



VTEC Primer

Valid Time Event Code

**Your Guide to Interpreting
VTEC**

Definition of a VTEC Event

- An event is a specific combination of phenomenon (e.g., Heavy Snow, Tornado, Wind) and level of significance (e.g., Watch, Warning, or Advisory).

- Common examples of events include:

	Phenomenon	Level of Significance
Heavy Snow Warning	HS	W
Winter Storm Warning	WS	W
Tornado Watch	TO	A
Wind Advisory	WI	Y

- Each event given an Event Tracking Number (ETN), a four-digit number which stays with the event through its lifetime - from first issuance until upgrade, downgrade, cancellation or expiration.

VTEC Explained

P-VTEC String: /k.aaa.cccc.pp.s.####.yymmddThhnnZ_B-yymmddThhnnZ_E/

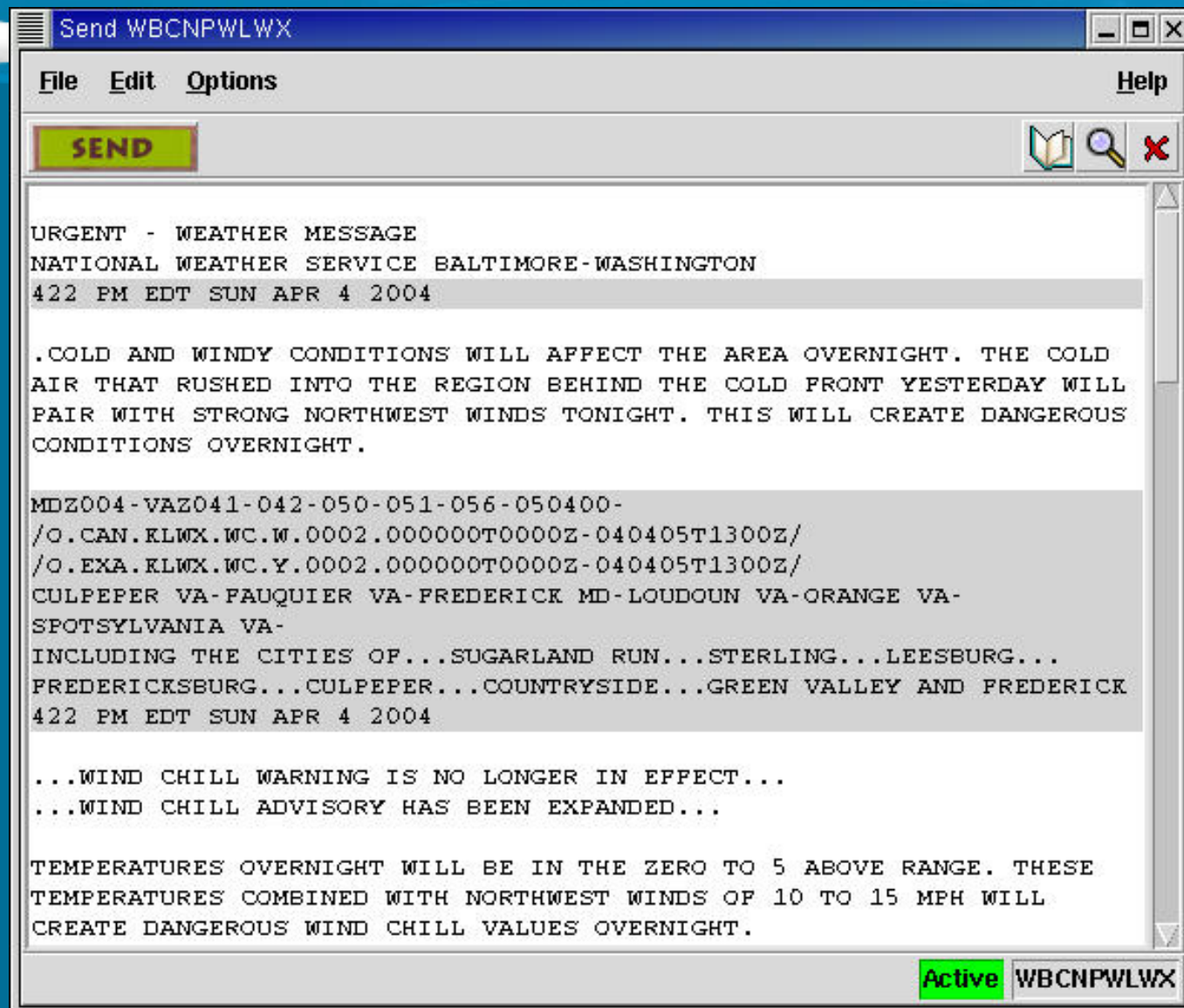
P-VTEC String	<u>Event Group</u>	<u>Date/Time Group</u>
	k - Product Class aaa - Action cccc - Office ID pp - Phenomena s - Significance #### - Event Tracking Number (ETN)	yymmddThhnnZ _B - Event Beginning Date/Time yymmddThhnnZ _E - Event Ending Date/Time yy - year mm - month dd - day T - fixed time indicator

Product class (k)	O Operational product T Test product	E Experimental product X Experimental VTEC in Operational product	Phenomena (pp)	BZ Blizzard WS Winter Storm WW Winter Weather SN Snow HS Heavy Snow LE Lake Effect Snow LB Lake Effect Snow & Blowing Snow BS Blowing/Drifting Snow SB Snow & Blowing Snow IP Sleet HP Heavy Sleet ZR Freezing Rain IS Ice Storm FZ Freeze ZF Freezing Fog FR Frost WC Wind Chill EC Extreme Cold	W Wind HW High Wind LW Lake Wind FG Dense Fog SM Dense Smoke EH Excessive Heat DU Blowing Dust DS Dust Storm FL Flood FF Flash Flood SV Severe Thunderstorm TO Tomado FW Fire Weather (RFW, FWW) RH Radiological Hazard VD Volcano AF Volcanic Ashfall AS Air Stagnation	AV Avalanche TS Tsunami MA Marine SC Small Craft GL Gale SR Storm HF Hurricane Force Wind TR Tropical Storm HU Hurricane TY Typhoon TI Inland Tropical Storm Wind HI Inland Hurricane Wind LS Lakeshore Flood CF Coastal Flood UP Ice Accretion LO Low Water SU High Surf
Actions (aaa)	NEW New event CON Event continued EXT Event extended (time) EXA Event extended (area) EXB Event extended (both time and area)	UPG Event upgraded CAN Event cancelled EXP Event expiring COR Correction ROU Routine				
Significance (s)	W Warning A Watch	Y Advisory S Statement				

NWS products with VTEC

- WSWBOU – winter storm warning product
- NPWBOU – Non precipitation warning product
- RFWBOU – fire weather warning product
- TORBOU – tornado warning
- SVRBOU – severe thunderstorm warning
- SVSBOU – severe weather statement
- WCNBOU – watch county notification for tornado and severe thunderstorm watches.
- FFABOU – flood watches
- FLWBOU – river flood warnings
- FLSBOU – flood statements

VTEC Examples



The screenshot shows a window titled "Send WBCNPWLWX" with a menu bar (File, Edit, Options, Help) and a toolbar with a "SEND" button and icons for a book, magnifying glass, and close. The main text area contains a weather message:

URGENT - WEATHER MESSAGE
NATIONAL WEATHER SERVICE BALTIMORE-WASHINGTON
422 PM EDT SUN APR 4 2004

.COLD AND WINDY CONDITIONS WILL AFFECT THE AREA OVERNIGHT. THE COLD AIR THAT RUSHED INTO THE REGION BEHIND THE COLD FRONT YESTERDAY WILL PAIR WITH STRONG NORTHWEST WINDS TONIGHT. THIS WILL CREATE DANGEROUS CONDITIONS OVERNIGHT.

MDZ004-VAZ041-042-050-051-056-050400-
/O.CAN.KLWX.WC.W.0002.000000T0000Z-040405T1300Z/
/O.EXA.KLWX.WC.Y.0002.000000T0000Z-040405T1300Z/
CULPEPER VA-FAUQUIER VA-FREDERICK MD-LOUDOUN VA-ORANGE VA-
SPOTSYLVANIA VA-
INCLUDING THE CITIES OF...SUGARLAND RUN...STERLING...LEESBURG...
FREDERICKSBURG...CULPEPER...COUNTRYSIDE...GREEN VALLEY AND FREDERICK
422 PM EDT SUN APR 4 2004

...WIND CHILL WARNING IS NO LONGER IN EFFECT...
...WIND CHILL ADVISORY HAS BEEN EXPANDED...

TEMPERATURES OVERNIGHT WILL BE IN THE ZERO TO 5 ABOVE RANGE. THESE TEMPERATURES COMBINED WITH NORTHWEST WINDS OF 10 TO 15 MPH WILL CREATE DANGEROUS WIND CHILL VALUES OVERNIGHT.

Active WBCNPWLWX

New Hazard

```
MAZ001-NYZ058>061-190117-  
/O.NEW.KALY.WW.Y.0023.040519T1600Z-040520T0300Z/  
EASTERN COLUMBIA NY-EASTERN GREENE NY-NORTHERN BERKSHIRE MA-  
WESTERN COLUMBIA NY-WESTERN GREENE NY-  
INCLUDING THE CITIES OF...HUDSON...NORTH ADAMS AND PITTSFIELD  
1029 AM EDT TUE MAY 18 2004
```

```
...WINTER WEATHER ADVISORY IN EFFECT FROM 12 PM WEDNESDAY TO 11 PM  
EDT WEDNESDAY...
```

O – Operational VTEC

NEW – New hazard (first issuance)

KALY – Albany, NY WFO

WW – Winter Weather

Y – Advisory

0023 – 23rd Winter Weather Advisory issued this year

040519T1600Z – Hazard begins at 16Z on 5/19/04

040520T0300Z – Hazard ends at 03Z on 5/20/04

Continuing Hazard(s)

```
NYZ032-033-042-192200-  
/O.CON.KALY.ZF.Y.0002.000000T0000Z-040518T1930Z/  
/O.CON.KALY.HW.A.0004.040519T1600Z-040520T1000Z/  
HAMILTON NY-NORTHERN HERKIMER NY-NORTHERN WARREN NY-  
1002 AM EDT TUE MAY 18 2004
```

...FREEZING FOG ADVISORY REMAINS IN EFFECT UNTIL 3:30 PM EDT THIS AFTERNOON...

...HIGH WIND WATCH REMAINS IN EFFECT FROM WEDNESDAY AFTERNOON TO THURSDAY MORNING...

O – Operational VTEC

CON – Continued hazard (followup)

KALY – Albany, NY WFO

ZF – Freezing Fog

Y – Advisory

0002 – 2nd Fz. fog adv.

000000T0000Z – Hazard already in effect

040518T1930Z - Hazard ends at 1930Z on 5/18/04

040519T1600Z – Hazard begins at 16Z on 5/19/04

040520T1000Z – Hazard ends at 10Z on 5/20/04

HW – High Wind

A - Watch

0004 – 4th High wind watch

Cancelled/Cleared Hazard

```
NYZ079-081-272316-  
/T.CAN.KOKX.IS.W.0005.000000T0000Z-040728T1013Z/  
NORTHEAST SUFFOLK NY-SOUTHEAST SUFFOLK NY-  
INCLUDING THE CITIES OF...CENTER MORICHES...EAST SHOREHAM...  
HAMPTON BAYS...MANORVILLE...MASTIC...MASTIC BEACH...RIDGE...  
RIVERHEAD AND WADING RIVER  
617 PM EDT TUE JUL 27 2004
```

```
...TEST ICE STORM WARNING IS CANCELLED...
```

T – Test product

CAN – Cancelled hazard

KOKX – Upton, NY WFO

IS – Ice Storm

W – Warning

0005 – 5th Ice Storm Warning issued this year

000000T0000Z – Hazard ongoing

040728T1013Z – Hazard originally ended at 1013Z on 7/28/04

Upgraded Hazard

```
MDZ002-003-VAZ021-025>029-036>038-WVZ048>052-054-055-030456-  
/O.UPG.KLWX.FW.A.0004.000000T0000Z-040404T0500Z/  
/O.NEW.KLWX.FW.W.0003.040403T1700Z-040404T0500Z/  
ALBEMARLE VA-ALLEGANY MD-AUGUSTA VA-BERKELEY WV-FREDERICK VA-  
GRANT WV-GREENE VA-HAMPSHIRE WV-HARDY WV-HIGHLAND VA-MINERAL WV-  
MORGAN WV-NELSON VA-PAGE VA-PENDLETON WV-ROCKINGHAM VA-SHENANDOAH VA-  
WASHINGTON MD-  
INCLUDING THE CITIES OF...ROMNEY...PETERSBURG...MOOREFIELD...  
MARTINSBURG...KEYSER...WINCHESTER...WAYNESBORO...  
UNIVERSITY HEIGHTS...STAUNTON...HARRISONBURG...CHARLOTTESVILLE...  
HAGERSTOWN AND CUMBERLAND  
558 PM EST PRI APR 2 2004
```

```
...RED FLAG WARNING IN EFFECT FROM 12 PM SATURDAY TO 12 AM EST  
SUNDAY...
```

O – Operational VTEC

UPG – Upgraded hazard

KALY – Albany, NY WFO

FW – Fire Weather/Red Flag

A – Watch

0004 – 4th Fire Wx Watch

000000T0000Z – Hazard already in effect

040404T0500Z – Hazard would have ended at 05Z on 4/4/04

040403T1700Z – Hazard begins at 17Z on 4/3/04

040404T0500Z – Hazard ends at 05Z on 4/4/04

NEW – New Hazard

W - Warning

0003 – 3rd Red Flag Warning

Downgraded/Replaced Hazard

```
CTZ001-NYZ063>066-190117-  
/O.CAN.KALY.SN.Y.0011.040519T1600Z-040520T0300Z/  
/O.NEW.KALY.WW.Y.0023.040519T1600Z-040520T0300Z/  
EASTERN DUTCHESS NY-EASTERN ULSTER NY-NORTHERN LITCHFIELD CT-  
WESTERN DUTCHESS NY-WESTERN ULSTER NY-  
INCLUDING THE CITIES OF...ARLINGTON...BEACON...KINGSTON...  
MYERS CORNER...NEW PALTZ...POUGHKEEPSIE AND TORRINGTON  
1029 AM EDT TUE MAY 18 2004
```

```
...SNOW ADVISORY IS NO LONGER IN EFFECT...  
...WINTER WEATHER ADVISORY IN EFFECT FROM 12 PM WEDNESDAY TO 11 PM  
EDT WEDNESDAY...
```

O – Operational VTEC

CAN – Cancelled

KALY – Albany, NY WFO

SN – Snow

Y – Advisory

0011 – 11th Snow Adv. **0023** – 23rd Winter Wx Adv.

040519T1600Z – Hazard begins at 16Z on 5/19/04

040520T0300Z – Hazard ends at 03Z on 5/20/04

NEW – New hazard (1st issuance)

WW – Winter weather

Expiring Hazard

VAC003-047-079-113-271634-

/X.EXP.KLWX.SV.W.0056.000000T0000Z-040727T1615Z/

...THE SEVERE THUNDERSTORM WARNING FOR SOUTHWESTERN CULPEPER...
MADISON...GREENE AND NORTH CENTRAL ALBEMARLE COUNTIES EXPIRES AT 1215
PM EDT...

X – Experimental VTEC in an Operational product

EXP – Expiring hazard (last issuance of this hazard)

KLWX – Sterling, VA WFO

SV – Severe Thunderstorm

W – Warning

0056 – 56th Severe thunderstorm warning this year

000000T0000Z – Hazard ongoing

040727T1615Z – Hazard ends at 1615Z on 7/27/04

Corrected Hazard

```
NYZ077>081-140033-  
/O.COR.KOKX.BZ.A.0010.040713T2232Z-040714T2232Z/
```

O – Operational VTEC

COR – Corrected hazard

KOKX – Upton, NY WFO

BZ – Blizzard

A – Watch

0010 – 10th Blizzard Watch issued this year

040713T2232Z – Hazard begins at 2232Z on 7/13/04

040714T2232Z – Hazard ends at 2232Z on 7/14/04

Powerful dissemination tool

Combining VTEC and Weather Message software gives us a powerful tool to parse information to the customer.

Full warning...

WWUS45 KBOU 081940
WSWBOU

URGENT - WINTER WEATHER MESSAGE
NATIONAL WEATHER SERVICE DENVER CO
1240 PM MST SAT DEC 8 2007

COZ041-046-047-090345-
/O.NEW.KBOU.SN.Y.0016.071208T1940Z-071209T1200Z/
ELBERT/CENTRAL AND EAST DOUGLAS COUNTIES ABOVE 6000 FEET-
NORTH AND NORTHEAST ELBERT COUNTY BELOW 6000 FEET/NORTH LINCOLN
COUNTY-
SOUTHEAST ELBERT COUNTY BELOW 6000 FEET/SOUTH LINCOLN COUNTY-
INCLUDING...CASTLE ROCK...ELBERT...FONDIS...KIOWA...LARKSPUR...
AGATE...HUGO...LIMON...MATHESON...FORDER...KARVAL...KUTCH...
PUNKIN CENTER
1240 PM MST SAT DEC 8 2007

...SNOW ADVISORY IN EFFECT UNTIL 5 AM MST SUNDAY...

THE NATIONAL WEATHER SERVICE IN DENVER HAS ISSUED A SNOW
ADVISORY...WHICH IS IN EFFECT UNTIL 5 AM MST SUNDAY.

SNOW WILL INCREASE FROM SOUTH TO NORTH ACROSS NORTHEASTERN
COLORADO THIS AFTERNOON AND CONTINUE FOR MUCH OF THE NIGHT. IT
APPEARS THE HEAVIEST SNOW WILL BE IN DOUGLAS...ELBERT...AND
LINCOLN COUNTIES. SNOW ACCUMULATIONS OF 4 TO 8 INCHES ARE EXPECTED
IN THIS AREA BY SUNDAY MORNING.

Advisory parsed by software to reach your pager, cell phone, PDA...

- **The National Weather Service has issued a snow advisory until 5 am MST Sunday for eastern Douglas...Elbert...and Lincoln Counties.**
- **You get to chose how you want the information delivered!**

Questions/Comments



Contact:



Bob Glancy

Robert.Glancy@noaa.gov

