

NOUS41 KWBC 061654  
PNSWSH

TECHNICAL IMPLEMENTATION NOTICE 10-03  
NATIONAL WEATHER SERVICE HEADQUARTERS WASHINGTON DC  
1155 AM EST WED JANUARY 6 2010

TO: NATIONAL WEATHER SERVICE /NWS/ OFFICES  
FAMILY OF SERVICES /FOS/ SUBSCRIBERS  
FEDERAL AVIATION ADMINISTRATION /FAA/ OFFICES  
OTHER NWS AVIATION CUSTOMERS AND PARTNERS

FROM: CYNTHIA ABELMAN  
CHIEF...AVIATION SERVICES BRANCH

SUBJECT: ENHANCEMENT OF GRAPHICAL TURBULENCE  
GUIDANCE /GTG/: EFFECTIVE FEBURARY 9 2010

NOTE: THE FOLLOWING CHANGES HAVE NO IMPACT ON NOAA WEATHER WIRE  
SERVICE SUBSCRIBERS.

THE GTG HAS BEEN AVAILABLE AS AN NWS OPERATIONAL PRODUCT SINCE  
MARCH 2003. THE GTG IS AN AUTOMATICALLY GENERATED TURBULENCE  
PRODUCT THAT DIAGNOSES AND PREDICTS THE LOCATION AND INTENSITY  
OF TURBULENCE OVER THE CONTERMINOUS UNITED STATES AND ADJACENT  
COASTAL WATERS /CONUS/.

EFFECTIVE FEBURARY 9 2010 AT 1300 COORDINATED UNIVERSAL TIME  
/UTC/ THE NWS AVIATION WEATHER CENTER /AWC/ IN KANSAS CITY  
MISSOURI WILL IMPLEMENT AN ENHANCED VERSION OF THE GRAPHICAL  
TURBULENCE GUIDANCE /GTG/ PRODUCT. THIS ENHANCEMENT EXTENDS THE  
VERTICAL DOMAIN OF THE GTG INTO THE MIDDLE LEVEL OF THE  
ATMOSPHERE ... BETWEEN 10 AND 19 THOUSAND FEET ABOVE MEAN SEA  
LEVEL /FLIGHT LEVELS 100 TO 190/. TABLE 1 CONTAINS THE  
COMMUNICATION HEADERS FOR EACH FLIGHT LEVEL /FL/ AS WELL AS  
COMPOSITE GRIB FILE CHANGE INFORMATION.

THE GTG PRODUCES AN ANALYSIS... 1... 2 AND 3-HOUR TURBULENCE  
FORECAST EVERY HOUR AND A 6... 9 AND 12-HOUR FORECAST EVERY 3  
HOURS IN GRIB FORMAT. THIS PRODUCT ALSO PROVIDES A COMPOSITE  
FIELD REPRESENTING THE MAXIMUM TURBULENCE VALUE BETWEEN 10 AND  
45 THOUSAND FEET FOR EACH ANALYSIS AND FORECAST.

FOR MORE INFORMATION ABOUT THE GTG PRODUCT...GO TO /USE LOWER  
CASE LETTERS/:

[HTTP://WWW.WEATHER.AERO/TURBULENCE/DESCRIPTION.PHP](http://www.weather.aero/turbulence/description.php)

THE CURRENT PRODUCT DESCRIPTION DOCUMENT FOR THE GTG IS  
AVAILABLE AT /USE LOWER CASE LETTERS/:

[HTTP://PRODUCTS.WEATHER.GOV/](http://products.weather.gov/)

TABLE 1: NEW GTG WMO HEADERS:

FL	HEADING
100	YVW*70 KKCI
110	YVW*67 KKCI
120	YVW*65 KKCI
130	YVW*62 KKCI
140	YVW*60 KKCI
150	YVW*57 KKCI
160	YVW*55 KKCI
170	YVW*53 KKCI
180	YVW*50 KKCI
190	YVW*48 KKCI
200	YVW*46 KKCI

WHERE \* = A = 00 HOUR ANALYSIS

\* = B = 01 HOUR FORECAST

\* = C = 02 HOUR FORECAST

\* = D = 03 HOUR FORECAST

\* = G = 06 HOUR FORECAST

\* = J = 09 HOUR FORECAST

\* = M = 12 HOUR FORECAST

THE LEVEL INDICATOR IN THE COMPOSITE GRIB FILE WILL CHANGE TO .../ATMOS COL/. THIS ENHANCEMENT WAS MADE TO INDICATE THE DATA IN THE FILE IS A COMPOSITE FOR ALL LEVELS FROM FL450 DOWN TO FL100.

THE GTG PRODUCT WILL CONTINUE TO BE AVAILABLE IN GRIB FORMAT FROM THE FOLLOWING SYSTEMS:

1. SATELLITE BROADCAST NETWORK /SBN/ NOAAPORT CHANNEL
2. NWS FTP SERVERS AT /USE LOWER CASE LETTERS EXCEPT SL AND DC MUST BE IN UPPER CASE/:

FTP://TGFTP.NWS.NOAA.GOV/SL.US008001/DC.AVSPT

3. THE FAMILY OF SERVICES /FOS/ HIGH RESOLUTION DATA SERVICE AND SERVER ACCESS SERVICE

ADDITIONAL INFORMATION ON NWS AVIATION PRODUCT DISSEMINATION IS AVAILABLE AT /USE LOWER CASE LETTERS/:

HTTP://WEATHER.GOV/OS/DISEMSYS.SHTML

IF YOU HAVE QUESTIONS REGARDING THIS PRODUCT...CONTACT:

MICHAEL PAT MURPHY  
WARNING COORDINATION METEOROLOGIST  
AVIATION WEATHER CENTER  
7220 NW 101ST TERRACE  
ROOM 101

KANSAS CITY MO 64153  
PHONE: 816-584-72048  
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THIS AND OTHER NWS TECHNICAL IMPLEMENTATION NOTICES ARE  
AVAILABLE ONLINE AT /USE LOWER CASE LETTERS/

[HTTP://WWW.NWS.NOAA.GOV/OM/NOTIF.HTM](http://www.nws.noaa.gov/om/notif.htm)

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