WMO Headings for
Probabilistic Storm Surge (P-Surge) Products
As of 03/08/2024

WMO headings have the format of T1T2A1A2ii CCCC

1. The originating center IDs (CCCC) and T1 for P-Surge products are:
   KWEV Y = MDL's P-Surge 625m CONUS primary run
   KWEV Z = MDL's P-Surge 625m CONUS secondary run
   KWEW Z = MDL's P-Surge 625m Puerto Rico/USVI run
   KWES Z = MDL's P-Surge 312.5m Hawaii run

2. The T2 indicates the reference level of the forecasts and the product type:
   A = Probability of exceeding X feet (Above Datum) – Cumulative (0-102 hours)
   B = Probability of exceeding X feet (Above Datum) – Incremental (1 hourly)
   C = Probability of exceeding X feet (Above Ground Level) – Cumulative (6 hourly)
   D = Probability of exceeding X feet (Above Ground Level) – Incremental (6 hourly)

   E = Height (Above Datum) exceeded by X% of storms – Cumulative (0-78; 0-102 hours)
   F = Height (Above Datum) exceeded by X% of storms – Incremental (1 hourly)
   G = Height (Above Ground Level) exceeded by X% of storms – Cumulative (6 hourly)
   H = Height (Above Ground Level) exceeded by X% of storms – Incremental (6 hourly)

3. The A1 indicates probability of exceedance, percentile level, or ensemble value:

A =	Probability of Surge > 0 ft	10% Exceedance	Ensemble Maximum
B =	Probability of Surge > 1 ft	20% Exceedance	Ensemble Mean
C =	Probability of Surge > 2 ft	30% Exceedance	Ensemble Minimum
D =	Probability of Surge > 3 ft	40% Exceedance	
E =	Probability of Surge > 4 ft	50% Exceedance	
F =	Probability of Surge > 5 ft	60% Exceedance	
G =	Probability of Surge > 6 ft	70% Exceedance	
H =	Probability of Surge > 7 ft	80% Exceedance	
I =	Probability of Surge > 8 ft	90% Exceedance	
J =	Probability of Surge > 9 ft	5% Exceedance	
K =	Probability of Surge > 10 ft		
L =	Probability of Surge > 11 ft		
M =	Probability of Surge > 12 ft		
N =	Probability of Surge > 13 ft		
O =	Probability of Surge > 14 ft		
P =	Probability of Surge > 15 ft		
Q =	Probability of Surge > 16 ft		
R =	Probability of Surge > 17 ft		
S =	Probability of Surge > 18 ft		
T =	Probability of Surge > 19 ft		
U =	Probability of Surge > 20 ft		

V =	Probability of Surge > 21 ft		
W =	Probability of Surge > 22 ft		
X =	Probability of Surge > 23 ft		
Y =	Probability of Surge > 24 ft		
Z =	Probability of Surge > 25 ft		

Note: Shaded is for possible future use.

4. A2 indicates the valid time designator:

A = Day 0	E = Day 4	I = Day 8	M = Day 12	Q = Day 16
B = Day 1	F = Day 5	J = Day 9	N = Day 13	R = Day 17
C = Day 2	G = Day 6	K = Day 10	O = Day 14	
D = Day 3	H = Day 7	L = Day 11	P = Day 15	

Note: Shaded is for possible future use.

5. The ii field indicates the hour of the day:

24 = hour 00	12 = hour 12
01 = hour 01	13 = hour 13
02 = hour 02	14 = hour 14
03 = hour 03	15 = hour 15
04 = hour 04	16 = hour 16
05 = hour 05	17 = hour 17
06 = hour 06	18 = hour 18
07 = hour 07	19 = hour 19
08 = hour 08	20 = hour 20
09 = hour 09	21 = hour 21
10 = hour 10	22 = hour 22
11 = hour 11	23 = hour 23

Note:
A2ii = A21 indicates a valid time of 21z on Day 0 (not Day 1),
A2ii = B21 indicates a valid time of 21z on Day 1 (not Day 2),
A2ii = C21 indicates a valid time of 21z on Day 2 (not Day 3), and so on.

- The 18Z cycle, released at 21Z, starts Day 0 21Z (A21) and the first 6-hr product ends (i.e., has a valid time) Day 1 03Z (B03)
- The 00Z cycle, released at 03Z, starts Day 1 03Z (B03) and the first 6-hr product ends (i.e., has a valid time) Day 1 09Z (B09)
- The 06Z cycle, released at 09Z, starts Day 1 09Z (B09) and the first 6-hr product ends (i.e., has a valid time) Day 1 15Z (B15)
- The 12Z cycle, released at 15Z, starts Day 1 15Z (B15) and the first 6-hr product ends (i.e., has a valid time) Day 1 21Z (B21)