

METEOROLOGICAL SERVICE, JAMAICA



CLIMATE SMART PRODUCTS FOR AGRICULTURE THE JAMAICA CONTEXT

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10th December 2014

Developing Climate Service in Jamaica for the Agriculture sector



This was not an easy task

- 1. Meet with farmers and stakeholders to look at their needs.**
- 2. Created several climate smart related products for the sector.**
- 3. Build awareness of weather products through training and consultations with extension officers and farmers**

Developing Climate Service in Jamaica for the Agriculture sector



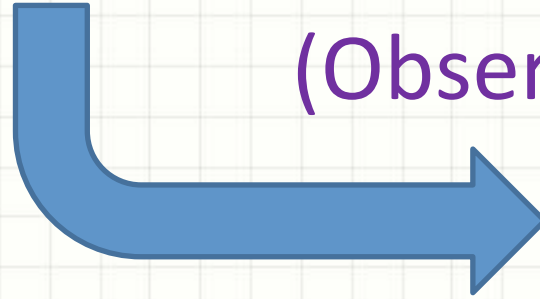
Also, working group was developed with Meteorological Service, RADA, CARDI and IRI

Mandates

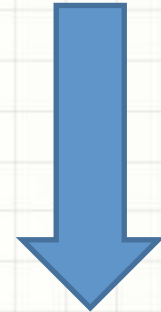
- Monitor the use of climate smart products (rainfall, drought and temperature forecast)
- Build awareness of the weather and climate products (done through training forums with farmers and extension officers)

1. INSTRUMENTATION

(Observations)



2. DATA



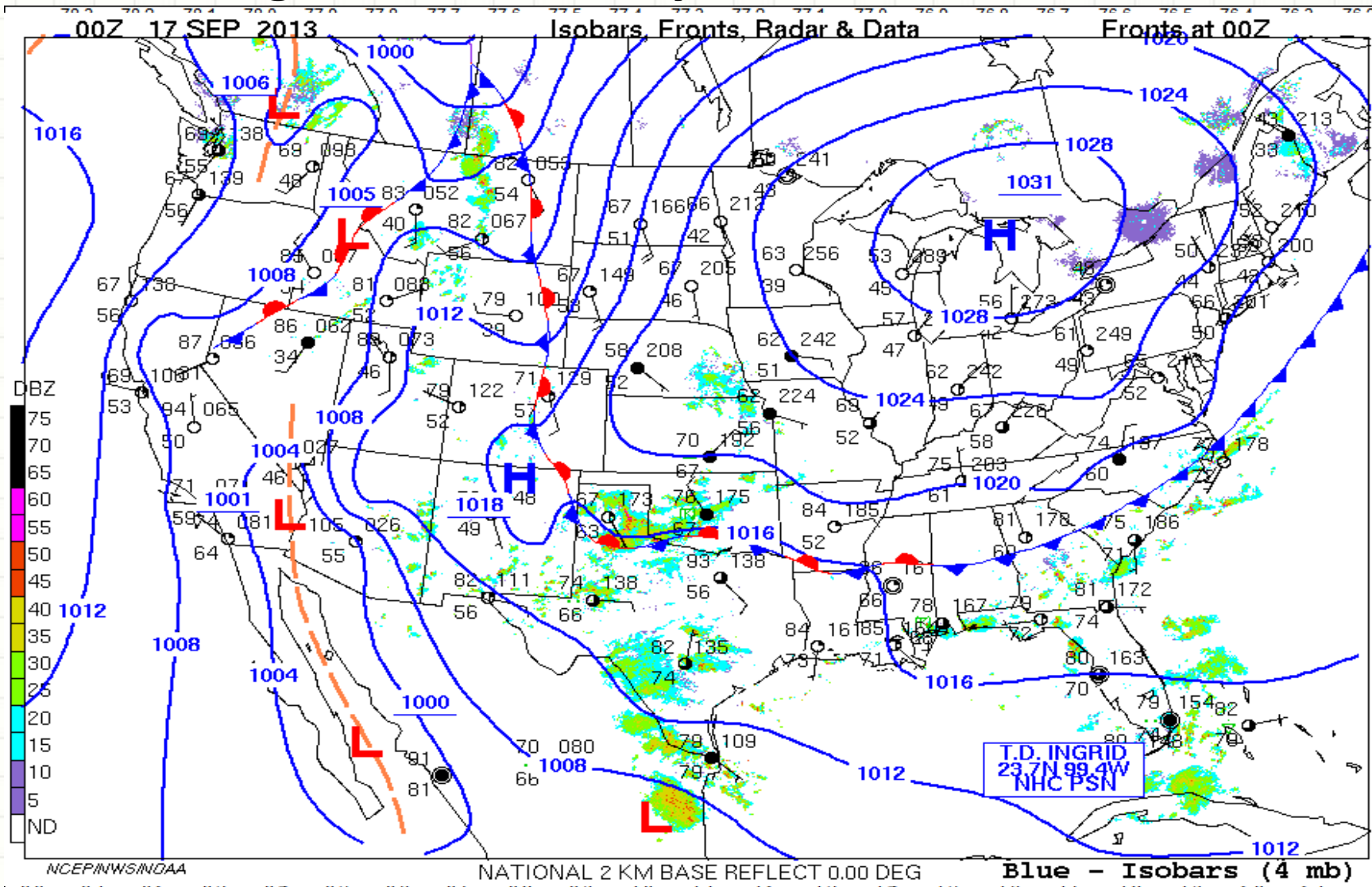
3. ANALYSIS



4. PRODUCTS & SERVICES

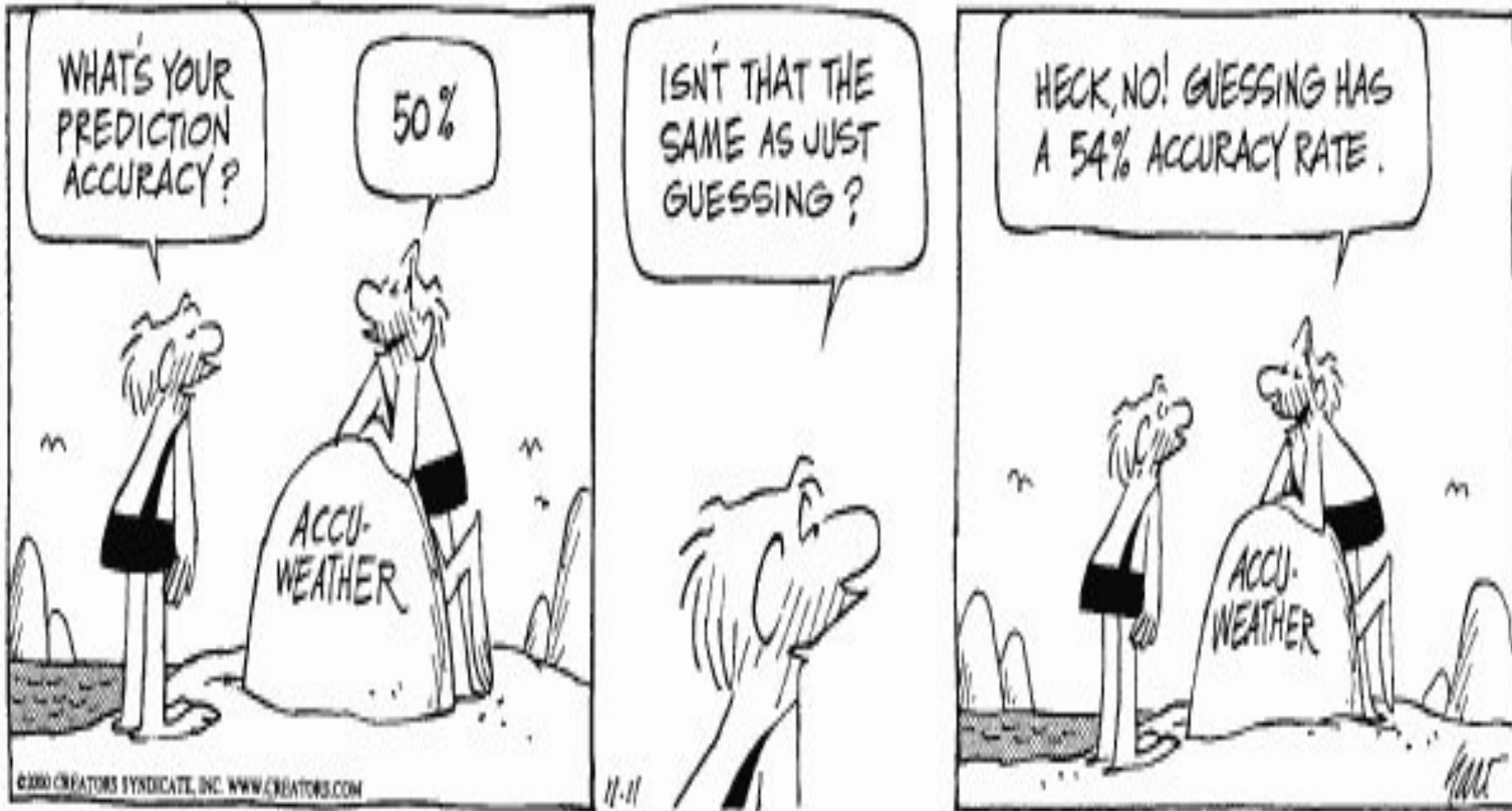
WEATHER SYSTEMS

Break down the science behind climate and weather forecasting to a community level forecast.



Probability Forecast

Communication



“How often are the forecasts correct?”

If the forecasts are correct 60% or more of the time, is that good?

What makes a good forecast?

Forecast: There is a 40% probability that Uruguay will win the 2014 FIFA World Cup Final

Confidence!

Verification?



What makes a good forecast?

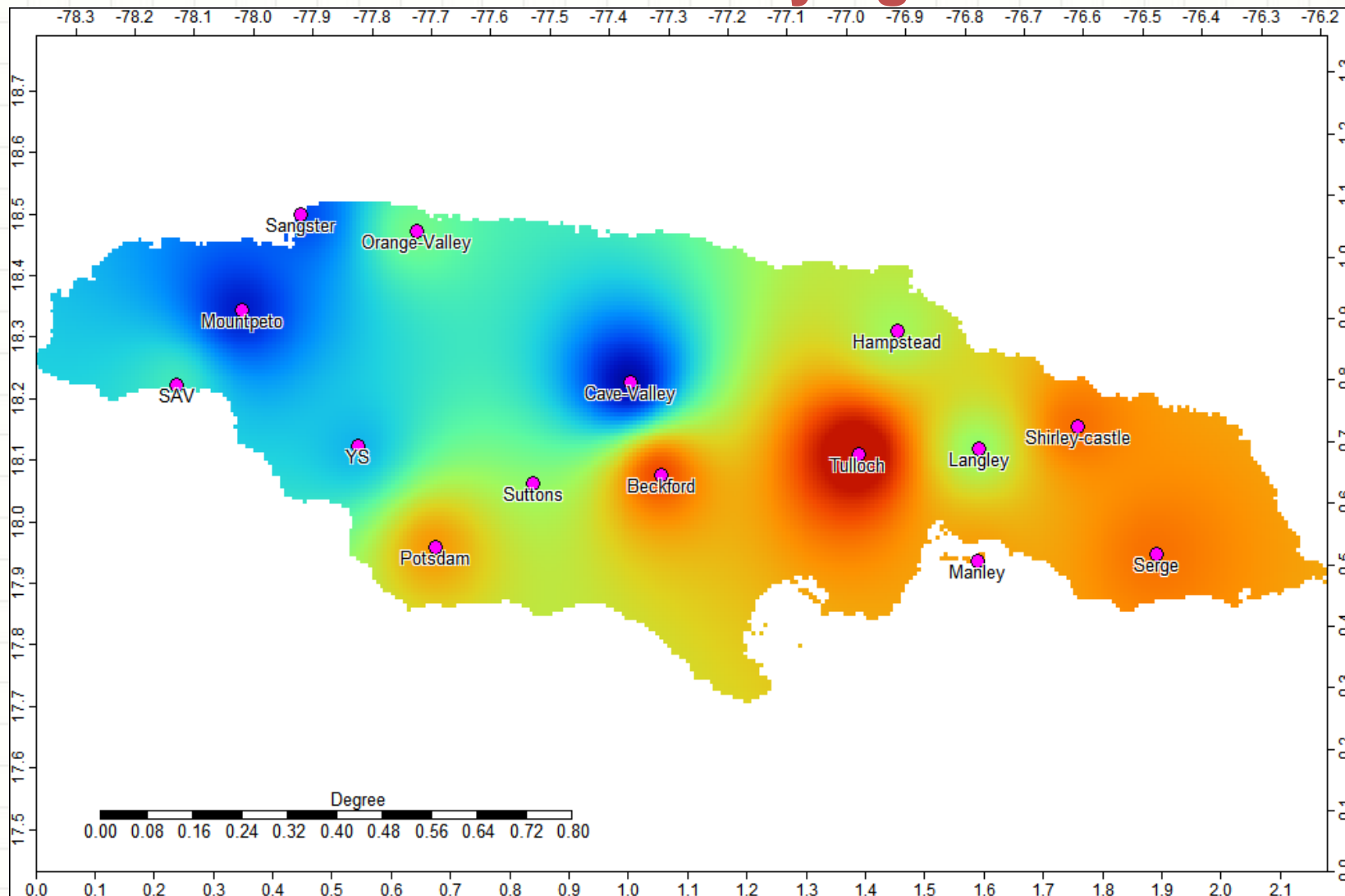


Skill

It comes from practice.

Climate Smart Products

Network of stations in key agriculture areas



“We can model and create climate friendly tools to assist our farmers”

NEW PRODUCTS

- Monthly Farmers Bulletins

SPI Value	Category	SPI Value	Category
-0.50 to 0.50	Normal	-0.80 to -0.51	Abnormally dry
0.80 to 0.51	Abnormally wet	-1.30 to -0.81	Moderately dry
1.30 to 0.81	Moderately wet	-1.60 to -1.31	Severely dry
1.60 to 1.31	Very wet	-2.00 to -1.61	Extremely dry
2.00 to 1.61	Extremely wet	≤ -2.01	Exceptionally dry
≥ 2.01	Exceptionally wet		

Table 1. Rainfall and Drought Analysis for Selected Stations

Parish	Station	October Monthly Total (mm)	Percent of 30 year Mean (%)	SPI for October
St. Thomas	Serge Island	87	33	-0.12
KSA	Langley	254	71	-0.46
KSA	Manley airport	16	14	-0.19
St. Catherine	Tulloch	193	81	0.14
Clarendon	Beckford Kraal	133	50	-0.52
Manchester	Sutton	378	149	0.74
St. Elizabeth	Y.S Estates	272	91	-0.61
Westmoreland	Sav-la-mar	108	45	-0.48
Hanover	Mount Peto	454	128	1.08
St. James	Sangster	28	17	-0.95
Trelawny	Orange Valley	65	44	-0.74
St. Ann				1.09
St. Mary				-0.19
Portland				-0.62

<http://jamaicacclimate.net>

NEW PRODUCTS

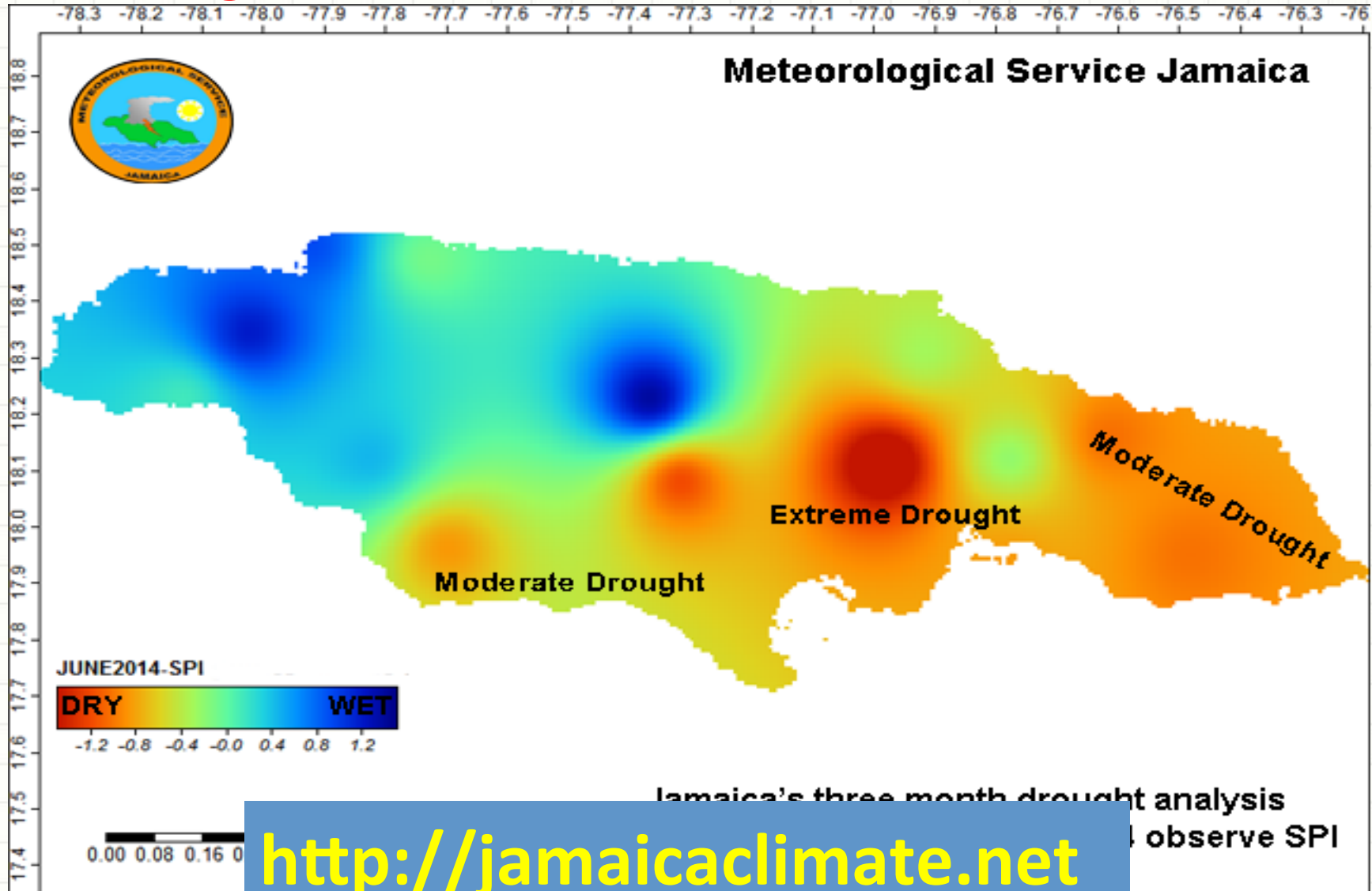
- **Seasonal Rainfall and Temperature Outlook**
(Climate Predictability Tool)

Station	Below (B) %	Normal (N) %	Above (A) %
Jamaica			
Rainfall	35	31	34
Temperature	10	25	65

<http://jamaicacclimate.net>

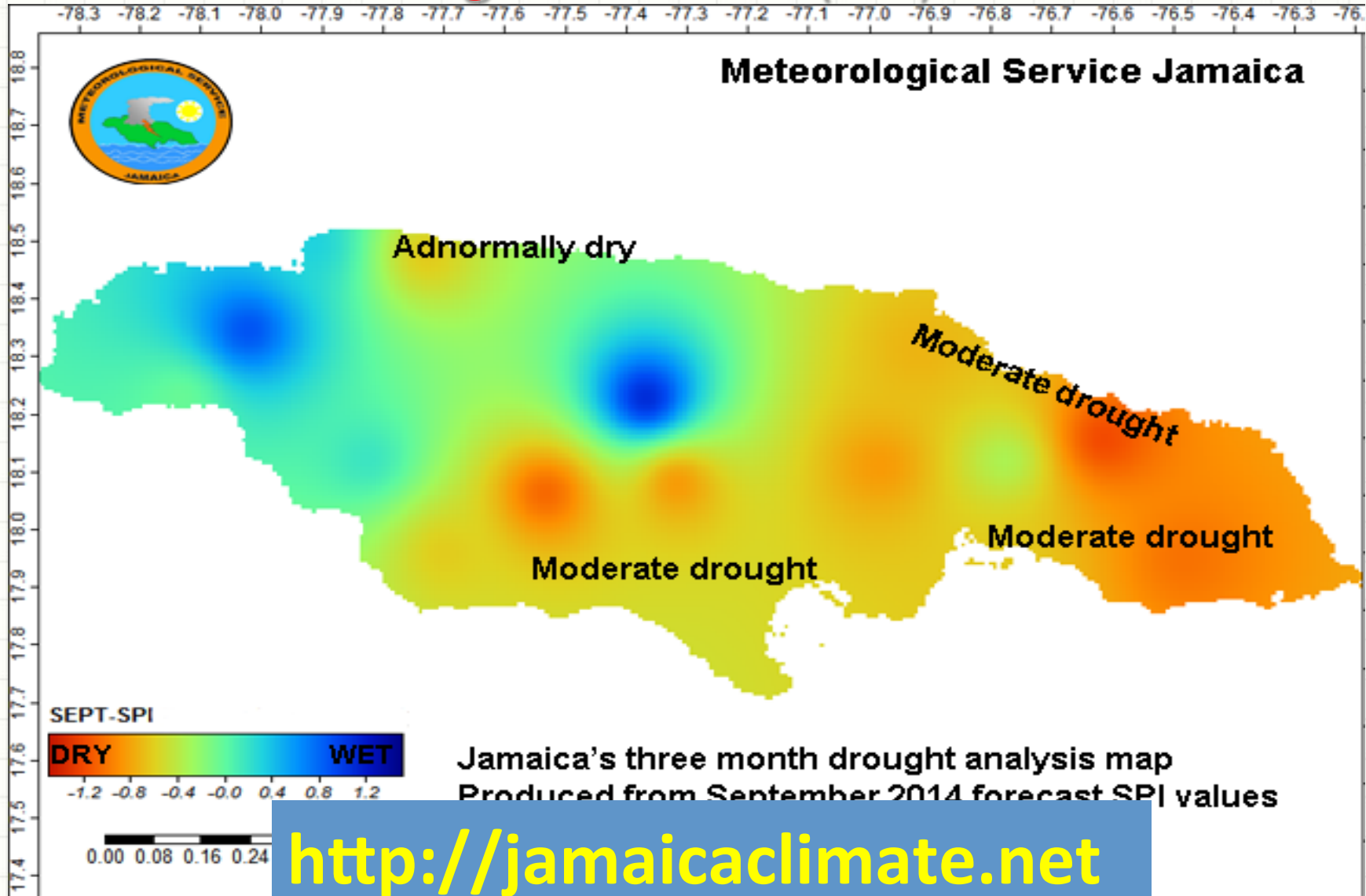
NEW PRODUCTS

- Drought Observation-SPI



NEW PRODUCTS

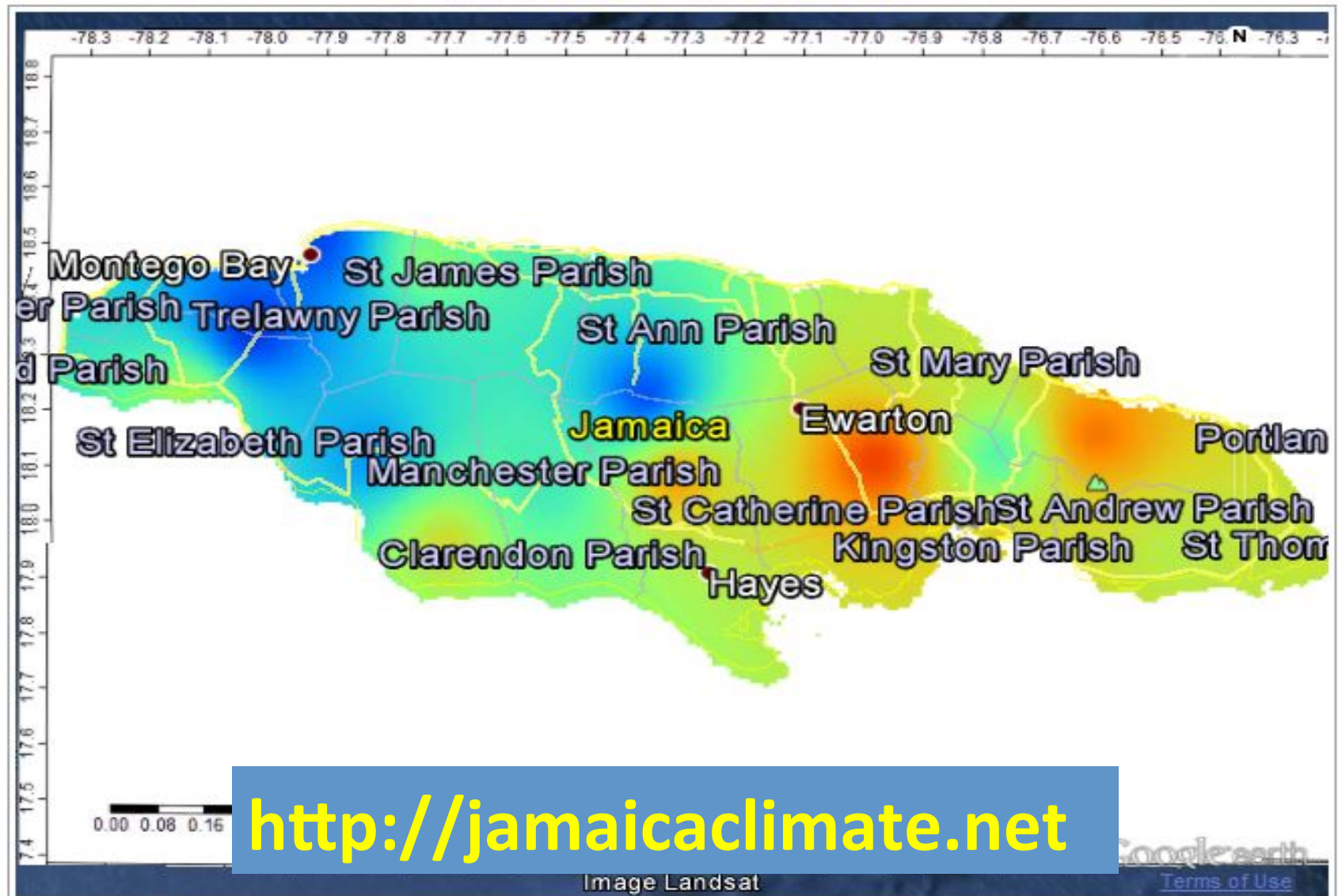
- Seasonal Drought Forecast (SPI)



NEW PRODUCTS

- Seasonal Drought Forecast (SPI) (3D Interactive Map)

[August 2014 Drought Forecast Map](#)



NEW PRODUCTS

Real time Weather Forecast (Done for any community across the island)

Kingston

Thu 1pm Fri 1am



TEMP 29°C 23°C

Wind ENE 5kts NNE 4kts

Rainfall 0.2 mm/h 0.0 mm/h

<http://agrilinksja.com>

Seasonal Forecast

Farmers Bulletin

Rainfall Summary

Astronomical Data

Weather Map

Forecast

Warnings

[CLICK HERE FOR WEATHER MAP](#)

Christiana Weather

Current hour is 28/Nov/2013 11:14:02 am

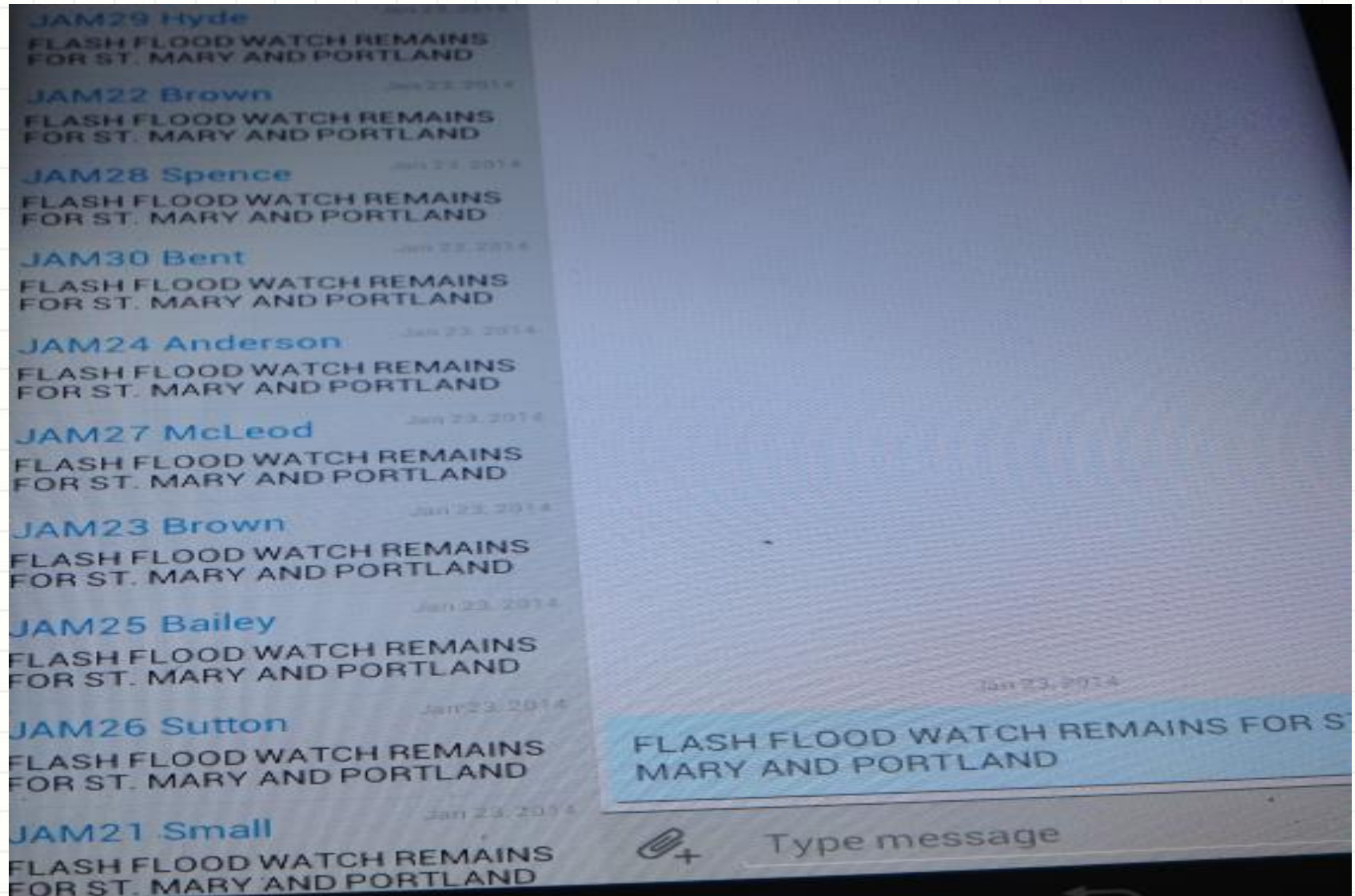
The selected place is: Christiana

Time	Temp	Rainfall	R.Humidity	Windspd	Winddir	Weather
Thu 01:00 pm	28 °C	0.6 mm	74 %	6 kts	NE	
Fri 01:00 am	23 °C	0.0 mm	90 %	7 kts	NE	
Fri 01:00 pm	28 °C	0.8 mm	72 %	7 kts	ENE	
Sat 01:00 am	23 °C	0.0 mm	91 %	5 kts	NE	
Sat 01:00 pm	27 °C	0.3 mm	73 %	6 kts	E	
Sun 01:00 am	22 °C	0.0 mm	91 %	5 kts	NE	
Sun 01:00 pm	28 °C	0.4 mm	69 %	5 kts	ESE	
Mon 01:00 am	22 °C	0.0 mm	90 %	4 kts	ENE	
Mon 01:00 pm	28 °C	0.1 mm	59 %	4 kts	S	

<http://agrilinksja.com>

FREE SMS WEATHER ALERT

(For all farmers in our database)



Accessing our Products

- Mailing List (Email)
- Web Portals:

<http://metservice.gov.jm>

<http://agrilinksja.com>

<http://jamaicacclimate.net>

QUESTIONS



THANK YOU

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