

2. Argentia (AUT)

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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ARGENTIA (AUT)                                NL      8400104
Latitude: 47 17'N   Longitude: 53 59'W   Elevation/Altitude: 19      m
Years/Années : 1980 - 2013      # Years/Années :      15
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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	1980	8.3	14.7	17.0	17.0	17.0	19.0	34.8	41.0	46.2
EC-IDF	1981	6.6	12.3	18.1	23.0	25.8	31.7	58.5	73.6	91.6
EC-IDF	1982	4.6	7.9	10.7	15.8	20.5	34.0	61.3	69.4	69.4
EC-IDF	1983	5.9	11.2	14.4	16.2	17.3	23.8	39.3	55.6	68.2
EC-IDF	1984	4.7	8.0	9.0	10.1	10.4	20.2	39.4	51.0	53.0
EC-IDF	1985	3.5	5.3	7.9	12.0	15.4	29.5	39.8	44.3	57.6
EC-IDF	1986	3.1	4.8	7.2	11.3	15.0	16.7	30.4	44.5	66.4
EC-IDF	2004	4.2	7.8	9.6	11.6	19.2	26.6	46.8	73.2	108.6
EC-IDF	2005	3.8	6.6	8.4	14.8	21.2	25.2	33.2	42.8	52.6
EC-IDF	2006	7.2	11.4	12.6	14.2	23.4	29.4	31.8	38.3	66.6
EC-IDF	2007	5.2	10.4	15.6	24.0	38.0	61.0	150.8	200.4	204.8
EC-IDF	2008	5.4	9.6	13.0	20.4	23.0	24.0	35.2	46.8	53.2
EC-IDF	2009	3.0	5.4	7.0	11.2	16.4	24.4	34.4	42.0	43.4
EC-IDF	2012	4.0	5.6	7.4	11.2	18.0	20.0	29.0	41.2	43.8
EC-IDF	2013	3.0	5.6	7.2	10.8	16.4	22.0	35.0	45.2	56.4

	# Yrs. Années	15	15	15	15	15	15	15	15	15
	Mean Moyenne	4.8	8.4	11.0	14.9	19.8	27.2	46.6	60.6	72.1
	Std. Dev. Écart-type	1.6	3.0	3.8	4.5	6.3	10.6	30.3	40.5	40.8
	Skew. Dissymétrie	0.80	0.59	0.64	0.96	1.67	2.56	3.28	3.33	2.80
	Kurtosis	3.47	2.95	2.58	3.37	7.63	11.10	14.35	14.69	11.72

*-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
2007	2 h	61.0	60.3
2007	6 h	150.8	141.8
2007	12 h	200.4	187.6
2007	24 h	204.8	200.0

Trend/Tendance : ARGENTIA (AUT), NL 8400104

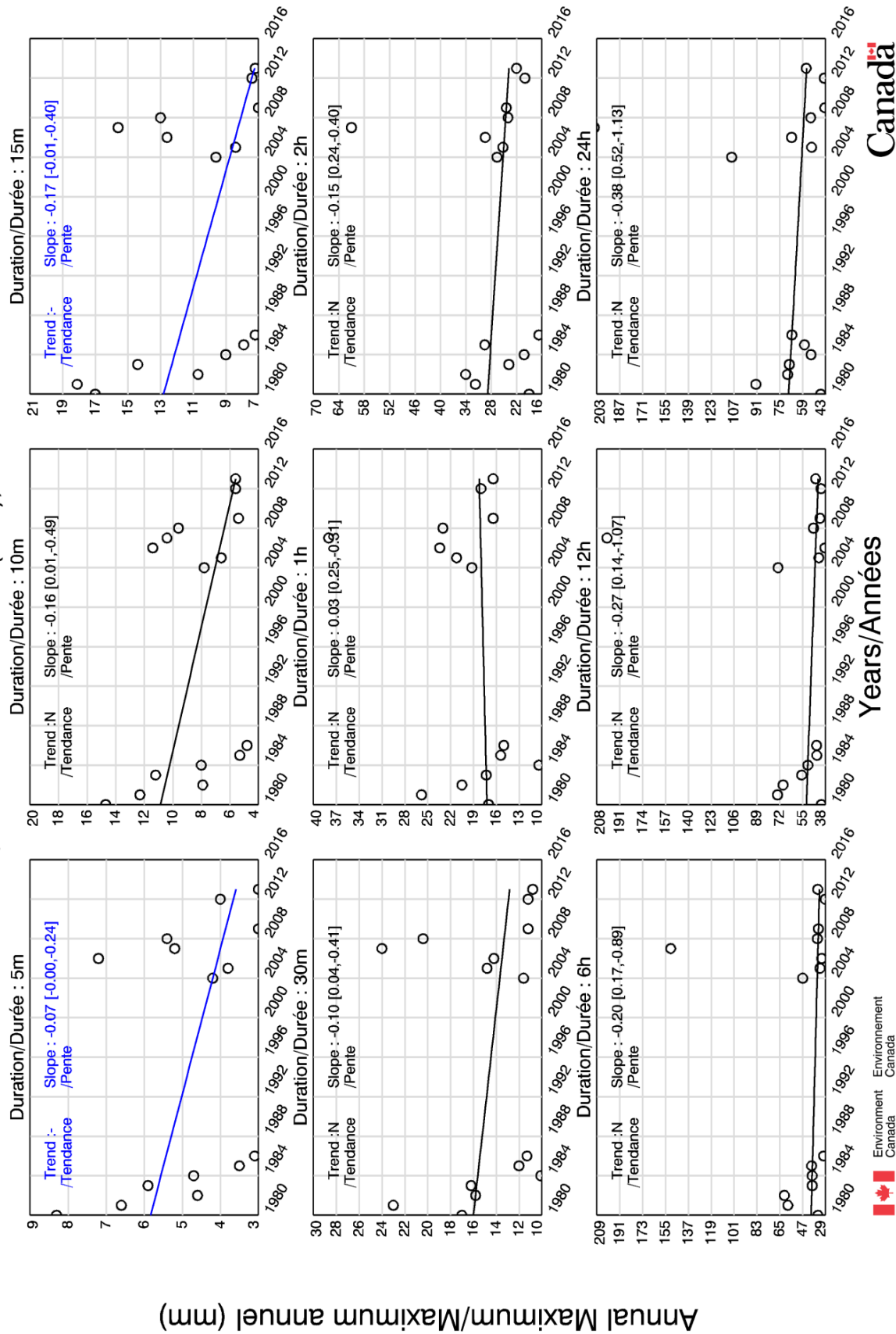


Figure 2.4 Argentia (AUT) Trend Plot – EC IDF V2.3

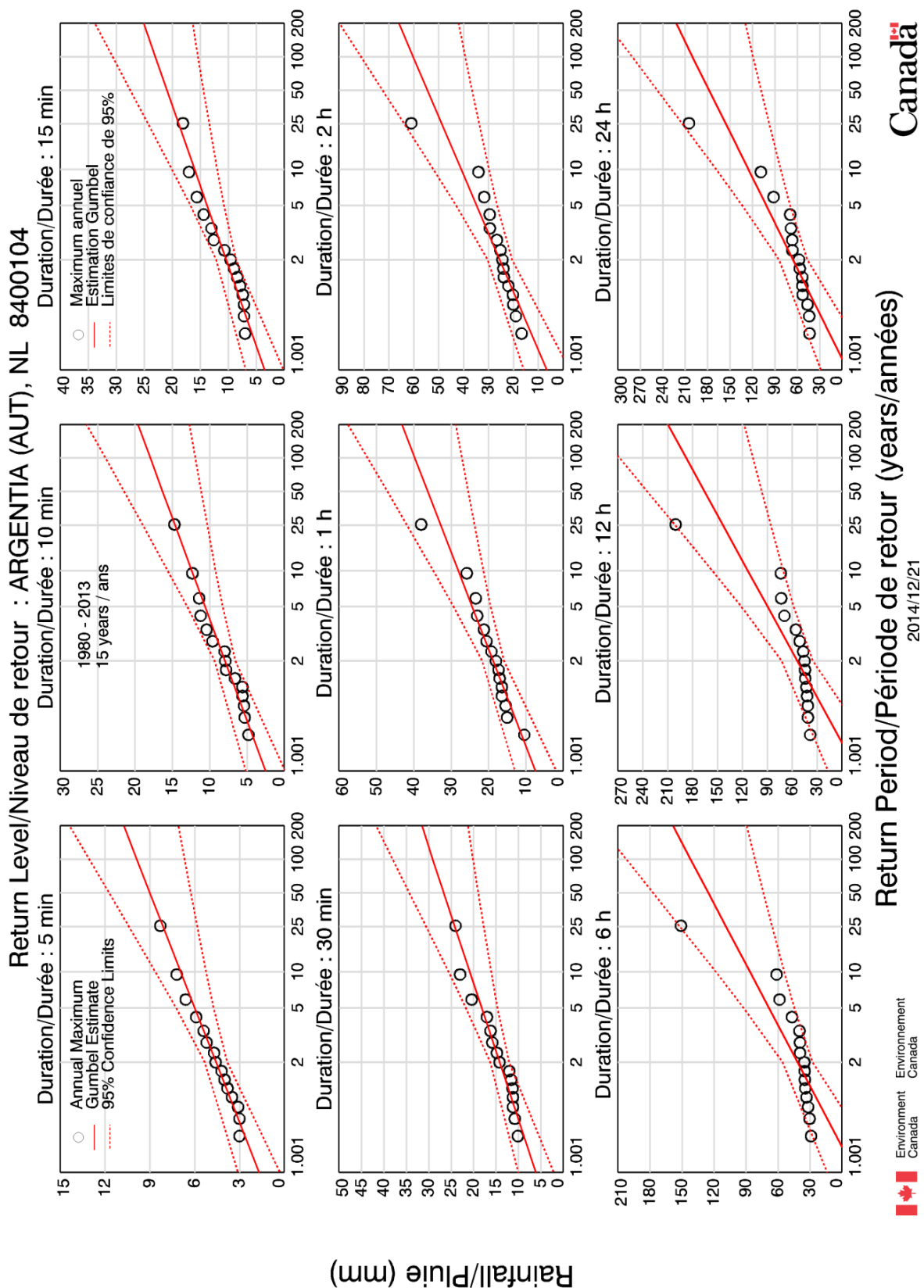


Figure 2.3 Argentia (AUT) Return Level Plot – EC IDF V2.3

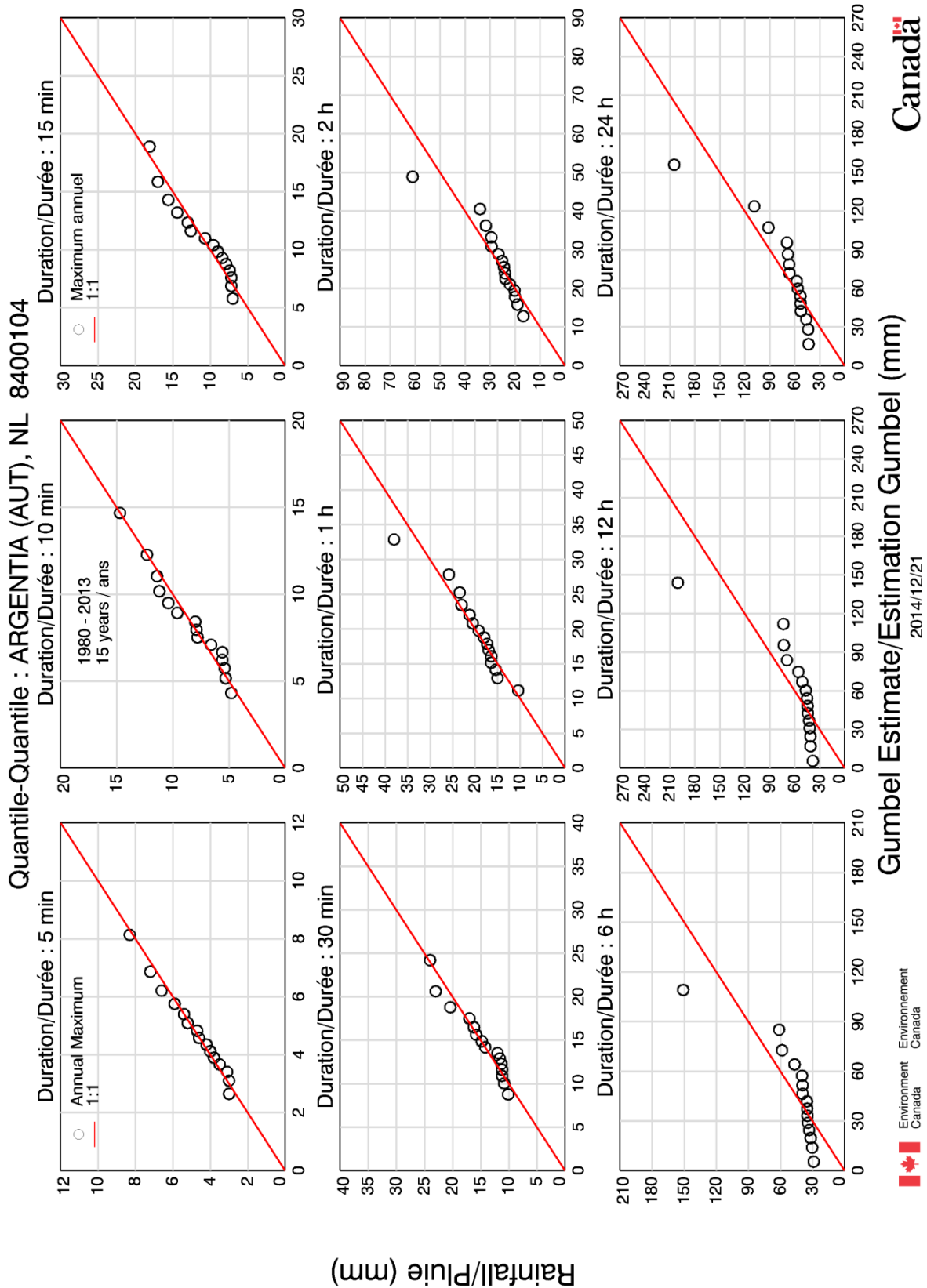


Figure 2.2 Argentia (AUT) Quantile-Quantile Plot – EC IDF V2.3

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

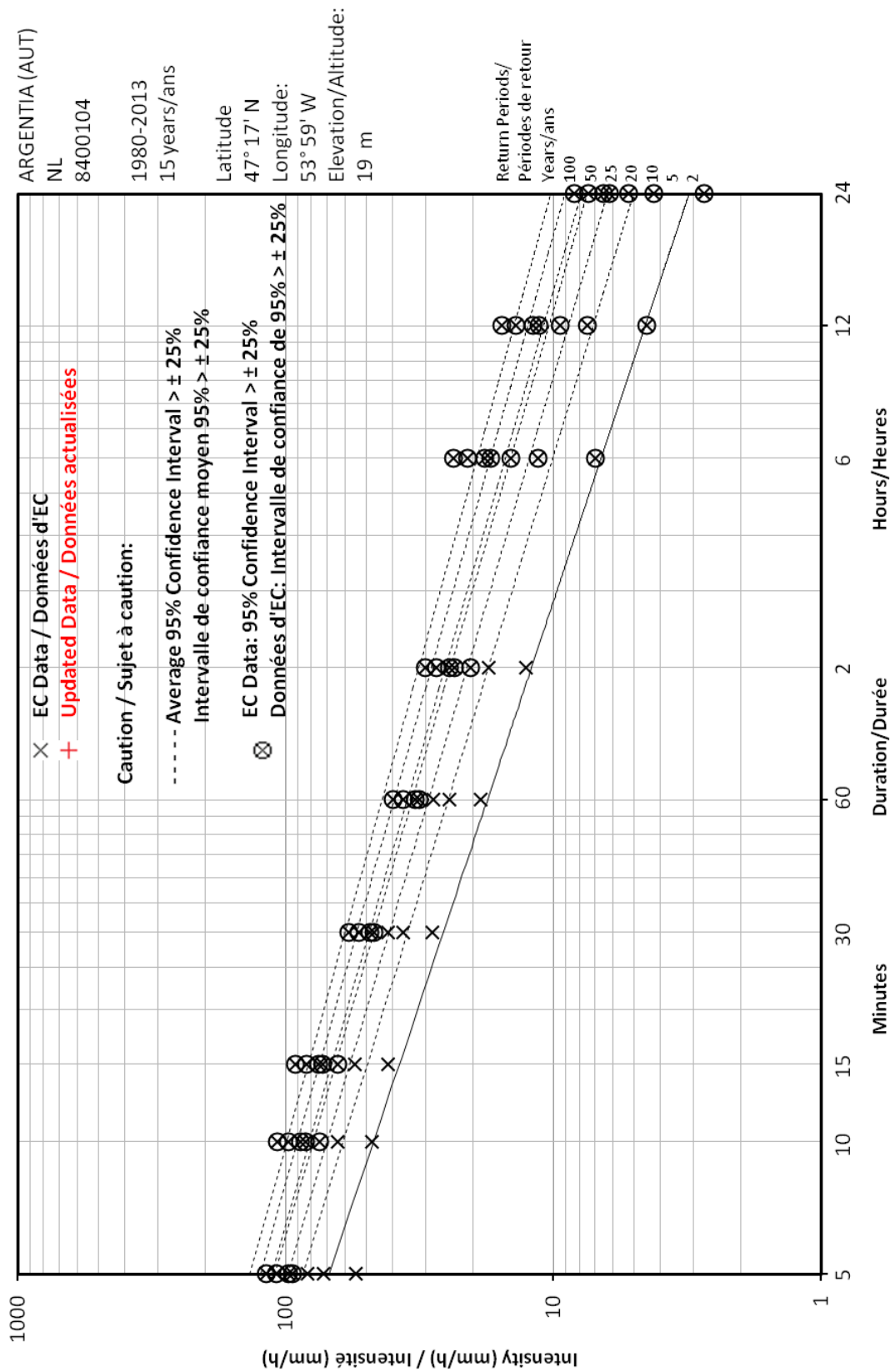


Figure 2.1 Argentia (AUT) IDF Curve - EC IDF V2.3

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 Années
	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	
EC-IDF 5 min	4.6	6.0	6.9	7.8	8.1	9.0	9.9	15
EC-IDF 10 min	7.9	10.6	12.4	14.1	14.6	16.3	17.9	15
EC-IDF 15 min	10.4	13.8	16.0	18.2	18.8	20.9	23.0	15
EC-IDF 30 min	14.2	18.2	20.8	23.3	24.1	26.6	29.1	15
EC-IDF 1 h	18.8	24.4	28.1	31.6	32.8	36.3	39.7	15
EC-IDF 2 h	25.4	34.8	40.9	46.9	48.7	54.5	60.3	15
EC-IDF 6 h	41.7	68.5	86.2	103.3	108.7	125.3	141.8	15
EC-IDF 12 h	54.0	89.7	113.4	136.1	143.4	165.6	187.6	15
EC-IDF 24 h	65.4	101.4	125.3	148.2	155.4	177.8	200.0	15

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 Années
	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	yr/ans	
EC-IDF 5 min	54.8	71.9	83.1	93.9	97.4	107.9	118.4	15
	+/- 8.9	+/- 15.1	+/- 20.4	+/- 25.7	+/- 27.4	+/- 32.8	+/- 38.3	15
EC-IDF 10 min	47.7	63.7	74.3	84.5	87.8	97.7	107.6	15
	+/- 8.4	+/- 14.2	+/- 19.2	+/- 24.3	+/- 25.9	+/- 31.0	+/- 36.1	15
EC-IDF 15 min	41.5	55.1	64.0	72.7	75.4	83.8	92.1	15
	+/- 7.1	+/- 12.0	+/- 16.2	+/- 20.5	+/- 21.9	+/- 26.2	+/- 30.5	15
EC-IDF 30 min	28.3	36.3	41.6	46.7	48.3	53.2	58.1	15
	+/- 4.2	+/- 7.1	+/- 9.5	+/- 12.1	+/- 12.9	+/- 15.4	+/- 17.9	15
EC-IDF 1 h	18.8	24.4	28.1	31.6	32.8	36.3	39.7	15
	+/- 2.9	+/- 5.0	+/- 6.7	+/- 8.5	+/- 9.0	+/- 10.8	+/- 12.6	15
EC-IDF 2 h	12.7	17.4	20.5	23.4	24.4	27.3	30.1	15
	+/- 2.5	+/- 4.1	+/- 5.6	+/- 7.0	+/- 7.5	+/- 9.0	+/- 10.5	15
EC-IDF 6 h	6.9	11.4	14.4	17.2	18.1	20.9	23.6	15
	+/- 2.3	+/- 4.0	+/- 5.3	+/- 6.8	+/- 7.2	+/- 8.6	+/- 10.0	15
EC-IDF 12 h	4.5	7.5	9.5	11.3	11.9	13.8	15.6	15
	+/- 1.6	+/- 2.6	+/- 3.6	+/- 4.5	+/- 4.8	+/- 5.8	+/- 6.7	15
EC-IDF 24 h	2.7	4.2	5.2	6.2	6.5	7.4	8.3	15
	+/- 0.8	+/- 1.3	+/- 1.8	+/- 2.3	+/- 2.4	+/- 2.9	+/- 3.4	15

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	24.2	32.4	37.9	43.1	44.7	49.8	54.9
Std. Dev. /Écart-type (RR)	19.7	25.5	29.4	33.1	34.2	37.9	41.5
Std. Error/Erreur-type	5.5	5.9	6.4	7.0	7.2	7.9	8.6
Coefficient (A)	17.6	24.7	29.3	33.7	35.1	39.4	43.6
Exponent/Exposant (B)	-0.546	-0.502	-0.485	-0.474	-0.471	-0.463	-0.457
Mean % Error/% erreur moyenne	8.4	8.4	9.3	10.0	10.3	10.9	11.5