

NOUS41 KWBC 091717
PNSWSH

TECHNICAL IMPLEMENTATION NOTICE 07-35
NATIONAL WEATHER SERVICE HEADQUARTERS WASHINGTON DC
117 PM EDT WED MAY 9 2007

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

FROM: PAUL HIRSCHBERG
CHIEF...SCIENCE PLANS BRANCH
OFFICE OF SCIENCE AND TECHNOLOGY

SUBJECT: NATIONAL ENVIRONMENTAL SATELLITE...DATA AND INFORMATION SERVICE
POLAR SATELLITE MICROWAVE PRODUCTS TO BE ADDED TO NOAAPORT: EFFECTIVE JULY
24 2007

EFFECTIVE TUESDAY JULY 24 2007...BEGINNING AT APPROXIMATELY 1500
COORDINATED UNIVERSAL TIME /UTC/...THE NATIONAL ENVIRONMENTAL
SATELLITE...DATA AND INFORMATION SERVICE /NESDIS/ AND NWS WILL BEGIN
DISSEMINATION OF POLAR SATELLITE /MICROWAVE BASED/ PRODUCTS VIA NOAAPORT.

THIS ADDITION CONSISTS OF TWO PRODUCTS /I.E...TWO PARAMETERS/...TOTAL
PRECIPITABLE WATER /TPW/ ESTIMATES AND RAINFALL RATE ESTIMATES.

ONE VERSION OF THESE PRODUCTS IS GENERATED BASED ON THE ADVANCED MICROWAVE
SOUNDING UNIT /AMSU/ FROM THE NESDIS POLAR ORBITING OPERATIONAL
ENVIRONMENTAL SATELLITES /POES/ AND ON THE EUROPEAN METEOROLOGICAL
OPERATIONAL SATELLITE PROGRAMME /METOP/...WHEN THE METOP SPACECRAFT
BECOMES FULLY OPERATIONAL IN MAY 2007.

A SECOND VERSION OF THESE PRODUCTS IS GENERATED BASED ON THE SPECIAL
SENSOR MICROWAVE IMAGER /SSMI/ FROM THE DEFENSE METEOROLOGICAL SATELLITE
PROGRAM /DMSP/.

BEGINNING WITH THE F-16 DMSP SPACECRAFT...THE SPECIAL SENSOR MICROWAVE
IMAGER SOUNDER /SSMIS/ WILL REPLACE THE SSMI AS A BASIS FOR THESE
PRODUCTS. INITIALLY...MICROWAVE SENSOR DATA FROM THE FOLLOWING SPACECRAFT
AND INSTRUMENTS WILL BE USED IN THE GENERATION OF THESE PRODUCTS AS
FOLLOWS:

SPACECRAFT	INSTRUMENT
-----	-----
POES NOAA-15	AMSU
POES NOAA-17	AMSU
POES NOAA-18	AMSU
DMSP F-13	SSMI
DMSP F-14	SSMI

WHEN METOP-A BECOMES OPERATIONAL...ITS PRODUCTS WILL REPLACE NOAA-17 AMSU PRODUCTS. NOAA-16 AND F-15 PRODUCTS WILL ALSO BE RESTORED AND ADDED TO THE PRODUCT SUITE. THUS...IN THE FUTURE...IT IS ANTICIPATED THAT THESE PRODUCTS WILL BE BASED ON SENSOR DATA FROM THE FOLLOWING SPACECRAFT AND INSTRUMENTS:

SPACECRAFT	INSTRUMENT
-----	-----
POES NOAA-15	AMSU
POES NOAA-16	AMSU
POES NOAA-18	AMSU
METOP-A	AMSU
DMSP F-13	SSMI
DMSP F-14	SSMI
DMSP F-15	SSMI

OVER TIME...AS OLDER SPACECRAFT ARE RETIRED...DATA FROM NEWER SPACECRAFT AND INSTRUMENTS MAY BE BROUGHT ON LINE.

THE NOAAPORT-PRODUCED MICROWAVE PRODUCTS WILL BE PROVIDED FOR FOUR GEOGRAPHICAL REGIONS AS SHOWN BELOW IN TABLE 1. EACH TYPE OF PRODUCT WILL BE DISTRIBUTED AT A FREQUENCY OF APPROXIMATELY ONE PER HOUR. EACH PRODUCT WILL CONTAIN COMPOSITES OF MULTIPLE RECENT ORBITS. THE APPROXIMATE HORIZONTAL RESOLUTION OF THESE PRODUCTS WILL BE 8 KILOMETERS.

TABLE 1. PARAMETERS...INSTRUMENT...GEOGRAPHICAL REGIONS...WORLD METEOROLOGICAL ORGANIZATION /WMO/ HEADINGS AND APPROXIMATE PER-PRODUCT DATA VOLUMES

PARAMETER	INSTRUMENT	SECTOR	WMO HEADING	SIZE
-----	-----	-----	-----	----
TPW	AMSU	SUPERNATIONAL	TITN17 KNES	1550 KB
TPW	AMSU	ALASKA NATIONAL	TITB17 KNES	886 KB
TPW	AMSU	HAWAII NATIONAL	TITI17 KNES	2990 KB
TPW	AMSU	PUERTO RICO NATIONAL	TITQ17 KNES	886 KB
TPW	SSMI	SUPERNATIONAL	TIDN17 KNES	1550 KB
TPW	SSMI	ALASKA NATIONAL	TIDB17 KNES	886 KB
TPW	SSMI	HAWAII NATIONAL	TIDI17 KNES	2990 KB
TPW	SSMI	PUERTO RICO NATIONAL	TIDQ17 KNES	886 KB
RAINFALL RATE	AMSU	SUPERNATIONAL	TITN29 KNES	1550 KB
RAINFALL RATE	AMSU	ALASKA NATIONAL	TITB29 KNES	886 KB
RAINFALL RATE	AMSU	HAWAII NATIONAL	TITI29 KNES	2990 KB
RAINFALL RATE	AMSU	PUERTO RICO NATIONAL	TITQ29 KNES	886 KB
RAINFALL RATE	SSMI	SUPERNATIONAL	TIDN29 KNES	1550 KB
RAINFALL RATE	SSMI	ALASKA NATIONAL	TIDB29 KNES	886 KB
RAINFALL RATE	SSMI	HAWAII NATIONAL	TIDI29 KNES	2990 KB
RAINFALL RATE	SSMI	PUERTO RICO NATIONAL	TIDQ29 KNES	886 KB

THE SUPERNATIONAL SECTORS COVER THE CONTIGUOUS U.S. /CONUS/ AREA AND THEY WILL BE DISSEMINATED VIA THE NOAAPORT GOES DVB CHANNEL /JOINING EXISTING NESDIS IMAGERY/. THE OUTSIDE THE CONUS SECTORS /I.E. ALASKA...HAWAII AND PUERTO RICO/ WILL BE DISSEMINATED VIA THE OCONUS DVB CHANNEL /ALSO CALLED THE FOURTH DVB CHANNEL/. THE FORMAT OF THESE PRODUCTS IS SIMILAR TO THAT OF EXISTING NOAAPORT SATELLITE IMAGERY ON THOSE DVB CHANNELS...AND IS

DESCRIBED IN THE INTERFACE CONTROL DOCUMENT FOR THE ADVANCED WEATHER INTERACTIVE PROCESSING SYSTEM /AWIPS/ AND NESDIS /USE LOWER CASE FOR ICD AND CH/:

[HTTP://WWW.NWS.NOAA.GOV/NOAAPORT/DOCUMENT/ICD%20CH5-2005-1.PDF](http://www.nws.noaa.gov/noaaport/document/ICD%20CH5-2005-1.pdf)

PRECIPITABLE WATER PRODUCT EXAMPLES CAN BE FOUND AT /USE LOWER CASE EXCEPT FOR PS...TROP...DATA AND RT/:

[HTTP://WWW.SSD.NOAA.GOV/PS/TROP/DATA/RT/NWATL-AMPW-LOOP.HTML](http://www.ssd.noaa.gov/ps/trop/data/rt/nwatl-ampw-loop.html)

THE RAINFALL RATE PRODUCTS WILL PROVIDE COVERAGE OVER THE LAND AND MARINE AREAS...EXCEPT WHERE THERE IS SNOW ON THE GROUND OR SEA ICE. INITIALLY...THE TOTAL PRECIPITABLE WATER PRODUCTS WILL PROVIDE COVERAGE FOR MARINE AREAS ONLY...THOUGH THIS COVERAGE WILL LATER BE AUGMENTED TO INCLUDE LAND COVERAGE AS WELL.

IF YOU HAVE ANY QUESTIONS CONCERNING THE NOAAPORT ACTIVATION OF THESE PRODUCTS...PLEASE CONTACT:

BRIAN GOCKEL
NWS...OFFICE OF SCIENCE AND TECHNOLOGY
SILVER SPRING MARYLAND
PHONE: 301-713-0304 EXT. 158
EMAIL: BRIAN.GOCKEL@NOAA.GOV

IF YOU HAVE ANY QUESTIONS CONCERNING THE TECHNICAL DETAILS OF THESE PRODUCTS OR THEIR GENERATION...PLEASE CONTACT:

SHELDON KUSSELSON
NESDIS...SSD...SAB
CAMP SPRINGS MARYLAND
PHONE: 301-763-8444
SHELDON.KUSSELSON@NOAA.GOV

OR

LIMIN ZHAO
NESDIS...SSD...PIB
CAMP SPRINGS MARYLAND
PHONE: 301-763-8142 EXT. 125
LIMIN.ZHAO@NOAA.GOV

NATIONAL TECHNICAL IMPLEMENTATION NOTICES ARE ONLINE AT /USE LOWER CASE/:

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

\$\$
NNNN