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Climate prediction verification-El Nino/La Nina

气候预测检验 厄尔尼诺/拉尼娜

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was proposed by the China Meteorological Administration.

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Climate predictions tested for El Nino/La Nina

1 Scope

This document specifies the variables, indicators and evaluation requirements for the verification of El Niño/La Niña historical returns and real-time forecasts.

This document applies to operations, services and scientific research for El Niño/La Niña climate prediction verification.

2 Normative references

This document has no normative references.

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 [Source. GB/T 33666-2017, 2.1]

The numerical value of the ocean surface temperature.

Note. The unit is Celsius (°C).

3.2 climatological normal

Climate Annual value The average value of meteorological elements in the last three consecutive full decades.

Note. According to the relevant regulations of the World Meteorological Organization (WMO), it is updated every decade, that is, during the period from 2011 to 2020, the 1981-2010 The average is taken as its climate average, and so on.

[Source. GB/T 21983-2020, 2.2]

3.3 Sea surface temperature anomaly SST anomaly; SSTA

The difference between the sea surface temperature (3.1) and the climate mean (3.2).

3.4 El Niño/La Niña index

A monitoring index for sea surface temperature anomalies (3.3) reflecting El Niño/La Niña phenomena.

Note. Including NINO3.4 index, NINO3 index, NINO4 index, etc.

4.1 Test variables

The historical returns of El Niño/La Niña climate forecasts (hereinafter referred to as "historical returns") should be based on historical data with observation samples of more than 18 months.

The monthly average of the NINO3.4 index reported in history and observed is used as the test variable. Among them, the monthly average of the NINO3.4 index should be determined by the sea surface temperature.