

NOUS41 KWBC 152010
PNSWSH

PUBLIC INFORMATION STATEMENT...COMMENT REQUEST
NATIONAL WEATHER SERVICE HEADQUARTERS WASHINGTON DC
410 PM EDT MON MAR 15 2010

TO: SUBSCRIBERS:
-FAMILY OF SERVICES
-NOAA WEATHER WIRE SERVICE
-EMERGENCY MANAGERS WEATHER INFORMATION NETWORK
-NOAAPORT
OTHER NWS PARTNERS...USERS AND EMPLOYEES

FROM: RICHARD J. VOGT
DIRECTOR...WSR-88D RADAR OPERATIONS CENTER

SUBJECT: SOLICITING COMMENTS BY APRIL 20 2010 ON NWS PLANS FOR AN
OPERATIONAL FIELD TEST OF AVSET CONTROLLED WSR-88D VOLUME SCANNING:
EFFECTIVE JULY 2010

THE NWS IS PLANNING AN OPERATIONAL FIELD TEST OF THE AUTOMATED VOLUME SCAN
EVALUATION AND TERMINATION /AVSET/ ALGORITHM AT EIGHT WEATHER SURVEILLANCE
RADAR-1988...DOPPLER /WSR-88D/ BUILD 12 RADAR PRODUCT GENERATOR FIELD
SITES STARTING NO EARLIER THAN JULY 15 2010 AND ENDING JANUARY 31 2011.
THE PURPOSE OF THE TEST IS TO ENSURE AVSET FUNCTIONALITY INTEGRATES INTO
WSR-88D FIELD OPERATIONS. IF THE PROPOSED TEST IS APPROVED...THE TEST
SITES WILL ISSUE A FREE TEXT MESSAGE IN ADVANCE OF USING AVSET THE FIRST
TIME.

THE PROPOSED WSR-88 AVSET OPERATIONAL TEST SITES ARE:

KCCX: STATE COLLEGE PA
KEMX: TUCSON AZ
KGGW: GLASGOW MT
KGLD: GOODLAND KS
KIND: INDIANAPOLIS IN
KLWX: STERLING VA
KMLB: MELBOURNE FL
KTLX: NORMAN/OKLAHOMA CITY OK

AVSET HAS BEEN DEVELOPED TO MEET WSR-88D AGENCY REQUIREMENTS FOR FASTER
VOLUME COVERAGE PATTERN /VCP/ UPDATES...ESPECIALLY IN SEVERE WEATHER
SITUATIONS. THE BASIC PREMISE OF THE AVSET FUNCTION IS TO TERMINATE A
VOLUME SCAN AFTER THE WSR-88D HAS SCANNED ALL OF THE ELEVATIONS WITH
IMPORTANT RETURNS. THE NET EFFECT OF AVSET IS TO SHORTEN THE ELAPSED TIME
BETWEEN DATA COLLECTION ON LOW ELEVATION ANGLES. WHEN AVSET IS
OPERATING...THE VOLUME COVERAGE PATTERN /VCP/ NUMBER DOES NOT CHANGE...THE
ELEVATION ANGLES EXECUTED BEFORE THE TERMINATION OF THE VCP DO NOT
CHANGE...AND VOLUMETRIC PRODUCTS ARE PRODUCED. THE AVSET FUNCTION:

- EVALUATES THE RETURN ON EACH ELEVATION ABOVE FIVE DEGREES AND TERMINATES
THE VCP IF THE AREAL COVERAGE THRESHOLDS ARE NOT MET.

- SHORTENS THE ELAPSED TIME BETWEEN DATA COLLECTION ON LOW-ELEVATION ANGLES AND GENERATION OF VOLUME-BASED PRODUCTS DURING PERIODS WHEN LITTLE OR NO DATA ARE AVAILABLE ON HIGHER TILTS.

- RESULTS IN FASTER VCP UPDATES WITHOUT IMPACTING THE QUALITY AND ACCURACY OF THE BASE DATA ESTIMATES.

DURING THE TEST PERIOD...SITE OPERATORS WILL BE ASKED TO USE AVSET AS OFTEN AS THEY WISH. THE DEFAULT STATE OF THE AVSET FUNCTION IS /DISABLED/. THUS...OPERATORS MUST MANUALLY ACTIVATE AVSET EACH TIME USE IS DESIRED. AVSET IS AUTOMATICALLY DISABLED WHEN A CLEAR AIR COVERAGE PATTERN...VCP 31 OR VCP 32...IS INVOKED.

THE WSR-88D RADAR OPERATIONS CENTER HAS CONDUCTED EXTENSIVE OFF-LINE AVSET TESTING. AVSET DOES NOT ADVERSELY AFFECT NEXRAD AGENCY SYSTEMS AND NWS BELIEVES THERE WILL BE LITTLE OR NO ADVERSE IMPACT OF AVSET ON USER SYSTEMS. HOWEVER...AVSET WILL INCREASE NARROWBAND AND LEVEL II COMMUNICATIONS LOADING. SINGLE-SITE NARROWBAND COMMUNICATIONS AND LEVEL II LOADING CAN INCREASE UP TO 30 PERCENT /WORST CASE/ WITH A FAST VCP. USING AVSET IS AN OPERATOR-SELECTABLE OPTION. THUS...THE OVERALL NETWORK-WIDE COMMUNICATIONS INCREASES WILL BE MUCH LESS THAN THE INDIVIDUAL SITE FIGURES.

MORE AVSET DETAILS ARE AVAILABLE UNDER /NEW RADAR TECHNOLOGY/ AT /USE LOWER CASE/:

[HTTP://WWW.ROC.NOAA.GOV/WSR88D/](http://www.roc.noaa.gov/WSR88D/)

THE NWS IS REQUESTING COMMENTS THROUGH APRIL 20 2010 ON THE PROPOSED OPERATIONAL FIELD TEST. SEND COMMENTS TO:

TIM.D.CRUM@NOAA.GOV
MICHAEL.ISTOK@NOAA.GOV

NATIONAL PUBLIC INFORMATION STATEMENTS ARE ONLINE AT /USE LOWER CASE/:

[HTTPS://WWW.WEATHER.GOV/NOTIFICATION/ARCHIVE](https://www.weather.gov/notification/archive)

\$\$
NNNN