

NHOP sonde drop format

The official sounding observation data is operationally transmitted in FM 37-IX TEMP DROP coded format as defined by the WMO Manual on Codes, No. 306 as explained in Appendix G "Temp Drop Codes" in the latest version of the [Office of the Federal Co-ordinator for Meteorology's](#) (OFCM) [National Hurricane Operation Plan](#) (NHOP). Below is an abbreviated explanation of the format.

Example

```
Sonde # 991515151 1754 UTC 13 Sep 99
UZNT13 KWBC 131820
XXAA 63183 99256 70775 08057 99007 28448 01027 00064 28047 01028
92752 22419 02525 85484 18448 04532 70127 10258 04029 50585 04159
03530 40757 15371 03029 30968 30371 00526 88999 77999
51515 10167 03230
61616 NOAA9 1708A FLOYD OB 01
62626 SPL 2551N07756W MBL WND 01528=
XXBB 63188 99256 70775 08057 00007 28448 11002 28248 22929 22619
33820 17458 44674 08858 55633 05433 66575 00624 77554 00356 88516
02950 99504 03757 11498 04162 22484 05966 33447 09959 44438 10567
55388 16974 66345 23370 77332 25363 88316 27773 99300 30571
21212 00007 01027 11833 04532 22623 02026 33457 04534 44331 02018
55300 00526
31313 09608 81754
51515 10167 03230
61616 NOAA9 1708A FLOYD OB 01
62626 SPL 2551N07756W MBL WND 01528=
```

Header section

Sonde # 991515151 1754 UTC 13 Sep 99

The first field is sonde identification serial number followed by the time of launch (HHMM format) in Universal Time Code (UTC) and the date (day month year). This is a special HRD header in the transmitted message file for each sonde released, inserted by the Editsonde software. It is a non-standard WMO/NWS format line that is stripped before it is received by the National Weather Service Telecommunication Gateway (NWSTG).

WMO Abbreviated Heading

```
UZNT13 KWBC 131820
TTAAii CCCC YYGggg
```





TT = General code and data type designators

- U -- upper-air data
- Z -- upper-level pressure, temperature, humidity and wind from a sonde released by carrier balloon or aircraft

AA = Geographical area designators

- NT -- North Atlantic basin (N. Atlantic, Caribbean, Gulf of Mexico)
- PN -- North Pacific basin

ii = Product index and distribution designator

<p>Links of Interest</p> <ul style="list-style-type: none"> • Hurricane Field Program • Current Hurricane Data • Hurricane FAQ • HRD Projects • HRD Calendar • HRD Blog • External Links
<p>AOML Tools & Resources</p> <ul style="list-style-type: none"> • AOML Home • Contact Information • Search for Staff • Search Publications • AOML Newsletter • AOML Weather
<p>Employee Tools</p> <ul style="list-style-type: none"> • Check Email
<p>Stay Connected</p> <p>     </p>

- 13 -- index for dropwindsonde product (int'l distribution)

CCCC = Processing center identifier

- KWBC, which stands for the NWSTG

YY = Day of month message transmitted

GG = Hour message transmitted

gg = Minute message transmitted

Section A

XXAA 63183

MMmm YGGId

MMmm = Indicator for drop report, section A

YY = Day of the month, +50 when wind data is in knots

GG = Actual time of obs, nearest whole hour

Id = Highest mandatory level for which wind is available

- (7 = 700 hPa 5 = 500 hPa etc.)

99256 70775 08057

99LLL QLLLL MMUO

99 = Indicator of position block

LLL = Latitude in tenths of a degree

Q = quadrant of globe.

LLLL = Longitude in tenths of a degree

MMM = Marsden square number

U = Units digit in reported latitude

O = Units digit in reported longitude

99007 28448 01027

99PPP TTTDD dffff

99 = Indicator of surface data block

PPP = Pressure at surface in whole millibars

TTT = Temperature in tenths of °C

DD = Dew point depression in tenths °C

dd = wind direction nearest 5°

fff = wind speed in knots

00064 28047 01028

PPhhh TTTDD dffff

PP = Pressure of standard isobaric surface

hhh = height of standard pressure level

TTT = Temperature in tenths of °C

DD = Dew point depression in tenths °C

dd = wind direction nearest 5°

fff = wind speed in knots

88999 = Indicator tropopause not observed

77999 = Indicator maximum wind not observed

21212 = Data at significant levels wrt wind, as above

31313 09608 81754

31313 0rrss 8GGgg

31313 = Data on sounding system
rr = sonde system : 96 - dropsonde
ss = tracking system : 08 - satellite navigation
8 = Indicator for time of observation
GG = Actual time of launch in whole hours (UTC)
gg = Actual time of launch in minutes (UTC)

51515 10167 03230

51515 10167 0PPpp

51515 = Additional data in regional code
10167 = Temperature data doubtful between pressure levels
PP = Bottom pressure level in tens of hPa
pp = Top pressure level in tens of hPa

61616 NOAA9 1708A FLOYD OB 01

61616 AAAAA TTTTB SSSSS 00###

61616 = Mission information indicator
AAAAA = Aircraft designation (NOAA 49)
TTTT = Task number
B = Basin (A = Atlantic)
SSSSS = Storm or project name
00### = Obs number for this flight

62626 SPL 2551N07756W MBL WND 01528=

62626 SPL LLLLNO0000W MBL WND ddfff

62626 = Indicator of Remarks block
SPL = Splash location
LLLLN = Latitude N
OOOOOW = Longitude W
MBL WND = Mean Boundary Layer Wind
dd = wind direction to nearest 5°
fff = wind speed in knots

Section B

XXBB 63188

MMmm YYGG/

MMmm = Indicator for drop report, section B
YY = Day of the month, +50 when wind is in knots
GG = Actual time of obs, nearest whole hour
/ = Filler number

22484 05966

LLPPP TTTDD

LL = Level number
PPP = Pressure of level
TTT = Temperature in tenths °
DD = Dew point depression in tenths °

[Return](#) to format page.

