

## **REGIONAL FORECAST FOR THE SELVA MAYA REGION**

México, Guatemala and Belize

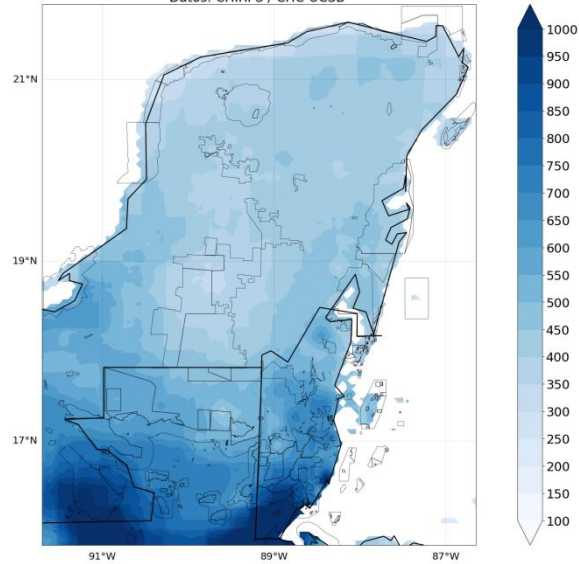
This probabilistic precipitation forecast for the Selva Maya Region for the months of May, June and July was derived from the forecast that is prepared by the Meteorological Service – CONAGUA (Mexico) and the consensus between the National Institute for Seismology, Vulcanology, Meteorology and Hydrology-INSIVUMMEH – (Guatemala) and the National Meteorological Service – NMS (Belize). This consensus came out of the LXIV Regional Climate Outlook Forum for Central America which is organized by the Regional Committee for Hydrological Resources (CRRH). The ultimate objective is to provide seasonal climate forecast information to decision makers at different levels.

### **CLIMATOLOGY OF THE SELVA MAYA REGION**

The climatology of accumulated precipitation for the months of May, June and July (MJJ) is computed using the average rainfall accumulations for those months from the year 1981 to 2010 which is obtained from the hybrid database “Rainfall Estimates from Rain Gauge and Satellite Observations” (CHIRPS). This database includes data from satellite hydro-estimator combined with data from surface rain gauges.

Figure 1 shows the map of the average accumulated precipitation for the three months (May, June and July). It can be seen from the figure that the highest accumulations of rainfall during this period occur in Belize, the central Eastern and western regions of Guatemala and Eastern Chiapas with values of over 750 mm. However, this rainfall pattern decreases northward, that is towards Campeche, Quintana Roo and Yucatan where the average amounts recorded range from 200 to 400 mm during this trimester.

Climatología de precipitación acumulada, Mayo - Julio (1981 - 2010)  
Región de la Selva Maya (México, Guatemala y Belize)  
Datos: CHIRPS / CHC-UCSB

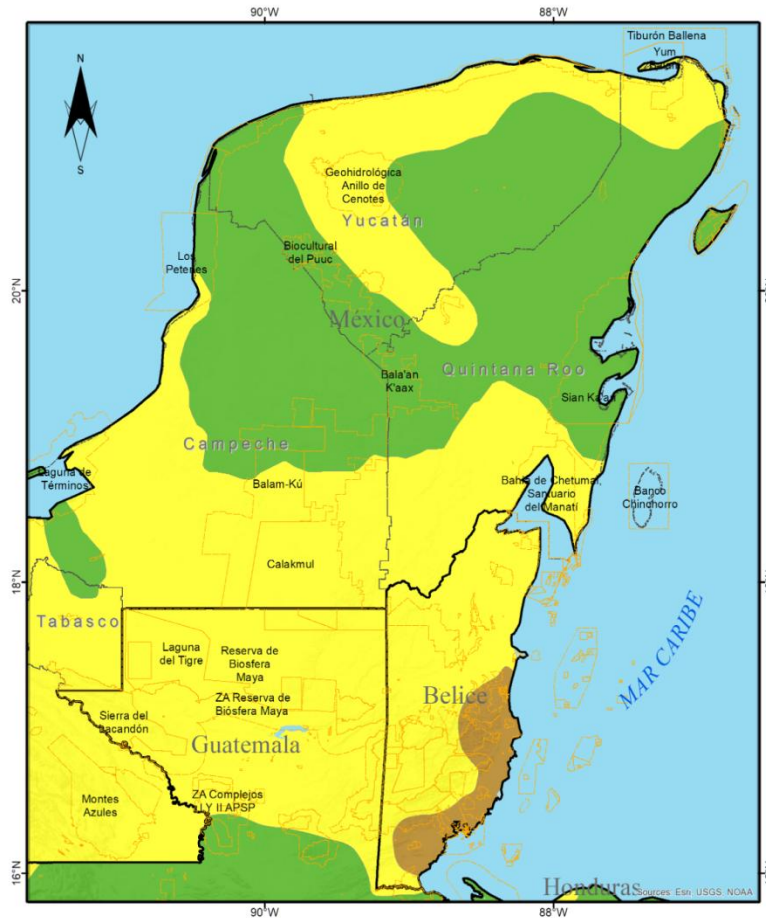


**Figure 1.** Map showing the climatology of precipitation for the Selva Maya Region.

### FORECAST FOR THE SELVA MAYA

By means of the LXII Central American Climate Outlook Forum the "LXIV Regional Climate Consensus Forecast" for Central America was obtained, which in this occasion includes the southern portions of Mexico. This was further validated by the Meteorological Services of Mexico, Guatemala and Belize for the Selva Maya Region covering the period from May to July.

PERSPECTIVA CLIMÁTICA SELVA MAYA  
MÉXICO, GUATEMALA Y BELIZE  
MAYO - JULIO 2021



Escala Gráfica



Leyenda

- Áreas protegidas
- Estados Mexicanos
- Probabilidad de lluvia
  - Mayor a lo normal
  - Normal
  - Menor a lo normal

Fuente: Información de la Perspectiva Climática generada en el LXII Foro del Clima de América Central, Sur de México y República Dominicana.

Figure 2. Map showing the Climate Outlook for the Selva Maya Region.

Table 1. Rainfall Accumulations Probabilities for the period May to July 2021

	Above Normal (Green)
	Normal (Yellow)

	<b>Below Normal (Brown)</b>
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**Table 2.** Most probable rainfall categories for the Selva Maya Region for the May to July 2021.

Country	Mostly Probable Category		
	Above Normal (A)	Normal (N)	Below Normal (B)
<b>México</b>	North-Central areas of Quintana Roo, as well as the West-Central and Northeastern areas of Yucatán and Campeche.	Eastern Chiapas, Tabasco and Southern Campeche, Northern Chiapas and Quintana Roo	
<b>Belize</b>		Northern, central and southern areas of Belize.	Southeastern coastal areas of Belize.
<b>Guatemala</b>	South of Petén in the municipalities of San Luis, south of the municipality of Sayaxché	Petén	

## DESCRIPTION OF THE SEASONAL CLIMATE OUTLOOK FOR THE SELVA MAYA REGION BY COUNTRY

### México

In the southeastern areas of Mexico which encompasses a large portion of the region known as the Selva Maya, the rainy season usually starts after the third week in May. For this year 2021, a great start to the rainy season is expected during the month of May over the region of interest in this bulletin. In the rainfall forecast for the period May to July it is expected that rainfall totals will be above normal or normal for most areas in Quintana Roo, Yucatán and northeastern Campeche, while for the rest of the region, averaged conditions are expected.

### Guatemala

High temperatures will continue to be recorded in May, as well as localized convective rainfall events, localized severe thunderstorms and strong winds. After the second half of May the rain starts due to the passage of easterly waves. In June, significant rainfall accumulations are expected. However, some rainfall deficits cannot be ruled out. An inclement weather event (days with heavy rainfall, drizzle and/or intermittent rain) cannot be ruled out. For the month of July, the mid-summer drought can begin sometime between the 10 to 20 July (which is considered normal), and it is not expected to last too long with possible interruptions caused by isolated rainfall events. Information regarding the mid-summer drought is updated on a monthly basis. It is recommended that users follow the updated monthly climate forecast which can be found on the following webpage: <https://insivumeh.gob.gt/meteorologia/perspectiva-climatica/>

### Belize

The tools used to create this forecast are: the Climatology, global and regional models and the Climate Predictability Tool (CPT) used through the Caribbean Climate Forecast Generator (CAROGEN). Considering the aforementioned inputs, the forecast for the next three months (MJJ) suggest that rainfall will tend to be normal to below normal for the entire country. There is a low probability (20%) that it may be above normal.

This corresponds to a range of approximately 400 mm of rainfall for the districts of Corozal and Orange Walk to around 1100 mm in the Toledo District. It is possible that there is a slight delay in the start of the rainy season as indicated in the following table.

### Expected start of the rainy season in Belize for the year 2021.

Districts	Most likely Start Dates of the Rainy Season
Toledo District	May 15 to June 1.
Stann Creek, Cayo and Belize Districts	June 10 to June 15.
Orange Walk and Corozal Districts	June 10 to June 15.

**Quantities of rainfall forecasted for the trimester by district.**

District	Rainfall (mm)
Toledo	600-1100
Stann Creek	500-700
Cayo	400-700
Belize	400-500
Orange Walk and Corozal	400-500

It is expected that both maximum daytime temperatures as well as minimum nighttime temperatures will be above normal during this period. Information regarding seasonal rainfall and temperature forecasts are updated monthly on the National Meteorological Service (NMS) of Belize's website. It is recommended that users monitor the monthly seasonal forecast on the NMS website: <http://nms.gov.bz/climate-services/seasonal-outlook/>

The next climate forecast for the Selva Maya Region will be prepared based on the results of the next Central American Climate Outlook Forum.

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