

3. Burgeo NL

This station was not updated in CRA (2015) because it is an active IDF station and was updated by EC. The EC IDF V2.3 (2015) curve is reproduced below, with the addition of the 20-year return period.

Office of Climate Change and Energy Efficiency

Short Duration Rainfall Intensity-Duration-Frequency Data
Données sur l'intensité, la durée et la fréquence des chutes
de pluie de courte durée

Gumbel - Method of moments/Méthode des moments

2015/10/30

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BURGEO NL                                     NL      8400801
Latitude: 47 37'N   Longitude: 57 37'W   Elevation/Altitude: 10      m
Years/Années : 1967 - 2012           # Years/Années :    31
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Table 1 : Annual Maximum (mm)/Maximum annuel (mm)

	Year Année	5 min	10 min	15 min	30 min	1 h	2 h	6 h	12 h	24 h
EC-IDF	1967	5.6	8.1	10.4	13.5	16.3	22.4	35.6	43.9	50.5
EC-IDF	1968	7.9	9.7	10.7	16.0	25.9	37.6	54.4	66.0	94.0
EC-IDF	1969	6.1	6.3	6.3	8.6	13.5	23.9	46.0	49.3	52.1
EC-IDF	1970	5.6	7.4	9.1	17.3	22.9	33.0	50.3	74.9	80.3
EC-IDF	1971	8.1	11.4	12.2	19.8	31.5	44.7	64.5	80.5	92.2
EC-IDF	1972	6.3	10.9	11.2	14.0	17.5	22.9	42.7	55.9	73.7
EC-IDF	1973	4.1	6.6	8.4	12.2	21.8	28.4	58.2	65.3	67.6
EC-IDF	1974	4.1	5.1	6.3	10.4	17.3	25.7	38.4	49.0	71.9
EC-IDF	1975	3.6	6.1	8.1	10.9	13.7	21.3	40.4	61.2	73.4
EC-IDF	1976	7.1	10.7	11.9	17.5	21.3	34.8	61.5	80.0	93.2
EC-IDF	1978	4.9	8.8	13.0	16.9	24.5	35.9	46.7	54.8	75.6
EC-IDF	1979	4.8	9.3	12.8	21.3	25.7	45.9	78.3	90.4	113.2
EC-IDF	1980	4.2	5.9	7.6	11.6	18.8	31.0	59.4	69.0	75.3
EC-IDF	1981	4.8	7.0	8.5	11.5	20.6	26.8	51.4	60.2	71.5
EC-IDF	1982	12.7	14.9	18.4	20.4	24.9	26.5	36.3	53.6	76.8
EC-IDF	1983	7.8	11.6	15.1	17.7	20.2	32.3	61.6	82.4	90.6
EC-IDF	1984	10.2	15.9	20.4	27.9	30.8	34.1	35.9	49.7	68.3
EC-IDF	1985	5.7	8.0	11.1	13.2	19.0	23.7	43.0	78.0	108.3
EC-IDF	1986	6.0	7.5	9.6	13.3	13.7	26.6	59.4	73.8	80.0
EC-IDF	1987	4.0	5.9	7.7	11.7	17.5	24.4	53.1	61.0	62.2
EC-IDF	1988	6.5	9.0	13.3	16.9	29.4	45.0	48.9	52.5	54.1
EC-IDF	1989	9.3	10.5	11.9	14.8	20.4	30.7	51.5	64.7	66.5
EC-IDF	1990	5.6	7.0	10.0	15.3	20.9	31.1	38.2	54.1	71.0
EC-IDF	1991	8.9	9.2	9.5	10.6	14.9	19.7	32.5	44.9	57.9
EC-IDF	1993	3.4	4.4	5.8	11.0	14.3	25.4	50.4	69.5	73.0
EC-IDF	1994	5.1	9.7	14.4	15.7	15.7	18.9	34.2	45.4	50.4
EC-IDF	2006	5.6	11.2	15.2	17.6	20.2	24.6	35.4	53.6	74.6
EC-IDF	2007	9.0	12.2	13.2	15.4	19.0	24.6	57.6	59.6	66.8
EC-IDF	2008	4.8	5.8	8.6	14.4	23.8	33.6	50.2	69.8	70.0
EC-IDF	2009	4.4	8.8	12.2	17.8	23.0	27.4	42.8	54.6	82.6
EC-IDF	2012	5.4	6.8	7.4	11.4	16.0	24.6	33.8	46.6	64.8
	# Yrs. Années	31	31	31	31	31	31	31	31	31
	Mean Moyenne	6.2	8.8	11.0	15.1	20.5	29.3	48.1	61.7	74.3
	Std. Dev.	2.2	2.7	3.4	4.0	4.9	7.1	11.1	12.5	15.2

Écart-type										
Skew.	1.20	0.77	0.82	1.06	0.57	0.93	0.57	0.50	0.70	
Dissymétrie										
Kurtosis	4.58	3.68	3.97	5.27	3.01	3.56	3.34	2.60	3.88	

*-99.9 Indicates Missing Data/Données manquantes

Warning: annual maximum amount greater than 100-yr return period amount

Avertissement : la quantité maximale annuelle excède la quantité

pour une période de retour de 100 ans

Year/Année	Duration/Durée	Data/Données	100-yr/ans
1984	30 min	27.9	27.6

Table 2a : Return Period Rainfall Amounts (mm)
Quantité de pluie (mm) par période de retour

Duration/Durée		2	5	10	20	25	50	100	#Years
		yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	Années
EC-IDF	5 min	5.8	7.7	9.0	10.2	10.6	11.8	12.9	31
EC-IDF	10 min	8.3	10.7	12.3	13.9	14.4	15.9	17.4	31
EC-IDF	15 min	10.4	13.4	15.5	17.4	18.0	19.9	21.8	31
EC-IDF	30 min	14.4	17.9	20.3	22.5	23.2	25.4	27.6	31
EC-IDF	1 h	19.7	24.0	26.9	29.7	30.6	33.3	36.0	31
EC-IDF	2 h	28.1	34.4	38.6	42.6	43.9	47.8	51.7	31
EC-IDF	6 h	46.3	56.1	62.6	68.8	70.8	76.9	82.9	31
EC-IDF	12 h	59.7	70.8	78.1	85.1	87.4	94.2	101.1	31
EC-IDF	24 h	71.8	85.2	94.1	102.6	105.3	113.7	122.0	31

Table 2b :

Return Period Rainfall Rates (mm/h) - 95% Confidence limits

Intensité de la pluie (mm/h) par période de retour - Limites de confiance de 95%

Duration/Durée		2	5	10	20	25	50	100	#Years
		yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	Années
EC-IDF	5 min	69.9	92.8	107.9	122.5	127.1	141.3	155.4	31
		+/- 8.4	+/- 14.1	+/- 19.0	+/- 24.0	+/- 25.7	+/- 30.7	+/- 35.8	31
EC-IDF	10 min	49.9	64.4	74.0	83.2	86.2	95.2	104.1	31
		+/- 5.3	+/- 8.9	+/- 12.1	+/- 15.3	+/- 16.3	+/- 19.5	+/- 22.7	31
EC-IDF	15 min	41.7	53.8	61.8	69.6	72.0	79.5	87.0	31
		+/- 4.4	+/- 7.5	+/- 10.1	+/- 12.8	+/- 13.6	+/- 16.3	+/- 19.0	31
EC-IDF	30 min	28.8	35.9	40.5	45.0	46.5	50.8	55.2	31
		+/- 2.6	+/- 4.4	+/- 5.9	+/- 7.4	+/- 7.9	+/- 9.5	+/- 11.1	31
EC-IDF	1 h	19.7	24.0	26.9	29.7	30.6	33.3	36.0	31
		+/- 1.6	+/- 2.7	+/- 3.6	+/- 4.6	+/- 4.9	+/- 5.9	+/- 6.8	31
EC-IDF	2 h	14.1	17.2	19.3	21.3	21.9	23.9	25.8	31
		+/- 1.2	+/- 1.9	+/- 2.6	+/- 3.3	+/- 3.5	+/- 4.2	+/- 4.9	31
EC-IDF	6 h	7.7	9.4	10.4	11.5	11.8	12.8	13.8	31
		+/- 0.6	+/- 1.0	+/- 1.4	+/- 1.7	+/- 1.8	+/- 2.2	+/- 2.6	31
EC-IDF	12 h	5.0	5.9	6.5	7.1	7.3	7.9	8.4	31
		+/- 0.3	+/- 0.6	+/- 0.8	+/- 1.0	+/- 1.0	+/- 1.2	+/- 1.4	31
EC-IDF	24 h	3.0	3.6	3.9	4.3	4.4	4.7	5.1	31
		+/- 0.2	+/- 0.3	+/- 0.5	+/- 0.6	+/- 0.6	+/- 0.8	+/- 0.9	31

Table 3 : Interpolation Equation / Équation d'interpolation: $R = A \cdot T^B$

R = Interpolated Rainfall rate (mm/h)/Intensité interpolée de la pluie (mm/h)

RR = Rainfall rate (mm/h) / Intensité de la pluie (mm/h)

T = Rainfall duration (h) / Durée de la pluie (h)

Statistics/Statistiques	2	5	10	20	25	50	100
	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans

Mean of RR/Moyenne de RR	26.6	34.1	39.0	43.8	45.3	49.9	54.5
Std. Dev. /Écart-type (RR)	23.0	30.6	35.6	40.4	41.9	46.7	51.3
Std. Error/Erreur-type	2.0	2.2	2.3	2.4	2.5	2.6	2.8
Coefficient (A)	19.2	23.9	27.1	30.0	31.0	33.9	36.8
Exponent/Exposant (B)	-0.548	-0.567	-0.576	-0.583	-0.585	-0.590	-0.594
Mean % Error/% erreur moyenne	4.8	4.2	4.0	4.0	4.0	4.0	4.0

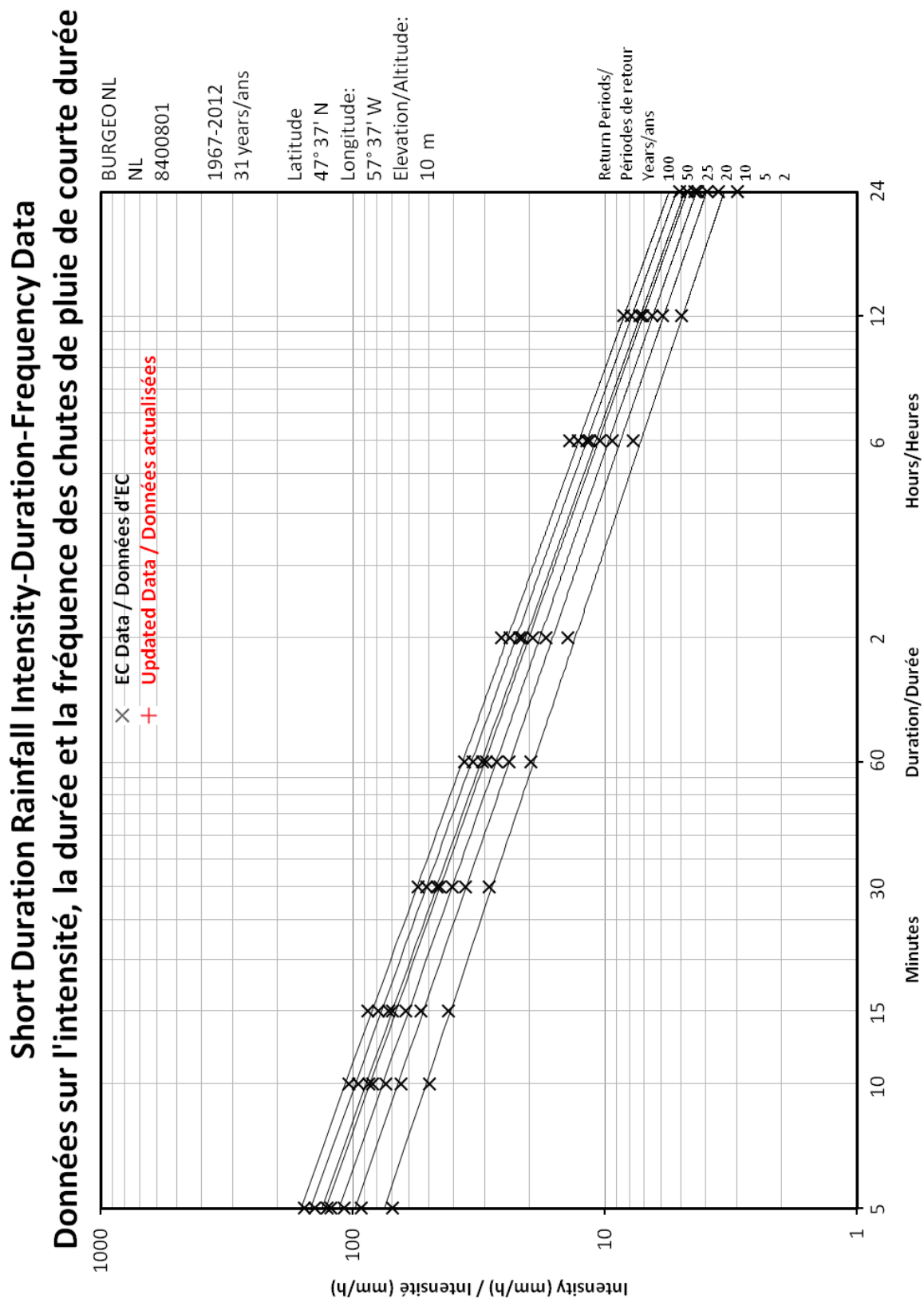


Figure 3.1 Burgeo NL IDF Curve - EC IDF V2.3

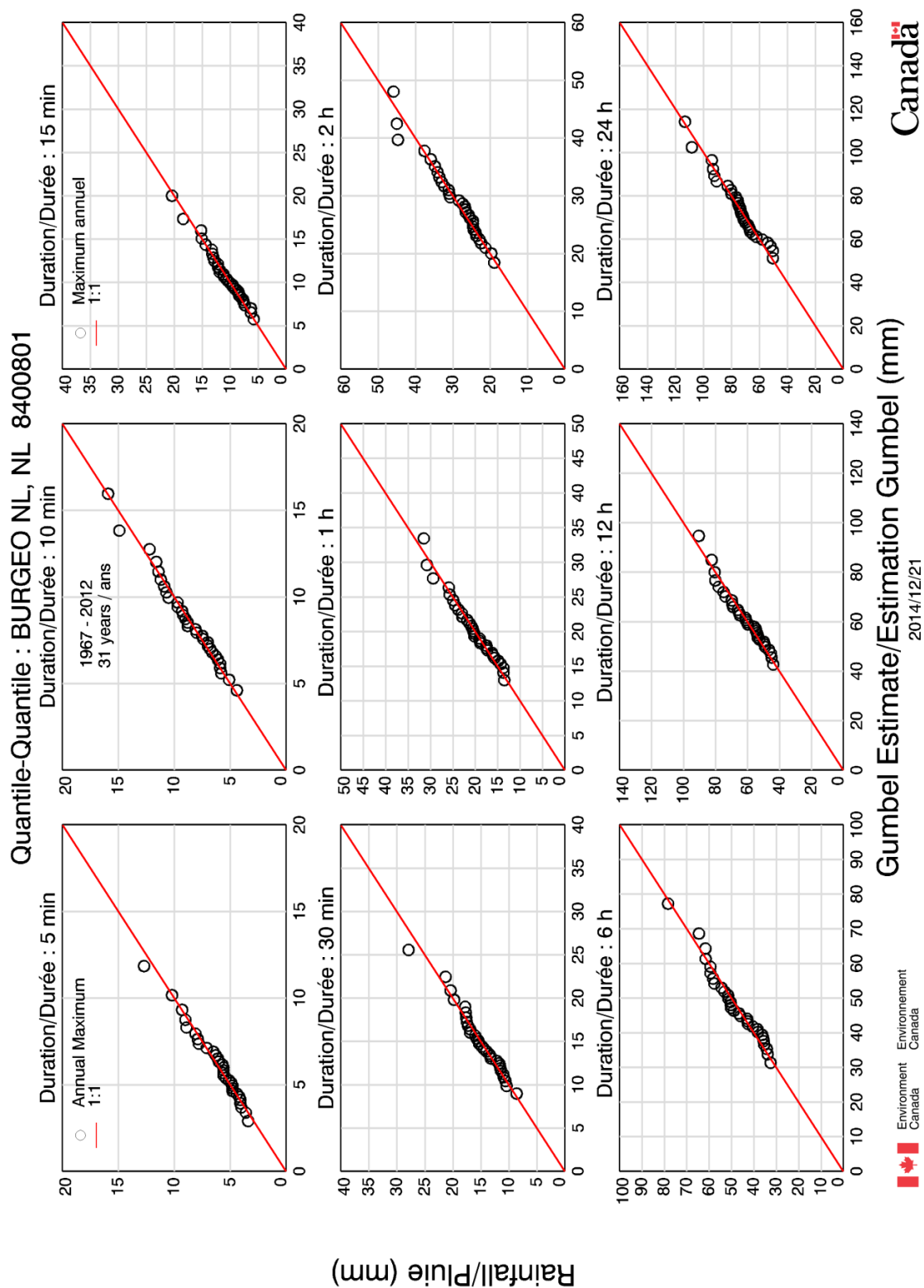


Figure 3.2 Burgeo NL Quantile-Quantile Plot - EC IDF V2.3

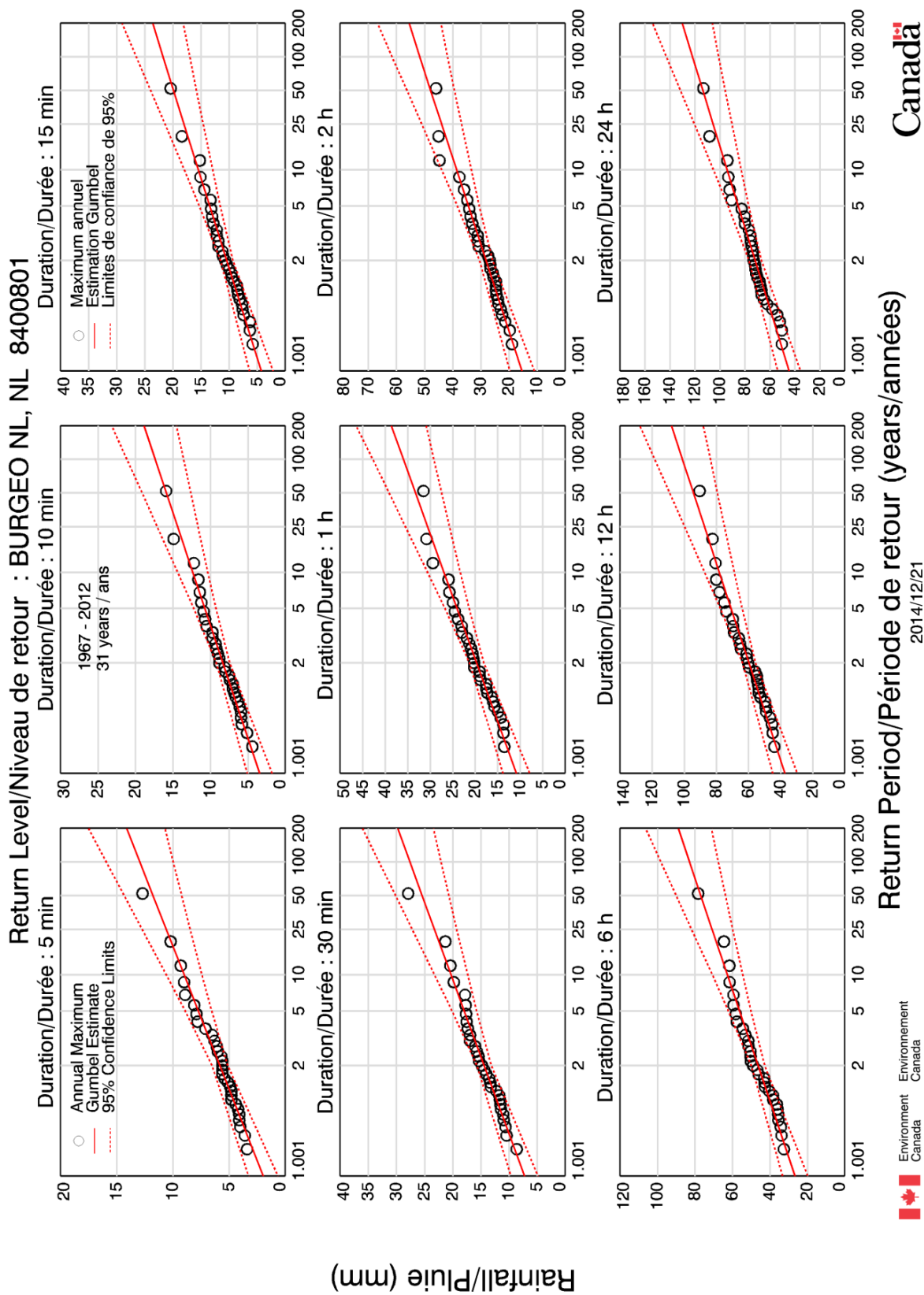


Figure 3.3 Burgeo NL Return Level Plot – EC IDF V2.3

Trend/Tendance : BURGEON NL, NL 8400801

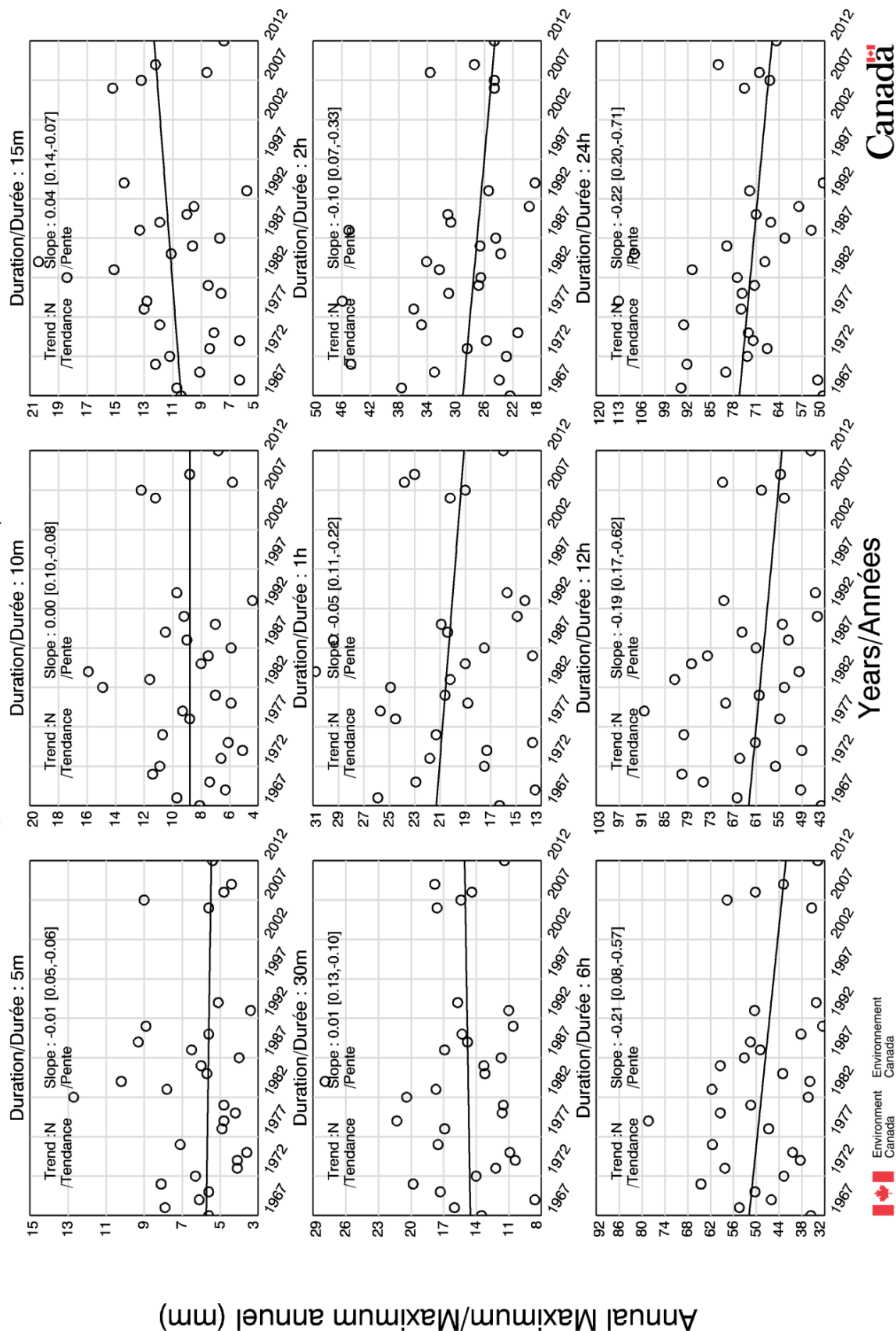


Figure 3.4 Burgeo NL Trend Plot – EC IDF V2.3