</b>                            |
| ETE:                    | Blk Time: <b>7:56 (7.9)</b> | Flt Time: <b>7:38 (7.6)</b>                  |
| Sponsor Org: <b>NHC</b> | Program: <b>Hucl. SURV</b>  | Purpose: <b>H. WILMA<br/>IN NW CARIBBEAN</b> |

## AOC Personnel

|                       |                       |
|-----------------------|-----------------------|
| AC: <b>FINKE</b>      | Sys Eng: <b>ROLES</b> |
| CP: <b>FINN</b>       | Data Sys: <b>HILL</b> |
| Nav:                  | Radar:                |
| FE: <del>KEESER</del> | GPS/BT: <b>SMITH</b>  |
| FD: <b>DAMIANO</b>    | Cld Phys:             |
| Avionics:             |                       |

## Participating Scientists / Visitors / AOC

| Name (Last, First)        | Activity on Aircraft | Affiliation           |
|---------------------------|----------------------|-----------------------|
| <b>GOLDENBERG, S</b>      | <b>NAPS</b>          | <b>HRD</b>            |
| <b>PIERCE, W</b>          | <b>OBS</b>           | <b>NOAA CORPS</b>     |
| <del>HEENE, RICHARD</del> | <del>OBS</del>       | <del>WFLA CH 8</del>  |
| <b>HEENE, RICHARD</b>     | <b>OBS (MEDIA)</b>   | <b>MY YOUNG PROD.</b> |
| <b>CHIP OSOWSKI</b>       | <b>OBS MEDIA</b>     | <b>WFLA CH. 8</b>     |
|                           |                      |                       |
|                           |                      |                       |
|                           |                      |                       |

Proposed/Actual Mission Remarks (Recco, Fixes, Storm, PENET, NHOP #)

1014.0

NOAA 9 1024A WILMA

TEAL 27

Had St. Elmos Fire on cockpit windshield at ~ 1048Z  
went between 2 cells; active lgt on left cell.

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AOCWF2

Flt ID: **N051020** Time Off: **0545Z** Time On: **1323Z**

A/C (Take Off) Wx Station (Take Off) A/C (Land) Wx Station (Land)

Pressure **1014.0** **29.95** / **1013.7** **1014.5** **29.97** / **1014.4**

Number Data Disposition / Date / Quality

Flt Lvl Tapes **1**

Radar Tapes

Cloud Physics Tapes

Video Tapes

AXBT

AXCP

AXCTD

Dropsondes **28** **26 good & 2 winds failed at 700mb + 620mb, respectively****27 messages sent**

Video

Forward Left Side Right Side Down Remarks

Time On

Time Off

Rate

Remarks

First OR 0645Z

2142  
8506



NOAA G-IV ERROR SUMMARY  
HURRICANE 2005  
TS WILMA IN NW CARIBBEAN



**Flight ID: N051020**

| <u>Sensor or system</u>   | <u>Number or Name</u> |
|---------------------------|-----------------------|
| INE (for wind derivation) | VEW_PITR, VNS_PITR    |
| Accelerometer             | ACINS_PITR            |
| Temperature Probe         | AT3                   |
| Dew Point Probe           | DPRC                  |
| Static Pressure           | PS2C                  |
| Dynamic Pressure          | QC2C                  |
| Attack Angle              | AKRD1                 |
| Slip Angle                | SSRD2                 |
| Vert. Wind                | PALT                  |
| Constants File            | 49cal041              |
| Project Directory         | /proj/506             |

Local surface observation not current or unavailable.

Notes:

There were no data gaps.

The Total Temperature #2 (TT2) probe was not available for this mission.

Dynamic sideslip pressure #1, DBP1, produced erroneous output beginning at 1133Z and until the aircraft landed.

All other instruments worked optimally during the flight.

|                          | <b>Takeoff</b> | <b>Landing</b> |
|--------------------------|----------------|----------------|
| Aircraft Static Pressure | 1014.0mb       | 1014.5mb       |
| Corrected Tower Pressure | 1013.7mb       | 1014.4mb       |

Flight Director: A. Barry Damiano (813) 828-3310 ext. 3073

05/020N

NO Data Gaps

VEW-PITR, VNS-PITR

TT3-AT3

DPRC

PS2M

QC2M

TAS2

AKR01

SSRDL

DBPI is ~~flaky~~ flaky  
starting at ~~1247~~ until end of flt  
1133Z

0546-1323

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HURRICANE SYNOPTIC SURVEILLANCE MISSION PLAN: WILMA

Prepared by the Hurricane Research Division File: current1.ftk

Aircraft: N49RF      Altitude: FL410-450      Proposed takeoff: 20/0530Z

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## DROP LOCATIONS

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| # | LAT<br>(d m) | LON<br>(d m) | RAD/AZM<br>(nm/dg) | TIME<br>(h:mm) |
|---|--------------|--------------|--------------------|----------------|
|---|--------------|--------------|--------------------|----------------|

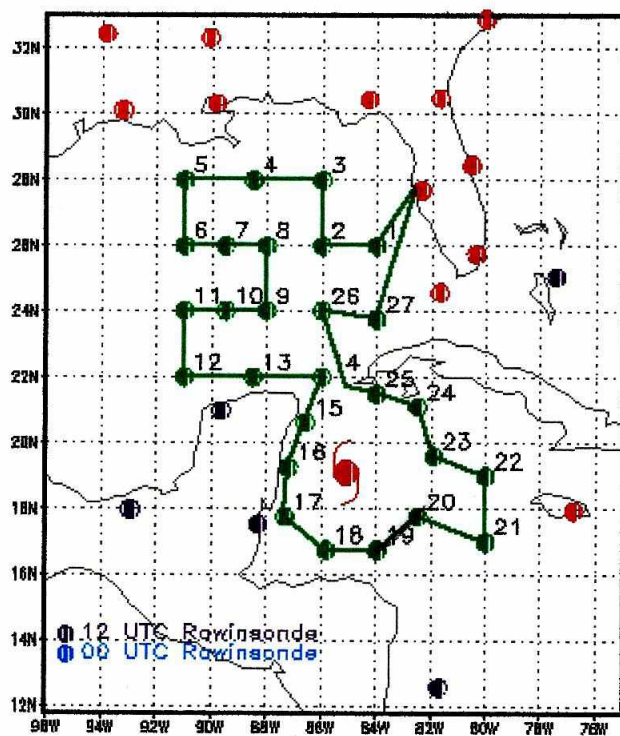
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|               |                  |                  |             |                 |
|---------------|------------------|------------------|-------------|-----------------|
| <del>1</del>  | <del>26 00</del> | <del>84 00</del> | <del></del> | <del>0.33</del> |
| <del>2</del>  | <del>26 00</del> | <del>86 00</del> | <del></del> | <del>0.43</del> |
| <del>3</del>  | <del>28 00</del> | <del>86 00</del> | <del></del> | <del>1.00</del> |
| <del>4</del>  | <del>28 00</del> | <del>88 30</del> | <del></del> | <del>1.18</del> |
| <del>5</del>  | <del>28 00</del> | <del>91 00</del> | <del></del> | <del>1.36</del> |
| <del>6</del>  | <del>26 00</del> | <del>91 00</del> | <del></del> | <del>1.52</del> |
| <del>7</del>  | <del>26 00</del> | <del>89 30</del> | <del></del> | <del>2.00</del> |
| <del>8</del>  | <del>26 00</del> | <del>88 00</del> | <del></del> | <del>2.14</del> |
| <del>9</del>  | <del>24 00</del> | <del>88 00</del> | <del></del> | <del>2.30</del> |
| <del>10</del> | <del>24 00</del> | <del>89 30</del> | <del></del> | <del>2.41</del> |
| <del>11</del> | <del>24 00</del> | <del>91 00</del> | <del></del> | <del>2.53</del> |
| <del>12</del> | <del>22 00</del> | <del>91 00</del> | <del></del> | <del>3.09</del> |
| <del>13</del> | <del>22 00</del> | <del>88 30</del> | <del></del> | <del>3.28</del> |
| <del>14</del> | <del>22 00</del> | <del>86 00</del> | <del></del> | <del>3.41</del> |
| <del>15</del> | <del>20 37</del> | <del>86 36</del> | <del></del> | <del>3.59</del> |
| <del>16</del> | <del>19 15</del> | <del>87 12</del> | <del></del> | <del>4.11</del> |
| <del>17</del> | <del>17 46</del> | <del>87 20</del> | <del></del> | <del>4.23</del> |
| <del>18</del> | <del>16 45</del> | <del>85 50</del> | <del></del> | <del>4.37</del> |
| <del>19</del> | <del>16 45</del> | <del>83 58</del> | <del></del> | <del>4.52</del> |
| <del>20</del> | <del>17 46</del> | <del>82 28</del> | <del></del> | <del>5.06</del> |
| <del>21</del> | <del>17 00</del> | <del>80 00</del> | <del></del> | <del>5.27</del> |
| <del>22</del> | <del>19 00</del> | <del>80 00</del> | <del></del> | <del>5.43</del> |
| <del>23</del> | <del>19 36</del> | <del>81 54</del> | <del></del> | <del>5.50</del> |
| <del>24</del> | <del>21 06</del> | <del>82 30</del> | <del></del> | <del>6.11</del> |
| <del>25</del> | <del>21 30</del> | <del>84 00</del> | <del></del> | <del>6.23</del> |
| <del>26</del> | <del>24 00</del> | <del>86 00</del> | <del></del> | <del>6.52</del> |
| <del>27</del> | <del>23 45</del> | <del>84 00</del> | <del></del> | <del>7.07</del> |

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OSOWSKI, CHIP

011 874-5-5140-7474



GRADS: COLA/IBES

2005-10-19-12:28

# N49RF AVAPS DropSonde Log

Project: Hurricane '05 Flight ID: 051020N Flt Dir: ABD

Mission: Wilma Flight #: 2 Status: Sys 1 ✓ Sys 2 ✓ Launcher S/N: 02

| Drop # | Sonde Serial Number | Chn. # | Time (Zulu) | Press. offset | Winds time | Operator Initials | Comments /Status/<br>Failure Reason | \$ | GOOD<br>✓ |
|--------|---------------------|--------|-------------|---------------|------------|-------------------|-------------------------------------|----|-----------|
| 1      | 002 615 601         | 1      | 0609        | Ø             | 23         | JAS               |                                     | N  | ✓         |
| 2      | 000 715 047         | 2      | 0624        | Ø             | 28         |                   |                                     |    | ✓         |
| 3      | 002 615 535         | 1      | 0641        | Ø             | 45         |                   |                                     |    | ✓         |
| 4      | 002 615 665         | 1      | 0659        | Ø             | 37         |                   |                                     |    | ✓         |
| 5      | 002 615 333         | 1      | 0720        | Ø             | 21         |                   |                                     |    | ✓         |
| 6      | 010 715 179         | 2      | 0736        | -8            | 25         |                   |                                     |    | ✓         |
| 7      | 000 745 617         | 3      | 0745        | Ø             | 35         |                   |                                     |    | ✓         |
| 8      | 002 615 559         | 1      | 0756        | Ø             | 27         |                   |                                     |    | ✓         |
| 9      | 002 648 002         | 2      | 0813        | Ø             | 73         |                   |                                     |    | ✓         |
| 10     | 012 225 059         | 1      | 0824        | Ø             | 86         |                   |                                     |    | ✓         |
| 11     | 012 548 001         | 2      | 0835        | Ø             | 56         |                   |                                     |    | ✓         |
| 12     | 012 225 085         | 1      | 0852        | Ø             | 31         |                   |                                     |    | ✓         |
| 13     | 000 715 352         | 2      | 0910        | Ø             | 61         |                   |                                     |    | ✓         |
| 14     | 000 715 381         | 1      | 0929        | Ø             | 30         |                   | WINDS FAILED @ 725mb                |    | B         |
| 15     | 012 548 020         | 2      | 0940        | Ø             | ✓          |                   | WINDS FAILED @ 600mb                |    | B         |
| 16     | 011 838 038         | 1      | 0952        | 0             | 25         |                   | DROP 16                             |    | ✓         |
| 17     | 053 170 069         | 4      | 0954        | Ø             | Ø          |                   | Rev F DROP 16+                      |    | ✓         |
| 18     | 053 166 113         | 2      | 1004        | +8            | Ø          |                   | Rev F DROP 17                       |    | ✓         |
| 19     | 012 625 005         | 1      | 1019        | Ø             | 19         |                   | DROP 18                             |    | ✓         |
| 20     | 053 170 066         | 2      | 1032        | Ø             | Ø          |                   | Rev F 19                            |    | ✓         |
| 21     | 002 158 079         | 1      | 1046        | Ø             | 20         |                   | 20-                                 |    | ✓         |
| 22     | 012 225 057         | 1      | 1106        | Ø             | 29         |                   | 21                                  |    | ✓         |
| 23     | 002 615 314         | 2      | 1122        | Ø             | 51         |                   | 22                                  |    | ✓         |
| 24     | 012 225 155         | 3      | 1139        | Ø             | 28         |                   | 23                                  |    | ✓         |
| 25     | 043 845 097         | 1      | 1154        | Ø             | 27         |                   | 24                                  |    | ✓         |
| 26     | 002 615 567         | 5      | 1212        | Ø             | 25         |                   | Rev 3.1 SW* 25                      |    | ✓         |
| 27     | 984 728 032         | 6      | 1231        | 2.0           | 29         |                   | RH HTR PROBLEM 26                   |    | ✓         |
| 28     | 984 325 418         | 5      | 1245        | Ø             | 27         |                   | DROP POINT 27                       |    | ✓         |
| 29     |                     |        |             |               |            |                   |                                     |    |           |
| 30     |                     |        |             |               |            |                   |                                     |    |           |
| 31     |                     |        |             |               |            |                   |                                     |    |           |
| 32     |                     |        |             |               |            |                   |                                     |    |           |
| 33     |                     |        |             |               |            |                   |                                     |    |           |

\$ Codes A = AOC N = NHC/NWS H = HRD OW = NESDIS

\* Switched SW TO ALLOW USE OF Rev B sondes  
NHC 26 AOC 2