

NATIONAL WEATHER SERVICE INSTRUCTION 10-1002
FEBRUARY 5, 2009

Operations and Services
Climate Services, NWSPD 10-10

CLIMATE MONITORING

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

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Certified by: W/OS4 (A. Tribble)

Type of Issuance: Emergency

SUMMARY OF REVISIONS: This instruction supersedes NWS Instruction 10-1002, issued March 25, 2008.

This instruction was updated for the following:

CPC will issue ENSO alerts in the El Niño/Southern Oscillation (ENSO) Diagnostic Discussion, as described below and in section 6.3.2, for the following situations:

- An ENSO “watch” will be issued when conditions are favorable for the development of El Niño or La Niña conditions within the next three months.
- An ENSO “advisory” will be issued when El Niño or La Niña conditions are already observed and expected to continue.
- An ENSO “final advisory” will be issued when either El Niño or La Niña conditions have ended .

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

(signed)

September 22, 2008

David B. Caldwell
Director, Office of Climate,
Water, and Weather Services

Date

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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.

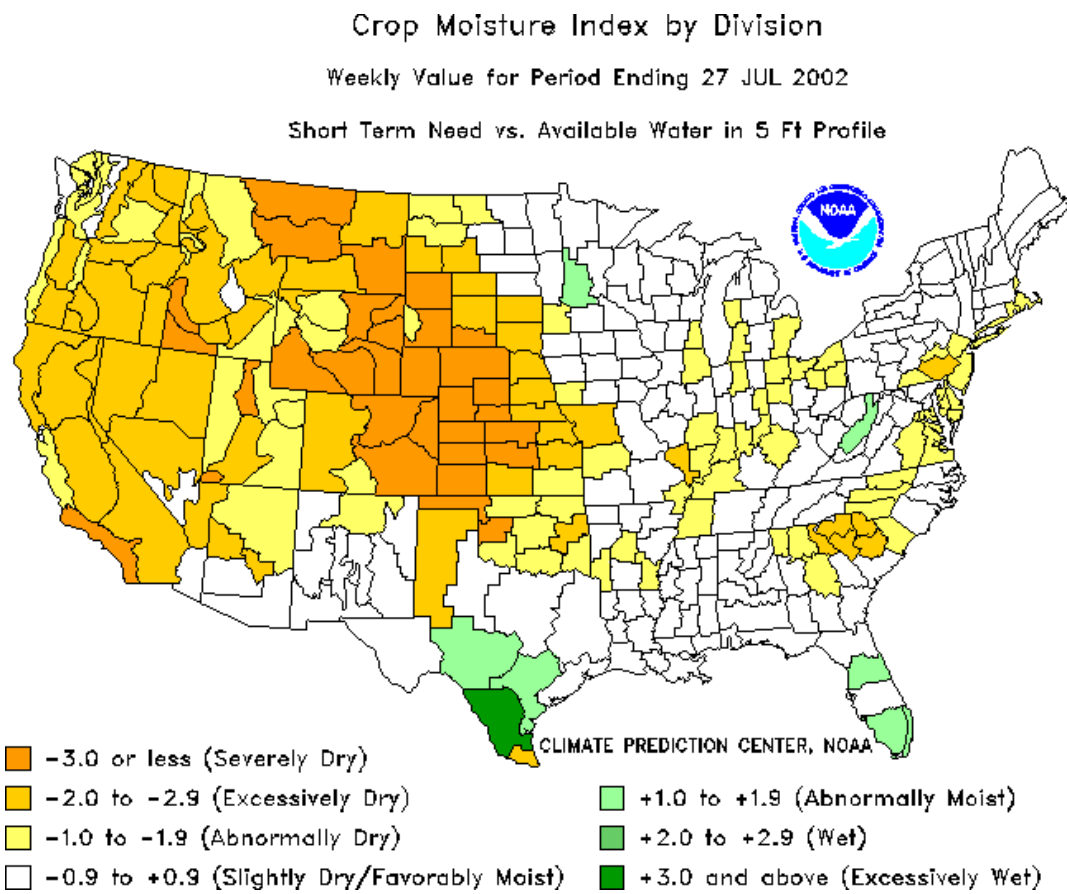


Figure 1. Crop Moisture Index for week ending July 27, 2002.

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 Format. 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 Updates, Amendments, and Corrections. 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:

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<u>index#</u>	<u>name</u>	<u>state</u>	<u>site</u>	<u>index#</u>	<u>name</u>	<u>state</u>	<u>site</u>
70026	Barrow	AK	PABR	70086	Barter Island	AK	PBTI
70133	Kotzebue	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

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<u>index#</u>	<u>name</u>	<u>state</u>	<u>site</u>	<u>index#</u>	<u>name</u>	<u>state</u>	<u>site</u>
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

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<u>index#</u>	<u>name</u>	<u>state</u>	<u>site</u>	<u>index#</u>	<u>name</u>	<u>state</u>	<u>site</u>
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 1P₀P₀P₀P₀ 2PPPP 3s_nTTT s_ts_ts_t 4s_nT_xT_xT_xs_nT_nT_nT_n 5eee 6R₁R₁R₁R₁R_dn_r 7S₁S₁S₁p_sp_sp_s
 8m_pm_pm_tm_tm_tx_tx_tx_t 9m_em_em_rm_rm_sm_s 333 0T₂₅ T₂₅ T₃₀ T₃₀ 1T₃₅T₃₅T₄₀T₄₀ 2T_{n0}T_{n0}T_{x0}T_{x0}
 3R₀₁R₀₁R₀₅R₀₅ 4R₁₀R₁₀R₅₀R₅₀ 5R₁₀₀R₁₀₀R₁₅₀R₁₅₀ 6S₀₀S₀₀S₀₁S₀₁ 7S₁₀S₁₀S₅₀S₅₀ 8f₁₀f₁₀f₂₀f₂₀f₃₀f₃₀
 9V₁V₁V₂V₂V₃V₃ 444 0s_nT_{xd}T_{xd}T_{xd}Y_xY_x 1s_nT_{nd}T_{nd}T_{nd}Y_nY_n 2s_nT_{ax}T_{ax}T_{ax}Y_{ax}Y_{ax} 3s_nT_{an}T_{an}Y_{an}Y_{an}
 4R_xR_xR_xR_xY_rY_r 5R_iw_ff_xf_xY_{fx}Y_{fx} 6D_{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) P₀P₀P₀P₀ 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) $s_n T_x T_x T_x$ Average maximum temperature in tenths of a degree Celsius.
 $s_n T_n T_n T_n$ Average minimum temperature in tenths of a degree Celsius.
- (5) eee Mean vapor pressure for the month in tenths of a millibar.
- (6) $R_1 R_1 R_1 R_1$ 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.
 $n_r n_r$ Number of days in month with precipitation equal to or more than 1 mm
- (7) $S_1 S_1 S_1$ Total sunshine for the month to the nearest hour (solidus for unknown).
 $p_s p_s p_s$ Percent of normal sunshine.
- (8) $m_p m_p$ days with missing pressure.
 $m_t m_t$ days of missing temperature.
 $m_{tx} m_{tx}$ days of missing extreme temperature.
- (9) $m_e m_e$ days of missing vapor pressure data.
 $m_r m_r$ days of missing precipitation data.
 $m_s m_s$ 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) $S_n T_{xd} T_{xd} T_{xd}$ maximum daily mean temperature (tenths of °C).
 $Y_x Y_x$ date of occurrence.

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

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

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

(4) $R_x R_x R_x R_x$ Daily maximum precipitation (mm).
 $Y_r Y_r$ date of occurrence.

(5) Ri_w source code for units of wind speed (4=knots).
 $f_x f_x f_x$ 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

http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/

6.1 Mission Connection. CPC issues this bulletin to provide insight into climate outlooks by providing the status and reviewing the potential impacts 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 9:00 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.

El Niño (La Niña) is defined by a positive (negative) mean sea surface temperature (SST) anomaly of 0.5°C or greater over 3 consecutive months in the Niño 3.4 region of the central Pacific Ocean (5°N to 5°S and 120°W to 170°W). The mean SST anomalies are computed from the 30 year (1971-2000) Niño 3.4 SST base period mean for those three consecutive months. See [NWS Instruction 10-1004](#) for information on SST base period means.

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 to 6 months. 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.

CPC will issue ENSO alerts, as described below, for the following situations:

- An ENSO “watch” will be issued when conditions are favorable for the development of El Niño or La Niña conditions within the next three months.
- An ENSO “advisory” will be issued when El Niño or La Niña conditions are already observed and expected to continue.
- An ENSO “final advisory” will be issued when either El Niño or La Niña conditions have ended.

CPC defines El Niño (La Niña) “conditions” as existing when:

- A one-month positive (negative) SST anomaly in the Niño 3.4 region of 0.5°C (-0.5°C) or greater (less) is observed and is expected to persist for at least 3 consecutive months...**and**

- An atmospheric response typically associated with El Niño (La Niña) is observed over the equatorial Pacific region as per El Niño /La Niña documentation on the following CPC web page:
http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/ensocycle/enso_cycle.shtml

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 [HTTP://WWW.CPC.NCEP.NOAA.GOV](http://WWW.CPC.NCEP.NOAA.GOV)

(ENSO Alerts, if needed)

SYNOPSIS: (Text)

(Diagnostic Text)

THIS DISCUSSION IS A CONSOLIDATED EFFORT OF THE NATIONAL ATMOSPHERIC AND OCEANIC ADMINISTRATION /NOAA/, NOAA'S NATIONAL WEATHER SERVICE, AND THEIR FUNDED INSTITUTIONS. OCEANIC AND ATMOSPHERIC CONDITIONS ARE UPDATED WEEKLY ON THE CLIMATE PREDICTION CENTER WEB SITE /EL NINO/LA NINA CURRENT CONDITIONS AND EXPERT DISCUSSIONS/. FORECASTS FOR THE EVOLUTION OF EL NINO/LA NINA ARE UPDATED MONTHLY IN THE FORECAST FORUM SECTION OF CPC'S CLIMATE DIAGNOSTICS BULLETIN. THE NEXT ENSO DIAGNOSTICS DISCUSSION IS SCHEDULED FOR ----. TO RECEIVE AN E-MAIL NOTIFICATION WHEN THE MONTHLY ENSO DIAGNOSTIC DISCUSSIONS ARE RELEASED...PLEASE SEND AN E-MAIL MESSAGE TO: NCEP.LIST.ENSO-UPDATE@NOAA.GOV.

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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 the web site of CPC 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. 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**
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**
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**
CPC collects and produces daily and monthly data, time series, and maps for precipitation and temperature.