Rainfall frequency and extreme forecasts

wet days and wet spells outlooks December 2016 to February 2017

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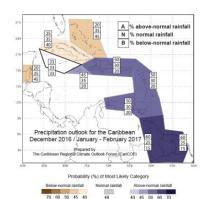








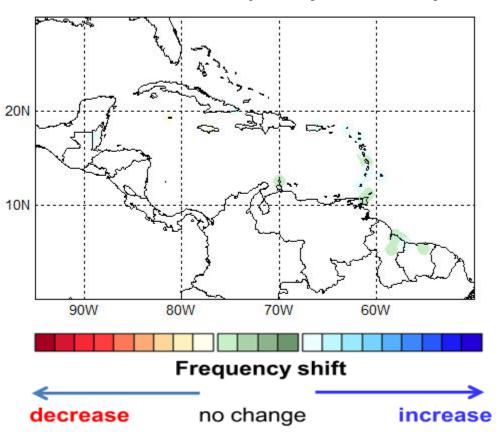




Wet day frequency shifts

Forecast for: December 2016 to February 2017



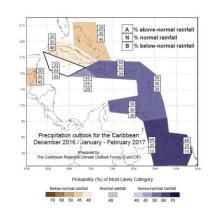


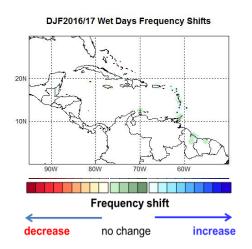
USUALLY: Across the region during November-December-January, about 25 to 45 days out of a total of 90 days are wet days.

FORECAST: DJF rainfall is likely to be above- to normal in much of the region, By contrast, below- to normal is forecast for Bahamas, Belize and Cuba. We forecast no change from the usual amount of wet days (low confidence).

IMPLICATION:

- Disruptions of outdoor activities by rainfall will become fewer as the months progress.
- Surface dryness will increase faster in the extreme north and west of the region than elsewhere.

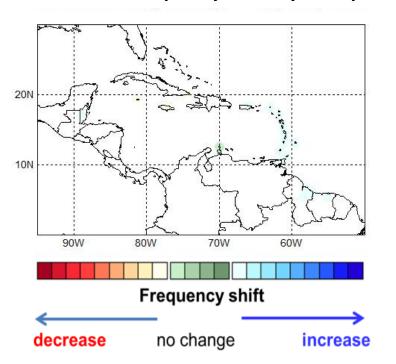




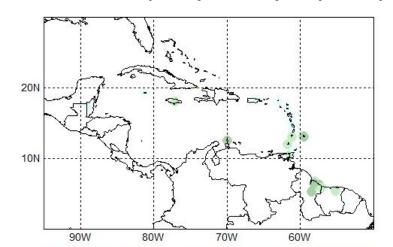
Wet spells frequency shifts

Forecast for: December 2016 to February 2017

DJF 2016-'17 frequency of 7-day wet spells



DJF 2016-'17 frequency of 7-day very wet spells



USUALLY: Roughly 1 to 3 wet spells (ABC Islands: 2 to 6; coastal Guianas: 1 to 5) occur from December to February, of which up to 2 are very wet (ABC Islands: up to 4; coastal Guianas: up to 3).

FORECAST: DJF rainfall is likely to be aboveto normal in much of the region, By contrast, below- to normal is forecast for Bahamas, Belize and Cuba. We forecast no change from the usual amount of wet days or wet spells (low confidence), or very wet spells (low to medium confidence).

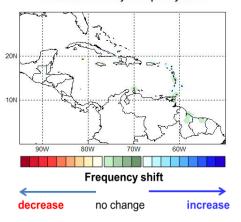
IMPLICATION:

- Recharge of large water reservoirs by rainfall to slow down by end of year.
- Depletion of large reservoirs during dry season likely slower than usual.

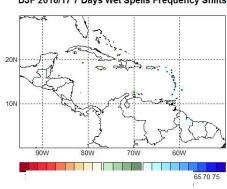
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A % above-normal rainfall N % normal rainfall

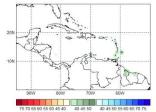
DJF2016/17 Wet Days Frequency Shifts



DJF 2016/17 7 Days Wet Spells Frequency Shifts



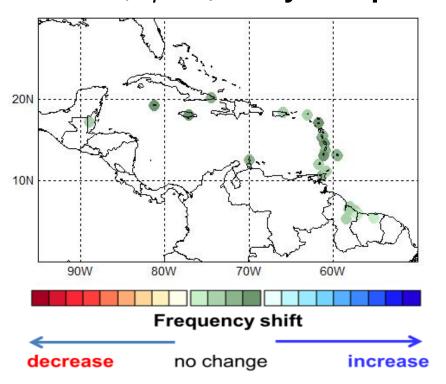
DJF 2016/17 7-day Very Wet Spell Frequency S



Extreme wet spells frequency shifts

Forecast for: December 2016 to February 2017

DJF 2016-'17 frequency of extreme (top 1%) 3-day wet spells



USUALLY: Up to 1 extreme wet spells can occur from December to February, except in coastal Guianas (up to 2) which are in their short wet season.

FORECAST: DJF rainfall is likely to be above- to normal in much of the region, By contrast, below- to normal is forecast for Bahamas, Belize and Cuba. We forecast no change from the usual amount of wet days or wet spells (low confidence), or very wet spells (low to medium confidence). Apart from the coastal Guianas, we forecast low chances for extreme wet spells beyond December (high confid.).

IMPLICATION: Flash flood potential mostly disappearing by end of year, except in Guianas.

December 2016 to February 2017	No. of wet days		No. of 7-day wet spells (20% wettest)		No. of 7-day very wet spells (10% wettest)		No. of 3-day extremely we spells (1% wettest)		are expected
_	Climatology	Forecast	Climatology	Forecast	Climatology	Forecast	Climatology	Forecast	ďx
Antigua (VC Bird)	23-40	23-40	1.3-2.6	1.2-3.4	0.3-1.4	0.3-1.4	0-0		e e
Aruba (Beatrix)	12-36	13-36	2.1-6.4	2.6-6.7	0.3-3.6	0.9-3.3	0-1		e ar
Barbados (CIMH)	21-44	23-43	0.9-2.5	0.9-2.5	0-1.3	0-1.2	0-0		on6
Barbados (GAIA)	22-43	23-42	0.7-3	0.9-3.3	0-1.4	0.3-1.2	0-0		grey none
Belize (C. Farm)	21-41	20-39	1.3-3.7	1.1-4	0.4-1.7	0.3-1.7	0-1		gre
Cayman	11-22	11-24	0.4-2.1	0.3-2.5	0-1	0-1.1	0-0		
Cuba (Punta Maisi)	12-22	12-24	1.6-4	1.5-4.5	0.5-2.1	0.6-2.1	0-0		se,
Dominica (Canefield)	36-54	35-53	0.8-3.9	0.5-3.7	0-1.5	0-1.4	0-0		<mark>dark blue</mark> an increase,
Dominica (Douglas Charles)	48-62	45-64	0.8-3	0.7-3.3	0-1.3	0-1.3	0-0		l) L
Grenada (MBIA)	20-39	19-42	0.7-3.9	0.8-3.7	0-2.1	0-1.8	0-1.1		an
Guyana_73	15-35	17-31	0.9-5.4	1.2-5.2	0.4-3.9	0.6-3	0-2		e e
Guyana (Albion)	25-51	29-50	1.3-6	1.7-5.5	0.4-3.4	0.7-2.9	0-1.9		Q
Guyana (Blairmont)	33-53	32-55	1.1-5.6	1.5-5.3	0.4-3.2	0.8-2.7	0-2		ark
Guyana (Enmore)	27-51	30-49	1.3-4.9	1.8-5	0.4-4	0.8-3.6	0-1	0-1.1	0
Guyana (Georgetown)	33-59	36-56	0.7-5.5	1.1-5.8	0-4.4	0.5-3.4	0-2	0-2.1	>
Guyana (New Amsterdam)	31-54	32-53	0.9-5.3	1.5-5	0.7-3.9	0.8-2.9	0-2) Suc
Guyana (Skeldon)	27-48	29-48	1.2-4.8	1.4-4.7	0.4-2.6	0.6-2.3	0-2.1		ane
Guyana (Timehri)	38-64	40-60	1.3-5	1.6-5	0.4-3.1	0.7-2.7	0-1.3	0-1.5	fre
Jamaica (Worthy Park)	17-25	14-26	0.4-2.6	0.3-2.4	0-1.7	0-1.4	0-0		a decrease in frequency,
Martinique (FDF Desaix)	43-59	42-60	0.9-3	1.1-3.1	0-1.3	0-1.1	0-0		ase.
Puerto Rico (San Juan)	30-46	31-46	1.3-3.6	1.6-3.8	0.4-1.4	0.5-1.6	0-1	0-0.9	reg
St. Lucia (Hewanorra)	29-47	30-47	0.9-2.7	1-2.9	0-1.3	0.2-1.2	0-0.2		dec
St. Maarten (TNCM)	29-47	29-48	1.6-4.4	1.4-4.9	0-2.1	0-2.1	0-1	0-1	
St. Vincent (ET Joshua)	42-60	41-60	0.9-3	1-3.1	0-1.8	0.4-1.6	0-0		brown is
Suriname (Zanderij)	42-55	41-55	1.6-3.9	1.8-4	0.4-2.3	0.7-2.2	0-1	0-1.1	NO.
Tobago (ANR Robinson)	26-41	27-41	0-2.7	0-2.6	0-1.3	0-1.3	0-1		b
Trinidada(Piarco)bb	23-38	23-40	0.7-3.4	0.9-3.8	0-2.1	0-1.8	0-1	0-0.9	