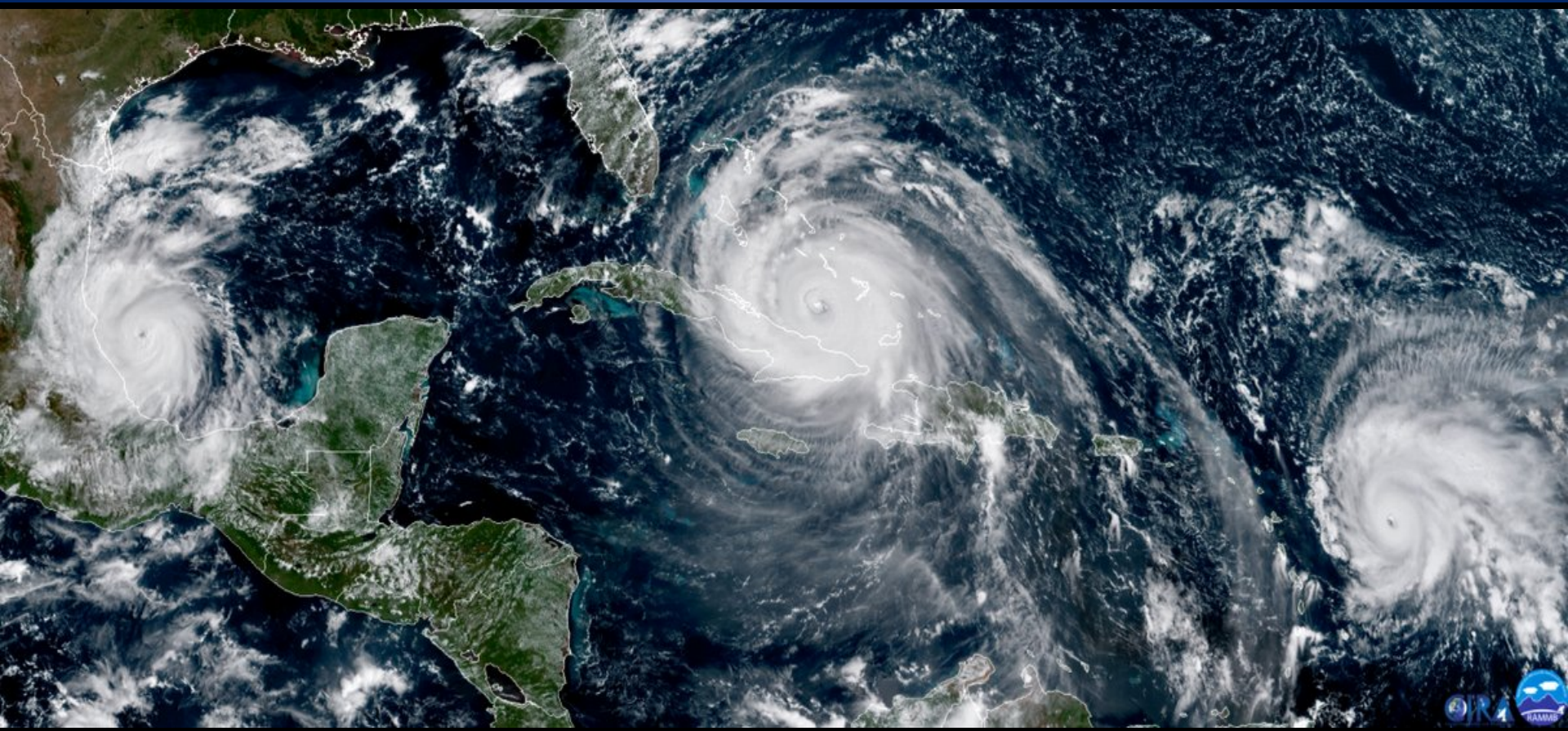




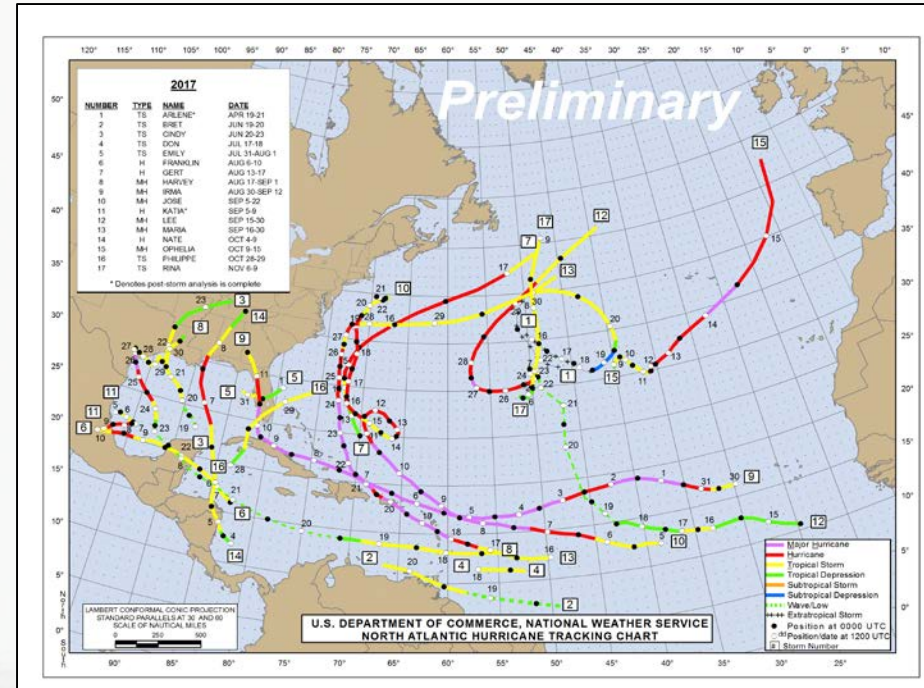
New reconnaissance vortex data message for 2018



Eric Blake, Hurricane Specialist
Interdepartmental Hurricane Conference 2018
Thanks to whole VDM team

Why Change the Vortex Message?

- Last leg leaving a hurricane notorious for finding the maximum winds
- Yet, no SFMR or outbound flight-level winds in message unless added in remarks
- Can't easily parse a free-form section, so must be manually entered
- Also center dropsonde wind needed for pressure estimates, only in remarks
- Standardized format needed to make the messages easily parsable



Recon Vortex Message 2018 Changes

OLD

```
URNT12 KNHC 241133
VORTEX DATA MESSAGE      AL162016
A. 24/11:12:50Z
B. 10 deg 58 min N
   082 deg 46 min W
C. 700 mb 2927 m
D. 90 kt
E. 144 deg 5 nm
F. 253 deg 78 kt
G. 158 deg 8 nm
H. 977 mb
I. 10 C / 3042 m
J. 18 C / 3045 m
K. NA / NA
L. CLOSED
M. C20
N. 12345 / 7
O. 0.02 / 1 nm
P. AF301 0616A OTTO          OB 13
MAX OUTBOUND AND MAX FL WIND 108 KT 349 / 14
NM 11:17:00Z
CNTR DROPSONDE SFC WIND 210 / 11 KT
```

NEW

```
URNT12 KNHC 241133
VORTEX DATA MESSAGE      AL162016
A. 24/11:12:50Z
B. 10.97 deg N 082.77 deg W
C. 700 mb 2927 m
D. 977 mb
E. 210 deg 11 kt
F. CLOSED
G. C20
H. 90 kt
I. 144 deg 5 nm 11:07:00Z
J. 253 deg 78 kt
K. 158 deg 8 nm 11:07:30Z
L. 95 kt
M. 314 deg 5 nm 11:17:00Z
N. 033 deg 108 kt
O. 349 deg 14 nm 11:17:30Z
P. 10 C / 3042 m
Q. 18 C / 3045 m
R. NA / NA
S. 12345 / 7
T. 0.02 / 1 nm
U. AF301 0616A OTTO OB 13
MAX FL WIND 108 KT 349 / 14 NM 11:17:00Z
```

- **New formal entry for outbound wind maxima (Items L-O)**
- **Latitude and longitude now given in decimal degrees (Item B)**
- **New data block for TC center attributes.**
- **Includes observation times for max wind data.**

VDM Changes for 2018

URNT12 KNHC 241133

VORTEX DATA MESSAGE AL162016

A. 24/11:12:50Z

B. 10.97 deg N 082.77 deg W

C. 700 mb 2927 m

D. 977 mb

E. 210 deg 11 kt

F. CLOSED

G. C20

H. 90 kt

I. 144 deg 5 nm 11:07:00Z

J. 253 deg 78 kt

K. 158 deg 8 nm 11:07:30Z

L. 95 kt

M. 314 deg 5 nm 11:17:00Z

N. 033 deg 108 kt

O. 349 deg 14 nm 11:17:30Z

P. 10 C / 3042 m

Q. 18 C / 3045 m

R. NA / NA

S. 12345 / 7

T. 0.02 / 1 nm

U. AF301 0616A OTTO OB 13

MAX FL WIND 108 KT 349 / 14 NM 11:17:00Z

A. Date and time of fix

B. Lat/Lon of center position

C. Minimum height at standard pressure level

D. Minimum sea-level pressure

E. Surface wind from center dropwindsonde

F. Eye characteristic

G. Eye shape/orientation/diameter

H. Maximum inbound observed surface wind

I. Bearing, range, and time of (H).

J. Maximum inbound observed FL wind

K. Bearing, range, and time of (J).

L. Maximum outbound observed surface wind

M. Bearing, range, and time of (L).

N. Maximum outbound observed FL wind.

O. Bearing, range, and time of (N).

P. Max FL T/PA observed outside of eye.

Q. Max FL T/PA observed inside the eye.

R. TD/SST observed inside the eye.

S. Fix determined by...

T. Fix accuracy (navigational, meteorological)

U. AC ID, mission ID, storm name, ob number

Remarks, incl max FL wind during

Center group, inbound group, outbound group, temperature group, fix statistics group

Questions/Comments?

