## THE ROLE OF AN NSO IN ENHANCING ENVIRONMENT, CLIMATE CHANGE AND DISASTER STATISTICS

### CSO Trinidad and Tobago

### Nov 2022 Satee Boodoo

Caribbean Sea



Tobago

#### TRINIDAD AND TOBAGO





## CLIMATE WIND SPEEDS TRINIDAD AND TOBAGO

#### 1999 PIARCO

#### 2002 PIARCO





## TEMPERATURE SUNSHINE HUMIDITY

### PIARCO CROWN POINT

Year	Mean Minimum Tempera ture	Mean Temper ature	Mean Maximu m Tempera ture	Mean Sunshine Hours	Mean Relative Humidit y	Year	Mean Minimum Temperat ure	Mean Tempera ture	Mean Maximum Temperat ure	Mean Sunshine Hours	Mean Relative Humidity
						1999	24.5	27.2	30.7	7.8	81.1
1999	23.3	26.7	31.7	7.2	82.4						
						2000	24.2	26.8	30.4	7.8	81.1
2000	23.4	26.9	32.0	7.1	81.8						
	<u> </u>	o /  =	<b></b>		~~ ~	2001	24.7		30.9	8.1	
2001	23.5	26./	31.6	7.9	80./						
2002	23.7	27.1	32.3	7.5	82.4	2002	24.1		30.7	7.4	80.7
2003	23.7	27.1	32.3	7.8	80.8	2003					

# NATURAL HAZARDS META DATA

**Tropical cyclone**: A non-frontal synoptic scale low-pressure system over tropical or sub-tropical waters with organized convection (i.e. thunderstorm activity) and a definite cyclonic surface wind circulation.

**Tropical Disturbance:** A discrete tropical weather system of apparently organized convection - generally 200 to 600 km (100 to 300 nmi) in diameter - originating in the tropics or subtropics, having a nonfrontal migratory character, and maintaining its identity for 24 hours or more.

**Tropical Depression:** A tropical cyclone in which the maximum sustained wind speed (using the U.S. 1 minute average standard) is 33 kt (38 mph, 18 m/s) or less. Depressions have a closed circulation.

**Tropical Storm:** A tropical cyclone in which the maximum sustained surface wind speed (using the U.S. 1 minute average standard) ranges from 34 kt (39 mph, 19 m/s) to 63 kt (73 mph, 34 m/s).

## **TROPICAL STORMS AND HURRICANES**

Designated No. for the	Designated No. for the Date of Passage		20 August 1969	
3	1-2 September 1878	EDITH (6)	5 September 1971	
5	12 August 1886	IRENE (10)	13 September 1971	
6	16 August 1886	ALMA (4)	14 August 1974	
8	1 November 1888	GRETA (8)	10 August 1978	
10	12 October 1891			
7	6 October 1892	CORA (4)	13 September 1978	
1	3 August 1928	DANIELLE (4)	8 September 1986	
2	27 June 1933		14 Outstand 1000	
6	12 August 1933	JOAN (TT)	14 October 1988	
7	16 August 1933	ARTHUR (1)	25 July 1990	
2	9 August 1938	FRAN (6)	14 August 1990	
2	24 July 1944		7 4 1000	
ANNA (1)	20 July 1961	DKET (2)	/ August 1993	
FLORA (7)	30 September 1963	JOYCE (10)	1 October 2000	

TROPICAL STORMS AND HURRICANES Designated No. for the year	Date of Passage
Ivan (9)	6 September 2004
Dennis (5)	6 July 2005
Emily (6)	14 July 2005
Felix (6)	1 September 2007

# EARTHQUAKES

Date	Magnitude	Intensity
21 October, 1766	-	7.9
20 September, 1825	VIII	-
24 February, 1918	VIII	-
4 December, 1954	VIII	> 6.5
September, 1968	V - VII	5.1
March, 1982	-	5.4
March, 1983	-	5.8
March, 1988	-	6.2
1 January, 1996	VI	5
2 April, 1997	-	5.6
22 April, 1997	-	5.9
9 July, 1997	-	5.7
4 October, 2000	-	5.8

EARTHQUAKES Date	Magnitude (Richter Scale)
22 March 2005	4.6
24 October 2005	4.9
1 December 2005	4.1
29 September 2006	5.8
29 September 2006	5.1
15 November 2006	4.8
17 November 2006	4.5
23 February 2007	4.7
29 November 2007	7.3

# FLOODS

Data available 1981-2007
Year and Date
≻Mild, Severe, Extensive
≻High Winds; Heavy Rainfall
Areas Affected
Severity of Damages
Flashflooding in Communities
Destruction to property and crops

➢Loss of Human Life

## Sharing Experiences PRODUCTION



Environmental Student



Technical Language



Ongoing Business = Ongoing Interest

# DATA VERIFICATION



Cross Check Data National Sources



Cross Check International Sources



Google Searches

## PRODUCTION Bad Experiences



Protect the collection process



DATA CONTRIBUTORS



## **REALITY CHECK**

#### MAJOR WORK

#### OPEN DATA RATING 2022



Environmental Indicators State of Environment Reports 2013 -2018 Needs FULL TIME consistent work Stakeholder Relationships Lost

# **OPEN DATE WATCH ENVIRONMENT INDICATORS**

- 1. (18.2) Data on protected lands
- 2. (19.2) Data on timber harvests or deforestation
- 3. (19.3) Data on mining or extractive activities
- 4. (19.4) Water consumption
- 5. (20.1) Energy consumption
- 6. (20.2) Energy supply
- 7. (21.1) Greenhouse gas emissions
- 8. (21.2) Emissions of air or water pollutants



### NSO

Access Key INVOLVEMENT

ANNUAL 2022 KAP STUDIES 2016 2022 STATE OF ENVIRONMENT REPORT

EMA

ODPM <u>RiX</u> Platform

## RIX PLATFORM UN OFFICE FOR DISASTER REDUCTION

1	Education System	The Education System of Trinidad and Tobago at a Glance : xls format
2	Travel statistics	Trinidad & Tobago Arrivals By Regions 2014 – March 2022.xlsx
3	Travel statistics	Arrivals by Purpose of Visit 2014 – March 2022.xlsx
4	Travel statistics	Arrivals by Main Market 2014 – March 2022.xlsx
5	Macroeconomic and financial data	National accounts
6		Consumer price
7	Aditional data	Average yearly visitor expenditure
8	Aditional data	Direction of trade statistics

## INVOLVEMENT IN ENVIRONMENT AND CLIMATE CHANGE STATISTICS

EPPD

MONTREAL PROTOCOL COP 34 OCT/NOV 22 COP 15 UN CBD Biodiversity Framework UNFCCC Inventory of Greenhouse Gas Emissions

## **MOVING FORWARD**

EPPD

THE NATIONAL OZONE OFFICER - SEPT 2022 STAKEHOLDER LINKAGES UNFCC National Communication 1<sup>ST(232Pgs)</sup>

2<sup>ND (119 Pgs.)</sup>

3<sup>RD</sup> Sept 21 (352 Pgs)

ENVIR. UNIT Statistician Statistical Officer Sunshine and Rainfall

Environmental Statistics Climate Change Disaster Statistics

## THANKS FOR YOUR ATTENTION