Department of Commerce · National Oceanic & Atmospheric Administration · National Weather Service

NATIONAL WEATHER SERVICE INSTRUCTION 10-1002
MARCH 25, 2008

Operations and Services
Climate Services, NWSPD 10-10

CLIMATE MONITORING

NOTICE: This publication is available at: http://www.noaa.nws.gov/directives

SUMMARY OF REVISIONS: This instruction supersedes NWS Instruction 10-1002, issued March 4, 2005.

The Palmer Drought Severity Index, The U.S. Drought Monitor, and The National Drought Summary have been relocated to a new instruction (NWS I 10-1202, National Drought Products).

Hard copy mail subscription of the Climate Diagnostics Bulletin (Section 4) has been discontinued. The Bulletin continues to be issued on the internet.

The list of CLIMAT stations (Section 5.3.1) has been updated with a few deletions and several additions.

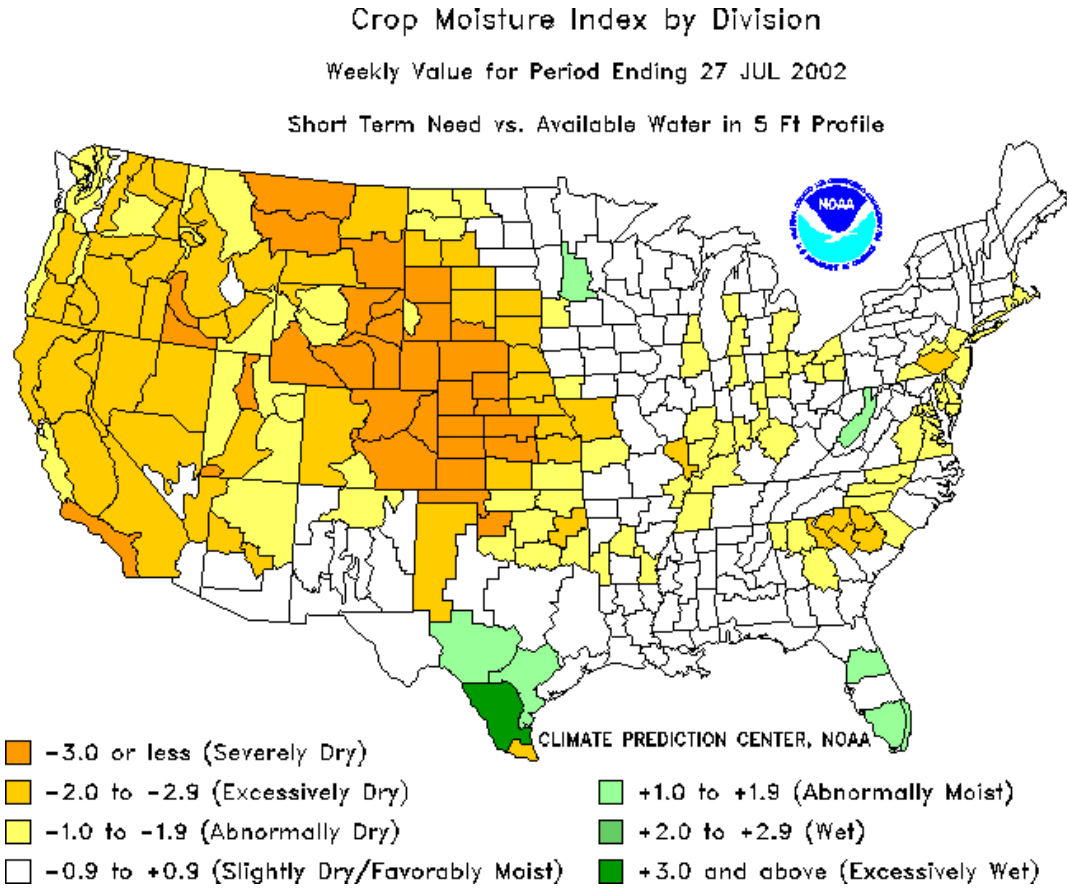All other aspects of this instruction remain unchanged from the previous version.

(signed)_____March 11, 2008__
David B. Caldwell   Date
Director, Office of Climate,
Water, and Weather Services

Table of Contents: Page

1.   Introduction. This instructional directive describes the narrative and graphical climate monitoring products issued by the National Weather Service's (NWS) Climate Prediction Center (CPC). Product World Meteorological Organization (WMO) headings and Advanced Weather Interactive Processing System (AWIPS) identifiers are listed (if available) for NWS dissemination systems. All products are available or linked through http://www.cpc.ncep.noaa.gov on the internet unless indicated otherwise.

2.   Crop Moisture Index. Internet issuance only; http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/regional_monitoring/cmi.gif no WMO heading and no AWIPS ID:

2.1   Mission Connection. Crop Moisture Index is prepared by USDA's Joint Agricultural Weather Facility (JAWF), located at the U.S Department of Agriculture (USDA). CPC is represented at JAWF and helps prepare the product. JAWF issues this bulletin for short-term planning by agricultural interests.

2.2   Issuance Guidelines.

2.2.1   Creation Software. JAWF uses in-house National Center of Atmospheric Research Graphics.

2.2.2   Issuance Criteria. These are scheduled products.

2.2.3   Issuance Time. JAWF issues this product each Monday at around 12:00 noon Eastern local time.

2.2.4   Valid Time. This product is valid for one week after issuance

2.2.5   Product Expiration Time. This product expires with the next issuance one week later.

2.3   Technical Description. JAWF will follow the format and content described in this section.

2.3.1   Content.   The index depicts short-term (up to 4 weeks) abnormal dryness or wetness affecting agriculture. This index responds rapidly, can change considerably from week to week, and indicates normal conditions at the beginning and end of the growing season.

2.3.2   Format. JAWF assigns numerical index values for each National Climatic Data Center (NCDC) climate data division.

Crop Moisture Index by Division

Weekly Value for Period Ending 27 JUL 2002

Short Term Need vs. Available Water in 5 Ft Profile

Figure 1. Crop Moisture Index for week ending July 27, 2002.

2.4   Updates, Amendments, and Corrections. JAWF does not issue updates or amendments. They will issue corrections as needed.

3.   Weekly Weather and Crop Bulletin (WWCB). Internet issuance and hard copy subscription only. No WMO heading and AWIPS ID.

The electronic internet version remains free and is print-available on the internet at http://www.usda.gov/oce/weather/pubs/Weekly/Wwcb/index.htm. Hard copy subscription information is available on the Portable Document File (PDF) of the bulletin.

3.1   Mission Connection. The WWCB is prepared by JAWF, located at the USDA. CPC is represented at JAWF and helps prepare the product. JAWF issues this bulletin to provide information for agricultural operations.

3.2   Issuance Guidelines.

3.2.1   Creation Software. JAWF uses PDF software.

3.2.2   Issuance Criteria. These are scheduled products.

3.2.3   Issuance Time. JAWF issues the product by 12:00 noon Eastern local time the third business day of the week. This will be Wednesday except for weeks when there is a federal holiday before Thursday.

3.2.4   Valid Time. This product is valid for one week after issuance.

3.2.5   Product Expiration Time. This product expires with the next issuance.

3.3   Technical Description. The team will follow the format and content described in this section.

3.3.1   Content. JAWF includes reports on United States weather and crop status for the past week as well as growing conditions around the world.

3.3.2   <u>Format</u>. The following is usually included in the bulletin:

Highlights and Total Precipitation Map
Impact(s) from significant event(s) map(s) and summary/summaries
Temperature Departure and Average Temperature Maps
Extreme Maximum and Minimum Temperature Maps
Agricultural Weather Data
Soil Temperature Map (in season)
Growing Degree Day Maps (in season) and Pan Evaporation Map (in season)
National Weather Data for Selected Cities (tables)
National Agricultural Summary and Snow Cover Map (in season)
International Weather and Crop Summary (brief text highlights of each area below)
   Total weekly precipitation map and detailed text summary for each area
      Western Former Soviet Union
      Europe
      Australia
      Southeast Asia
      Eastern Asia
      South America
      South Africa (winter)
      Middle East (winter)
      Northwestern Africa (winter)
      South Asia (summer)
      Newlands Former Soviet Union (summer)
      South-Central Former Soviet Union (summer)
      Mexico (summer)
      Canada (summer)
Subscription Information & Drought Monitor (current)

JAWF may also occasionally include CPC outlooks, other CPC monitoring information, and hydrological information in the bulletin, as appropriate.

3.4   <u>Updates, Amendments, and Corrections</u>. JAWF does not issue updates or amendments. They will issue corrections as needed.

4.   Climate Diagnostics Bulletin. Issued on the Internet only. http://www.cpc.ncep.noaa.gov/products/CDB/. No WMO heading and no AWIPS ID.

4.1   Mission Connection. CPC issues this bulletin to provide insight into climate outlooks by reviewing past climate conditions and looking ahead to implications on the upcoming seasons.

4.2   Issuance Guidelines.

4.2.1   Creation Software. CPC issues the publication using web page creation software.

4.2.2   Issuance Criteria. This is a scheduled product.

4.2.3   Issuance Time. CPC issues the bulletin on the 15th of the month (if a weekday), or the first weekday after the 15th.

4.2.4   Valid Time. This product is valid until the next issuance.

4.2.5   Product Expiration Time. This product expires with the next issuance.

4.3   Technical Description. CPC will follow the format and content described in this section.

4.3.1   Content. CPC reports on the previous month's status of the ocean-atmosphere climate system in the tropics and extratropics and provides analysis of various seasonal outlook guidance tools.

4.3.2   Format. The following is generic table of contents. (text and graphics).

> · Tropical Highlights
> · Forecast Forum
>   Outlook statement
>   Discussion
> · Extratropical Highlights
>   Northern Hemisphere
>   North America
>   Europe and Asia
>   Southern Hemisphere

4.4   Updates, Amendments, and Corrections. CPC does not issue updates or amendments. They will issue corrections as needed.

5.   CLIMAT messages. WMO Headings (nine Messages): CSXX(01-09) KWNO. No internet posting.

5.1   Mission Connection. The program for the international exchange of monthly mean data is called the "CLIMAT" program. The World Data Center for Meteorology (operated by NCDC)

collects CLIMAT messages for publication under WMO sponsorship. The CLIMAT program serves the following objectives:

- To provide regular assessments and authoritative statements on the interpretation and applicability of instrumental and proxy data for the study of climate variability, the detection of climate change, and the validation of climate models and forecasts;

- To develop awareness of the inter-annual variability of the global climate system and to facilitate the generation, interpretation, and dissemination of this information in global and regional scale climate fluctuations;

- To support the Global Climate Observing System in the maintenance and integrated development of existing observation systems, including traditional in situ surface and upper-air observations, satellite systems, and new observing technologies;

- To facilitate the development and implementation of methods to enable the rescue, preservation, and management of climate data by WMO Members, especially developing countries; promote the international exchange of climate data and related products; and coordinate the preparation and distribution of global and regional data sets, including metadata, as required for both research and development of climate information and prediction services.

5.2   Issuance Guidelines.

5.2.1   Creation Software. CPC generates coded CLIMAT text messages using a special CLIMAT program that extracts the observed data from a Climate Data Base containing about

two years worth of daily global data. CPC generates CLIMAT messages from METAR observations at specified Automated Surface Observation System observing sites.

5.2.2   Issuance Criteria. These are scheduled products.

5.2.3   Issuance Time. CPC issues the CLIMAT messages once a month on a weekday between the fourth and sixth around 1800 UTC.

5.2.4   Valid Time. This product is valid until the next issuance.

5.2.5   Product Expiration Time. This product expires with the next issuance.

5.3   Technical Description. CPC uses the following format and content described in this section.

5.3.1   Content. CPC provides coded monthly CLIMAT reports for the following stations within the 50 states, Puerto Rico and Pacific Islands. These stations are:

index#	name	state	site	index#	name	state	site
70026	Barrow	AK	PABR	70086	Barter Island	AK	PBTI
70133	Kotzubue	AK	PAOT	70200	Nome	AK	PAOM
70219	Bethel	AK	PABE	70231	McGrath	AK	PAMC
70249	Puntilla	AK	PPTI	70251	Talkeetna	AK	PTKA
70261	Fairbanks	AK	PAFA	70273	Anchorage	AK	PANC
70308	St. Paul	AK	PASN	70316	Cold Bay	AK	PACD
70326	King Salmon	AK	PAKN	70341	Homer	AK	PHOM
70361	Yakutat	AK	PAYA	70398	Annette	AK	PANT
72201	Key West	FL	KEYW	72202	Miami	FL	KMIA
72203	West Palm Beach	FL	KPBI	72205	Orlando	FL	KMCO
72206	Jacksonville	FL	KJAX	72207	Savannah	GA	KSAV
72208	Charleston	SC	KCHS	72211	Tampa	FL	KTPA
72214	Tallahassee	FL	KTLH	72217	Macon	GA	KMCN
72218	Augusta	GA	KAGS	72219	Atlanta	GA	KATL
72223	Mobile	AL	KMOB	72226	Montgomery	AL	KMGM
72231	New Orleans	LA	KMSY	72234	Meridian	MS	KMEI
72235	Jackson	MS	KJAN	72240	Lake Charles	LA	KLCH
72242	Galveston	TX	KGLS	72243	Houston	TX	KIAH
72248	Shreveport	LA	KSHV	72250	Brownsville	TX	KBRO
72251	Corpus Christi	TX	KCRP	72253	San Antonio	TX	KSAT
72254	Austin	TX	KAUS	72255	Victoria	TX	KVCT
72256	Waco	TX	KACT	72259	Dallas/Fort Worth	TX	KDFW
72263	San Angelo	TX	KSJT	72265	Midland	TX	KMAF
72266	Abilene	TX	KABI	72267	Lubbock	TX	KLBB
72270	El Paso	TX	KELP	72274	Tucson	AZ	KTUS
72278	Phoenix	AZ	KPHX	72290	San Diego	CA	KSAN
72295	Los Angeles	CA	KLAX	72306	Raleigh/Durham	NC	KRDU
72308	Norfolk	VA	KORF	72310	Columbia	SC	KCAE
72312	Greenville	SC	KGMU	72314	Charlotte	NC	KCLT
72315	Asheville	NC	KAVL	72317	Greensboro	NC	KGSO
72324	Chattanooga	TN	KCHA	72326	Knoxville	TN	KTYS
72327	Nashville	TN	KBNA	72340	Little Rock	AR	KLIT
72344	Fort Smith	AR	KFSM	72351	Wichita Falls	TX	KSPS
72353	Oklahoma City	OK	KOKC	72356	Tulsa	OK	KTUL
72360	Clayton	NM	KCAO	72363	Amarillo	TX	KAMA
72365	Albuquerque	NM	KABQ	72386	Las Vegas	NV	KLAS
72389	Fresno	CA	KFAT	72394	Santa Maria	CA	KSMX
72401	Richmond	VA	KRIC	72405	Washington	DC	KDCA
72406	Baltimore	MD	KBWI	72407	Atlantic City	NJ	KACY
72408	Philadelphia	PA	KPHL	72411	Roanoke	VA	KROA
72412	Beckley	WV	KBKW	72414	Charleston	WV	KCRW
72421	Cincinnati	KY	KCVG	72422	Lexington	KY	KLEX
72423	Louisville	KY	KSDF	72425	Huntington	WV	KHTS
72428	Columbus	OH	KCMH	72429	Dayton	OH	KDAY

index#	name	state	site	index#	name	state	site
72432	Evansville	IN	KEVV	72434	St. Louis	MO	KSTL
72438	Indianapolis	IN	KIND	72439	Springfield	IL	KSPI
72440	Springfield	MO	KSGF	72445	Columbia	MO	KCOU
72446	Kansas City	MO	KMCI	72450	Wichita	KS	KICT
72451	Dodge City	KS	KDDC	72456	Topeka	KS	KTOP
72458	Concordia	KS	KCNK	72465	Goodland	KS	KGLD
72476	Grand Junction	CO	KGJT	72483	Sacramento	CA	KSAC
72486	Ely	NV	KELY	72488	Reno	NV	KRNO
74492	Blue Hill/Milton	MA	KMQE	72494	San Francisco	CA	KSFO
72503	New York	NY	KLGA	72507	Providence	RI	KPVD
72508	Windsor Locks	CT	KBDL	72509	Boston	MA	KBOS
72513	Wilkes-Barre	PA	KAVP	72515	Binghamton	NY	KBGM
72517	Allentown	PA	KABE	72518	Albany	NY	KALB
72519	Syracuse	NY	KSYR	72520	Pittsburgh	PA	KPIT
72521	Akron	OH	KACK	72525	Youngstown	OH	KYNG
72528	Buffalo	NY	KBUF	72529	Rochester	NY	KROC
72530	Chicago	IL	KORD	72532	Peoria	IL	KPIA
72533	Fort Wayne	IN	KFWA	72535	South Bend	IN	KSBN
72536	Toledo	OH	KTOL	72537	Detroit	MI	KDTW
72544	Moline	IL	KMLI	72546	Des Moines	IA	KDSM
72552	Grand Island	NE	KGRI	72556	Norfolk	NE	KOFK
72557	Sioux City	IA	KSUX	72562	North Platte	NE	KLBF
72564	Cheyenne	WY	KCYS	72565	Denver	CO	KDEN
72569	Casper	WY	KCPR	72572	Salt Lake City	UT	KSLC
72576	Lander	WY	KLND	72578	Pocatello	ID	KPIH
72583	Winnemucca	NV	KWMC	72594	Redding	CA	KRDD
72597	Medford	OR	KMFR	72605	Concord	NH	KCON
72606	Portland	ME	KPWM	72613	Mt. Washington	NH	KMWN
72617	Burlington	VT	KBTV	72635	Grand Rapids	MI	KGRR
72636	Muskegon	MI	KMKG	72637	Flint	MI	KFNT
72640	Milwaukee	WI	KMKE	72641	Madison	WI	KMSN
72644	Rochester	MN	KRST	72645	Green Bay	WI	KGRB
72651	Sioux Falls	SD	KFSD	72654	Huron	SD	KHON
72658	Minneapolis	MN	KMSP	72662	Rapid City	SD	KRAP
72666	Sheridan	WY	KSHR	72677	Billings	MT	KBIL
72681	Boise	ID	KBOI	72688	Pendleton	OR	KPDT
72698	Portland	OR	KPDX	72712	Caribou	ME	KCAR
72734	Sault Ste. Marie	MI	KANJ	72743	Marquette	MI	KMQT
72745	Duluth	MN	KDLH	72747	International Falls	MN	KINL
72753	Fargo	ND	KFAR	72764	Bismarck	ND	KBIS
72767	Williston	ND	KISN	72768	Glasgow	MT	KGGW
72772	Helena	MT	KHLN	72773	Missoula	MT	KMSO
72775	Great Falls	MT	KGTF	72781	Yakima	WA	KYKM
72785	Spokane	WA	KGEG	72791	Astoria	OR	KAST

index#	name	state	site	index#	name	state	site
72792	Olympia	WA	KOLM	72793	Seattle	WA	KSEA
72797	Quillayute	WA	KUIL	78367	Guantanamo Bay	CU	MUGM
78526	San Juan	PR	MJSJ	91165	Lihue	HI	PHLI
91182	Honolulu	HI	PHNL	91212	Guam	GU	PGUM
91218	Anderson AFB	GU	PUAM	91245	Wake	UM	PWAK
91285	Hilo	HI	PHTO	91334	Chuuk	FM	PTKK
91348	Pohnpei	FM	PTPN	91366	Kwajalein	MH	PKWA
91376	Majuro	MH	PKMJ	91413	Yap	FM	PTYA
91765	Pago Pago	AS	NSTU				

5.3.2   Format. Each of the nine collectives (CSXX[01-09] KWNO) has approximately one tenth of the total station reports. Each collective begins with the following:

CLIMAT MMJJJ, where MM is the 2-digit number for the month and JJJ is the year with the thousands digit dropped. (e.g. March 2002 is 03002).

Within the collectives, each station has a report as indicated generically:
Section 1 (111): Monthly data
Section 2 (222): not used
Section 3 (333): Number of the days in the month with parameters beyond certain thresholds
Section 4 (444): Extreme values during the month and occurrence of thunder and hail.

111 IIiii 1$P_0P_0P_0P_0$ 2PPPP 3$s_nTTTs_ts_ts_t$ 4$s_nT_xT_xT_xs_nT_nT_nT_n$ 5eee 6$R_1R_1R_1R_1R_dn_rn_r$7$S_1S_1S_1p_sp_sp_s$ 8$m_pm_pm_tm_tm_{tx}m_{tx}$ 9$m_em_em_rm_rm_sm_s$ 333 0T_{25} T_{25} T_{30} T_{30} 1$T_{35}T_{35}T_{40}T_{40}$ 2$T_{n0}T_{n0}T_{x0}T_{x0}$ 3$R_{01}R_{01}R_{05}R_{05}$ 4$R_{10}R_{10}R_{50}R_{50}$ 5$R_{100}R_{100}R_{150}R_{150}$ 6$s_{00}s_{00}s_{01}s_{01}$ 7$s_{10}s_{10}s_{50}s_{50}$ 8$f_{10}f_{10}f_{20}f_{20}f_{30}f_{30}$ 9$V_1V_1V_2V_2V_3V_3$ 444 0$s_nT_{xd}T_{xd}T_{xd}Y_xY_x$ 1$s_nT_{nd}T_{nd}T_{nd}Y_nY_n$ 2$s_nT_{ax}T_{ax}T_{ax}Y_{ax}Y_{ax}$ 3$s_nT_{an}T_{an}Y_{an}Y_{an}$ 4$R_xR_xR_xR_xY_rY_r$ 5$Ri_wf_xf_xf_xY_{fx}Y_{fx}$ 6$D_{ts}D_{ts}D_{gr}D_{gr}$

Specifications of Symbolic Letters.
        s_n - Sign of temperature: 0 for positive or zero, and 1 for negative values.
        0,1,2, etc - group identifiers within a section.

Section 1. (111).
        IIiii   International index number of the station (II=country/area #, iii=station #).

(1) $P_oP_oP_oP_o$ Monthly average station pressure in tenths of millibars, thousands digit being omitted.

(2)   PPPP   Monthly average sea level pressure in tenths of millibars, thousands digit being omitted.

(3) s_nTTT Average air temperature in tenths of a degree Celsius.
        $s_ts_ts_t$ Standard deviation of daily average temperatures during the month in tenths of a degree Celsius.

(4) $s_nT_xT_xT_x$ Average maximum temperature in tenths of a degree Celsius.
     $s_nT_nT_nT_n$ Average minimum temperature in tenths of a degree Celsius.

(5) eee Mean vapor pressure for the month in tenths of a millibar.

(6) $R_1R_1R_1R_1$ Total precipitation for the month in millimeters.
     R_d Quintile (frequency group) within which RRRR falls. The solidus (slant)
             is used if records were incomplete for the period 1971-2000, unless
             NESDIS has estimated these values; i.e., via the gamma function.
     n_rn_r Number of days in month with precipitation equal to or more than 1 mm

(7) $S_1S_1S_1$ Total sunshine for the month to the nearest hour (solidus for unknown).
     $p_sp_sp_s$ Percent of normal sunshine.

(8) m_pm_p days with missing pressure.
     m_tm_t days of missing temperature.
     $m_{tx}m_{tx}$ days of missing extreme temperature.

(9) m_em_e days of missing vapor pressure data.
     m_rm_r days of missing precipitation data.
     m_sm_s days of missing sunshine data.

Section 3 (333); sections with all zero occurrences are omitted in the transmission

(0) $T_{25}T_{25}$ number of days temperature reaches 25°C or higher.
     $T_{30}T_{30}$ number of days temperature reaches 30°C or higher.

(1) $T_{35}T_{35}$ number of days temperature reaches 35°C or higher.
     $T_{40}T_{40}$ number of days temperature reaches 40°C or higher.

(2) $T_{n0}T_{n0}$ days with minimum temperature below 0°C.
     $T_{x0}T_{x0}$ days with maximum temperature below 0°C.

(3) $R_{01}R_{01}$ days with precipitation 1 mm or more.
     $R_{05}R_{05}$ days with precipitation 5 mm or more.

(4) $R_{10}R_{10}$ days with precipitation 10 mm or more.
     $R_{50}R_{50}$ days with precipitation 50 mm or more.

(5) $R_{100}R_{100}$ days with precipitation 100 mm or more.
     $R_{150}R_{150}$ days with precipitation 150 mm or more.

(6) through (9) Inadequate data for inclusion [snow (6 & 7), wind (8), and visibility (9)]

Section 4 (444)

(0) $s_nT_{xd}T_{xd}T_{xd}$ maximum daily mean temperature (tenths of °C).
     Y_xY_x date of occurrence.

(1) $s_nT_{nd}T_{nd}T_{nd}$ minimum daily mean temperature (tenths of °C).
     Y_nY_n date of occurrence.

(2) $s_nT_{ax}T_{ax}T_{ax}$ monthly maximum temperature (tenths of °C).
     $Y_{ax}Y_{ax}$ date of occurrence.

(3) $s_nT_{an}T_{an}T_{an}$ monthly minimum temperature (tenths of °C).
     $Y_{an}Y_{an}$ date of occurrence.

(4) $R_xR_xR_xR_x$ Daily maximum precipitation (mm).
     Y_rY_r date of occurrence.

(5) Ri_w source code for units of wind speed (4=knots).
     $f_xf_xf_x$ maximum wind speed .
     $Y_{fx}Y_{fx}$ date of maximum wind speed.
            Note: METAR observations do not provide this data. Thus CLIMAT reports for
            this group are coded as 54/////.

(6) $D_{ts}D_{ts}$ number of days with a thunderstorm.
     $D_{gr}D_{gr}$ number of days with hail.

5.4   Updates, Amendments, and Corrections. CPC does not issue updates or amendments.
They will issue corrections as needed.

6.   El Niño/Southern Oscillation (ENSO) Diagnostic Discussion.
WMO heading - FXUS24 KWNC   AWIPS ID - PMDENS

6.1   Mission Connection. CPC issues this bulletin to provide insight into climate outlooks by
reviewing the potential effects of the ENSO.

6.2   Issuance Guidelines.

6.2.1 Creation Software. CPC uses a text editor.

6.2.2 Issuance Criteria. This is a scheduled product.

6.2.3 Issuance Time. CPC will usually issue this monthly discussion on the Thursday from the
5th to the 11th, at around 10:00 a.m. Eastern local time. If necessary, the issuance date may be
changed with advance notice (e.g. due to holidays). The issuance time may be delayed a few
hours if it is part of a climate outlook press conference.

6.2.4   Valid Time. This product is valid for approximately the next three to four months.

6.2.5   Product Expiration Time. This product expires with the next issuance.

6.3   Technical Description. CPC will follow the format and content described in this section.

6.3.1   Mass News Disseminator Header.

EL NINO/SOUTHERN OSCILLATION (ENSO) DIAGNOSTIC DISCUSSION
NWS CLIMATE PREDICTION CENTER CAMP SPRINGS MD

6.3.2   Content. CPC will indicate the expected occurrence (or lack of occurrence) of El Niño or La Niña for the next 3 months. El Niño (La Niña) is defined by a positive (negative) sea surface temperature (SST) anomaly of 0.5ºC or greater from the average over 3 consecutive months in the Niño 3.4 region of the Pacific Ocean (5ºN to 5ºS and 120ºW to 170ºW). Niño 3.4 three month SST area averages are computed from 1971-2000 SST base period means (see NWS Instruction 10-1004).

CPC will also address current oceanic and atmospheric conditions in the Pacific and climate outlooks for the following one to three seasons. They include analysis of current and recent patterns in surface and subsurface water temperature anomalies in the tropical Pacific; related analyses such as rainfall, outgoing long wave radiation, etc.; influencing factors such as Madden-Julian Oscillations, Kelvin waves, etc; and statistical and coupled model predictions.

6.3.3   Format. The following is a generic format.

EL NINO/SOUTHERN OSCILLATION (ENSO) DIAGNOSTIC DISCUSSION
NWS CLIMATE PREDICTION CENTER CAMP SPRINGS MD
1000 AM E-T THU mo. # 20--

NOTE: FIGURES MENTIONED IN THE DISCUSSION ARE AVAILABLE ON THE INTERNET AT (url).
                                        ---text---

THIS DISCUSSION IS A TEAM EFFORT OF NOAA AND ITS FUNDED INSTITUTIONS. UPDATES OF SST... 850-HPA WIND... OLR AND THE EQUATORIAL SUBSURFACE TEMPERATURE STRUCTURE ARE AVAILABLE ON THE CLIMATE PREDICTION CENTER WEB PAGE AT HTTP://WWW.CPC.NCEP.NOAA.GOV (WEEKLY UPDATE). FORECASTS FOR THE EVOLUTION OF EL NIÑO/LA NIÑA ARE UPDATED MONTHLY IN CPC'S CLIMATE DIAGNOSTICS BULLETIN FORECAST FORUM. TO RECEIVE AN E-MAIL NOTIFICATION WHEN UPDATED ENSO DIAGNOSTIC DISCUSSIONS ARE RELEASED PLEASE SEND YOUR E-MAIL ADDRESS TO:
               CLIMATE PREDICTION CENTER
                NATIONAL CENTERS FOR ENVIRONMENTAL PREDICTION

NOAA/NATIONAL WEATHER SERVICE
CAMP SPRINGS MD 20746-4304
 E-MAIL: (contact) -optional-

$$

6.4   Updates, Amendments, and Corrections. CPC does not issue updates or amendments.
They will issue corrections as needed.

7.   Other Monitoring Products. CPC produces other monitoring products that provide
important information for production of CPC climate outlooks. Companies and other
organizations also depend on these products as input to their own value added products. These
products are available on the CPC web site at their monitoring and data page. Due to the
importance of these products, CPC will give issuance of these products high priority along with
use of a backup web site. NWS Internet information is available subject to NWS internet policy.

CPC collects and produces daily and monthly data, time series, and maps for various climate
parameters, such as precipitation, temperature, snow cover, and degree days for the United
States, Pacific Islands, and other parts of the world. The CPC also compiles data on historic and
current atmospheric and oceanic conditions, ENSO and other climate patterns such as the North
Atlantic and Madden-Julian Oscillations, and stratospheric ozone and temperature.

CPC monitoring products cover each of the following broad categories:

·   Oceanic and Atmospheric Monitoring and Data
            CPC monitors weather and climate and compiles data on historic and current
            atmospheric and oceanic conditions, ENSO, tropical intra-seasonal oscillations,
            arctic oscillation, tropical Atlantic hurricane potential, tropical east-Pacific
            hurricane potential and other climate patterns such as the Madden-Julian
            Oscillation, and stratospheric ozone and temperature.

·   United States Climate Data and Maps
            The CPC collects and produces daily and monthly data, time series, and maps for
            various climate parameters, such as precipitation, temperature, and degree days.
            Precipitation maps include the U.S. Daily Precipitation Analysis.

·   Global Climate Data and Maps
            The CPC produces maps and time series for precipitation and surface
            temperatures for Africa, Asia, Europe, South and Central America, Mexico,
            Caribbean, Australia, and New Zealand.

·   Pacific Island Climate Data and Maps
            The CPC collects and produces daily and monthly data, time series, and maps for
            precipitation and temperature.