

ANEXO 1. REGISTROS DE PRECIPITACIÓN Y TEMPERATURA IDEAM-AMB

Tabla 1. Registros de precipitación diaria multianual IDEAM-AMB

FECHA	BERLIN [37015020]	BUCARAMANGA IDEAM [23190830]	GALVICIA LA [23190400]	MATAJIRA [23190340]	PICACHO EL [23190300]	LA GRANJA	MIRAFLORES
7/11/2018	0.8	0	0	0	0	0	0
7/12/2018	0.5	0	0	0	0	0	0
7/13/2018	0.4	3	0	1.4	0	0	0
7/14/2018	1.6	0	0	0	0	0	0
7/15/2018	0.1	0	0	0	0	0	0
7/16/2018	1.8	0	0	0	0.5	0	0
7/17/2018	0.8	43.4	0	0	0	0	0
7/18/2018	0	0	0	0	0	0	5
7/19/2018	1.7	0	0	0	0	0	0
7/20/2018	0.4	1.1	0	0	0	0	0
7/21/2018	1.8	0	1	0.2	0.8	0	0
7/22/2018	0	0	0	0	0	0	0
7/23/2018	1.9	0.9	3.5	1.4	16.9	0	0
7/24/2018	2.4	1.2	5	0	0	0	2
7/25/2018	1.1	28.4	6.2	0	0	0	5
7/26/2018	4.9	0.9	14.8	1.8	10.4	0	0
7/27/2018	1.4	10.8	14.8	0.8	0	10.5	7.7
7/28/2018	0	0.3	0	0	0	12.5	0
7/29/2018	1.1	0	0	0	0	0	0
7/30/2018	2.7	0	0	0	0	0	0
7/31/2018	2.9	0	0	0	0	4.5	0
8/1/2018	0	17.7	19	0	0	0	2.5
8/2/2018	0.5	0.5	5.5	2.2	0	22.5	0
8/3/2018	0.5	0.4	0	0	9.8	0	0
8/4/2018	0	0	0	0	7.3	10.5	0
8/5/2018	2.2	0	0	0	4.5	0	0
8/6/2018	0	0	0	0	0	0	0
8/7/2018	0.2	0	0	0	0	0	0
8/8/2018	8.2	1.5	3.1	0	2.6	0	0
8/9/2018	0.8	0	0	0.2	0	0	0
8/10/2018	4	0.6	5.2	0	0	0	0
8/11/2018	1	0	0	0.4	0	0	0
8/12/2018	0.5	0	0	2.1	0	0	0
8/13/2018	1.1	73	7.1	5.1	0	0	0
8/14/2018	6.3	1.8	6	0	4.8	11.2	5.5
8/15/2018	0	0	0	0	3.7	0	20
8/16/2018	1	0	0	0	0	0	0
8/17/2018	0.4	0	0	0	0	0	0
8/18/2018	3.7	5.3	13	35	0	16.8	0
8/19/2018	0.4	0	4	0.8	24.3	0	3.1
8/20/2018	0.5	0	0	0	0	0	0
8/21/2018	0	0	0	0	0	0	0
8/22/2018	9.1	0	0	1.2	1.5	0	2.2

FECHA	BERLIN [37015020]	BUCARAMANGA IDEAM [23190830]	GALVICIA LA [23190400]	MATAJIRA [23190340]	PICACHO EL [23190300]	LA GRANJA	MIRAFLORES
8/23/2018	3.1	10	5.6	6.2	3.4	52.6	0
8/24/2018	0.6	0	0	0	0	0	4
8/25/2018	0	0.7	2.5	0	14.8	0	0
8/26/2018	7.8	2.4	9.6	2.8	10.3	0	0
8/27/2018	0.3	0.5	15.4	0	9.6	6.2	10
8/28/2018	0.1	20.8	5	0	0	0	0
8/29/2018	4.1	0	4	0.6	0	0	0
8/30/2018	0.3	2.3	8.2	10.6	0	3.2	5.2
8/31/2018	0.5	0	4.4	0	5.6	0	0
9/1/2018	0	0	2	0	0	15.2	15
9/2/2018	0.1	10.7	17.1	3.8	0	0	0
9/3/2018	0.7	0	3.2	5.4	9.3	6.4	0
9/4/2018	14.1	0	1.8	1.2	10.1	12.6	13
9/5/2018	10.8	37.8	36	16.8	24	0	4
9/6/2018	7	20.5	20	17.7	0	26.7	32
9/7/2018	5	0.9	6.6	3.8	33	0	6.2
9/8/2018	0	0	7.6	0	0	9.1	0
9/9/2018	0	0.5	1	0.5	5.9	0	0
9/10/2018	0	2.7	0	0	0	0	2.4
9/11/2018	0.5	0	0	0	0	0	0
9/12/2018	0.6	0	0	0	0	0	4.1
9/13/2018	0	0	0	2.6	0	2.1	0
9/14/2018	4	0	0.5	0	2.3	0	0
9/15/2018	2.6	4.9	13.8	7.1	0	0	2.2
9/16/2018	0	0	0	0	4.5	7.5	18.1
9/17/2018	0.5	0	0	0	0	0	0
9/18/2018	1.2	0	8.7	1.4	36.3	0	0
9/19/2018	0	0	5.2	0	11.3	0	13
9/20/2018	0	0	0	0	8.7	0	6
9/21/2018	0	0	0	0	0	0	0
9/22/2018	14.9	0	0	0	0	0	16.2
9/23/2018	2.7	0	5.6	0	26.3	2.1	8.4
9/24/2018	0.9	0	0	0	4.3	0	2.1
9/25/2018	0.1	0	2	2.7	8.1	2.1	0
9/26/2018	0.4	0.9	0.5	0	0	9.2	1.2
9/27/2018	0.4	43.5	0	4	0	0	0
9/28/2018	14.3	23.4	5.8	4.8	16.5	6.2	16.4
9/29/2018	14.8	8.7	15	8.1	20.1	0	26.2
9/30/2018	5.4	0	0.5	0	9.3	3.289349539	4.134581714
10/1/2018	9.7	35	12.9	7.3	11.4	9.5	2.1
10/2/2018	4.7	0	0	0	0	7.1	4.1
10/3/2018	6.1	3.5	1	12.2	1.2	2.1	0
10/4/2018	20.4	0.9	17	3.8	11.3	2.5	0
10/5/2018	0.8	11.3	23.5	11.8	9.7	13.5	40.4
10/6/2018	0	0.7	9	13.2	5.1	11.5	16.1
10/7/2018	0	0	0	0	1.3	18.5	7.2
10/8/2018	0	1.9	0	2.6	0	2.1	5.3
10/9/2018	0.2	0	4	0.9	12.8	1.7	1.1

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10/10/2018	22.8	0	15.2	4.7	16.3	1.1	11.2
10/11/2018	13.6	7	14	0	8.1	4.5	29
10/12/2018	4.2	1.2	6.5	3.8	0	2.3	0
10/13/2018	0	2.3	4.1	0	0	5.2	2.1
10/14/2018	11.4	1.8	46	0.9	0	0	10
10/15/2018	1.2	9.4	0.5	34.2	5.3	1.4	5
10/16/2018	0.5	0	0	2.2	9.5	0	16.1
10/17/2018	0	0	0	0	0	1.7	0
10/18/2018	5.4	28	102.3	0.5	0	1	0
10/19/2018	9	4.2	17	8	12.6	4.7	5.2
10/20/2018	0.8	2.6	5.2	16.1	21.2	1.3	25.1
10/21/2018	5.1	2.1	24.3	11.2	25.3	40.1	5
10/22/2018	8.7	39.6	37.4	15.4	29.4	25.5	30
10/23/2018	0.3	4.3	2.3	1.7	6.8	14.1	45.2
10/24/2018	17.8	1.5	7.8	6.8	8.1	5.1	5
10/25/2018	0.4	0.2	0	0.3	0	5	0
10/26/2018	0	0	1.3	0	0.3	0	6
10/27/2018	0	0	0	0	0.2	0	0
10/28/2018	0	0	0	1.8	0	0	0
10/29/2018	0	0	0	0	0	0	0
10/30/2018	0	36.2	1	1.2	0	0	0
10/31/2018	0	0	0	0	2.6	0	0
11/1/2018	0	0	0	1.6	0.6	4	0
11/2/2018	0	0.3	1.6	0	0	0	4
11/3/2018	0	0	0	0	0	0	9
11/4/2018	14	38.3	69.9	26.9	0	0	6
11/5/2018	15.7	6	14.5	4.2	0	2.1	30
11/6/2018	2	27.7	0.9	3.6	0	0	1
11/7/2018	6.2	0	0	0	0	6	4
11/8/2018	3.9	0.4	0	0	0	0	2
11/9/2018	8.6	9.5	0	1.3	8.6	7	0
11/10/2018	0	0.3	0	1.3	6.4	0	2
11/11/2018	0	0	0	0	4.5	2	6
11/12/2018	0	0	0	0	0	0	2
11/13/2018	0	0	0	0	0	3.1	0
11/14/2018	0	0	0	0	0	0	0
11/15/2018	0	0	0	0	13.8	0	0
11/16/2018	0	0	0	0	0	0	0
11/17/2018	0.2	0	0	0	0	0	0
11/18/2018	1	0.2	6.3	0.8	0	6.5	1
11/19/2018	1.1	8.2	22	0.9	0	0.5	1
11/20/2018	0	0	0	0	0	3	0
11/21/2018	0	0	0	0	0	0	0
11/22/2018	0	11.7	17	0	1.6	0	0
11/23/2018	0	0	0	0	0	8.5	1
11/24/2018	2.7	0.4	7.3	8.4	0	8.5	0
11/25/2018	0	0.8	0.6	0	2.3	0	7
11/26/2018	0	0	0	0	0	17.1	2.4

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11/27/2018	0	0	0	0	0	0	0
11/28/2018	0	1	3.5	0	0	0	10
11/29/2018	0	0	3	0.7	0	0	0
11/30/2018	0	0	0	0	0	0	0
12/1/2018	0	0	0	0	0	0	0
12/2/2018	0	0	0	0	0	0	0
12/3/2018	0	0	0	0	0	0	0
12/4/2018	0	0	0	0	0	0	0
12/5/2018	0	0	0.5	0	0	0	0
12/6/2018	0	0	0	0	0	0	0
12/7/2018	0	0	0	0	0	0	0
12/8/2018	0	0	0	0	0	0	0
12/9/2018	0	0	0	0	0	0	1
12/10/2018	0	0	0	0	0	0	0
12/11/2018	0	0	0	0	5.3	0	0
12/12/2018	0.1	0	0.8	0	9.8	0	0
12/13/2018	0	0.9	1.4	4.2	0	0	0
12/14/2018	0	0	30	2.6	3.1	4.5	14
12/15/2018	0	0	0	0	0	2.1	2
12/16/2018	0	0	0	0	0	0	0
12/17/2018	0	0	0	0	0	0	0
12/18/2018	0	0	0	0	0	0	0
12/19/2018	0	0	33	0	0	0	0
12/20/2018	0	0	0	0	0	0	0
12/21/2018	0	0	0	0	0	0	0
12/22/2018	0	0	0	0	0	0	0
12/23/2018	0	0	0.4	0	0	0	0
12/24/2018	0	0	0	0	0	0	0
12/25/2018	0	0	0	0	0	0	0
12/26/2018	0	0	0	0	0	0	0
12/27/2018	0	0	0	0	0	0	0
12/28/2018	0	0	0	0	0	0	0
12/29/2018	0	0	0	0	0	0	0
12/30/2018	0	0	0	0.3	0	0	0
12/31/2018	0	0	0	0	0	0	0
1/1/2019	0	0	0	0	0	0	0
1/2/2019	0	0	0	0	0	0	0
1/3/2019	0	0	1.7	0	0	0	0
1/4/2019	0	0	0	0	0	20.1	0
1/5/2019	0	0	0	0	0	0	0
1/6/2019	0	1.6	5.8	0.4	0	0	0
1/7/2019	0	0	0	0.2	0	10.2	0.7
1/8/2019	0.6	17.2	35.6	24.8	0	0	0
1/9/2019	3.9	0	0	2.2	17.9	0	3.3
1/10/2019	0.9	0	0	7.8	0	0	0
1/11/2019	0	9	0	0	4.1	0	1.9
1/12/2019	1.9	5.6	25.4	13.1	0	2.5	0
1/13/2019	0.9	1.8	4.8	0	0	0	3.6

FECHA	BERLIN [37015020]	BUCARAMANGA IDEAM [23190830]	GALVICIA LA [23190400]	MATAJIRA [23190340]	PICACHO EL [23190300]	LA GRANJA	MIRAFLORES
1/14/2019	7.9	0	21	15.7	9.8	0	2.5
1/15/2019	0	0.3	0.5	0	7.6	0	24.8
1/16/2019	0	0	2	0	0	0	14.6
1/17/2019	0	0	0	0	0	0	7.1
1/18/2019	0	0	0	0	0	0	0
1/19/2019	0	0	0	0	0	0	0
1/20/2019	0	1.5	17.5	0	0	13.2	0
1/21/2019	0	0	0	0	0	2.1	1.6
1/22/2019	0	0	0	0	0	0	0
1/23/2019	0	0	0	0	0	0	0
1/24/2019	0	0	0	11.2	0	0	0
1/25/2019	0	2.8	12.7	0	0	0	2.3
1/26/2019	0	0	0	0	0	0	13.1
1/27/2019	0	20.4	0	0	0	0	0
1/28/2019	0	0.5	0	0	0.4	0	0
1/29/2019	0	4.5	0	12.8	0	0	9
1/30/2019	0	8.5	1.2	3.7	0	0	0
1/31/2019	0	0	0	0	0	0	0.2
2/1/2019	0	2.8	0	0	0	0	0
2/2/2019	0	2.5	0	0	0	0	0
2/3/2019	0	0	0	0	0	0	0
2/4/2019	0	0	0	0	0	0	0
2/5/2019	0	0	0	0	0	0	0
2/6/2019	0	0	0	0	0	0	0
2/7/2019	0	0	32	0	1.5	0	2
2/8/2019	0	0	8.2	4.6	7.5	0	16.8
2/9/2019	0.1	0	3.1	0.1	8.1	12.8	10.5
2/10/2019	2.1	0.6	2.5	0	0	0	0.3
2/11/2019	0	0	0	0	0	2.8	12.9
2/12/2019	0	0	0	0	0	0	1.7
2/13/2019	0	0.7	0	0	0	0	0
2/14/2019	0	0	0	0	0	0	0
2/15/2019	0	0	0	0	0	0	0
2/16/2019	0	8.5	0	2.1	3.5	0	0.4
2/17/2019	0	0	0	0	0	6.5	4.9
2/18/2019	1.8	0.3	0	0	1	2	1.5
2/19/2019	9.3	0.5	0	0.8	0	3	0
2/20/2019	0.9	10.1	0	1.1	0	4.2	0.6
2/21/2019	0	0	0	2.2	0	0	0.3
2/22/2019	0	0	0	0	3.1	0	18.5
2/23/2019	0	0	30.5	0	2.3	0	9.7
2/24/2019	0	0	0	0	0	2.8	17.4
2/25/2019	0	0	0	0	0	0	0
2/26/2019	0	0	0	0	0	0	0
2/27/2019	4.3	0.8	4	0.4	2.3	0	0
2/28/2019	0	0	0	0	0	0	0.9
3/1/2019	0	48.6	58.5	41.3	0	24.1	0
3/2/2019	0.8	0.4	0	0	11.2	0	0

FECHA	BERLIN [37015020]	BUCARAMANGA IDEAM [23190830]	GALVICIA LA [23190400]	MATAJIRA [23190340]	PICACHO EL [23190300]	LA GRANJA	MIRAFLORES
3/3/2019	11	0	0	0	10.4	1.1	0
3/4/2019	0	38	0	15.3	0	0.8	0
3/5/2019	0	0.8	0	0	0	46.1	3.2
3/6/2019	0	0	0	0	0	0	0
3/7/2019	0.5	0	2.2	3.9	0	0	0
3/8/2019	0	0.1	15.3	2.2	0	8.1	2.1
3/9/2019	0	0.8	3.3	5.8	11.3	0	0
3/10/2019	2.4	0	1	0	9.5	1.6	3
3/11/2019	2.2	0	2.5	5.1	7.5	0	0
3/12/2019	0	17.2	31.6	0	1	7.1	8
3/13/2019	0	2.2	0	0	0	0	0
3/14/2019	0	0	0	0	0	0	0
3/15/2019	0	0	0	0.2	0	0	0
3/16/2019	0	0	3.3	0	0	0	0
3/17/2019	0	0	0	3.8	5	0	5
3/18/2019	0.4	2.5	0	0	0	44.1	0
3/19/2019	9.8	0	0	0	0	0	1
3/20/2019	11.3	0	0	22.8	0	2.5	0
3/21/2019	6.7	0	0	0	0	24.8	30.2
3/22/2019	0.4	45	23.4	8.3	0	13.1	2.3
3/23/2019	0	1.2	1	0	6.8	0	7
3/24/2019	0	1.1	3.8	16.3	11.3	0	9
3/25/2019	0	0	0	0	10.6	2.3	10
3/26/2019	2.3	0	0	0	6.7	0	9.6
3/27/2019	0	0	0	0	0.5	1.5	2.1
3/28/2019	11.9	26.8	0	0	0	0	1
3/29/2019	13.4	0	10	1.3	16.9	3.2	0
3/30/2019	0.2	0	3	0.4	6.9	3.6	2.2
3/31/2019	0.2	0	0	0	0	0	1
4/1/2019	13	5.3	18.7	32.6	0	0	0
4/2/2019	0	1	4.2	1.7	0	0	6.3
4/3/2019	0	15.9	8	3.8	0	1.5	0
4/4/2019	0	0	0	0	0	8.2	0.5
4/5/2019	0	0.5	59	27.1	0.9	0	0
4/6/2019	3.4	8.8	3	0	0	7.4	9
4/7/2019	0	2.3	0	0	0	10.5	0
4/8/2019	0	0	0	0	0	0	0
4/9/2019	1.5	30	7.8	3	0.8	0	0
4/10/2019	2.3	0	10.2	2.7	0	0	0
4/11/2019	0	0.3	0	0	0	0	0
4/12/2019	0	0	0	3.2	0	0	0
4/13/2019	0	2.4	0	0	0	0	0
4/14/2019	0	0	3.4	2.3	0	4.8	0.5
4/15/2019	0.4	0.4	5.6	3.4	0	5.8	0
4/16/2019	8	0	6	0	12.8	0	7.4
4/17/2019	6.2	0	12.5	0	0	0	6
4/18/2019	5	40.2	106	13	0	4.3	0
4/19/2019	20	5	21	11.9	15.3	10.2	5

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4/20/2019	6.8	12.2	73.3	33.5	0	13.2	20.1
4/21/2019	6	12.1	55	15	0	16.8	46.5
4/22/2019	2.4	5	6.3	2.1	0	11.5	20
4/23/2019	0.1	0	0	0	0	0	5
4/24/2019	17.1	0	1.1	0	9.8	0	0
4/25/2019	1.2	0.2	0	0	5.1	19.5	1
4/26/2019	0	0.2	3	6.8	11.5	0	6
4/27/2019	0.2	34.6	37	5.1	13.9	0	3
4/28/2019	0	0	0.5	0	0	6.5	0
4/29/2019	0	0	0	0	0	0	0
4/30/2019	0	0	0	0	0	0	0.5
5/1/2019	0	0	0	0	0	0	0
5/2/2019	0	0	0	0	0	0	0
5/3/2019	3.4	0	0	0	3.6	0	0
5/4/2019	1.9	0	0.7	0	0	0	0
5/5/2019	0.2	0	0	0	0	0	0
5/6/2019	0	0	0	0	0	0	0
5/7/2019	12.9	2.2	18	5.4	27.5	0	0
5/8/2019	0.6	1.2	7.8	11.7	0	9.5	7.2
5/9/2019	1.5	8.4	22	8.4	14.3	26.2	11.1
5/10/2019	1.2	0.1	3.1	3.1	16.5	13.5	10
5/11/2019	0.9	1	0	2.9	0	9.1	7
5/12/2019	0.2	0	6	0.5	25.4	16.5	26
5/13/2019	0.6	0	0	4.8	0	4.1	27
5/14/2019	0.4	5.8	0	2.1	0	0	0
5/15/2019	0.6	0.1	6.7	0.8	0	1.5	0
5/16/2019	0	0	0	0	0	0	13
5/17/2019	0	0.3	0	0	0	0	16.3
5/18/2019	0	5.7	1	8	12.9	2.1	0
5/19/2019	0	0.1	2.5	1.7	4.8	3.2	0
5/20/2019	0	0	0	3.8	0	28.3	0
5/21/2019	0	0	0.5	0.7	10	0	8
5/22/2019	2.3	5.6	14.2	18.4	0	12.1	0
5/23/2019	38.8	23	54.5	45.5	0	37.2	22
5/24/2019	20.4	0	0	0	15.1	4.5	12.2
5/25/2019	4.8	4.7	14.6	7.6	11.8	8.1	7.2
5/26/2019	9.7	4.4	13.3	27.9	8.5	6.1	18
5/27/2019	0	0.3	0	0.9	12.1	1.1	2
5/28/2019	0.8	0.1	9.4	6.3	36.2	9.1	4.3
5/29/2019	3.9	6.7	12.1	8	17.6	2.5	0
5/30/2019	5.9	0	0	0	13.3	0	14.4
5/31/2019	4.3	12	5.8	1.6	14.8	0	23
6/1/2019	7.5	0	6	2.4	28.9	3.1	9.2
6/2/2019	15.9	2.7	9.2	8	8	8.5	1.5
6/3/2019	0	0	2	0	12.1	8.2	8
6/4/2019	1.1	0	0	0	17.3	0	15.1
6/5/2019	1.2	3	8	1.5	22.9	0	6.2
6/6/2019	0.2	4.2	4.2	0	0	3.2	30

FECHA	BERLIN [37015020]	BUCARAMANGA IDEAM [23190830]	GALVICIA LA [23190400]	MATAJIRA [23190340]	PICACHO EL [23190300]	LA GRANJA	MIRAFLORES
6/7/2019	2.8	7.2	19.8	1.7	3.1	0	10
6/8/2019	0.3	1	4.6	0	8.6	31.1	1.4
6/9/2019	1.1	0	0	0	0	0	2.2
6/10/2019	1.3	0.1	5	0.7	0	0	0
6/11/2019	1.2	29.1	1.2	0	0	2.1	0
6/12/2019	0	0	0	0	0	0	0
6/13/2019	0	0	0	0	0	0	0
6/14/2019	0.7	2	2.5	0	0	0	0
6/15/2019	0	0	0	0	0	3.5	4
6/16/2019	0.6	0	0	0	0	0	0
6/17/2019	0.6	0	0	0	0	0	0
6/18/2019	4	1.5	0	0.8	5.9	7.5	0
6/19/2019	10	0	6.3	2.4	8.4	3.1	0
6/20/2019	4.1	2	9.5	0.8	6.3	6.5	4.5
6/21/2019	10.5	0	1.3	0	4.1	0	0
6/22/2019	2.1	0	0	0	1.8	0	0
6/23/2019	0	0.9	2.5	0	0	0	0
6/24/2019	1	3	0	0	0.8	0	0
6/25/2019	2.4	0	0	0	0	0	0
6/26/2019	0	0	0	0	0	0	0
6/27/2019	0	0	0	0	0	0	0
6/28/2019	2.1	0	0	0	0	0	0
6/29/2019	17.9	0.1	2.4	0	0	0	0
6/30/2019	8.1	0	0	0	0	0	0
7/1/2019	4.8	0.3	2.6	1.1	0	0	0
7/2/2019	2	0	0	0	0	0	0
7/3/2019	0	0	0	0	0	0	0
7/4/2019	0	0	0	0	0	0	0
7/5/2019	7.5	0	0	0	0	0	0
7/6/2019	0	0	0	0	0	0	0
7/7/2019	0	0	0	0	0	0	0
7/8/2019	1.7	4.1	15	1.4	2.8	0	0
7/9/2019	0.8	0.1	6	0	0	10.5	5.5
7/10/2019	3.8	3.2	8	1.8	0	0	0
7/11/2019	0	7.7	6.9	0	0	0	0
7/12/2019	0	0.8	1.6	0	0	0	0
7/13/2019	0.9	1.1	7.5	2.1	0	0	0
7/14/2019	0.4	0	0	0	0	11.1	0
7/15/2019	0	1.1	5.3	0	0	0	0
7/16/2019	0	32.6	7.4	1.7	0	0	0
7/17/2019	0	0	0	0	0	17.2	6.5
7/18/2019	0.2	1.7	0	0	2.9	0	0
7/19/2019	1	0.8	20	0	0.4	0	0
7/20/2019	1.1	0	0	0	0	0	0
7/21/2019	0	0	1	0	0	0	0
7/22/2019	1.5	4.2	7.5	0.7	0	0	0
7/23/2019	1.2	0	0	0.3	0	5.1	1.2
7/24/2019	1.3	0.3	5.1	0	0	0	0

FECHA	BERLIN [37015020]	BUCARAMANGA IDEAM [23190830]	GALVICIA LA [23190400]	MATAJIRA [23190340]	PICACHO EL [23190300]	LA GRANJA	MIRAFLORES
7/25/2019	1.2	0	0	0	0	0	0
7/26/2019	5	1.1	0	0	0	0	0
7/27/2019	0	0	0	0	0.2	0	0
7/28/2019	0	1.6	5.2	9.1	0	0	4.1
7/29/2019	1	13.1	35	9.2	0	5.2	0
7/30/2019	0.5	1.2	4.5	0	3	1.1	3.3
7/31/2019	0.8	0.4	3.2	0	0	0	0
8/1/2019	0.1	0	0	8.8	0	0	0
8/2/2019	0.4	0	0.5	0	0	5.8	0
8/3/2019	0	26.1	19.5	6.4	0	8.5	0
8/4/2019	0	1	8.2	0	0	0	0
8/5/2019	1.1	0	3.4	1.4	0	0	1.1
8/6/2019	1.1	7.2	16.8	0.5	26.3	0	2.2
8/7/2019	1.1	6.9	12.4	3.1	4.2	3.2	8.6
8/8/2019	0	1.4	6.6	0	0	4.5	15
8/9/2019	0.1	0	9.6	0	0	0	3.7
8/10/2019	0.6	1.1	0	0	0	0	0
8/11/2019	0.2	0.2	0	0	0	0	0
8/12/2019	0	2.7	0.5	0	7.8	0	0
8/13/2019	2.5	2.2	2.6	1.7	4	0	0
8/14/2019	2.7	3.9	13	0.4	12.9	2.5	0
8/15/2019	0	3.1	10.6	0	0	0	13.1
8/16/2019	4	0.6	5.5	1.5	8.7	0	4.3
8/17/2019	0.4	0	0	0	0	8.5	0
8/18/2019	0.4	8.3	6	7.5	0	0	0
8/19/2019	0.5	1.7	1	0	0	0	0
8/20/2019	0.7	0.3	1.8	0	0	0	2
8/21/2019	0	0	0	0	0	0	0
8/22/2019	0	0	0	0.9	0	0	0
8/23/2019	0	8.9	27	0.3	0	0	0
8/24/2019	1.7	0.9	6.7	0	0	0	0
8/25/2019	0	0.2	7.1	11.5	0	5.5	0
8/26/2019	0	8.7	5.4	0.3	6.9	1.6	0
8/27/2019	8.1	2.5	4.5	48.2	3.1	0	0
8/28/2019	4.7	2.7	21.7	1.4	0	37.2	10.1
8/29/2019	0	0	0	0	0	2.2	0
8/30/2019	0	0	0	0	0	0	0
8/31/2019	0	0.5	0	0	0	0.075725608	0
9/1/2019	0	0	0	0	0	0	0
9/2/2019	0	9.6	24	6.2	12.8	0	0
9/3/2019	0	0	0	0	0	26.1	25.5
9/4/2019	0.2	0	4	0	0	0	0
9/5/2019	1.4	0.1	0	0.4	18.3	0	0
9/6/2019	0	0	7	0	10.4	1.5	0
9/7/2019	1.3	0	7.2	0.5	3.9	2.8	10
9/8/2019	0.9	1.8	12	4.1	0	0	20.5
9/9/2019	0	0	0	0	0	3.5	1.2
9/10/2019	0	0	0	0	0	0	0

FECHA	BERLIN [37015020]	BUCARAMANGA IDEAM [23190830]	GALVICIA LA [23190400]	MATAJIRA [23190340]	PICACHO EL [23190300]	LA GRANJA	MIRAFLORES
9/11/2019	3.3	1.6	3.5	0	0	0	0
9/12/2019	0	0	1.2	0.6	0	3.5	0.58
9/13/2019	0.8	0	0	0	0	2.1	8
9/14/2019	0.2	0.5	0	0	0	0	0
9/15/2019	0	0	0	0	0	0	0
9/16/2019	0.5	0	0	1.1	0	0	0
9/17/2019	0	0.5	0	3.7	11.8	3.2	3
9/18/2019	23.5	0	0.5	1.4	9.2	0	15
9/19/2019	0	0	0	0	0	5.2	11
9/20/2019	6.2	6.7	10.5	14.8	0	0	0
9/21/2019	2.5	2.4	9	0.8	22.3	52.2	14
9/22/2019	15.1	3.6	7.7	4.4	12.9	3.2	2
9/23/2019	2.1	2.9	5.2	1.1	7.9	4.5	4
9/24/2019	0.1	11.2	0	5.4	0	20.2	5.3
9/25/2019	5.4	0	7	0	28.3	0	1.6
9/26/2019	0	0	1.8	1.2	0	0	4.3
9/27/2019	0	0	0	0	12.1	1.5	0
9/28/2019	6.9	3.6	1.5	0.6	6	0	0
9/29/2019	0.3	12.6	23	5.6	0	5.5	2.1
9/30/2019	5.1	0	0	0	13.1	0	38
10/1/2019	0.3	0.7	5.3	0.9	11.2	12.1	38.2
10/2/2019	1.5	0	0	0	1.3	8.1	44
10/3/2019	3.8	0	4	0	0.1	1.5	0
10/4/2019	0.2	0	0	0	0	0	0
10/5/2019	0	2.5	0	0	0	0	0
10/6/2019	0	3.2	0	0	0	0	0.5
10/7/2019	0	0	0	0	0	0	0
10/8/2019	0	12	38	1.5	5.6	0	3
10/9/2019	0	10	7.4	0.9	0	6.4	2.5
10/10/2019	0	2.5	0	0.3	41.4	2.1	4
10/11/2019	17.2	0.2	0.5	4.4	7.1	0	5
10/12/2019	2.7	0	0	0	7.6	3.1	20
10/13/2019	0	0	0	0	0	0	0
10/14/2019	0	0	0	0	0	0	0
10/15/2019	0.4	0	0	0	13.7	0	0
10/16/2019	0.4	1.4	10.5	0	0	0	0
10/17/2019	4.9	5.4	3.8	2.4	33.5	0	3.2
10/18/2019	10.9	18.8	0.5	13.2	9.5	6.3	7.4
10/19/2019	1.1	7.1	12	6.3	0	8.5	41.2
10/20/2019	0	0.4	2.4	4.7	23.7	12.5	15.5
10/21/2019	1.1	2.8	27.3	9.3	0	0	6
10/22/2019	0	2.7	11.4	3.7	12.9	12.2	17.5
10/23/2019	2.3	0.5	0	0	8.5	3.1	8.4
10/24/2019	3.2	3	0	2.4	12.5	0	2
10/25/2019	4.6	0	13.5	10.5	0	0	3.5
10/26/2019	0	0	1.3	0	0	28.2	13
10/27/2019	0	0	0	0	1.5	3.1	0
10/28/2019	0	1	8.2	0	0	0	0

FECHA	BERLIN [37015020]	BUCARAMANGA IDEAM [23190830]	GALVICIA LA [23190400]	MATAJIRA [23190340]	PICACHO EL [23190300]	LA GRANJA	MIRAFLORES
10/29/2019	0	0	0	0	0	0	3
10/30/2019	0	0	4.1	0	0	0	0
10/31/2019	0	0	0	0	0	0	0
11/1/2019	0	0	0	0	0	0	0
11/2/2019	0	0	4.1	1.4	0	0	5
11/3/2019	0.4	0.6	0	0.8	0	0	0
11/4/2019	0.6	0	0	0	0	0	0
11/5/2019	0	0	0	0	12.8	0	2.5
11/6/2019	0	0	0	0	0	0	0
11/7/2019	0.4	0	0	0	0	0	0
11/8/2019	0	0	1	0	0	0	0
11/9/2019	0	0	0	3.6	0	0	0
11/10/2019	0	3.7	18	5.5	5.5	0	0.5
11/11/2019	1.7	0	0	1.1	0	5.5	1.4
11/12/2019	4.3	61.4	15	20	9.4	4.1	20.2
11/13/2019	0	0	1.5	6.7	10.3	35.8	48
11/14/2019	0	44.7	28	10.8	5.7	8.5	24.5
11/15/2019	0	0.4	1.4	3.1	0	1.5	0
11/16/2019	0	0	0	0.4	0	0	2
11/17/2019	0	0	0	0	0	0	0
11/18/2019	0	0	0	0	0	0	0
11/19/2019	0	0.6	10	0	0	0	0
11/20/2019	0	4.2	1.1	0	0	0	0
11/21/2019	0	54.6	10	29.4	19.4	0	0
11/22/2019	24.4	0	0	0	0	0	0
11/23/2019	0.5	0	2.4	6.5	0	0	2.5
11/24/2019	0	0	0	0	0	9.3	38.4
11/25/2019	3	0	0	0	3.9	0	0
11/26/2019	1	0	0	0	0	0	0
11/27/2019	1.3	0	0	0	0	0	0
11/28/2019	0.6	0	2	0	0	0	0
11/29/2019	0	0	0	0	0	0	0
11/30/2019	0	0	0	0	0	0	0
12/1/2019	0	0	0	0	0	0	0
12/2/2019	0	14.3	0	0	0.1	0	0
12/3/2019	0	0	0	0	0	0	0
12/4/2019	0	0	0	0	0	0	8.1
12/5/2019	0	0	0	0	0	0	0
12/6/2019	0	0	0	0	0	0	0
12/7/2019	0	0	0	0	0	0	0
12/8/2019	0	7.6	26.4	4.2	0	0	0
12/9/2019	0	0	0	0	0	0	0
12/10/2019	0	0	0	0	0	0	0
12/11/2019	0	0.2	4.7	0.2	0	0	0
12/12/2019	0	1.1	3.4	0.9	12.9	0	8
12/13/2019	0	2.2	0	0	0	2.5	0
12/14/2019	0.9	1.1	0	8	0	0	0
12/15/2019	0.5	0	0	0	0	24.1	14.5

FECHA	BERLIN [37015020]	BUCARAMANGA IDEAM [23190830]	GALVICIA LA [23190400]	MATAJIRA [23190340]	PICACHO EL [23190300]	LA GRANJA	MIRAFLORES
12/16/2019	0	0	0	0	0	0	0
12/17/2019	0	0	0	0.7	0	0	0
12/18/2019	0	0	0	0	19.2	0	0
12/19/2019	0.4	0	0	0	0	0	3.3
12/20/2019	0.8	0	0	0	0	0	0
12/21/2019	3.1	0.3	1.1	0	0	0	0
12/22/2019	0	0	0	0	0	5.2	0
12/23/2019	0	0	0	3.4	0	0	0
12/24/2019	0	0	0	0	0	0	0
12/25/2019	3.5	24.7	48	18.2	0	0	0
12/26/2019	0.5	4	7	0.7	33.3	59.2	33.4
12/27/2019	0	1.1	0	0	0	1.5	2.1
12/28/2019	0	0	0	0	0	0	2.2
12/29/2019	0	0	0	1	0	0	0
12/30/2019	0	51.8	21.3	0	0	0	0
12/31/2019	0	27.9	25.5	5.3	0	0	0
1/1/2020	0	0	0	0	0	0	0
1/2/2020	0	0	0	0	0	0	0
1/3/2020	0	0	0	0	0	0	0
1/4/2020	0	0	0	0	0	0	0
1/5/2020	0	0	0	0	0	0	0
1/6/2020	0	0	0	0	0	0	0
1/7/2020	0	0	0	0	0	0	0
1/8/2020	0	0	0	0	0	0	0
1/9/2020	0	0	0	0	0	0	0
1/10/2020	1	0	0	0	0	0	0
1/11/2020	0.3	0	0	0	0	0	0
1/12/2020	0	0	0	0	0	26.5	0
1/13/2020	0.4	0	0	0	0	0	0
1/14/2020	0	0	0	0	0	5.5	0
1/15/2020	0	0	0	0	0	0	0
1/16/2020	1.4	0	0	0	0	0	0
1/17/2020	0.3	0	0	0	0	0	0
1/18/2020	1	0	0	0	0	0	0
1/19/2020	1	0.9	0	0	0	0	0
1/20/2020	1.1	20.7	2.6	0	5.1	0	0
1/21/2020	3.3	10.872768	40.7	15.6	0	0	17
1/22/2020	1.7	-	0	0	0	5.5	0
1/23/2020	0.4	-	4.3	0.4	0	0	10.5
1/24/2020	0.6	-	4	0.5	0	0	0
1/25/2020	0	-	0	0	9.7	0	3
1/26/2020	0.5	-	30	15.7	5.6	0	0
1/27/2020	1.2	-	44.2	61.6	19.5	1.5	0
1/28/2020	0.3	-	0.5	2.7	8.5	52.5	0
1/29/2020	4.8	-	4	0.7	0	0	0
1/30/2020	0	-	0	0	6.4	0	0
1/31/2020	0	-	4.3	0.3	0	0	0
2/1/2020	0	-	0	0	0	0	0

FECHA	BERLIN [37015020]	BUCARAMANGA IDEAM [23190830]	GALVICIA LA [23190400]	MATAJIRA [23190340]	PICACHO EL [23190300]	LA GRANJA	MIRAFLORES
2/2/2020	0	-	0	0	0	0	0
2/3/2020	0	-	0	0	0	0	0
2/4/2020	0	-	0	0	0	0	0
2/5/2020	0	-	0	0	0	0	0
2/6/2020	0	-	0	0	0	0	0
2/7/2020	0	-	0	0	0	0	0
2/8/2020	0	-	0	0	0	0	0
2/9/2020	0	-	0	0	0	0	0
2/10/2020	0	-	0	0	0	0	0
2/11/2020	0	-	0	0	0	0	0
2/12/2020	0	-	0	0	0	0	0
2/13/2020	0	-	0	0	0	0	0
2/14/2020	0.9	-	0	1.9	11.6	0	0
2/15/2020	3.2	-	1.4	0	14.3	0	2.2
2/16/2020	0.7	-	0	3.6	0	0	11.6
2/17/2020	0	-	0	0	0	0	1.3
2/18/2020	0.9	-	0	0	0.4	0	0
2/19/2020	0.8	-	0	0	0	0	0
2/20/2020	0	-	12	0	0	0	0
2/21/2020	0.5	-	2.4	5	0	10.5	3.1
2/22/2020	0	-	24.6	2.9	0	16.2	0
2/23/2020	1.6	-	40	12.5	4.3	0	1.3
2/24/2020	1.5	-	17.4	0	0	2.1	2.5
2/25/2020	0	-	0	0	0	0	0
2/26/2020	0	-	0	0	0	0	0
2/27/2020	0	-	0.5	0	0	0	0
2/28/2020	0	-	0	0	0	0	0
2/29/2020	0	-	20.2	0.8	0	0	0
3/1/2020	4	-	43.5	34.7	0	2.5	4.4
3/2/2020	0	-	0	0	0	10.5	1.5
3/3/2020	0	-	0	0	0	0	0
3/4/2020	0	-	0	0	0	0	0
3/5/2020	0	-	0	0	0	0	0
3/6/2020	0	-	0	0	0	0	0
3/7/2020	0	-	5	2.9	0	0	0
3/8/2020	0	-	0	0.3	0	0	0
3/9/2020	0.7	-	0	0	0	1.8	0
3/10/2020	0.8	-	0	0.3	2.2	0	0
3/11/2020	0.2	-	7.1	2.9	0	2.5	15.5
3/12/2020	0	-	15.4	1	0.4	1.5	2.5
3/13/2020	2.3	-	4	0.5	7.1	0	0.3
3/14/2020	0	-	51.5	3.6	0	1.5	0
3/15/2020	0	-	0.5	0.6	0	0	0
3/16/2020	0	-	0	0	0	0	0
3/17/2020	0	-	0	0	0	0	0
3/18/2020	0	-	0	0	0	0	0
3/19/2020	0	-	0	0	0	0	0
3/20/2020	4	-	2	7.6	9.4	0	5

FECHA	BERLIN [37015020]	BUCARAMANGA IDEAM [23190830]	GALVICIA LA [23190400]	MATAJIRA [23190340]	PICACHO EL [23190300]	LA GRANJA	MIRAFLORES
3/21/2020	0	-	0	0	0	20.3	13
3/22/2020	0	-	0	0	0	0	0
3/23/2020	0.2	-	0	0	0	0	9
3/24/2020	3.2	-	0	0	0	0	0
3/25/2020	6	-	14.5	6.2	2.3	0	0
3/26/2020	0	-	0	0	0	2.5	0
3/27/2020	0	-	0	0	0	0	0
3/28/2020	0	-	0	0	0	0	0
3/29/2020	0	-	21	12.1	6.3	0	0
3/30/2020	0	-	0.5	6.5	0	0	0
3/31/2020	13	-	3.1	3.6	0	0	0
4/1/2020	2.9	-	0	3.1	0	4.5	11.3
4/2/2020	0.4	-	0	0	0	7.5	4.2
4/3/2020	0.5	-	17.5	4.4	0	0	3.1
4/4/2020	0.6	-	0	0	10.8	3.5	0.3
4/5/2020	0	-	0	0	7.1	0	0
4/6/2020	0	-	0	0	0	0	0
4/7/2020	0.5	-	0	0	0	0	0
4/8/2020	0.2	-	0	0	0	0	0
4/9/2020	0	-	0	0	0	0	0
4/10/2020	0.4	-	5.5	13.6	0	0	0
4/11/2020	0	-	0	1	0	0	1.1
4/12/2020	0	-	0	0	0	0	1
4/13/2020	0	-	0	0	0	0	0
4/14/2020	0	-	0	0	0	0	0
4/15/2020	0	-	0	0	0	0	0
4/16/2020	0	-	0	0	0	0	0
4/17/2020	0	-	0	0	0	0	0
4/18/2020	4.8	-	48	21.8	0	0	0
4/19/2020	0	-	8.7	2	28.3	20.2	29
4/20/2020	4.1	-	4	11.1	0	8.2	17.2
4/21/2020	1.1	-	11.2	0.3	0	0	0
4/22/2020	1	-	0	4.4	9.2	0	12.3
4/23/2020	0	-	0	0	0	0	0
4/24/2020	0	-	0	0	0	0	0
4/25/2020	0	-	0	0	0	0	0
4/26/2020	0	-	0	0.3	0	0	0
4/27/2020	0	-	0	0	0	0	0
4/28/2020	0	-	0	0	0	0	0
4/29/2020	0.7	-	3.6	0	9.3	0	0
4/30/2020	0.8	-	21.3	2.3	0	0	29
5/1/2020	0.2	-	0	0	4.2	0	3.2
5/2/2020	0.4	-	0	0	0	0	0
5/3/2020	0	-	0	0	0	0	0
5/4/2020	0	-	1.3	7.6	0	0	0
5/5/2020	0	-	0.7	0	0	4.1	0
5/6/2020	0.1	-	1.4	0	0	0	0
5/7/2020	0	-	0	0	0	0	0

FECHA	BERLIN [37015020]	BUCARAMANGA IDEAM [23190830]	GALVICIA LA [23190400]	MATAJIRA [23190340]	PICACHO EL [23190300]	LA GRANJA	MIRAFLORES
5/8/2020	0	-	0	0	2.1	0	0
5/9/2020	0.4	-	0	0	0	0	0
5/10/2020	0	-	0	0	0	0	0
5/11/2020	0	-	0	0	0	0	0
5/12/2020	0.4	-	2.3	5.9	0	0	0
5/13/2020	0.7	-	0	0	0.2	45.2	7.2
5/14/2020	0.1	-	0	0.2	0	0	0
5/15/2020	1.1	-	5.5	1.5	0	0	2.1
5/16/2020	0	-	0	0	0	5.1	9.2
5/17/2020	0	-	0	0	0	0	0
5/18/2020	0.6	-	4.4	0	0	0	0
5/19/2020	0	-	0	0	4.4	0	1
5/20/2020	0	-	0	0	0	0	0
5/21/2020	0.4	-	0	0	0	0	0
5/22/2020	0.6	-	0	13.8	0	0	15
5/23/2020	0	-	18.5	0	0	0	1
5/24/2020	0	-	0	0	0	0	0
5/25/2020	0	-	0	0	0	0	0
5/26/2020	3.4	-	9.4	0	3.5	0	0
5/27/2020	2.4	-	7	8.3	0	2.2	6.3
5/28/2020	1.3	-	13	3.8	0	5.5	19.2
5/29/2020	0	-	65	18.4	8.4	4.2	1
5/30/2020	0.4	-	7.6	11.8	5.1	13.2	3.2
5/31/2020	3.5	-	3.5	3.2	4.9	3.5	0.5
6/1/2020	1.4	-	1.4	2.210316012	10.4	2.1	1.2
6/2/2020	1	-	7.7	3.2	3.4	0	0
6/3/2020	0	-	0	4.5	2.3	0	0
6/4/2020	0	-	0	2.5	0	0	0
6/5/2020	0.2	-	3.5	0	0	0	0
6/6/2020	6.9	-	0	0	0	2.1	0
6/7/2020	1.4	-	6.6	0	0	0	5.3
6/8/2020	3.5	-	29	1.5	3.4	0	0
6/9/2020	1.7	-	1.6	29.8	5.8	11.5	6
6/10/2020	4.4	-	1	2	0	3.4	14.2
6/11/2020	3.8	-	19	0	0	0	5.2
6/12/2020	0	-	0	9.5	0	5.5	31
6/13/2020	0.1	-	1	6.5	9.4	10.5	0
6/14/2020	8.1	-	11.8	0	4.8	0	0
6/15/2020	1.1	-	29	4	0	7.5	10
6/16/2020	0.9	-	0	4.6	0	0	19.4
6/17/2020	0.5	-	1.5	0	0	0	1
6/18/2020	2.4	-	2	9.8	0	0	1
6/19/2020	0.5	-	0	1.2	11.3	0	9.2
6/20/2020	1.6	-	1	0	0	0	0
6/21/2020	4.2	-	0	0	13.9	0	0
6/22/2020	2	-	0	0	4.7	0	0
6/23/2020	1.9	-	0	0	2.1	7.8	0
6/24/2020	0	-	0	0	0	0	0

FECHA	BERLIN [37015020]	BUCARAMANGA IDEAM [23190830]	GALVICIA LA [23190400]	MATAJIRA [23190340]	PICACHO EL [23190300]	LA GRANJA	MIRAFLORES
6/25/2020	1	-	0	0	0	0	0
6/26/2020	7.6	-	0	0	0	0	0
6/27/2020	0	-	0	0	0	0	0
6/28/2020	3	-	5.5	0	0	0	0
6/29/2020	0.5	-	0	3	0	0	3
6/30/2020	0	-	0	0	0	0	0
7/1/2020	5.6	-	1.4	6.8	0	0	0
7/2/2020	6.9	-	1.2	0	3.5	0	0
7/3/2020	6.9	-	0	0.2	5	8.1	0.5
7/4/2020	5.5	-	0	0	0	0	0
7/5/2020	0	-	0	0	0	0	0
7/6/2020	1.1	-	0.5	0	0	0	0
7/7/2020	6.1	-	22.5	14.7	0	0	0
7/8/2020	0.8	-	9.1	0	0	14.8	5
7/9/2020	0.1	-	0	0	11.5	0	2.1
7/10/2020	0	-	3.5	5.7	13.2	0	0
7/11/2020	4.6	-	1.2	0	5.8	0	0
7/12/2020	3.3	-	8.4	0	0	4.8	2.2
7/13/2020	1.7	-	0	0	0	0	0
7/14/2020	0	-	0	0	0	0	0
7/15/2020	0.5	-	0	0	0	0	0
7/16/2020	3.1	-	3	0.6	0	0	0
7/17/2020	1.5	-	0	0	2.3	1.1	4
7/18/2020	1.5	-	4.1	0	0	0	0
7/19/2020	1	-	1	0	0	0	0
7/20/2020	3.3	-	7.4	1.7	4.8	0	0
7/21/2020	0	-	0	2.5	0	6.8	12
7/22/2020	0.1	-	3.2	0	0	0	0
7/23/2020	0.4	-	0	0	0	4.1	0
7/24/2020	5.2	-	13	11.2	17.6	0	0
7/25/2020	0	-	1.2	6.6	16.4	14.5	14.2
7/26/2020	4.3	-	19	9.1	7.9	0	0
7/27/2020	0.2	-	1.8	0	0	16.5	28.2
7/28/2020	0	-	0	0	12.1	0	0
7/29/2020	0.2	-	0	4.7	8.4	0	0
7/30/2020	3.4	-	3	13.7	0	0	0
7/31/2020	0.1	-	1	0	0	7.5	14
8/1/2020	0	-	1.8	0	0	0	0
8/2/2020	1.9	-	0	0	0	17.3	0
8/3/2020	14	-	12	13.5	9.5	0	2
8/4/2020	1.7	-	1.1	0	11.8	19.2	6
8/5/2020	2.7	-	2.7	2	0	0	3
8/6/2020	4.7	-	12	4.7	7.3	6.8	14.3
8/7/2020	3.7	-	0	0	11.4	0	4.4
8/8/2020	0.7	-	3	0	0	0	0
8/9/2020	2	-	5.4	0.3	16.5	0	0
8/10/2020	0.2	-	5.5	0	0	2.5	0
8/11/2020	0.8	-	1	0	0	5.5	0

FECHA	BERLIN [37015020]	BUCARAMANGA IDEAM [23190830]	GALVICIA LA [23190400]	MATAJIRA [23190340]	PICACHO EL [23190300]	LA GRANJA	MIRAFLORES
8/12/2020	0.3	-	0	0	0	0	0
8/13/2020	1.4	-	0	0	0	0	0
8/14/2020	0.1	-	0.6	0	2.1	0	0
8/15/2020	6.6	-	1	1.1	0	0	0
8/16/2020	0	-	3	1.8	0	0	0
8/17/2020	2.6	-	0	0	0	0	0
8/18/2020	0	-	0	0	0	0	0
8/19/2020	4.6	-	7.6	4.4	25.4	0	0
8/20/2020	12.1	-	8.2	3.2	0	8.2	15
8/21/2020	13.4	-	4.5	3.8	0	0	2.4
8/22/2020	1.2	-	1.7	1.6	0	8.1	10.1
8/23/2020	25.2	-	6	14.5	12.4	9.5	3.5
8/24/2020	0.9	-	0.7	0	21.8	0	1.5
8/25/2020	3.8	-	25	1.4	25.7	0	0.4
8/26/2020	0	-	1	0	3.1	0	6
8/27/2020	0	-	0	0	0	9.2	4.2
8/28/2020	0	-	0	0	0	0	0
8/29/2020	0	-	0	0	0	0	0
8/30/2020	0	-	2.2	0	0	0	0
8/31/2020	1	-	0	0	0	0	0
9/1/2020	2.5	-	22	0	8.3	0	0
9/2/2020	1.3	-	1	23.1	12.9	1.2	14.2
9/3/2020	25.5	-	10	7.8	4.6	0	5.4
9/4/2020	13.5	-	22.2	3.4	25.4	5.2	13.3
9/5/2020	0	-	4	8	18.7	0	9.3
9/6/2020	0.1	-	0	0.6	0	0	0
9/7/2020	14.6	-	12.4	0	22.3	0	0
9/8/2020	10.4	-	1	3.8	19.8	11.2	15
9/9/2020	0.2	-	2.2	0	15.4	0	5.3
9/10/2020	0	-	13	4.1	4.8	0	0
9/11/2020	0.5	-	0	4	2.8	0	0
9/12/2020	7	-	0	1.6	17	6.8	4.5
9/13/2020	0	-	13.2	0	0	0	0
9/14/2020	0.6	-	0	0	0	0	0
9/15/2020	0.1	-	0	0	0	0	0
9/16/2020	0.3	-	0	0.4	0	0	0.5
9/17/2020	0.7	-	0	0	0	0	0
9/18/2020	2.4	-	6.8	9.9	19.3	7.5	0
9/19/2020	8.3	-	4.5	20	8.5	18.5	16.5
9/20/2020	7.5	-	0	0	26.4	39.5	34.2
9/21/2020	0	-	6	0	0	0	0.5
9/22/2020	4.7	-	11	7.7	0	0	0
9/23/2020	0	-	0	0	8.5	11.2	0
9/24/2020	0.7	-	3.7	0	3.7	0	0
9/25/2020	0	-	0	0	0	0	0
9/26/2020	0.3	-	0	0	0	0	0
9/27/2020	0.1	-	0	0	0	0	0
9/28/2020	0	-	0	10.9	0	0	0

FECHA	BERLIN [37015020]	BUCARAMANGA IDEAM [23190830]	GALVICIA LA [23190400]	MATAJIRA [23190340]	PICACHO EL [23190300]	LA GRANJA	MIRAFLORES
9/29/2020	0.3	-	3.6	0	0	0	0
9/30/2020	0	-	0	0	0	0	0
10/1/2020	0	-	0	0	2.4	0	0
10/2/2020	7.6	-	3.4	2.7	12.2	0	0.9
10/3/2020	5.8	-	11.5	7.5	8.9	6.1	7.4
10/4/2020	1.1	-	4.7	2.6	0	18.5	15.2
10/5/2020	2.7	-	11	5.4	4.2	0	13.9
10/6/2020	5.1	-	2	0.8	6.9	10.1	40.3
10/7/2020	5.2	-	1.5	0	7.3	4.2	1.8
10/8/2020	3.3	-	0	0	19.7	0	4.3
10/9/2020	0	-	0	0	0	0	0.7
10/10/2020	0.3	-	1.7	0	0	0	0
10/11/2020	0.1	-	0	0	0	0	0
10/12/2020	0	-	2.1	0	11.9	0	0
10/13/2020	12.2	-	2.3	1.4	10.3	0	0
10/14/2020	0	-	3	7.3	0	0	7.5
10/15/2020	0	-	0	0.2	0	0	0.4
10/16/2020	0	-	0	0	8.3	9.1	8.7
10/17/2020	1.5	-	0	24.3	2.9	0	0
10/18/2020	6.8	-	0	2.4	0	22.1	27.3
10/19/2020	3.8	-	0.5	0.7	0	3.2	8.5
10/20/2020	1.7	-	0	0	12.4	0	0.3
10/21/2020	0	-	4.3	4	9.7	0	0
10/22/2020	0	-	0	0	5.1	0	11.3
10/23/2020	1.3	-	0.5	0	14.6	0	0
10/24/2020	0	-	0	0.6	5.3	0	8.5
10/25/2020	0	-	4.7	0	12.9	0	2.4
10/26/2020	0	-	0	0	0	2.1	2.5
10/27/2020	0	-	0	0	6.4	0	0
10/28/2020	2.3	-	26.1	7.5	8.1	0	2.1
10/29/2020	14.2	-	57.8	33	34.6	3.2	31.6
10/30/2020	16.9	-	6	25.3	14.7	46.2	30.8
10/31/2020	13.4	-	31	17.4	12.4	25.3	46.4
11/1/2020	0.3	-	0	1.1	0.2	0	42
11/2/2020	0.8	-	0	0.9	0	0	0
11/3/2020	0	-	8.6	28	2.2	0	6
11/4/2020	0.6	-	12	18.9	8.3	0	1
11/5/2020	1.8	-	1.7	0	4.7	10.5	0
11/6/2020	1	-	11.8	4.6	9.3	0	4
11/7/2020	26	-	32	18.5	17.8	0	3
11/8/2020	0.4	-	0.5	0	3.5	27.5	33.1
11/9/2020	0	-	8.2	27.5	9.8	2.5	1
11/10/2020	9	-	13.2	6.3	8.5	8.5	3.2
11/11/2020	1	-	4.5	2	9.7	17.2	9.2
11/12/2020	20.6	-	7	8	14.2	0	14
11/13/2020	0	-	0	0	2.1	20.5	3
11/14/2020	0.4	-	0	0	1.5	0	0
11/15/2020	12.2	-	0	2.4	8.5	0	0

FECHA	BERLIN [37015020]	BUCARAMANGA IDEAM [23190830]	GALVICIA LA [23190400]	MATAJIRA [23190340]	PICACHO EL [23190300]	LA GRANJA	MIRAFLORES
11/16/2020	1.6	-	43	41	11.3	0	0
11/17/2020	0.5	-	7.1	4.6	0	32.3	40
11/18/2020	16.7	-	7.5	6.2	34.5	1.2	12
11/19/2020	0.9	-	0	0	0	11.5	75
11/20/2020	0	-	0.5	0	0	0	0
11/21/2020	0	-	0	0	0	0	0
11/22/2020	0	-	0	0	0	0	0
11/23/2020	0	-	0	0	11.3	0	0
11/24/2020	0	-	0	0	6.2	0	1
11/25/2020	0	-	0	0	0	0	0
11/26/2020	0	-	0	0	0	0	0
11/27/2020	0.7	-	45	5.8	7.9	0	0
11/28/2020	5.6	-	13.2	8.7	8.1	9.3	10
11/29/2020	0.2	-	3.5	0	3.2	0	22.2
11/30/2020	0	-	0.5	0	0	0	0
12/1/2020	0.3	-	2.6	0	2.1	0	0
12/2/2020	0	-	1.5	0	0	0	0
12/3/2020	0	-	0	0	0	0	0
12/4/2020	0	-	0	0	0	0	0
12/5/2020	0	-	0	0	0	0	0
12/6/2020	0	-	2.5	0	0	0	0
12/7/2020	0	-	0	0.2	2.9	0	0
12/8/2020	0	-	0	0	0	0	0
12/9/2020	0	-	0	0	0	0	0
12/10/2020	0	-	0	0	0	0	0
12/11/2020	0	-	0	0	0	0	0
12/12/2020	0	-	0	0	0	0	0
12/13/2020	0	-	0	0	0	0	0
12/14/2020	0	-	0	0	0	0	0
12/15/2020	0	-	0	0	0	0	0
12/16/2020	0	-	0	0	0	0	0
12/17/2020	0	-	0	0	0	0	0
12/18/2020	0	-	0	0	0	0	0
12/19/2020	0	-	0	0	0	0	0
12/20/2020	0	-	0	0	0	0	0
12/21/2020	0	-	0	0	9	0	0
12/22/2020	0	-	0	0	0	0	0
12/23/2020	0	-	0	0	0	0	0
12/24/2020	0	-	0	0	0	0	0
12/25/2020	2.1	-	20.8	13.7	5.8	0	0
12/26/2020	3.3	-	9	0	13.9	0	0
12/27/2020	0	-	50.7	25.8	0	0	0
12/28/2020	0	-	0	0	4.9	7.1	0
12/29/2020	0	-	0	0	8.3	0	0
12/30/2020	11.7	-	0	0	3.1	0	0
12/31/2020	0	-	0.7	1.3	0	0	0
1/1/2021	0	-	0	0.8	0	0	3
1/2/2021	0.5	-	0.8	4.5	0	5.5	0

FECHA	BERLIN [37015020]	BUCARAMANGA IDEAM [23190830]	GALVICIA LA [23190400]	MATAJIRA [23190340]	PICACHO EL [23190300]	LA GRANJA	MIRAFLORES
1/3/2021	0	-	10	13.5	0	0	0
1/4/2021	0	-	0	0	0	2.5	0
1/5/2021	0	-	0.5	0	0	0	0
1/6/2021	0	-	0	0	0	0	0
1/7/2021	0	-	18.6	0	0	0	0
1/8/2021	4	-	0	0	0	6.5	0
1/9/2021	0.6	-	0	0	0	1.1	0
1/10/2021	0.9	-	1.1	0	0	0	0
1/11/2021	3.6	-	0	0	0	0	0
1/12/2021	0	-	0	0	0	0	0
1/13/2021	0	-	0	0	0	0	0
1/14/2021	0	-	0	0	0	0	0
1/15/2021	0	-	0	0	0	0	0
1/16/2021	0	-	0	0	0	0	0
1/17/2021	0	-	0	0	0	0	0
1/18/2021	0	-	0	0	0	0	0
1/19/2021	0	-	0	0	0	0	0
1/20/2021	0	-	0	0	0	0	0
1/21/2021	0	-	0	0	0	0	0
1/22/2021	0	-	0	0	0	0	0
1/23/2021	0	-	0	0	0	0	0
1/24/2021	0.6	-	0.2	0	0	0	0
1/25/2021	0	-	0	0	0	0	0
1/26/2021	0	-	0	0	0	0	0
1/27/2021	0	-	0	0	0	0	0
1/28/2021	0	-	0	0	0	0	0
1/29/2021	0	-	0	0	0	0	0
1/30/2021	0	-	0	0	3.1	0	0
1/31/2021	2.3	-	0	0	0	0	0
2/1/2021	0.3	-	11.5	1.1	0	0	0
2/2/2021	0	-	0	0	0	0	0
2/3/2021	0	-	0	0	0	0	0
2/4/2021	0	-	0	0	0	0	0
2/5/2021	0.5	-	6.3	21.6	0	0	0
2/6/2021	0	-	0	0	0	0	15
2/7/2021	11.6	-	0	0	6.2	0	0
2/8/2021	4.9	-	0	0.3	5.1	18.8	9
2/9/2021	3.3	-	1.1	10.9	3.9	0	1.2
2/10/2021	0.8	-	16	8	0	18.2	0
2/11/2021	0	-	0.8	0	0	3.8	5.8
2/12/2021	2.4	-	0	1.6	7.5	3.1	0
2/13/2021	3.9	-	3.5	2.3	4.1	3.2	0
2/14/2021	0	-	25.8	0.2	5.6	0	10.4
2/15/2021	0.9	-	8.4	0	0	10.2	2.3
2/16/2021	0.9	-	3	0.6	3.8	3.1	0
2/17/2021	1	-	0	0	0.6	0	0.5
2/18/2021	0	-	29.7	37.3	0	0	0
2/19/2021	0	-	0	0	4.2	27.2	0

FECHA	BERLIN [37015020]	BUCARAMANGA IDEAM [23190830]	GALVICIA LA [23190400]	MATAJIRA [23190340]	PICACHO EL [23190300]	LA GRANJA	MIRAFLORES
2/20/2021	0	-	0	0	0	0	0
2/21/2021	0	-	4.6	1.8	0.8	1.2	0
2/22/2021	0.2	-	3.3	0	0	1.2	0
2/23/2021	3.4	-	0	0	0	0	0
2/24/2021	0.9	-	0	0	6.5	0	0
2/25/2021	0.6	-	8.2	1.6	0	0	0
2/26/2021	0.6	-	16.4	0	0	0	3
2/27/2021	0.5	-	2	0.6	0	0	0
2/28/2021	0	-	2.1	0	0	0	0
3/1/2021	0	-	11	0.4	0	0	0
3/2/2021	0	-	0	0	0	0	0
3/3/2021	0	-	12.3	0	0	0	0
3/4/2021	0	-	1.5	1.1	0	0	0
3/5/2021	0	-	0	0	0	0	0
3/6/2021	1.1	-	8	0	5.3	0	0
3/7/2021	2.6	-	0	0	0.6	8.2	1.2
3/8/2021	0	-	0	0	0	11.1	4
3/9/2021	0	-	0	0	0	0	2.4
3/10/2021	0.6	-	1	2.2	0	0	0
3/11/2021	0.8	-	0	2.9	0	16.3	13.2
3/12/2021	2	-	15.1	7.2	0	23.5	0
3/13/2021	0	-	0	0	9.8	8.8	3.3
3/14/2021	0.5	-	0	0	8.1	0	0
3/15/2021	0.1	-	0	0	4.2	0	2
3/16/2021	0.6	-	4.1	0	1.1	0	0
3/17/2021	0.8	-	14.8	13.6	0	2.2	0
3/18/2021	1.1	-	0	5.7	0	8.1	6.3
3/19/2021	0	-	0	5.3	0	8.2	4.3
3/20/2021	0	-	16.6	2.4	0	3.2	0
3/21/2021	4.6	-	23.5	16	9.5	5.3	31
3/22/2021	0	-	0	0.5	13.8	22.2	27
3/23/2021	0.4	-	4	1.3	0.8	0	5.1
3/24/2021	1.4	-	7.6	26.7	33.8	4.5	0
3/25/2021	0.4	-	1.1	0	0	6.5	14.2
3/26/2021	28.2	-	29	50.8	8.2	11.5	6.1
3/27/2021	1.4	-	0	0	5.1	32.5	10
3/28/2021	0.2	-	1	0	0	0	0
3/29/2021	0.5	-	0	0	3.2	5.2	3
3/30/2021	1.2	-	0	0	0	0	0
3/31/2021	0.3	-	0	0	0	0	0
4/1/2021	0.6	-	1.4	1.7	8.5	0	0
4/2/2021	3.7	-	27.6	14.5	12.7	0	3
4/3/2021	2.8	-	0	0.6	18.9	0	15
4/4/2021	4.5	-	46.4	11.2	13.5	0	5
4/5/2021	4.4	-	0	18.4	17.2	26.5	16.2
4/6/2021	5.6	-	11.4	3.2	12.9	10.2	7.1
4/7/2021	5.7	-	3	6	21.3	0	13.1
4/8/2021	3.7	-	0	3.6	15.4	0	4.2

FECHA	BERLIN [37015020]	BUCARAMANGA IDEAM [23190830]	GALVICIA LA [23190400]	MATAJIRA [23190340]	PICACHO EL [23190300]	LA GRANJA	MIRAFLORES
4/9/2021	1.5	-	11.1	2	0	17.2	21
4/10/2021	0	-	17	0	9.3	0	0
4/11/2021	0.2	-	2	0	14.5	0	0
4/12/2021	0.2	-	0	0	14.1	0	0
4/13/2021	9.4	-	9	2.6	12.4	5.7	0
4/14/2021	8.8	-	3.2	0	13.4	0	3
4/15/2021	0.1	-	0	1.8	5	0	0
4/16/2021	0.4	-	0	0	3.1	0	0
4/17/2021	0.2	-	6.4	0	0	0	0
4/18/2021	0.8	-	0	0	12.3	0	1
4/19/2021	0	-	0	0	16.9	0	0
4/20/2021	0.9	-	4.8	0	7.1	0	0
4/21/2021	0.1	-	0	0	13.4	0	0
4/22/2021	0	-	0	0	0	0	0
4/23/2021	0	-	3.5	0	2.5	0	0
4/24/2021	0	-	0	1	0	0	1.4
4/25/2021	0	-	6.6	0	0	0	0
4/26/2021	0.2	-	15.5	23.3	0.3	0	0
4/27/2021	7.7	-	8.6	9.2	9.5	30.5	0
4/28/2021	2.3	-	0	0	8.5	25.5	13
4/29/2021	11.1	-	24.3	9.1	14.3	0	0
4/30/2021	10.4	-	0	6.1	10.3	0	19
5/1/2021	7	-	9.1	13.2	23.1	15.2	0
5/2/2021	8.2	-	58.3	13.5	11.1	17.5	20
5/3/2021	7.2	-	5	4.9	18.4	28.2	51
5/4/2021	14.2	-	40	2.5	12.9	18.5	8
5/5/2021	7.7	-	0	15.8	39.5	0	5
5/6/2021	11.6	-	4.2	0	18	0	25
5/7/2021	2.3	-	0	0.7	7.5	0	15.3
5/8/2021	0.4	-	0	13.2	17.8	0	5.2
5/9/2021	6.1	-	8	2.7	3.5	0	4
5/10/2021	0.5	-	0	0	0.3	0	4
5/11/2021	0.4	-	0	0	4.1	0	0
5/12/2021	0.9	-	2	0	0	0	0
5/13/2021	0	-	0	0	0	0	0
5/14/2021	0	-	0	0	0	0	0
5/15/2021	0	-	0	0	0	0	0
5/16/2021	2.9	-	8.5	22.9	7.3	49	1.4
5/17/2021	0.8	-	9.1	12.5	0	12.5	4.1
5/18/2021	0.3	-	0	0	3.1	3.2	1
5/19/2021	0	-	0	0	9.3	2.2	1
5/20/2021	0.5	-	0	1.3	0	0	0
5/21/2021	0	-	0	0	0	8.3	10.4
5/22/2021	0	-	0	0	0	0	0
5/23/2021	0	-	1.1	0	0	0	3.1
5/24/2021	0.8	-	0	0	0	0	0
5/25/2021	1.3	-	2.1	0	0	0	2.3
5/26/2021	0	-	6.3	0	0	0	0.0

FECHA	BERLIN [37015020]	BUCARAMANGA IDEAM [23190830]	GALVICIA LA [23190400]	MATAJIRA [23190340]	PICACHO EL [23190300]	LA GRANJA	MIRAFLORES
5/27/2021	0.7	-	4.4	0.5	2.8	0	0
5/28/2021	1.8	-	6.3	9.9	0	12.5	8
5/29/2021	9	-	12.8	4.1	10.5	24.5	10
5/30/2021	0.3	-	33.2	0	9.8	2.5	11
5/31/2021	0.5	-	20	2.2	8.5	0	1
6/1/2021	31.6	-	7.1	9.2	16.5	7.3	30
6/2/2021	18	-	0	0	0	10.5	14.2
6/3/2021	0.1	-	3	1.3	9.3	0	0
6/4/2021	0	-	0	0	0	22.4	12.3
6/5/2021	3.2	-	30	7	11.4	0	0
6/6/2021	10.8	-	2.5	1.2	8.8	7.1	9.2
6/7/2021	0.5	-	0.5	0	0	0	0
6/8/2021	2.5	-	5.7	0	0	0	0
6/9/2021	0	-	10	2.5	8.5	5.5	8
6/10/2021	0	-	2.4	0	0	0	0
6/11/2021	0.7	-	0	0	0	0	10
6/12/2021	1.1	-	30.5	0	11.3	0	4
6/13/2021	0	-	1.5	1.2	19.8	0	1.2
6/14/2021	0	-	0	0	0	2.5	4
6/15/2021	0.8	-	0	0	0	0	0
6/16/2021	0.3	-	0	0	0	0	0
6/17/2021	2.4	-	5.4	3.8	20.1	0	0
6/18/2021	2	-	9	2	14.2	24.3	13
6/19/2021	0.8	-	0	0	0	4.5	3
6/20/2021	4.8	-	10.5	0	4.3	0	0
6/21/2021	0.3	-	1.3	0	5.9	0	0
6/22/2021	0.4	-	2.1	12.8	0	0	0
6/23/2021	3.1	-	2	32.4	16.1	3.2	2
6/24/2021	15.4	-	6.3	21.3	18.3	0	9
6/25/2021	7.2	-	11	3.4	15.5	10.3	6.4
6/26/2021	1.5	-	0	2.3	0	21.2	15.2
6/27/2021	0.3	-	3.4	0	0	0	1
6/28/2021	0.4	-	1.5	0	0	0	0

Fuente: tomado y adaptado de registros IDEAM y AMB

Tabla 2. Registros de temperatura mínima y máxima diaria multianual IDEAM

FECHA	BERLÍN [37015020]	
	Tmín (°C)	Tmáx (°C)
7/11/2018	5.8	11.6
7/12/2018	6.4	9.8
7/13/2018	6.4	11.2
7/14/2018	6.6	11
7/15/2018	6.4	11.4
7/16/2018	5.8	11.8
7/17/2018	6.4	10
7/18/2018	5.8	11.4
7/19/2018	5.6	11.6

FECHA	BERLÍN [37015020]	
	Tmín (°C)	Tmáx (°C)
7/20/2018	6.4	9.8
7/21/2018	5.6	10.4
7/22/2018	5.8	11.2
7/23/2018	6.4	14.6
7/24/2018	6.8	12.8
7/25/2018	7.4	12.6
7/26/2018	5.2	13.8
7/27/2018	6.8	12.4
7/28/2018	6.8	14.2
7/29/2018	6.8	13.8
7/30/2018	6.8	11.2
7/31/2018	4.6	11
8/1/2018	5	11.6
8/2/2018	5.4	13.8
8/3/2018	5.6	13.2
8/4/2018	6	13.4
8/5/2018	6.2	12.4
8/6/2018	6.6	12.2
8/7/2018	5.6	13.2
8/8/2018	6	10.6
8/9/2018	6.4	11
8/10/2018	0.6	12.8
8/11/2018	6.6	12.6
8/12/2018	6.4	13.2
8/13/2018	5	13.2
8/14/2018	6.2	13.8
8/15/2018	7	14.2
8/16/2018	4.4	10.8
8/17/2018	6.6	13
8/18/2018	5.8	14
8/19/2018	5	12.8
8/20/2018	6	12
8/21/2018	6.4	13.6
8/22/2018	6.8	13.2
8/23/2018	5.6	12.8
8/24/2018	5.4	13.6
8/25/2018	5.6	13
8/26/2018	5.2	14.2
8/27/2018	5.4	13
8/28/2018	6	10.4
8/29/2018	5.8	13.8
8/30/2018	6	13.6
8/31/2018	4.2	14.2
9/1/2018	6.4	15.8
9/2/2018	3.6	15
9/3/2018	5	15.4
9/4/2018	6.2	13.8
9/5/2018	7	14
9/6/2018	6.6	13.6
9/7/2018	7	12.8
9/8/2018	5.6	13.8
9/9/2018	5	14

FECHA	BERLÍN [37015020]	
	Tmín (°C)	Tmáx (°C)
9/10/2018	3.2	14
9/11/2018	1.6	14.8
9/12/2018	2.2	15
9/13/2018	6.2	15.6
9/14/2018	4.6	15.4
9/15/2018	6.4	15.4
9/16/2018	6.8	13.2
9/17/2018	2.8	12.2
9/18/2018	5.255867397	15.4
9/19/2018	4.4	13.2
9/20/2018	4.8	13.8
9/21/2018	4.6	14.2
9/22/2018	7.4	14.6
9/23/2018	4.2	14.4
9/24/2018	7	13.2
9/25/2018	6.4	13
9/26/2018	6.6	13.6
9/27/2018	7.2	14.4
9/28/2018	7.2	13.2
9/29/2018	7	14
9/30/2018	7.8	15
10/1/2018	6.6	13.4
10/2/2018	7.6	15
10/3/2018	5	13.2
10/4/2018	6.8	13.8
10/5/2018	6.8	12.8
10/6/2018	7	14.2
10/7/2018	7.2	14.6
10/8/2018	5.4	15.4
10/9/2018	5.2	13.6
10/10/2018	6.6	14
10/11/2018	6.6	14.8
10/12/2018	7.2	13.2
10/13/2018	7.4	14.2
10/14/2018	5.8	15.2
10/15/2018	6.8	14.2
10/16/2018	6.8	13.8
10/17/2018	2.8	15.4
10/18/2018	3.8	15.8
10/19/2018	7.4	13.2
10/20/2018	6	13.8
10/21/2018	7.2	14
10/22/2018	7.4	13.2
10/23/2018	7.8	12.6
10/24/2018	8	14.6
10/25/2018	7.6	14.2
10/26/2018	7.6	13.6
10/27/2018	7	14
10/28/2018	4.2	14.4
10/29/2018	4.4	15.4
10/30/2018	6.4	13.4
10/31/2018	4.2	14.2

FECHA	BERLÍN [37015020]	
	Tmín (°C)	Tmáx (°C)
11/1/2018	6.6	14.2
11/2/2018	7.6	11.2
11/3/2018	6.8	13.4
11/4/2018	4.6	15.8
11/5/2018	6.6	13.8
11/6/2018	6	13.8
11/7/2018	7.6	14
11/8/2018	6.8	14
11/9/2018	7.2	14.6
11/10/2018	8	14.6
11/11/2018	5.4	14.4
11/12/2018	6.4	14
11/13/2018	5.4	12.4
11/14/2018	3.6	15.4
11/15/2018	1.4	16.4
11/16/2018	6.2	14.8
11/17/2018	6	14
11/18/2018	7.8	14.2
11/19/2018	8.2	12
11/20/2018	7.2	13.2
11/21/2018	6.6	14.4
11/22/2018	1.4	16.2
11/23/2018	4.4	15.4
11/24/2018	3.4	15
11/25/2018	6.6	15
11/26/2018	4	15.2
11/27/2018	0.8	14.8
11/28/2018	1.2	15.2
11/29/2018	3.4	15.4
11/30/2018	5.2	15.6
12/1/2018	-3.4	15.2
12/2/2018	-8	15.2
12/3/2018	-2.8	15.4
12/4/2018	-1.2	13.2
12/5/2018	-1.4	13.4
12/6/2018	-3.8	13.4
12/7/2018	-0.8	14.6
12/8/2018	3.2	14
12/9/2018	1.4	15.2
12/10/2018	-3.8	15.4
12/11/2018	3	15
12/12/2018	4.6	13.8
12/13/2018	7	13.8
12/14/2018	4	13.2
12/15/2018	5.4	14.4
12/16/2018	-2.2	15.4
12/17/2018	-3.2	15.2
12/18/2018	0.4	15
12/19/2018	4	13.2
12/20/2018	5.2	14.8
12/21/2018	5.4	15.2
12/22/2018	1	14

FECHA	BERLÍN [37015020]	
	Tmín (°C)	Tmáx (°C)
12/23/2018	3	14.4
12/24/2018	1.4	15.8
12/25/2018	2.6	15
12/26/2018	-0.6	14.4
12/27/2018	0.8	14.6
12/28/2018	0.4	13.2
12/29/2018	5.6	13.8
12/30/2018	1	15.4
12/31/2018	1.6	13.8
1/1/2019	6.4	15.4
1/2/2019	4	14.6
1/3/2019	0.4	16.2
1/4/2019	-0.4	15.6
1/5/2019	-1.6	17.4
1/6/2019	-1.8	17.2
1/7/2019	1.2	13
1/8/2019	3	15.6
1/9/2019	2.8	13.6
1/10/2019	4.6	12.6
1/11/2019	0.4	14.6
1/12/2019	0.8	13.4
1/13/2019	5.4	10.8
1/14/2019	6.2	13.2
1/15/2019	3.2	13
1/16/2019	4.4	15.2
1/17/2019	2.8	14.6
1/18/2019	1.4	14.4
1/19/2019	3	14.8
1/20/2019	4.6	16
1/21/2019	5.8	15.8
1/22/2019	2.4	15
1/23/2019	2.6	14.8
1/24/2019	2.4	17
1/25/2019	5.8	17
1/26/2019	1.4	17
1/27/2019	-1.6	15.4
1/28/2019	2	16.2
1/29/2019	2.2	17.4
1/30/2019	2.4	14.8
1/31/2019	3	14.6
2/1/2019	-1.2	17.6
2/2/2019	-2	17.8
2/3/2019	-6.2	18
2/4/2019	-6.4	17.8
2/5/2019	1	18
2/6/2019	-2.4	18.2
2/7/2019	2.4	16.8
2/8/2019	4.8	17.6
2/9/2019	7	17.560051
2/10/2019	5.29159389	15.8
2/11/2019	5.6	17.2
2/12/2019	5	18.6

FECHA	BERLÍN [37015020]	
	Tmín (°C)	Tmáx (°C)
2/13/2019	0.4	18
2/14/2019	4	17.4
2/15/2019	0.4	18.4
2/16/2019	0.2	15.8
2/17/2019	3.4	15.2
2/18/2019	6.4	14.2
2/19/2019	7.6	12.8
2/20/2019	7	14
2/21/2019	6.8	17
2/22/2019	1.6	17.2
2/23/2019	0.4	16.2
2/24/2019	3.8	15.4
2/25/2019	-4.2	16.6
2/26/2019	0.2	15.8
2/27/2019	4.2	15
2/28/2019	6.4	14.2
3/1/2019	5.6	16
3/2/2019	5.8	16
3/3/2019	6.4	16
3/4/2019	3.4	15.2
3/5/2019	5.2	15.4
3/6/2019	4.8	17.2
3/7/2019	4.6	17.6
3/8/2019	5.8	15
3/9/2019	7.6	13.2
3/10/2019	8	11
3/11/2019	7	13.6
3/12/2019	7	16.4
3/13/2019	7.6	17.4
3/14/2019	7.8	15.4
3/15/2019	4.8	15.4
3/16/2019	6.8	16.8
3/17/2019	6.2	15.6
3/18/2019	7.6	13.8
3/19/2019	7.8	13.8
3/20/2019	7.2	13.6
3/21/2019	6.8	13
3/22/2019	5.496247339	14
3/23/2019	7.4	13.8
3/24/2019	7.2	16
3/25/2019	3	17.4
3/26/2019	4.2	15.4
3/27/2019	1.8	17
3/28/2019	2.4	15.4
3/29/2019	6.8	13
3/30/2019	8.2	14.2
3/31/2019	9	12.8
4/1/2019	8.2	15
4/2/2019	5.471146754	15.2
4/3/2019	-2	14.6
4/4/2019	0.6	15
4/5/2019	-0.6	16.2

FECHA	BERLÍN [37015020]	
	Tmín (°C)	Tmáx (°C)
4/6/2019	4.6	15.6
4/7/2019	7.2	16.2
4/8/2019	5	16.8
4/9/2019	3.8	15.4
4/10/2019	5.4	15.8
4/11/2019	7.4	15.4
4/12/2019	4.4	15.6
4/13/2019	7.6	14.8
4/14/2019	4.4	17
4/15/2019	7.6	15.4
4/16/2019	6	15
4/17/2019	8.4	14.4
4/18/2019	8	14.4
4/19/2019	7.8	13.8
4/20/2019	8.8	14.2
4/21/2019	8.6	14.8
4/22/2019	8.2	13.4
4/23/2019	7.6	15
4/24/2019	3.6	15.8
4/25/2019	8.6	14.6
4/26/2019	8.6	15.4
4/27/2019	8	14.8
4/28/2019	8	14.6
4/29/2019	6.6	12.2
4/30/2019	5.2	13
5/1/2019	4.6	15.8
5/2/2019	4.6	15.8
5/3/2019	7.4	13.6
5/4/2019	8.2	11.4
5/5/2019	8.2	14
5/6/2019	7.2	13.6
5/7/2019	6	16.2
5/8/2019	7.6	13.4
5/9/2019	8.2	14.6
5/10/2019	8.2	13
5/11/2019	8.6	13
5/12/2019	5.711526695	13.4
5/13/2019	7.8	12.8
5/14/2019	8	12.8
5/15/2019	7.6	14.6
5/16/2019	5	15.4
5/17/2019	5.6	12.8
5/18/2019	2.6	12.8
5/19/2019	5.4	14.8
5/20/2019	6.4	14.6
5/21/2019	4	14.8
5/22/2019	5.4	14.4
5/23/2019	8.2	15.8
5/24/2019	7.4	14.4
5/25/2019	7.6	14.8
5/26/2019	7.6	15.6
5/27/2019	6.8	14.2

FECHA	BERLÍN [37015020]	
	Tmín (°C)	Tmáx (°C)
5/28/2019	6.8	14.2
5/29/2019	6.8	14.8
5/30/2019	7	14
5/31/2019	6.8	14.8
6/1/2019	5.406470907	14.2
6/2/2019	7.4	12.4
6/3/2019	7.8	12.8
6/4/2019	6	13.6
6/5/2019	6	15.2
6/6/2019	7.2	14
6/7/2019	8	12.8
6/8/2019	6.6	13.2
6/9/2019	7.4	12.8
6/10/2019	7.6	11.4
6/11/2019	7	11.8
6/12/2019	5.6	14
6/13/2019	5.2	14.6
6/14/2019	7.8	13.6
6/15/2019	7.6	13.4
6/16/2019	4.6	12.6
6/17/2019	4.8	11
6/18/2019	5.557381216	14.8
6/19/2019	5.514263985	10.2
6/20/2019	8	11.2
6/21/2019	7.6	10.4
6/22/2019	5.8	8.4
6/23/2019	5.2	13
6/24/2019	5.8	11.2
6/25/2019	7.2	11.4
6/26/2019	6.4	12.6
6/27/2019	4.2	13
6/28/2019	5.6	12.2
6/29/2019	7.2	9
6/30/2019	6.6	10.2
7/1/2019	6.4	11.8
7/2/2019	7	8.8
7/3/2019	5.8	12
7/4/2019	2	14
7/5/2019	4.2	11.2
7/6/2019	6.4	12.2
7/7/2019	5.8	13
7/8/2019	5.4	14
7/9/2019	7.4	11.2
7/10/2019	6	11.8
7/11/2019	5.6	12.2
7/12/2019	6	13
7/13/2019	7.2	11.4
7/14/2019	6.4	11.4
7/15/2019	4.8	14.2
7/16/2019	0.4	15
7/17/2019	5	13.8
7/18/2019	7	13

FECHA	BERLÍN [37015020]	
	Tmín (°C)	Tmáx (°C)
7/19/2019	7.2	11.8
7/20/2019	6.8	12.2
7/21/2019	6.2	12.8
7/22/2019	6.6	14
7/23/2019	6.8	9.6
7/24/2019	5.492705369	8
7/25/2019	2	13.2
7/26/2019	5.6	11
7/27/2019	5.6	16.4
7/28/2019	3.6	14.6
7/29/2019	3.4	15.4
7/30/2019	4	14.4
7/31/2019	5.259409366	13.6
8/1/2019	6.4	12.4
8/2/2019	6.4	13.8
8/3/2019	6.6	13.6
8/4/2019	4.6	14.2
8/5/2019	6.8	15.4
8/6/2019	7.8	15.4
8/7/2019	4.6	14.4
8/8/2019	7.6	13.8
8/9/2019	7	14
8/10/2019	6	12.8
8/11/2019	6.8	13.8
8/12/2019	2.8	14.6
8/13/2019	5.776202542	13.4
8/14/2019	7.8	13
8/15/2019	6.4	13.4
8/16/2019	7	10.2
8/17/2019	6.8	13.2
8/18/2019	5.8	14.4
8/19/2019	7	11.2
8/20/2019	6.2	12.6
8/21/2019	5.8	13
8/22/2019	2.6	14.8
8/23/2019	5.8	12.2
8/24/2019	2.8	11.2
8/25/2019	5.6	12
8/26/2019	6	14.2
8/27/2019	6.2	13
8/28/2019	6.4	13.4
8/29/2019	4	13.8
8/30/2019	4.8	14.2
8/31/2019	1.4	15.2
9/1/2019	5.6	15.2
9/2/2019	6.2	14.2
9/3/2019	6.2	13.4
9/4/2019	5.8	14.2
9/5/2019	4.8	15.8
9/6/2019	5.4	14.8
9/7/2019	0.8	14.2
9/8/2019	4.4	13.4

FECHA	BERLÍN [37015020]	
	Tmín (°C)	Tmáx (°C)
9/9/2019	6	12.4
9/10/2019	5.2	13
9/11/2019	7	15.8
9/12/2019	7.2	15.6
9/13/2019	6.4	14.2
9/14/2019	7.4	14.4
9/15/2019	6.6	13.8
9/16/2019	6.2	16
9/17/2019	7	16.4
9/18/2019	5.6	14.4
9/19/2019	6.4	12.4
9/20/2019	5.2	15.2
9/21/2019	5.4	13.2
9/22/2019	2.6	16.2
9/23/2019	5.019029424	13.8
9/24/2019	6.4	14.2
9/25/2019	6.4	14.4
9/26/2019	6.2	13.8
9/27/2019	4.2	14.4
9/28/2019	4.4	15.2
9/29/2019	7.4	13.2
9/30/2019	6.4	14.4
10/1/2019	3.4	15.6
10/2/2019	5	14.4
10/3/2019	6.2	15.8147258
10/4/2019	6	12.6
10/5/2019	5	14.2
10/6/2019	3.2	15
10/7/2019	6.8	14.8
10/8/2019	6	14.8
10/9/2019	2.8	14.8
10/10/2019	5.6	13.2
10/11/2019	6.2	13.2
10/12/2019	7.6	14.2
10/13/2019	6.8	11.2
10/14/2019	5.8	12.8
10/15/2019	3.6	12.4
10/16/2019	6.2	13.8
10/17/2019	5.8	15.2
10/18/2019	7.4	14.4
10/19/2019	6.4	11.8
10/20/2019	4.8	13.2
10/21/2019	2.6	15.4
10/22/2019	6.6	15
10/23/2019	6.8	14.8
10/24/2019	6.2	12.8
10/25/2019	6.2	12.8
10/26/2019	6.6	14.8
10/27/2019	6.4	14.2
10/28/2019	3.6	13.6
10/29/2019	6.4	14.8
10/30/2019	4.4	15.2

FECHA	BERLÍN [37015020]	
	Tmín (°C)	Tmáx (°C)
10/31/2019	3.4	15.4
11/1/2019	3.4	16.2
11/2/2019	5.2	15.6
11/3/2019	5.2	15.6
11/4/2019	7.2	14
11/5/2019	6.8	11
11/6/2019	5.8	13.4
11/7/2019	5.8	14.8
11/8/2019	7.6	14.2
11/9/2019	7	15
11/10/2019	5.2	16.2
11/11/2019	5.2	14.2
11/12/2019	5.564465155	13.8
11/13/2019	7	14
11/14/2019	7.6	15
11/15/2019	3	15.6
11/16/2019	0.4	14.8
11/17/2019	5.6	15.2
11/18/2019	0.6	15.6
11/19/2019	1.2	14.8
11/20/2019	3.8	15.6
11/21/2019	5	14.4
11/22/2019	6	14.2
11/23/2019	3.4	15.8
11/24/2019	3.6	15.8
11/25/2019	6.4	14.8
11/26/2019	6.4	9.8
11/27/2019	7	11.2
11/28/2019	7.4	11.4
11/29/2019	2	15.8
11/30/2019	1.6	15.2
12/1/2019	5.6	15
12/2/2019	5.8	13.4
12/3/2019	5.4	14.2
12/4/2019	5	15
12/5/2019	4.6	13
12/6/2019	2.4	15
12/7/2019	1.8	15.2
12/8/2019	0.8	14.4
12/9/2019	3.4	14.2
12/10/2019	0.8	15
12/11/2019	0.8	15.2
12/12/2019	-0.4	14
12/13/2019	1	15
12/14/2019	-0.2	11.4
12/15/2019	5.070318165	14.2
12/16/2019	7	12.4
12/17/2019	5.8	14.2
12/18/2019	5.6	13.8
12/19/2019	5.8	13.8
12/20/2019	6.6	13
12/21/2019	6.4	10.4

FECHA	BERLÍN [37015020]	
	Tmín (°C)	Tmáx (°C)
12/22/2019	7	11.8
12/23/2019	3.8	14.6
12/24/2019	6.6	14
12/25/2019	5.8	16.6
12/26/2019	7.8	14.8
12/27/2019	8.8	14
12/28/2019	4	15.4
12/29/2019	4.2	14
12/30/2019	6	15.6
12/31/2019	6.4	15
1/1/2020	1.8	15.6
1/2/2020	-6.8	17
1/3/2020	-7	16.2
1/4/2020	-7.4	17.2
1/5/2020	-4.6	17
1/6/2020	-6.6	16.8
1/7/2020	-3.4	15
1/8/2020	-1.4	14.2
1/9/2020	2.6	15.4
1/10/2020	2.2	12
1/11/2020	4.2	8.8
1/12/2020	2	13.6
1/13/2020	4	13.2
1/14/2020	5.4	15.8
1/15/2020	5.4	11.2
1/16/2020	5.6	12
1/17/2020	3.8	14.8
1/18/2020	3.6	11.6
1/19/2020	7.6	11.2
1/20/2020	6.6	14.6
1/21/2020	7	14.4
1/22/2020	6.2	11.8
1/23/2020	5.6	14.6
1/24/2020	7	14
1/25/2020	0.8	17.4
1/26/2020	0.4	15.2
1/27/2020	4.2	15.6
1/28/2020	7	15.8
1/29/2020	-1.6	16.4
1/30/2020	2.6	16.6
1/31/2020	2.2	16.2
2/1/2020	7	15.2
2/2/2020	2.4	18.4
2/3/2020	4	18.2
2/4/2020	-3.8	18
2/5/2020	-7.2	18.2
2/6/2020	-0.4	17.6
2/7/2020	-6	17
2/8/2020	2.8	16.2
2/9/2020	-2.4	16.2
2/10/2020	2.2	16.4
2/11/2020	4.2	17

FECHA	BERLÍN [37015020]	
	Tmín (°C)	Tmáx (°C)
2/12/2020	0.4	17.6
2/13/2020	0.6	17.4
2/14/2020	6.2	15.8
2/15/2020	6.2	16
2/16/2020	4.8	16.8
2/17/2020	5.8	15.8
2/18/2020	5.4	16.4
2/19/2020	6.2	11.8
2/20/2020	2.8	16.4
2/21/2020	2.4	16.2
2/22/2020	3.2	17.4855034
2/23/2020	5.453130107	15.6
2/24/2020	7.4	16.2
2/25/2020	7.4	16.6
2/26/2020	3.8	17.4
2/27/2020	0.6	17.4
2/28/2020	4.4	17.6
2/29/2020	4.2	17
3/1/2020	4.6	16.6
3/2/2020	7	16.8
3/3/2020	1	17.8
3/4/2020	-3	19
3/5/2020	-5	19.2
3/6/2020	-1.8	18.6
3/7/2020	-0.8	18.8
3/8/2020	2.2	18.2
3/9/2020	7.6	15.4
3/10/2020	4.8	16.6
3/11/2020	6	15.2
3/12/2020	6	17.4
3/13/2020	8.6	16.8
3/14/2020	7.2	15.2
3/15/2020	6.8	16.4
3/16/2020	1.2	16.2
3/17/2020	-3.8	19
3/18/2020	-1	16.8
3/19/2020	-1.4	16.6
3/20/2020	3.2	16
3/21/2020	4	11.8
3/22/2020	-1.6	15.4
3/23/2020	0.6	15.6
3/24/2020	4.8	15.4
3/25/2020	7.6	17
3/26/2020	8	16.4
3/27/2020	-1.4	17.4
3/28/2020	3	17.8
3/29/2020	3	17
3/30/2020	5.4	17.8
3/31/2020	7.8	17.4
4/1/2020	8	16
4/2/2020	5.4	15.6
4/3/2020	7	14

FECHA	BERLÍN [37015020]	
	Tmín (°C)	Tmáx (°C)
4/4/2020	9	17.2
4/5/2020	7.8	16
4/6/2020	8.8	15.8
4/7/2020	7.8	16.2
4/8/2020	8.4	14.4
4/9/2020	7.6	14.8
4/10/2020	6	15.8
4/11/2020	8.4	13.4
4/12/2020	7.4	15.4
4/13/2020	-0.8	17.6
4/14/2020	2.6	16.2
4/15/2020	4	16
4/16/2020	4.8	16.2
4/17/2020	1.2	15.4
4/18/2020	4.6	14.2
4/19/2020	8	16
4/20/2020	8	17
4/21/2020	7.8	14
4/22/2020	5.6	15.6
4/23/2020	7.8	13.2
4/24/2020	2.2	17.2
4/25/2020	1.8	17.2
4/26/2020	2.4	16.4
4/27/2020	5.4	18
4/28/2020	6.4	16.8
4/29/2020	2.6	18.8
4/30/2020	4	17.2
5/1/2020	7.6	12.4
5/2/2020	6.6	13.4
5/3/2020	8	14
5/4/2020	7.8	15
5/5/2020	6.4	16.2
5/6/2020	6.4	16.2
5/7/2020	8.4	14.4
5/8/2020	6	15.4
5/9/2020	8	13.2
5/10/2020	6.2	18
5/11/2020	5	17.2
5/12/2020	2	18
5/13/2020	6.2	13.6
5/14/2020	6.2	16.2
5/15/2020	7.8	17.2
5/16/2020	8	14.4
5/17/2020	7.8	14.6
5/18/2020	8	14.4
5/19/2020	7	15
5/20/2020	2	17.4
5/21/2020	6.4	16.4
5/22/2020	6.6	15
5/23/2020	7.4	14.4
5/24/2020	7.6	16.8
5/25/2020	8.6	16.4

FECHA	BERLÍN [37015020]	
	Tmín (°C)	Tmáx (°C)
5/26/2020	7.2	16
5/27/2020	8	16.4
5/28/2020	7.8	11.8
5/29/2020	7.6	14.8
5/30/2020	8	15.4
5/31/2020	4.6	16.2
6/1/2020	7.4	14
6/2/2020	6.4	15.4
6/3/2020	7.6	16.8
6/4/2020	6.2	14.6
6/5/2020	8	15
6/6/2020	7.8	11.2
6/7/2020	3.2	15.6
6/8/2020	5.8	15.4
6/9/2020	6.8	16
6/10/2020	6.8	11.4
6/11/2020	7.8	14.8
6/12/2020	7	15.4
6/13/2020	5	14.4
6/14/2020	7.6	16
6/15/2020	7.2	14.4
6/16/2020	6.8	15.2
6/17/2020	7	13.2
6/18/2020	7.2	12.4
6/19/2020	6.8	13
6/20/2020	7.6	12
6/21/2020	7.4	10.4
6/22/2020	6.8	10
6/23/2020	7	10.2
6/24/2020	4	12
6/25/2020	4.4	11.2
6/26/2020	6.6	9.6
6/27/2020	5	13
6/28/2020	5.4	11.8
6/29/2020	6.4	11
6/30/2020	3.2	14.4
7/1/2020	5.4	15.4
7/2/2020	7.4	10.2
7/3/2020	5.8	12
7/4/2020	4.8	9.4
7/5/2020	4	14.4
7/6/2020	5.2	13
7/7/2020	6	13.8
7/8/2020	7.4	14.6
7/9/2020	5.8	11
7/10/2020	5.2	13.6
7/11/2020	7.2	16.6
7/12/2020	6.8	13.6
7/13/2020	7	10.4
7/14/2020	5.6	11.8
7/15/2020	6.4	13.2
7/16/2020	6.8	14.4

FECHA	BERLÍN [37015020]	
	Tmín (°C)	Tmáx (°C)
7/17/2020	5	14.8
7/18/2020	6.8	13.6
7/19/2020	7.2	13.4
7/20/2020	7.4	12.2
7/21/2020	6.8	13.4
7/22/2020	7	12.2
7/23/2020	5.4	13.2
7/24/2020	5.6	13.4
7/25/2020	6.8	13.6
7/26/2020	5.6	14.2
7/27/2020	6.2	14.4
7/28/2020	6.8	14
7/29/2020	5	16
7/30/2020	6	14
7/31/2020	6.4	15.4
8/1/2020	8	14
8/2/2020	3	14.6
8/3/2020	5.4	16
8/4/2020	6.4	14.2
8/5/2020	6.6	14
8/6/2020	7	14.4
8/7/2020	6.4	13.6
8/8/2020	5.6	12.6
8/9/2020	6.4	11.4
8/10/2020	7.8	12.8
8/11/2020	7.4	14.8
8/12/2020	6.8	14.6
8/13/2020	8.2	13
8/14/2020	7	13.4
8/15/2020	5.6	15.8
8/16/2020	6.4	13.8
8/17/2020	7	11.4
8/18/2020	3.6	12.6
8/19/2020	5.4	16.2
8/20/2020	6.2	14.4
8/21/2020	7	13.4
8/22/2020	6	14.8
8/23/2020	6.6	11.4
8/24/2020	6	15.6
8/25/2020	6.8	14.4
8/26/2020	6.6	15.2
8/27/2020	7.2	14
8/28/2020	6.4	13.4
8/29/2020	2	13.8
8/30/2020	6.2	14
8/31/2020	1.6	15.2
9/1/2020	2	16.4
9/2/2020	7	16.2
9/3/2020	6.4	14.8
9/4/2020	6.8	15.4
9/5/2020	7	14.6
9/6/2020	7.2	14.2

FECHA	BERLÍN [37015020]	
	Tmín (°C)	Tmáx (°C)
9/7/2020	3	15.8
9/8/2020	7	15.8
9/9/2020	6.6	12
9/10/2020	2.8	15
9/11/2020	2.4	16.2
9/12/2020	5	14.2
9/13/2020	6.8	13.4
9/14/2020	2.8	14
9/15/2020	6.2	15.2
9/16/2020	6.2	14
9/17/2020	3.4	15.4
9/18/2020	7	15.6
9/19/2020	6.8	16
9/20/2020	7.2	13
9/21/2020	5	14.6
9/22/2020	3	16
9/23/2020	4.4	12.8
9/24/2020	6.8	13.2
9/25/2020	5.4	12.6
9/26/2020	5.2	12.6
9/27/2020	5.2	12.4
9/28/2020	4	15.2
9/29/2020	5	14.2
9/30/2020	6	12.6
10/1/2020	4	15.4
10/2/2020	4.8	14.8
10/3/2020	5	12.4
10/4/2020	6.4	13
10/5/2020	5.4	15.4
10/6/2020	5.6	15.8
10/7/2020	4.2	14.8
10/8/2020	6.4	12.8
10/9/2020	5.4	14
10/10/2020	5	15
10/11/2020	4	15.2
10/12/2020	6.8	13.2
10/13/2020	4.6	14.6
10/14/2020	4.8	17.6955144
10/15/2020	4.6	14.8
10/16/2020	5.8	15
10/17/2020	5.2	14
10/18/2020	7.6	13.8
10/19/2020	7.4	12.2
10/20/2020	5.8	14
10/21/2020	6	12.8
10/22/2020	7.2	14.2
10/23/2020	5.2	14.4
10/24/2020	5.4	13.4
10/25/2020	6	14.8
10/26/2020	4.4	15.8
10/27/2020	4.6	15
10/28/2020	5.6	15.6

FECHA	BERLÍN [37015020]	
	Tmín (°C)	Tmáx (°C)
10/29/2020	5.4	15.8
10/30/2020	7.8	14.6
10/31/2020	6.2	13.6
11/1/2020	6.8	12
11/2/2020	6.6	14.6
11/3/2020	4.4	15.8
11/4/2020	6.6	15.6
11/5/2020	6.4	12
11/6/2020	2.6	13.6
11/7/2020	6.6	13
11/8/2020	6.2	12.8
11/9/2020	5.8	14.8
11/10/2020	6.4	15.2
11/11/2020	6	13.8
11/12/2020	6.2	14.2
11/13/2020	7.2	14.2
11/14/2020	4.6	14.2
11/15/2020	6.8	14.2
11/16/2020	3.8	14.6
11/17/2020	6.6	12
11/18/2020	7	11.6
11/19/2020	7.2	13.4
11/20/2020	5.2	13.8
11/21/2020	3.4	14.8
11/22/2020	0.2	15.6
11/23/2020	2.4	16
11/24/2020	4.6	15.8
11/25/2020	4.6	15.8
11/26/2020	0.6	16
11/27/2020	4.8	14.8
11/28/2020	5.6	15
11/29/2020	6.8	12.4
11/30/2020	5.2	15
12/1/2020	4.8	14.2
12/2/2020	4.8	13.8
12/3/2020	6.8	15
12/4/2020	-0.8	15
12/5/2020	1.8	14.4
12/6/2020	1.4	14.4
12/7/2020	2.6	14
12/8/2020	2.4	14.4
12/9/2020	-1.6	14.2
12/10/2020	-0.6	15.4
12/11/2020	-1.2	14.4
12/12/2020	-3.8	14.4
12/13/2020	-5	14.8
12/14/2020	-3.6	13.8
12/15/2020	0.4	14.8
12/16/2020	2.8	13.8
12/17/2020	6.2	14.6
12/18/2020	5.8	13.8
12/19/2020	3	12.6

FECHA	BERLÍN [37015020]	
	Tmín (°C)	Tmáx (°C)
12/20/2020	1	14.4
12/21/2020	3	14.4
12/22/2020	3.4	14.4
12/23/2020	1.2	15
12/24/2020	3	15
12/25/2020	-0.6	14.2
12/26/2020	0.2	13.2
12/27/2020	2.6	12.4
12/28/2020	2.4	14
12/29/2020	5	14.4
12/30/2020	6	15.2
12/31/2020	5.4	14.6
1/1/2021	3.6	13.8
1/2/2021	5	13.6
1/3/2021	3	15.4
1/4/2021	1.4	15.6
1/5/2021	-7.6	14.8
1/6/2021	-4	14.4
1/7/2021	4	12.8
1/8/2021	3	10.4
1/9/2021	6.2	12
1/10/2021	6.4	11.4
1/11/2021	6.8	9.8
1/12/2021	0.6	14.2
1/13/2021	0.2	16.2
1/14/2021	-2.8	16.4
1/15/2021	-2	16
1/16/2021	0.2	16.6
1/17/2021	-5.4	15.4
1/18/2021	-4.6	15.6
1/19/2021	0.2	15.4
1/20/2021	1.4	15.6
1/21/2021	-3.2	15.4
1/22/2021	-3.2	15.6
1/23/2021	1.2	15.6
1/24/2021	6	11
1/25/2021	6	13.4
1/26/2021	-4.4	15.2
1/27/2021	-1.4	16.8
1/28/2021	-3	16
1/29/2021	-4.2	15
1/30/2021	-6.4	15.8
1/31/2021	-1.2	15.8
2/1/2021	4.8	12.8
2/2/2021	6.2	15.6
2/3/2021	3	16.2
2/4/2021	1	15.6
2/5/2021	0.8	15.6
2/6/2021	3.4	16.4
2/7/2021	-1.2	16.4
2/8/2021	2.8	15.2
2/9/2021	-0.2	15

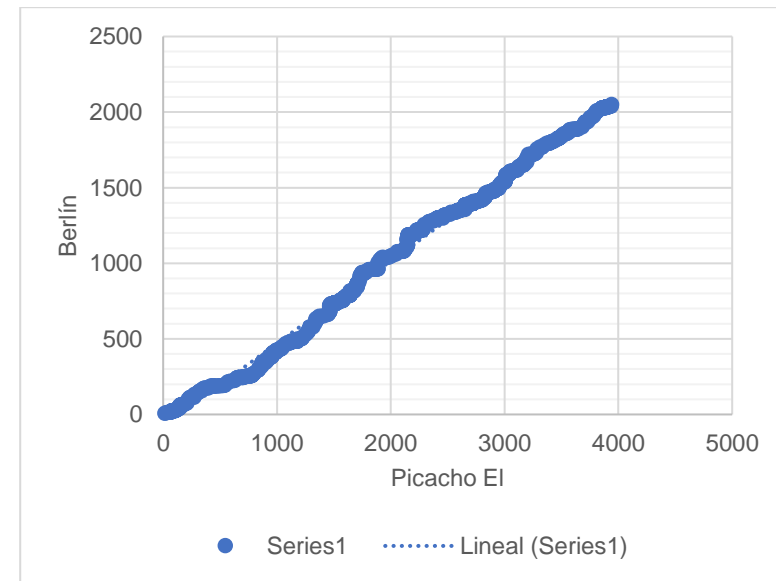
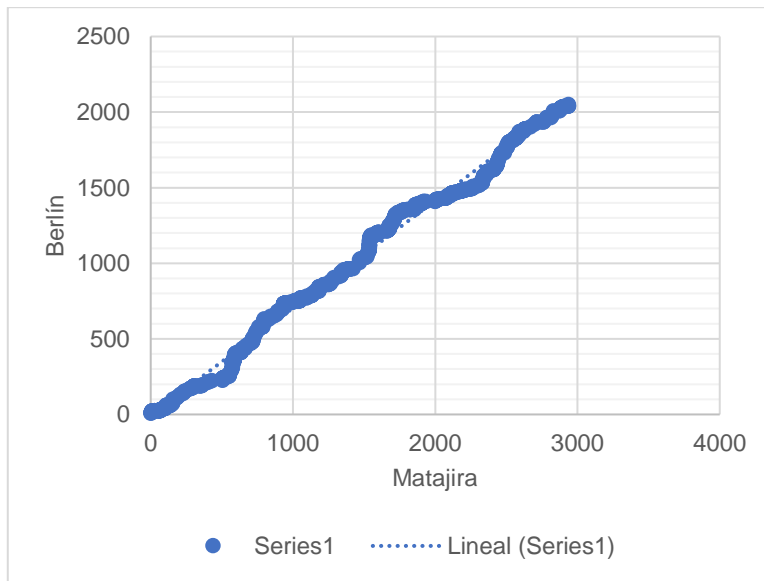
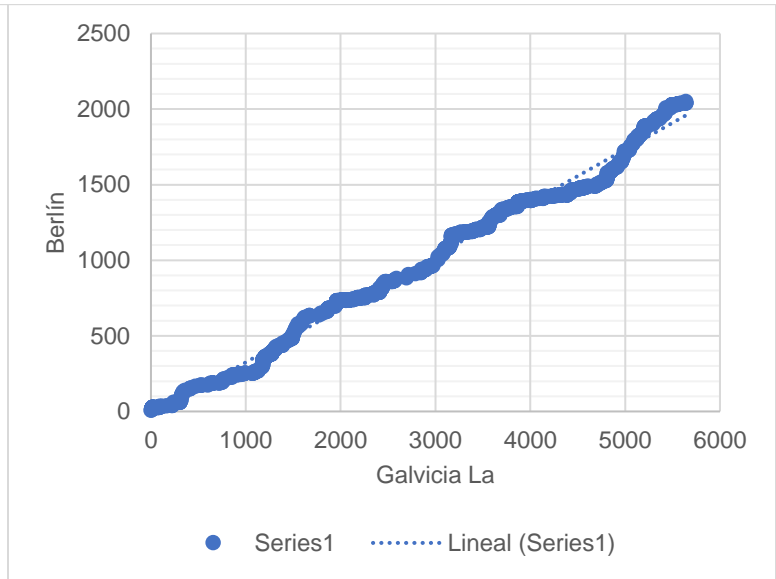
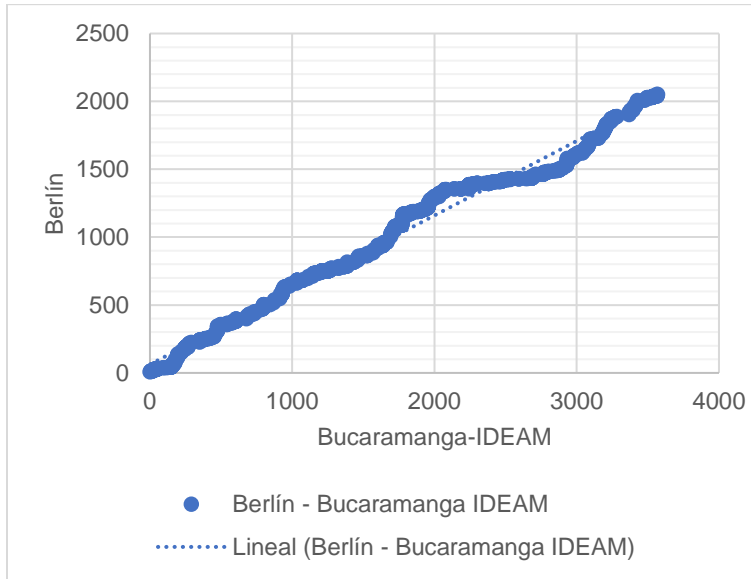
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	Tmín (°C)	Tmáx (°C)
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2/11/2021	4.8	14.2
2/12/2021	1.2	14.8
2/13/2021	4.8	14.8
2/14/2021	6.8	13.2
2/15/2021	5.2	17.2
2/16/2021	2	14.8
2/17/2021	3.8	14.4
2/18/2021	-0.8	16
2/19/2021	1.2	14.2
2/20/2021	0.2	13.2
2/21/2021	2	13.6
2/22/2021	4	14.6
2/23/2021	6.6	15.4
2/24/2021	5.6	12.6
2/25/2021	6.8	12.4
2/26/2021	7	15.4
2/27/2021	7	7
2/28/2021	6.4	15.8
3/1/2021	3.6	16.8
3/2/2021	-2.8	16.4
3/3/2021	-4.8	17.2
3/4/2021	-1.4	13.8
3/5/2021	1.6	13.8
3/6/2021	4.2	16.2
3/7/2021	6.6	9.8
3/8/2021	5.8	13.2
3/9/2021	1.4	15.8
3/10/2021	2	14.8
3/11/2021	3.4	13.6
3/12/2021	0.4	13.2
3/13/2021	1.6	13.4
3/14/2021	3.6	14
3/15/2021	5	13.6
3/16/2021	5.8	13.2
3/17/2021	6.6	11
3/18/2021	6.4	14.6
3/19/2021	4.6	15.8
3/20/2021	2.6	15.2
3/21/2021	1.8	15.8
3/22/2021	4.8	13.2
3/23/2021	1.8	13.6
3/24/2021	5.4	15
3/25/2021	6.4	13.6
3/26/2021	7.4	13.8
3/27/2021	7.6	11.8
3/28/2021	6.8	10.4
3/29/2021	6.8	11.8
3/30/2021	7.4	11.4
3/31/2021	7.2	10.6
4/1/2021	7.2	12.4
4/2/2021	6.6	12.6

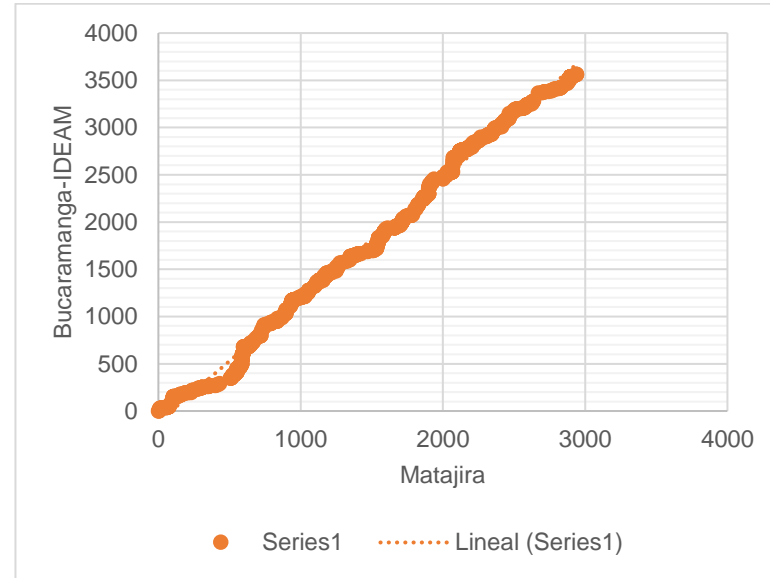
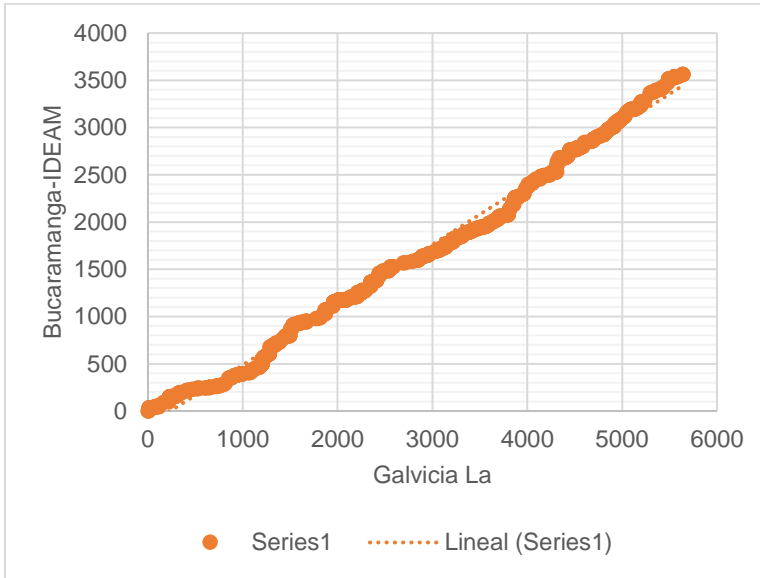
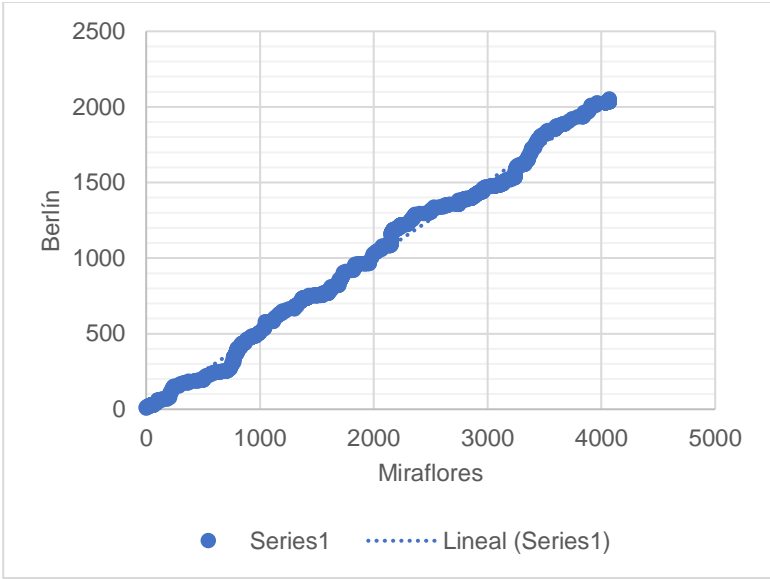
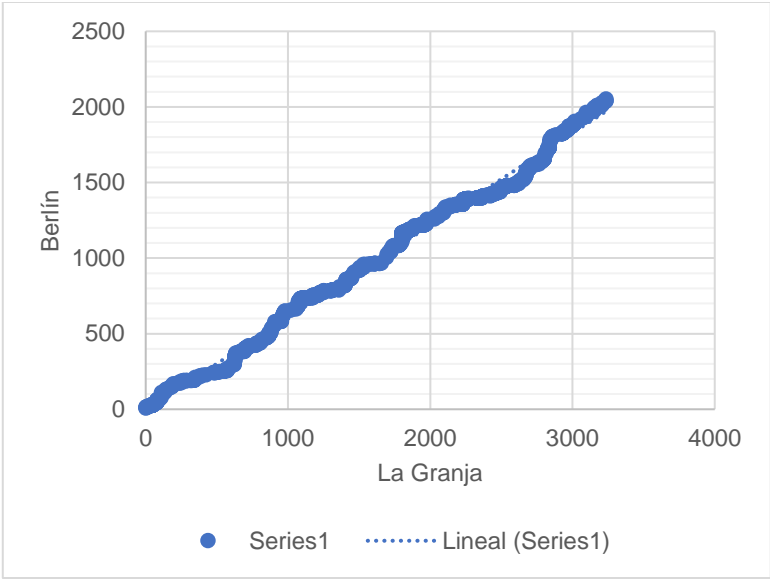
FECHA	BERLÍN [37015020]	
	Tmín (°C)	Tmáx (°C)
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4/4/2021	7.2	15.2
4/5/2021	7.8	14.6
4/6/2021	7.6	13.8
4/7/2021	6	14.6
4/8/2021	6.8	14.4
4/9/2021	6.4	14.4
4/10/2021	5.8	14.6
4/11/2021	6.2	15.6
4/12/2021	8.6	13.2
4/13/2021	7.8	15.2
4/14/2021	7	14.8
4/15/2021	6.6	13.8
4/16/2021	7	13.8
4/17/2021	6.8	13.2
4/18/2021	7.4	13
4/19/2021	3.6	13.6
4/20/2021	2.6	15
4/21/2021	0.8	14.2
4/22/2021	1.2	14.8
4/23/2021	5.8	15.4
4/24/2021	6.2	15.8
4/25/2021	5.4	15.6
4/26/2021	7.2	15.6
4/27/2021	7.2	14.6
4/28/2021	6.4	11.4
4/29/2021	7.6	11
4/30/2021	7	9.6
5/1/2021	4.4	12.2
5/2/2021	7.4	13.4
5/3/2021	7	12.6
5/4/2021	6.6	12.2
5/5/2021	8	13.8
5/6/2021	5.8	14
5/7/2021	5.6	14.2
5/8/2021	5.6	13.8
5/9/2021	7	13
5/10/2021	7	12
5/11/2021	4	11.6
5/12/2021	7	12.8
5/13/2021	6.6	14
5/14/2021	2.2	15.6
5/15/2021	3.2	16.4
5/16/2021	6.2	15.6
5/17/2021	8.4	14.8
5/18/2021	6	14.2
5/19/2021	6.2	15.4
5/20/2021	7	13.4
5/21/2021	6.4	14.8
5/22/2021	6.6	14.4
5/23/2021	7.4	13.8
5/24/2021	4.2	14

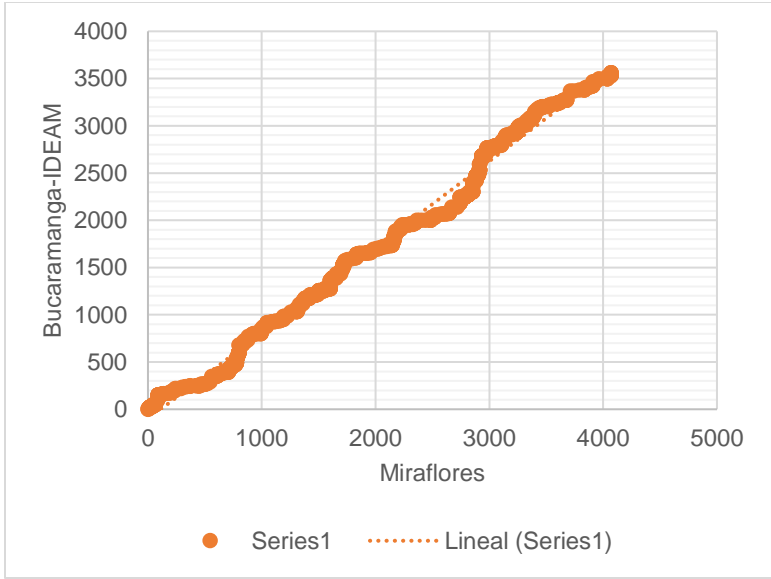
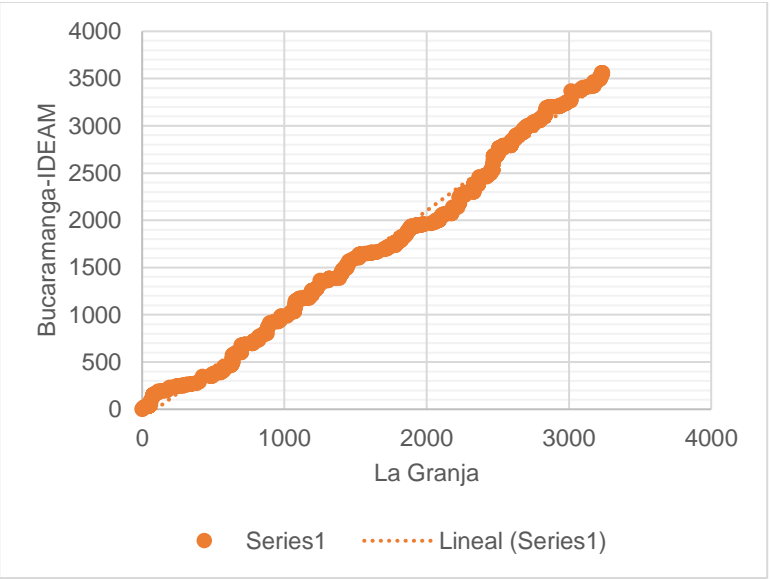
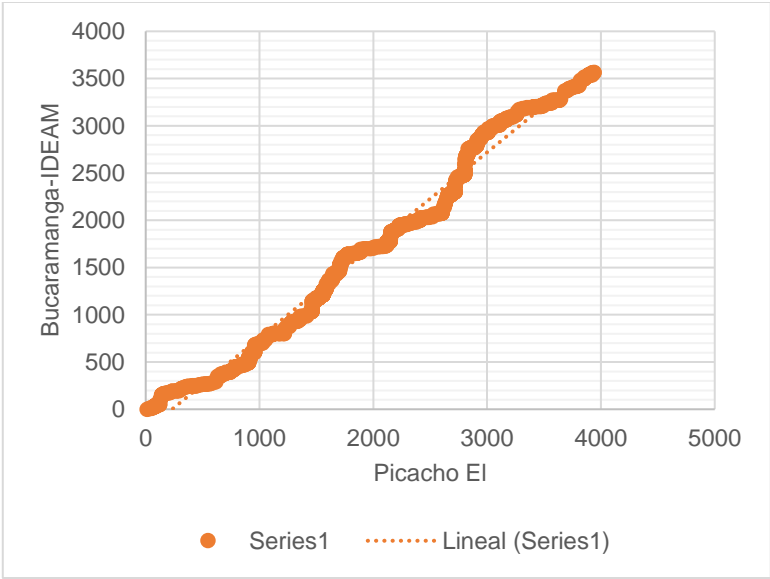
FECHA	BERLÍN [37015020]	
	Tmín (°C)	Tmáx (°C)
5/25/2021	4	12.4
5/26/2021	6.6	15.4
5/27/2021	5	15
5/28/2021	5.8	14.6
5/29/2021	7.4	14.6
5/30/2021	8	13.2
5/31/2021	8	15.2
6/1/2021	8.2	14
6/2/2021	7.4	14.4
6/3/2021	8.2	14
6/4/2021	7.4	14.4
6/5/2021	7.6	14.4
6/6/2021	7.6	10.6
6/7/2021	6.8	10.6
6/8/2021	6.8	13
6/9/2021	7	11.6
6/10/2021	1.6	15.6
6/11/2021	4.8	13.4
6/12/2021	4.2	14.4
6/13/2021	7.4	14.2
6/14/2021	5.8	14
6/15/2021	4.6	11.4
6/16/2021	4.2	11.4
6/17/2021	6.4	14.6
6/18/2021	5.4	13.6
6/19/2021	7	11.2
6/20/2021	7	10.2
6/21/2021	6	12.4
6/22/2021	6	13
6/23/2021	4.8	17.2
6/24/2021	6.8	12.6
6/25/2021	6	14.6
6/26/2021	6	12.6
6/27/2021	3.8	13.4
6/28/2021	6.6	14.2

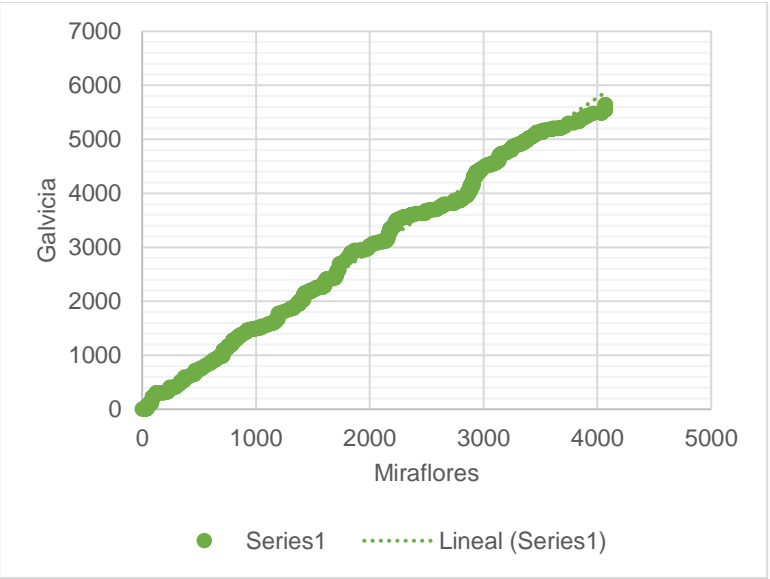
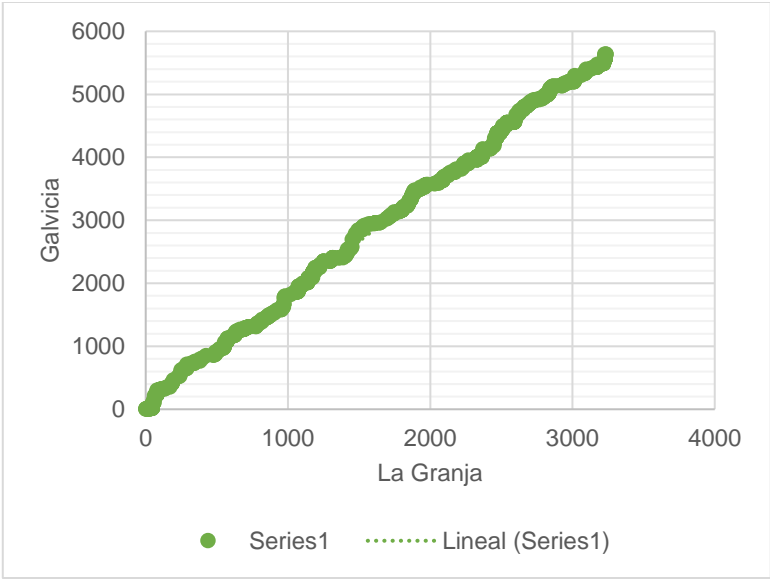
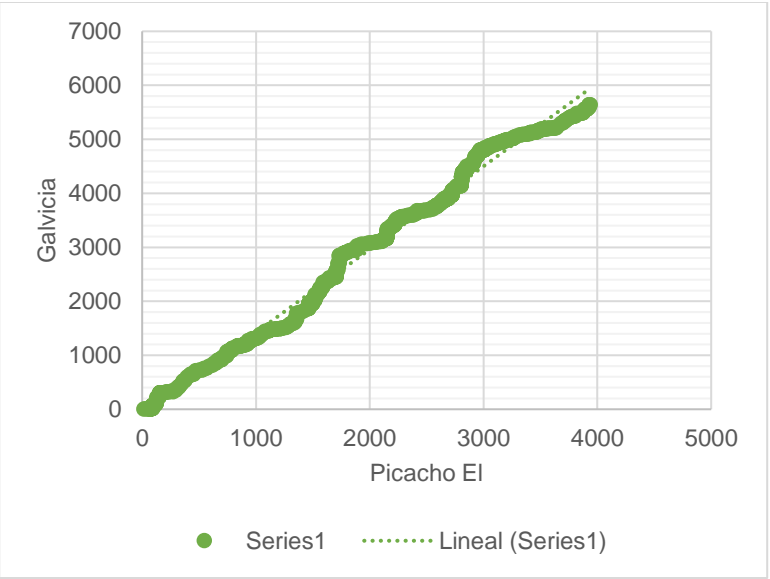
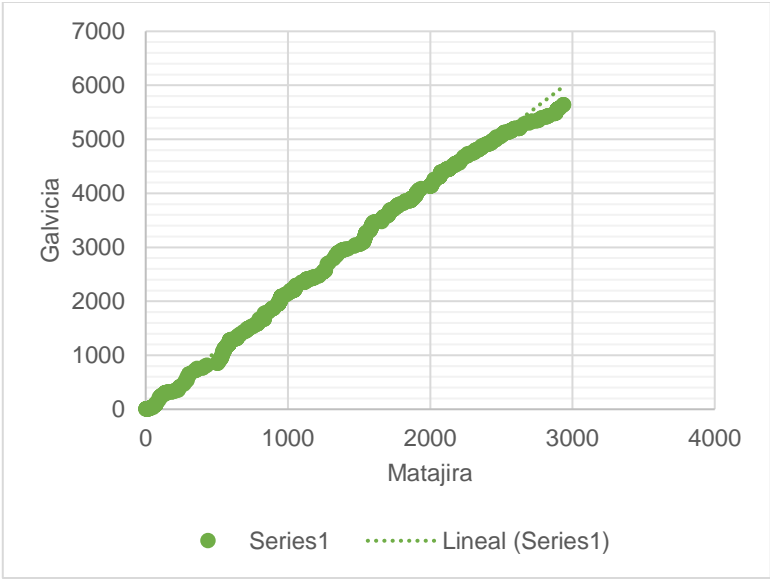
Fuente: tomado y adaptado de registros IDEAM

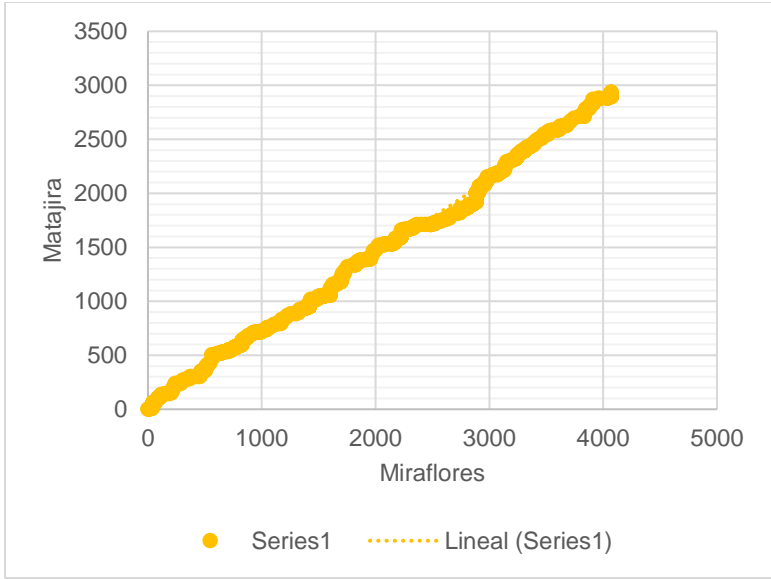
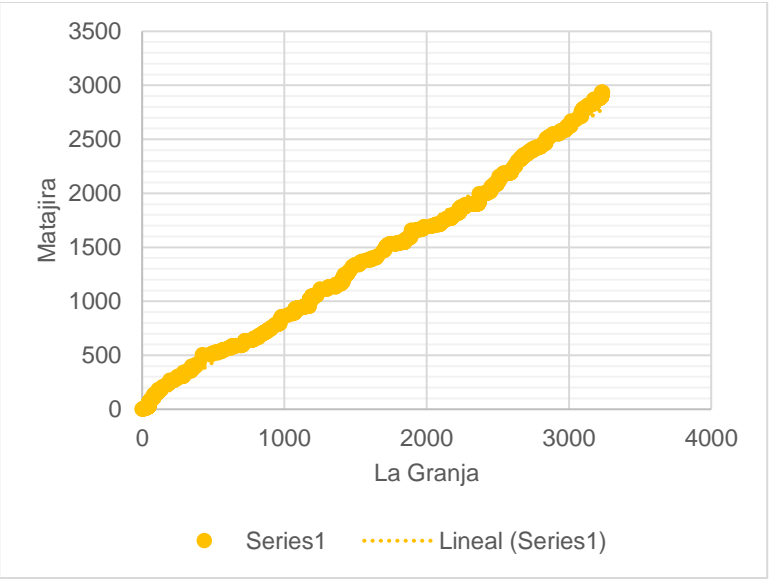
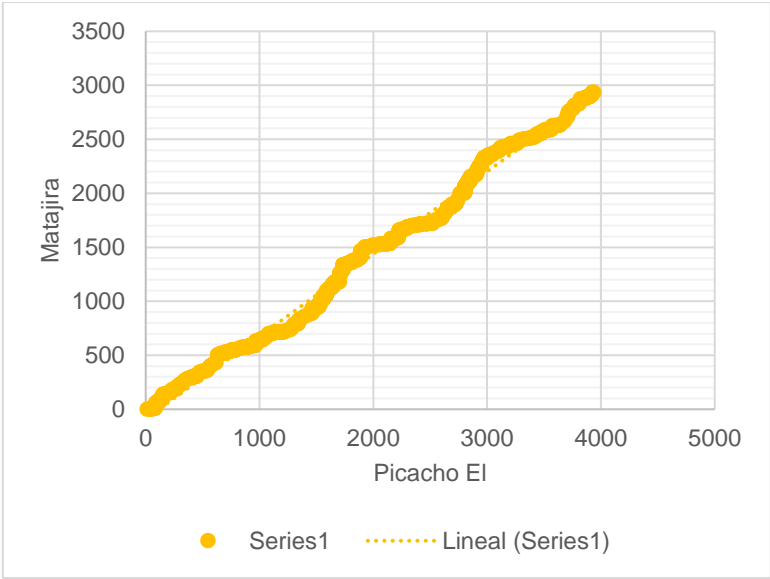
- ANÁLISIS DE DOBLES MASAS ENTRE ESTACIONES CON REGISTROS DE PRECIPITACIÓN

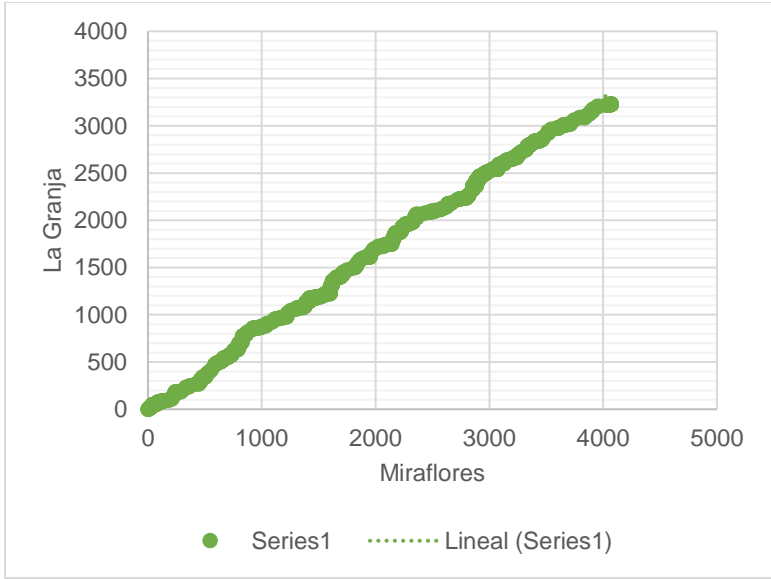
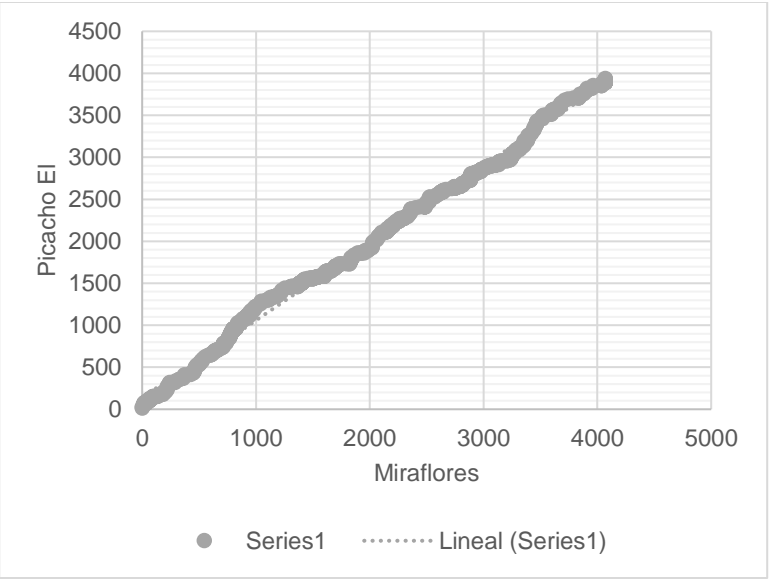
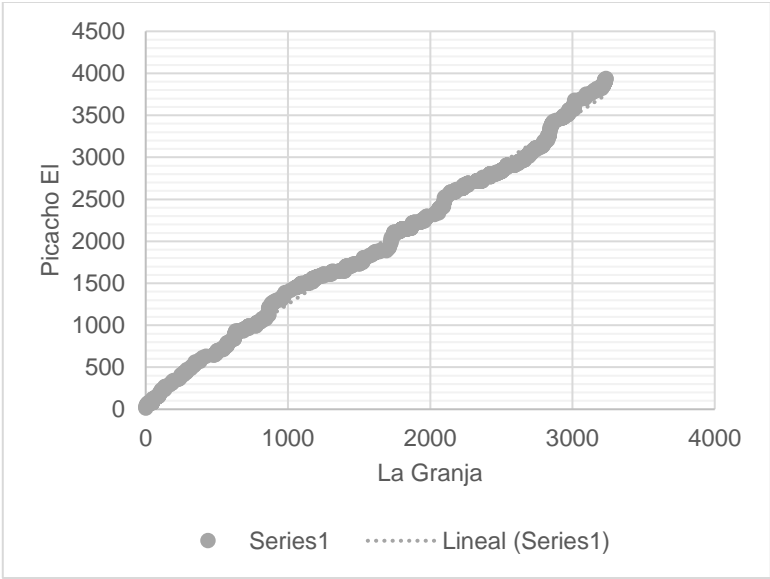












ANEXO 2. MAPAS DE NÚMEROS DE CURVA

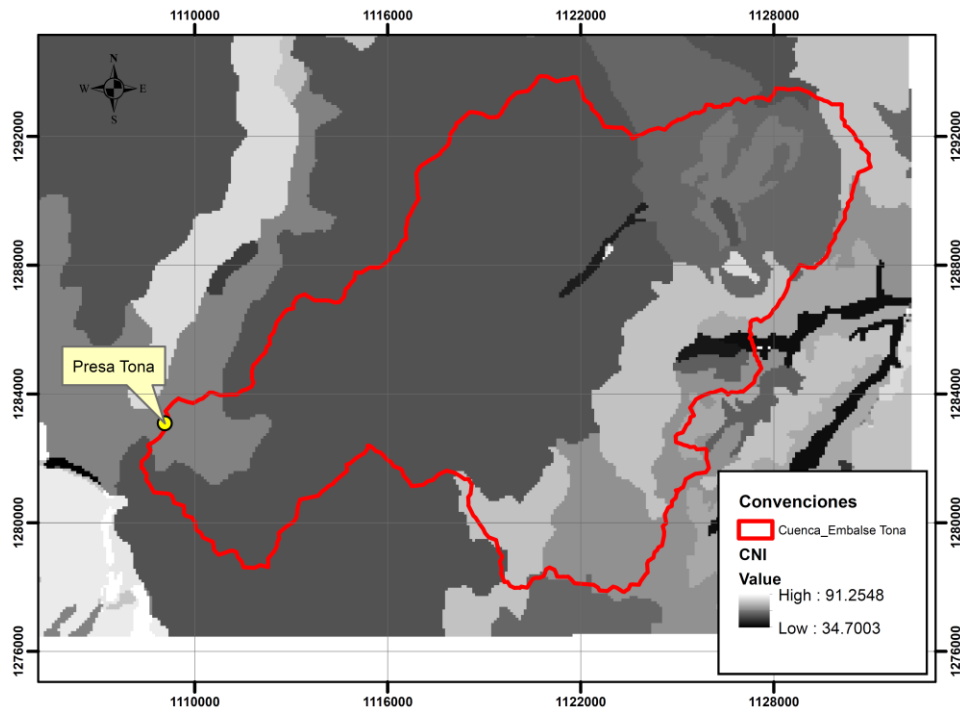


Figura 1. Número de curva para condición de humedad antecedente seca
Fuente: Elaboración propia

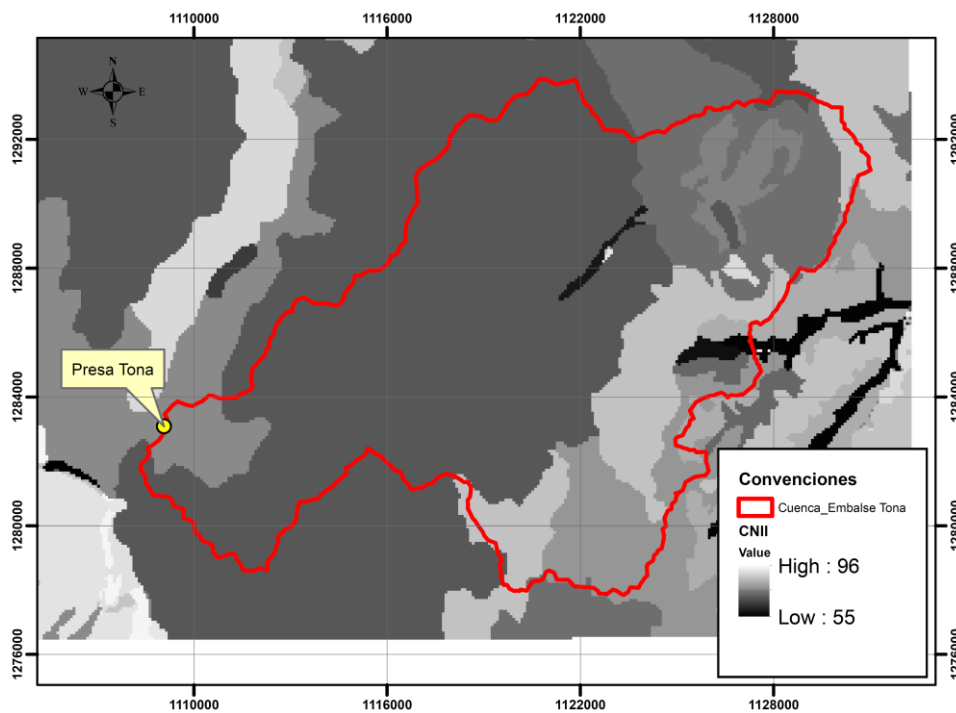


Figura 2. Número de curva para condición de humedad antecedente promedio
Fuente: Elaboración propia

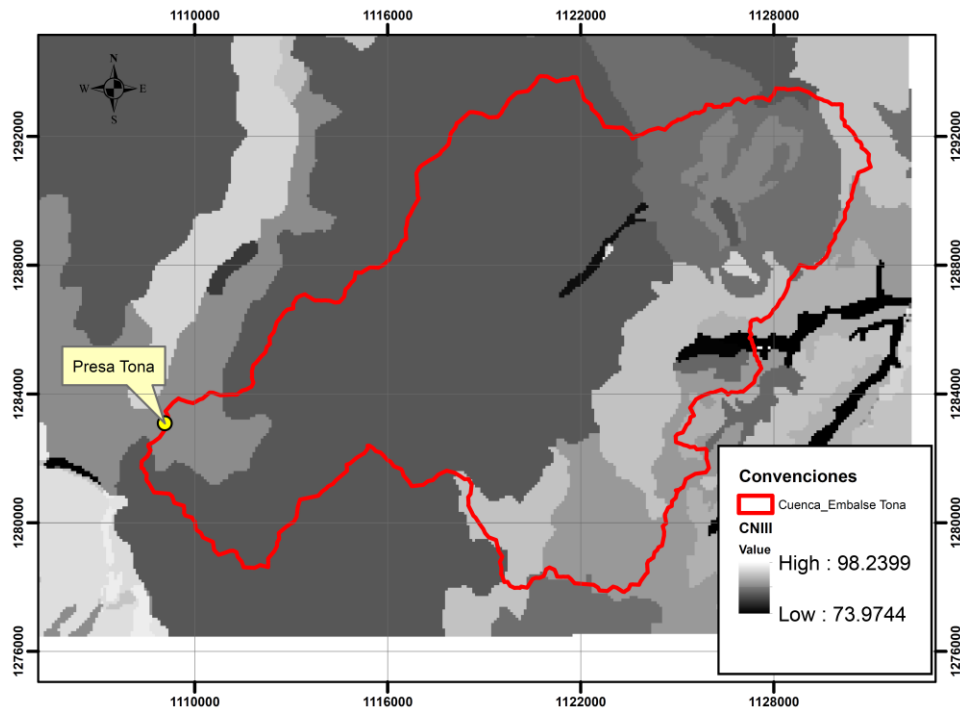


Figura 3. Número de curva para condición de humedad antecedente húmeda
Fuente: Elaboración propia

ANEXO 3. CÁLCULO DE TIEMPO DE CONCENTRACIÓN POR SUBCUENCA

El cálculo de los tiempos de concentración se hizo a partir de las siguientes ecuaciones (Vélez & Botero, 2010) (INVIAS, 2009):

- Ecuación de retardo del Soil Conservation Service (SCS):

$$t_c = \frac{100 * L_p^{0.8} * [(1000/CN) - 9]^{0.7}}{1900 * S_o^{0.5}}$$

Donde,

t_c : tiempo de concentración, min

L_p : longitud del cauce principal, pies

CN: número de curva

S_o : pendiente promedio del cauce principal, %

- Ecuación de Pilgrim y McDermott:

$$T_c = 0.76 * A^{0.38}$$

Donde,

T_c : tiempo de concentración, hr

A: Área de la cuenca, km²

- Ecuación de Témez:

$$T_c = 0.3 * \left[\frac{L}{S^{0.25}} \right]^{0.76}$$

Donde,

T_c : tiempo de concentración, hr

L: longitud del curso de agua más largo, km

S: pendiente promedio del cauce principal, m/m

- Ecuación de Kirpich:

$$T_c = 0.00013 * L_p^{0.77} * S^{-0.385}$$

Donde,

Tc: tiempo de concentración, hr

Lp: longitud el cauce, pies

S: pendiente promedio del cauce principal, m/m

- Ecuación de Giandotti:

$$T_c = \frac{4 * \sqrt{A} + 1.5 * L}{25.3 * \sqrt{S * L}}$$

Donde,

Tc: tiempo de concentración, hr

A: Área de la cuenca, km²

L: longitud del curso de agua más largo, km

S: pendiente promedio del cauce principal, m/m

- Ecuación de Bransby-Williams:

$$T_c = \frac{14.6}{60} * L * A^{-0.1} * S^{-0.2}$$

Donde,

Tc: tiempo de concentración, hr

L: longitud del curso de agua más largo, km

A: Área de la cuenca, km²

S: pendiente promedio del cauce principal, m/m

- Ecuación de Ventura-Heras:

$$T_c = 0.30 * \left(\frac{L}{S_o^{0.25}} \right)^{0.75}$$

Donde,

Tc: tiempo de concentración, hr

L: longitud del curso de agua más largo, km

So: Pendiente total del cauce principal, %

- Ecuación de Ven Te Chow:

$$T_c = 0.273 * \left(\frac{L}{S^{0.5}} \right)^{0.64}$$

Donde,

Tc: tiempo de concentración, hr

L: longitud del curso de agua más largo, km

S: pendiente promedio del cauce principal, m/m

- Ecuación de Valencia y Zuluaga:

$$T_c = 1.7694 * A^{0.325} * L^{-0.096} * S_o^{-0.290}$$

Donde,

Tc: tiempo de concentración, hr

A: Área de la cuenca, km²

L: longitud del curso de agua más largo, km

So: pendiente del cauce principal, %

- Ecuación de Clark:

$$T_c = 0.335 * \left[\frac{A}{S^{0.5}} \right]^{0.593}$$

Donde,

Tc: tiempo de concentración, hr

A: Área de la cuenca, km²

S: pendiente promedio del cauce principal, m/m

Tabla 1. Propiedades geométricas por subcuena

Subcuena	Propiedades subcuena			Propiedades cauce					Número de curva		
	Area, km ²	Sc, m/m	Sc, %	L, m	L, km	L, pies	S, m/m	So, %	CNI	CNII	CNIII
1	30.351	0.437	43.74%	8046.4	8.05	26399.0	0.065	6.550	49.49	70.00	84.29
2	49.991	0.444	44.43%	6866.2	6.87	22527.0	0.116	11.622	54.36	73.93	86.71
3	0.395	0.594	59.40%	697.5	0.70	2288.3	0.027	2.724	49.49	70.00	84.29
4	7.851	0.605	60.54%	3211.3	3.21	10535.9	0.079	7.878	49.49	70.00	84.29
5	22.523	0.367	36.73%	3450.8	3.45	11321.6	0.183	18.257	61.01	78.84	89.55
6	34.538	0.562	56.15%	9202.3	9.20	30191.1	0.051	5.129	51.08	71.31	85.11
7	12.055	0.439	43.86%	291.4	0.29	956.1	0.096	9.608	57.78	76.52	88.23
8	20.287	0.538	53.82%	6573.8	6.57	21567.5	0.061	6.085	50.35	70.71	84.74
9	15.554	0.539	53.85%	2025.8	2.03	6646.4	0.155	15.451	59.47	77.75	88.93

Fuente: Elaboración propia

Tabla 2. Cálculo del tiempo de concentración por subcuena

Subcuena	Tiempo de concentración, hr									
	SCS	Pilgrim y McDermott	Témez	Kirpich	Giandotti	Bransby-Williams	Ventura-Heras	V.T Chow	Valencia y Zuluaga	Clark
1	3.79	2.78	2.46	0.94	1.86	2.40	1.01	2.48	2.55	5.69
2	2.25	3.36	1.95	0.67	1.71	1.74	0.80	1.87	2.57	6.45
3	0.83	0.53	0.45	0.20	1.02	0.38	0.19	0.69	1.01	0.56
4	1.66	1.66	1.18	0.43	1.26	1.06	0.49	1.30	1.70	2.42
5	0.90	2.48	1.06	0.33	1.20	0.86	0.44	1.04	1.86	3.52
6	4.60	2.92	2.85	1.15	2.15	2.85	1.17	2.92	2.81	6.60
7	0.18	1.96	0.18	0.06	3.38	0.09	0.08	0.26	2.32	2.94
8	3.28	2.39	2.14	0.83	1.74	2.07	0.88	2.23	2.33	4.58
9	0.66	2.16	0.73	0.23	1.33	0.54	0.30	0.78	1.82	2.97

Fuente: Elaboración propia

Tabla 3. Valores seleccionados de tiempos de concentración por subcuena

Subcuena	Estadísticos		Límites		Tc prom, hr	Lag Time	
	μ	σ	Inferior	Superior		hr	min
1	2.59	1.30	1.30	3.89	2.62	1.57	94.16
2	2.34	1.56	0.78	3.90	2.03	1.22	73.12
3	0.59	0.28	0.30	0.87	0.57	0.34	20.69
4	1.31	0.56	0.75	1.88	1.40	0.84	50.47
5	1.37	0.94	0.43	2.30	1.05	0.63	37.89
6	3.00	1.52	1.48	4.52	2.75	1.65	99.00

Subcuenca	Estadísticos		Límites		Tc prom, hr	Lag Time	
	μ	σ	Inferior	Superior		hr	min
7	1.15	1.28	-0.13	2.42	0.64	0.39	23.11
8	2.25	1.03	1.21	3.28	2.31	1.39	83.18
9	1.15	0.85	0.30	2.01	0.88	0.53	31.73

Fuente: Elaboración propia

ANEXO 4. EVAPOTRANSPIRACIÓN POTENCIAL THORNTWHAITE

Tabla 1. Evapotranspiración Potencial corregida por el Método de Thornthwaite para el año 2018 – Estación Berlín

a						
I	0.995					
	31.131					
Mes	Tmín prom, °C	Tmáx prom, °C	Tprom, °C	i	Ka	ETP corregida, cm
Enero	3.588	14.656	9.122	2.485	1.011	4.715
Febrero	1.479	14.843	8.161	2.100	0.918	3.833
Marzo	4.445	15.219	9.832	2.784	1.033	5.189
Abril	6.748	13.520	10.134	2.914	1.024	5.303
Mayo	6.609	13.761	10.185	2.937	1.069	5.561
Junio	6.113	11.893	9.003	2.436	1.046	4.814
Julio	6.013	12.000	9.006	2.438	1.069	4.921
Agosto	5.639	12.877	9.258	2.541	1.062	5.023
Septiembre	5.535	14.193	9.864	2.798	1.017	5.127
Octubre	6.342	14.103	10.223	2.953	1.026	5.356
Noviembre	5.413	14.413	9.913	2.819	0.988	5.006
Diciembre	0.961	14.465	7.713	1.928	0.996	3.928

Fuente: Elaboración propia

Tabla 2. Evapotranspiración Potencial corregida por el Método de Thornthwaite para el año 2019 – Estación Berlín

a						
I	1.020					
	32.805					
Mes	Tmín prom, °C	Tmáx prom, °C	Tprom, °C	i	Ka	ETP corregida, cm
Enero	2.555	15.039	8.797	2.352	1.011	4.425
Febrero	2.196	16.577	9.387	2.595	0.918	4.294
Marzo	6.106	15.045	10.576	3.109	1.033	5.454
Abril	6.036	14.980	10.508	3.078	1.024	5.374
Mayo	6.687	14.200	10.444	3.050	1.069	5.572
Junio	6.423	12.367	9.395	2.598	1.046	4.895
Julio	5.398	12.613	9.006	2.437	1.069	4.791
Agosto	5.728	13.439	9.583	2.678	1.062	5.070
Septiembre	5.661	14.387	10.024	2.866	1.017	5.086
Octubre	5.477	14.071	9.774	2.759	1.026	4.998
Noviembre	4.932	14.433	9.683	2.720	0.988	4.770
Diciembre	4.499	14.116	9.308	2.562	0.996	4.615

Fuente: Elaboración propia

Tabla 3. Evapotranspiración Potencial corregida por el Método de Thornthwaite para el año 2020 – Estación Berlín

a						
I	1.025					
	33.109					
Mes	Tmín prom, °C	Tmáx prom, °C	Tprom, °C	i	Ka	ETP corregida, cm
Enero	1.903	14.555	8.229	2.126	1.011	4.112
Febrero	2.760	16.686	9.723	2.737	0.918	4.431
Marzo	2.923	16.826	9.874	2.802	1.033	5.063
Abril	5.667	15.920	10.793	3.206	1.024	5.501

a	1.025					
I	33.109					
Mes	Tmín prom, °C	Tmáx prom, °C	Tprom, °C	i	Ka	ETP corregida, cm
Mayo	6.813	15.348	11.081	3.336	1.069	5.896
Junio	6.407	13.327	9.867	2.799	1.046	5.123
Julio	6.155	13.394	9.774	2.759	1.069	5.185
Agosto	6.084	13.961	10.023	2.866	1.062	5.284
Septiembre	5.320	14.447	9.883	2.806	1.017	4.991
Octubre	5.568	14.448	10.008	2.859	1.026	5.097
Noviembre	5.240	14.220	9.730	2.740	0.988	4.773
Diciembre	1.897	14.290	8.094	2.073	0.996	3.981

Fuente: Elaboración propia

Tabla 4. Evapotranspiración Potencial corregida por el Método de Thornthwaite para el año 2021 – Estación Berlín

a	0.992					
I	30.942					
Mes	Tmín prom, °C	Tmáx prom, °C	Tprom, °C	i	Ka	ETP corregida, cm
Enero	0.058	14.548	7.303	1.775	1.011	3.793
Febrero	3.471	14.550	9.011	2.439	0.918	4.243
Marzo	3.858	13.755	8.806	2.356	1.033	4.664
Abril	6.233	14.040	10.137	2.915	1.024	5.319
Mayo	6.148	13.948	10.048	2.877	1.069	5.502
Junio	6.160	13.140	9.650	2.706	1.046	5.172
Julio	6.303	12.303	9.303	2.560	1.069	5.097
Agosto	6.381	13.716	10.048	2.877	1.062	5.465
Septiembre	5.453	13.827	9.640	2.702	1.017	5.025
Octubre	6.013	14.329	10.171	2.930	1.026	5.343
Noviembre	3.080	14.547	8.813	2.359	0.988	4.467
Diciembre	3.135	14.916	9.026	2.445	0.996	4.607

Fuente: Elaboración propia

ANEXO 5. POLÍGONOS DE THIESSEN POR ESCENARIO DE SIMULACIÓN

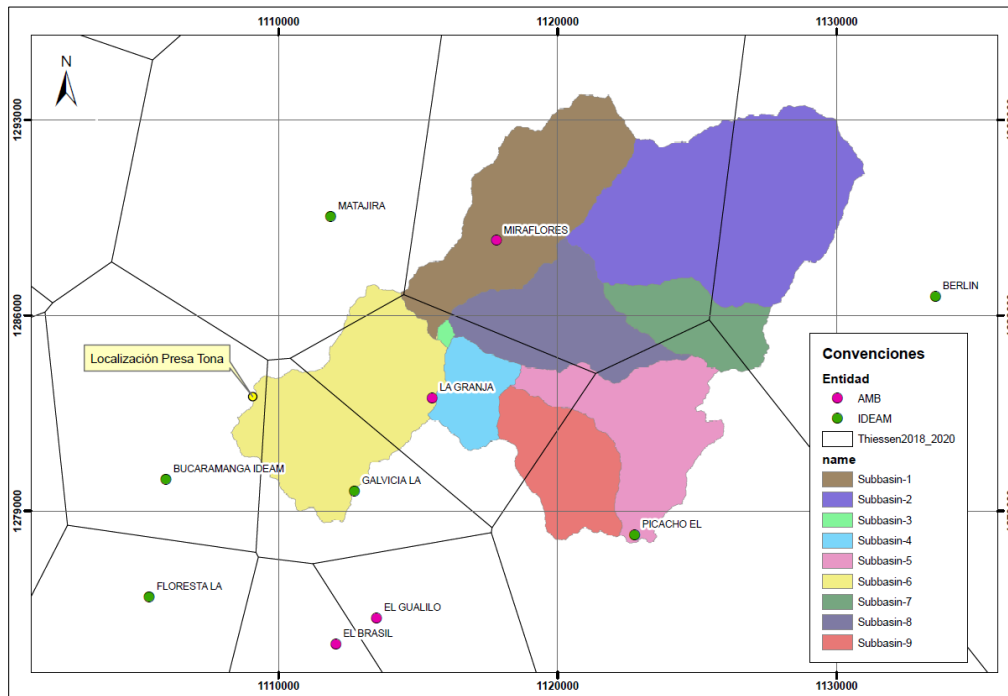


Figura 1. Polígonos de Thiessen para el escenario 2018-2020
Fuente: Elaboración propia

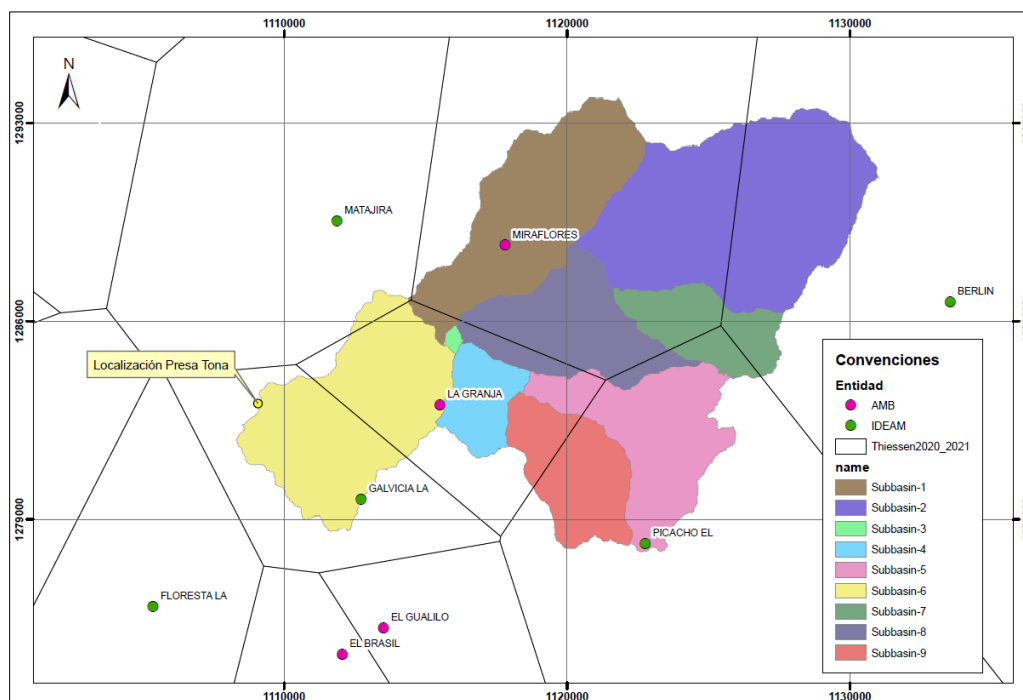


Figura 2. Polígonos de Thiessen para el escenario 2020-2021
Fuente: Elaboración propia

ANEXO 6. ANÁLISIS BATIMÉTRICO ACUEDUCTO METROPOLITANO DE BUCARAMANGA - AMB

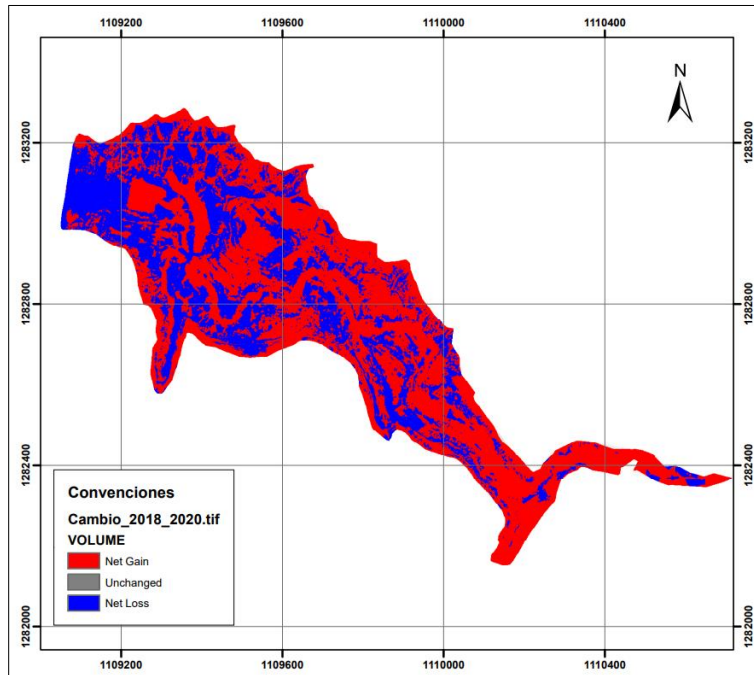


Figura 1. Comparación de levantamientos batimétricos para los años 2018-2020
Fuente: Elaboración propia

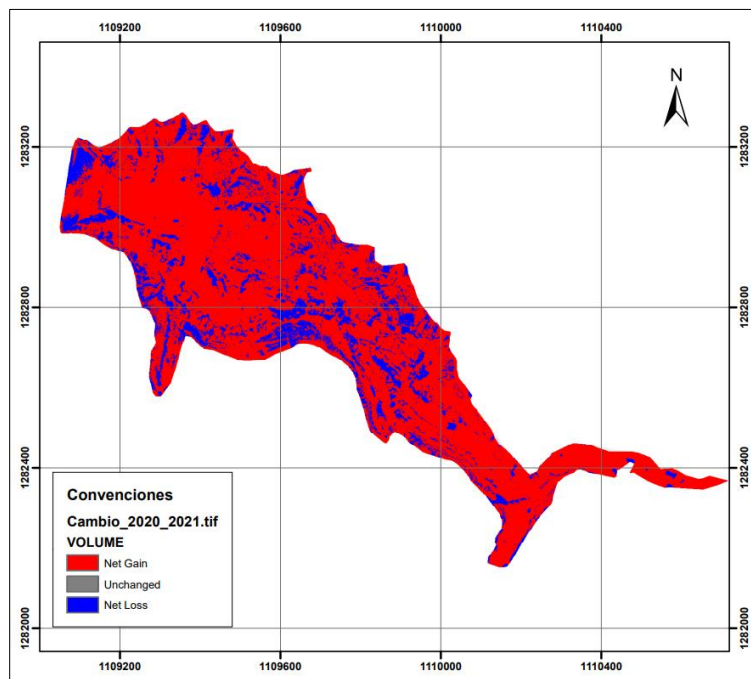


Figura 2. Comparación de levantamientos batimétricos para los años 2020-2021
Fuente: Elaboración propia

ANEXO 7. CURVAS DE GRADACIÓN GRANULOMÉTRICA

De acuerdo con la curva granulométrica de material de fondo, se obtuvo como carga de sedimentos a la salida de la cuenca que vierte al embalse una clasificación de partículas igual y se resume en la siguiente tabla:

Tabla 1. Clase de sedimento según clasificación AGU20

AGU 20	Clase		Diámetro medio, mm
Clay	Clay	Arcilla	0.004
VFM	Very Fine Silt	Limo muy fino	0.008
FM	Fine Silt	Limo fino	0.016
MM	Medium Silt	Limo medio	0.032
CM	Coarse Silt	Limo grueso	0.0625
VFS	Very Fine Sand	Arena muy fina	0.125
FS	Find Sand	Arena fina	0.25
MS	Medium Sand	Arena media	0.5
CS	Coarse Sand	Arena gruesa	1
VCS	Very Coarse Sand	Arena muy gruesa	2
VFG	Very Fine Gravel	Grava muy fina	4

Fuente: elaboración propia

A continuación, se muestra la carga de sedimentos obtenida en cada uno de los modelos elaborados (calibración y validación) para el punto de salida de la cuenca, es decir, la carga de sedimentos que se ingresará a HEC-HMS como condición de contorno y se generan las curvas de gradación granulométrica en cada caso:

1. Modelo 1 – Calibración (2018-2020):

En la Tabla 2 se encuentra la carga de sedimentos total y por clase de sedimento obtenida a la salida de la cuenca que vierte al río Tona.

Tabla 2. Carga de sedimentos a la salida de la cuenca en el elemento Junction-1 del Modelo 1 (2018-2020) en HMS

	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT	
SEDIMEN T-OUT TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	
PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	
11Jul2018	1293.6	153.61	68.64	203.47	273.42	28.704	208.31	57.026	31.605	7.475	249.22	12.125
12Jul2018	1090.1	127.57	58.91	170.67	230.84	23.921	177.15	47.653	27.435	6.641	209.26	10.084
13Jul2018	946.9	109.72	51.78	147.79	200.76	20.623	154.80	41.160	24.278	5.946	181.33	8.682
14Jul2018	860.2	99.00	47.43	133.96	182.53	18.639	141.21	37.245	22.350	5.519	164.44	7.839
15Jul2018	808.3	92.56	44.86	125.65	171.60	17.445	133.10	34.891	21.229	5.285	154.30	7.332
16Jul2018	777.2	88.63	43.38	120.64	165.07	16.720	128.32	33.466	20.606	5.174	148.19	7.024
17Jul2018	758.7	86.22	42.55	117.61	161.17	16.276	125.52	32.596	20.283	5.137	144.50	6.834
18Jul2018	747.6	84.70	42.10	115.75	158.83	15.999	123.91	32.058	20.138	5.144	142.24	6.716
19Jul2018	740.9	83.73	41.88	114.59	157.44	15.823	123.00	31.719	20.095	5.176	140.85	6.640
20Jul2018	736.9	83.08	41.79	113.86	156.59	15.708	122.50	31.499	20.111	5.222	139.97	6.590
21Jul2018	734.5	82.63	41.78	113.38	156.08	15.630	122.24	31.352	20.158	5.275	139.40	6.556
22Jul2018	733.0	82.31	41.81	113.06	155.76	15.573	122.13	31.249	20.222	5.331	139.02	6.531
23Jul2018	732.0	82.05	41.86	112.82	155.56	15.531	122.09	31.172	20.295	5.390	138.75	6.511
24Jul2018	731.4	81.85	41.93	112.64	155.43	15.496	122.10	31.110	20.373	5.449	138.54	6.496
25Jul2018	731.0	81.66	42.00	112.49	155.34	15.466	122.15	31.058	20.455	5.510	138.38	6.482
26Jul2018	730.7	81.49	42.09	112.36	155.27	15.438	122.21	31.010	20.541	5.573	138.23	6.469
27Jul2018	730.4	81.32	42.17	112.24	155.21	15.411	122.29	30.963	20.632	5.640	138.09	6.456
28Jul2018	730.2	81.14	42.27	112.11	155.17	15.382	122.38	30.914	20.732	5.712	137.95	6.443
29Jul2018	730.0	80.93	42.39	111.97	155.12	15.349	122.49	30.860	20.845	5.793	137.80	6.428
30Jul2018	729.7	80.67	42.54	111.80	155.08	15.309	122.64	30.792	20.986	5.892	137.61	6.409
31Jul2018	733.9	80.71	43.08	112.20	155.98	15.332	123.70	30.865	21.385	6.124	138.15	6.414
01Aug2018	738.8	81.31	43.36	112.93	156.95	15.440	124.46	31.076	21.552	6.230	139.05	6.461
02Aug2018	741.5	82.18	43.15	113.63	157.44	15.582	124.41	31.321	21.331	6.105	139.84	6.526
03Aug2018	748.2	83.27	43.31	114.84	158.83	15.774	125.24	31.686	21.326	6.051	141.29	6.610
04Aug2018	756.3	84.36	43.64	116.20	160.55	15.975	126.44	32.078	21.431	6.036	142.94	6.696

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
05Aug2018	762.6	85.17	43.91	117.23	161.88	16.124	127.39	32.372	21.525	6.026	144.20	6.759
06Aug2018	765.3	85.55	44.01	117.70	162.47	16.193	127.79	32.507	21.544	5.999	144.77	6.789
07Aug2018	767.8	85.86	44.12	118.11	163.00	16.252	128.16	32.623	21.576	5.983	145.26	6.814
08Aug2018	774.4	86.61	44.50	119.14	164.43	16.394	129.28	32.909	21.753	6.018	146.54	6.873
09Aug2018	780.2	87.25	44.83	120.03	165.65	16.515	130.25	33.152	21.912	6.051	147.63	6.924
10Aug2018	779.4	87.18	44.78	119.92	165.50	16.501	130.12	33.123	21.881	6.030	147.50	6.918
11Aug2018	774.4	86.63	44.47	119.16	164.43	16.398	129.26	32.914	21.722	5.973	146.55	6.875
12Aug2018	767.1	85.84	44.03	118.05	162.87	16.247	128.01	32.611	21.499	5.900	145.19	6.812
13Aug2018	762.9	85.39	43.79	117.42	161.99	16.161	127.31	32.437	21.372	5.858	144.41	6.776
14Aug2018	770.2	86.17	44.23	118.53	163.55	16.311	128.56	32.740	21.598	5.926	145.77	6.838
15Aug2018	789.4	88.23	45.39	121.42	167.61	16.703	131.82	33.533	22.186	6.107	149.35	7.002
16Aug2018	801.0	89.48	46.09	123.18	170.08	16.942	133.80	34.014	22.544	6.218	151.51	7.102
17Aug2018	797.1	89.07	45.85	122.59	169.26	16.862	133.14	33.854	22.428	6.183	150.79	7.069
18Aug2018	799.1	89.28	45.97	122.89	169.67	16.903	133.47	33.935	22.490	6.203	151.16	7.085
19Aug2018	811.1	90.58	46.70	124.71	172.23	17.150	135.53	34.435	22.862	6.320	153.41	7.189
20Aug2018	819.3	91.46	47.20	125.95	173.97	17.318	136.92	34.773	23.115	6.400	154.93	7.259
21Aug2018	818.5	91.37	47.15	125.82	173.79	17.301	136.78	34.739	23.093	6.395	154.77	7.252
22Aug2018	819.5	91.48	47.21	125.98	174.01	17.322	136.96	34.781	23.127	6.408	154.97	7.260
23Aug2018	830.1	92.62	47.85	127.58	176.25	17.539	138.75	35.220	23.452	6.512	156.94	7.351
24Aug2018	841.2	93.82	48.52	129.27	178.61	17.768	140.64	35.682	23.793	6.621	159.02	7.447
25Aug2018	848.1	94.58	48.93	130.32	180.08	17.912	141.81	35.972	24.003	6.689	160.31	7.507
26Aug2018	854.2	95.24	49.30	131.25	181.38	18.039	142.85	36.227	24.190	6.749	161.46	7.560
27Aug2018	861.3	96.00	49.72	132.32	182.87	18.184	144.05	36.520	24.406	6.819	162.78	7.621
28Aug2018	866.1	96.53	50.01	133.05	183.90	18.283	144.87	36.721	24.555	6.868	163.68	7.662
29Aug2018	867.3	96.66	50.08	133.23	184.16	18.308	145.08	36.771	24.594	6.882	163.91	7.673
30Aug2018	867.9	96.72	50.12	133.32	184.28	18.319	145.18	36.794	24.614	6.890	164.01	7.677
31Aug2018	869.0	96.83	50.19	133.48	184.51	18.341	145.36	36.838	24.650	6.904	164.21	7.686

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
01Sep2018	872.8	97.23	50.42	134.05	185.31	18.418	146.01	36.993	24.770	6.944	164.91	7.718
02Sep2018	876.7	97.64	50.66	134.64	186.14	18.497	146.68	37.154	24.894	6.985	165.64	7.751
03Sep2018	879.7	97.96	50.85	135.09	186.78	18.558	147.20	37.277	24.991	7.018	166.20	7.777
04Sep2018	887.7	98.81	51.33	136.29	188.47	18.721	148.57	37.606	25.241	7.098	167.68	7.844
05Sep2018	902.3	100.38	52.22	138.50	191.58	19.019	151.06	38.209	25.696	7.243	170.41	7.969
06Sep2018	923.1	102.62	53.49	141.66	196.01	19.447	154.62	39.073	26.343	7.449	174.30	8.147
07Sep2018	945.5	105.02	54.83	145.03	200.74	19.904	158.42	39.998	27.034	7.670	178.46	8.338
08Sep2018	960.4	106.63	55.73	147.29	203.91	20.212	160.96	40.617	27.495	7.818	181.25	8.467
09Sep2018	967.0	107.36	56.13	148.30	205.32	20.349	162.08	40.894	27.699	7.885	182.49	8.524
10Sep2018	968.9	107.56	56.24	148.58	205.70	20.388	162.39	40.972	27.755	7.906	182.83	8.541
11Sep2018	967.0	107.37	56.13	148.31	205.31	20.351	162.07	40.897	27.698	7.890	182.49	8.525
12Sep2018	963.4	106.98	55.91	147.75	204.53	20.276	161.45	40.746	27.587	7.858	181.81	8.494
13Sep2018	959.1	106.51	55.65	147.10	203.62	20.187	160.72	40.567	27.458	7.820	181.01	8.457
14Sep2018	954.0	105.95	55.35	146.32	202.53	20.080	159.85	40.351	27.305	7.775	180.04	8.412
15Sep2018	950.3	105.54	55.14	145.76	201.76	20.004	159.25	40.197	27.201	7.745	179.36	8.380
16Sep2018	951.3	105.63	55.21	145.90	201.97	20.021	159.43	40.234	27.240	7.760	179.53	8.387
17Sep2018	953.7	105.88	55.36	146.26	202.49	20.069	159.86	40.331	27.325	7.791	179.98	8.407
18Sep2018	956.7	106.18	55.56	146.70	203.13	20.127	160.38	40.450	27.428	7.826	180.52	8.431
19Sep2018	962.9	106.82	55.94	147.62	204.43	20.250	161.44	40.699	27.629	7.894	181.65	8.482
20Sep2018	969.0	107.46	56.33	148.54	205.74	20.374	162.51	40.950	27.832	7.963	182.79	8.533
21Sep2018	972.4	107.81	56.54	149.04	206.46	20.440	163.10	41.086	27.948	8.004	183.41	8.561
22Sep2018	977.0	108.29	56.83	149.72	207.43	20.532	163.89	41.272	28.099	8.057	184.26	8.599
23Sep2018	985.2	109.15	57.33	150.95	209.16	20.698	165.29	41.607	28.362	8.145	185.77	8.668
24Sep2018	992.1	109.88	57.76	151.99	210.63	20.837	166.48	41.890	28.586	8.221	187.05	8.726
25Sep2018	995.2	110.21	57.96	152.46	211.30	20.901	167.03	42.018	28.694	8.260	187.64	8.753
26Sep2018	995.7	110.25	58.00	152.52	211.39	20.907	167.11	42.033	28.716	8.271	187.71	8.756
27Sep2018	994.9	110.16	57.96	152.40	211.24	20.891	167.00	42.000	28.703	8.272	187.57	8.749

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
28Sep2018	1000.7	110.76	58.32	153.26	212.45	21.005	167.99	42.233	28.891	8.337	188.63	8.796
29Sep2018	1016.0	112.38	59.26	155.56	215.70	21.316	170.61	42.862	29.377	8.497	191.47	8.926
30Sep2018	1031.8	114.07	60.23	157.95	219.07	21.639	173.33	43.514	29.881	8.664	194.42	9.060
01Oct2018	1043.4	115.31	60.95	159.70	221.53	21.875	175.32	43.992	30.251	8.788	196.57	9.159
02Oct2018	1051.0	116.11	61.41	160.84	223.14	22.029	176.62	44.304	30.495	8.872	197.98	9.223
03Oct2018	1054.8	116.51	61.65	161.41	223.94	22.105	177.27	44.458	30.620	8.917	198.68	9.255
04Oct2018	1060.5	117.11	62.00	162.25	225.14	22.219	178.24	44.689	30.805	8.981	199.72	9.302
05Oct2018	1074.7	118.63	62.87	164.40	228.17	22.510	180.69	45.276	31.258	9.133	202.38	9.423
06Oct2018	1092.6	120.54	63.97	167.10	231.97	22.875	183.75	46.014	31.824	9.321	205.71	9.576
07Oct2018	1106.1	121.98	64.79	169.13	234.82	23.149	186.04	46.568	32.247	9.464	208.20	9.690
08Oct2018	1113.7	122.80	65.25	170.28	236.43	23.305	187.34	46.884	32.488	9.546	209.63	9.755
09Oct2018	1118.5	123.31	65.54	171.01	237.45	23.404	188.16	47.082	32.642	9.601	210.52	9.796
10Oct2018	1127.3	124.24	66.08	172.32	239.31	23.581	189.66	47.442	32.922	9.696	212.15	9.870
11Oct2018	1142.0	125.81	66.99	174.54	242.44	23.881	192.19	48.048	33.393	9.855	214.88	9.995
12Oct2018	1153.4	127.02	67.69	176.25	244.85	24.111	194.14	48.515	33.757	9.979	217.00	10.091
13Oct2018	1157.1	127.40	67.92	176.80	245.64	24.185	194.78	48.665	33.881	10.025	217.68	10.122
14Oct2018	1158.4	127.53	68.01	177.00	245.92	24.211	195.02	48.717	33.931	10.046	217.92	10.133
15Oct2018	1159.9	127.68	68.11	177.21	246.23	24.239	195.27	48.774	33.986	10.070	218.18	10.144
16Oct2018	1162.4	127.93	68.27	177.58	246.76	24.287	195.72	48.873	34.076	10.105	218.64	10.164
17Oct2018	1162.4	127.92	68.29	177.57	246.77	24.286	195.74	48.871	34.090	10.116	218.63	10.163
18Oct2018	1158.2	127.44	68.04	176.93	245.87	24.196	195.04	48.691	33.971	10.083	217.84	10.126
19Oct2018	1156.9	127.27	67.98	176.71	245.59	24.165	194.83	48.630	33.946	10.081	217.57	10.113
20Oct2018	1164.0	128.01	68.44	177.77	247.11	24.306	196.08	48.917	34.190	10.168	218.88	10.171
21Oct2018	1179.7	129.64	69.42	180.11	250.43	24.620	198.78	49.554	34.705	10.346	221.78	10.302
22Oct2018	1645.9	179.39	97.91	250.39	349.37	34.120	278.53	68.762	49.447	15.268	308.47	14.264
23Oct2018	1755.0	191.80	104.07	267.22	372.41	36.457	296.52	73.436	52.477	16.213	329.15	15.247
24Oct2018	1392.8	153.04	81.99	212.59	295.60	29.061	234.67	58.491	41.050	12.370	261.76	12.161

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
25Oct2018	1298.5	142.65	76.45	198.21	275.63	27.091	218.83	54.530	38.252	11.469	244.06	11.336
26Oct2018	1280.0	140.46	75.46	195.30	271.71	26.681	215.84	53.715	37.799	11.353	240.50	11.163
27Oct2018	1272.2	139.51	75.07	194.04	270.05	26.504	214.60	53.363	37.634	11.329	238.96	11.088
28Oct2018	1262.7	138.43	74.54	192.57	268.04	26.300	213.03	52.955	37.386	11.271	237.16	11.002
29Oct2018	1249.3	136.95	73.76	190.52	265.19	26.020	210.78	52.391	37.000	11.162	234.63	10.885
30Oct2018	1233.9	135.26	72.85	188.18	261.92	25.699	208.18	51.745	36.544	11.026	231.74	10.751
31Oct2018	1217.7	133.49	71.90	185.71	258.49	25.363	205.46	51.068	36.064	10.880	228.71	10.610
01Nov2018	1202.1	131.77	70.97	183.32	255.17	25.035	202.81	50.409	35.600	10.738	225.76	10.473
02Nov2018	1188.0	130.21	70.15	181.17	252.18	24.740	200.45	49.816	35.187	10.613	223.11	10.349
03Nov2018	1176.9	128.98	69.51	179.47	249.84	24.507	198.60	49.347	34.871	10.520	221.03	10.251
04Nov2018	1171.5	128.35	69.22	178.63	248.69	24.389	197.72	49.112	34.733	10.485	219.99	10.202
05Nov2018	1174.1	128.57	69.41	178.98	249.24	24.433	198.20	49.204	34.846	10.534	220.43	10.219
06Nov2018	1176.6	128.80	69.60	179.34	249.78	24.478	198.68	49.299	34.956	10.581	220.89	10.238
07Nov2018	1174.4	128.53	69.49	178.99	249.32	24.428	198.33	49.199	34.914	10.577	220.45	10.217
08Nov2018	1170.4	128.06	69.27	178.36	248.46	24.340	197.68	49.023	34.812	10.554	219.68	10.180
09Nov2018	1165.5	127.50	69.00	177.59	247.42	24.233	196.87	48.811	34.684	10.521	218.74	10.135
10Nov2018	1160.3	126.90	68.71	176.79	246.32	24.121	196.02	48.587	34.550	10.488	217.75	10.088
11Nov2018	1155.0	126.28	68.42	175.95	245.18	24.005	195.14	48.354	34.410	10.454	216.73	10.039
12Nov2018	1148.6	125.56	68.06	174.96	243.83	23.868	194.08	48.080	34.240	10.409	215.51	9.981
13Nov2018	1139.8	124.57	67.55	173.61	241.96	23.682	192.61	47.707	33.992	10.339	213.85	9.903
14Nov2018	1128.9	123.37	66.92	171.94	239.65	23.453	190.78	47.247	33.676	10.246	211.79	9.807
15Nov2018	1117.6	122.12	66.26	170.22	237.26	23.217	188.90	46.772	33.352	10.151	209.68	9.709
16Nov2018	1105.9	120.82	65.58	168.42	234.77	22.970	186.93	46.276	33.013	10.050	207.46	9.605
17Nov2018	1093.5	119.44	64.86	166.52	232.13	22.709	184.85	45.752	32.653	9.943	205.12	9.496
18Nov2018	1081.7	118.13	64.17	164.71	229.63	22.460	182.87	45.252	32.313	9.843	202.89	9.392
19Nov2018	1070.4	116.87	63.52	162.98	227.23	22.223	180.98	44.774	31.990	9.748	200.76	9.292
20Nov2018	1059.4	115.65	62.88	161.29	224.90	21.991	179.14	44.308	31.676	9.656	198.68	9.195

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
21Nov2018	1048.0	114.38	62.22	159.54	222.48	21.750	177.23	43.825	31.348	9.560	196.53	9.094
22Nov2018	1036.5	113.11	61.55	157.78	220.05	21.509	175.31	43.342	31.019	9.463	194.37	8.993
23Nov2018	1026.2	111.96	60.96	156.20	217.86	21.292	173.59	42.904	30.726	9.378	192.42	8.902
24Nov2018	1017.4	110.97	60.46	154.85	216.00	21.105	172.13	42.530	30.483	9.310	190.76	8.823
25Nov2018	1011.1	110.24	60.11	153.86	214.65	20.967	171.09	42.254	30.317	9.268	189.54	8.765
26Nov2018	1006.7	109.72	59.88	153.17	213.73	20.870	170.39	42.061	30.216	9.248	188.70	8.724
27Nov2018	1001.8	109.14	59.62	152.40	212.69	20.762	169.59	41.846	30.096	9.222	187.76	8.679
28Nov2018	996.8	108.56	59.35	151.62	211.63	20.652	168.78	41.628	29.972	9.194	186.80	8.633
29Nov2018	991.2	107.91	59.04	150.74	210.44	20.531	167.86	41.385	29.827	9.159	185.72	8.582
30Nov2018	982.9	106.99	58.57	149.47	208.69	20.356	166.48	41.034	29.596	9.095	184.16	8.508
01Dec2018	973.2	105.91	58.00	147.98	206.63	20.152	164.86	40.624	29.318	9.014	182.33	8.423
02Dec2018	962.8	104.75	57.40	146.38	204.40	19.931	163.10	40.181	29.016	8.925	180.36	8.331
03Dec2018	951.8	103.54	56.76	144.70	202.08	19.701	161.26	39.719	28.699	8.831	178.29	8.234
04Dec2018	940.6	102.30	56.11	142.99	199.71	19.467	159.39	39.247	28.376	8.734	176.19	8.136
05Dec2018	929.4	101.05	55.45	141.27	197.32	19.231	157.50	38.772	28.050	8.637	174.07	8.037
06Dec2018	918.1	99.80	54.79	139.54	194.93	18.994	155.61	38.296	27.724	8.540	171.94	7.938
07Dec2018	906.8	98.55	54.13	137.81	192.53	18.756	153.71	37.818	27.397	8.443	169.81	7.838
08Dec2018	895.7	97.32	53.49	136.11	190.18	18.523	151.86	37.350	27.078	8.348	167.72	7.740
09Dec2018	886.8	96.32	52.98	134.74	188.29	18.334	150.38	36.971	26.830	8.278	166.03	7.661
10Dec2018	880.1	95.55	52.61	133.69	186.87	18.188	149.28	36.680	26.655	8.233	164.75	7.600
11Dec2018	874.3	94.87	52.30	132.78	185.64	18.061	148.33	36.426	26.512	8.200	163.63	7.546
12Dec2018	869.2	94.25	52.04	131.97	184.55	17.946	147.51	36.199	26.394	8.177	162.64	7.498
13Dec2018	865.3	93.77	51.85	131.34	183.72	17.856	146.90	36.021	26.318	8.170	161.87	7.460
14Dec2018	865.4	93.70	51.91	131.31	183.74	17.846	146.98	36.005	26.374	8.209	161.84	7.455
15Dec2018	867.5	93.85	52.09	131.58	184.18	17.877	147.40	36.072	26.494	8.271	162.18	7.467
16Dec2018	866.2	93.65	52.06	131.35	183.91	17.841	147.23	36.003	26.501	8.295	161.90	7.451
17Dec2018	862.4	93.18	51.87	130.73	183.09	17.754	146.63	35.830	26.424	8.289	161.15	7.414

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
18Dec2018	855.9	92.44	51.52	129.73	181.73	17.614	145.57	35.550	26.263	8.254	159.92	7.356
19Dec2018	843.3	91.05	50.78	127.80	179.05	17.350	143.45	35.020	25.898	8.148	157.54	7.245
20Dec2018	828.2	89.40	49.89	125.50	175.84	17.036	140.90	34.387	25.449	8.012	154.71	7.114
21Dec2018	816.0	88.05	49.18	123.63	173.25	16.780	138.85	33.872	25.096	7.909	152.41	7.007
22Dec2018	804.8	86.81	48.53	121.91	170.87	16.545	136.97	33.399	24.774	7.816	150.30	6.908
23Dec2018	793.9	85.59	47.89	120.24	168.55	16.315	135.14	32.937	24.460	7.724	148.24	6.812
24Dec2018	786.2	84.71	47.46	119.04	166.92	16.149	133.87	32.606	24.252	7.668	146.77	6.742
25Dec2018	781.3	84.13	47.21	118.27	165.88	16.040	133.08	32.389	24.141	7.648	145.82	6.696
26Dec2018	777.3	83.62	47.01	117.61	165.03	15.946	132.46	32.203	24.064	7.641	145.02	6.656
27Dec2018	768.3	82.58	46.53	116.21	163.13	15.750	131.00	31.813	23.838	7.584	143.31	6.574
28Dec2018	753.6	80.86	45.73	113.92	160.02	15.428	128.61	31.171	23.458	7.478	140.49	6.438
29Dec2018	741.3	79.29	45.15	111.92	157.43	15.138	126.72	30.603	23.225	7.438	138.06	6.315
30Dec2018	733.8	78.12	44.95	110.58	155.84	14.929	125.75	30.202	23.225	7.506	136.44	6.224
31Dec2018	729.0	77.16	45.00	109.57	154.81	14.761	125.30	29.889	23.398	7.673	135.25	6.150
01Jan2019	725.7	76.29	45.22	108.71	154.04	14.611	125.15	29.612	23.731	7.971	134.24	6.083
02Jan2019	723.0	75.45	45.57	107.82	153.25	14.461	125.09	29.332	24.271	8.534	133.21	6.018
03Jan2019	720.2	75.07	45.55	106.97	151.95	14.371	124.21	29.125	24.760	10.086	132.13	5.985
04Jan2019	719.4	75.74	44.92	107.14	151.44	14.463	123.14	29.254	24.396	10.621	132.24	6.032
05Jan2019	720.3	76.63	44.32	107.90	151.88	14.612	122.76	29.519	23.658	9.798	133.10	6.099
06Jan2019	721.0	77.21	43.94	108.45	152.26	14.713	122.59	29.702	23.143	9.145	133.72	6.144
07Jan2019	722.6	77.69	43.77	108.97	152.77	14.798	122.70	29.863	22.828	8.657	134.34	6.181
08Jan2019	723.5	77.97	43.66	109.30	153.11	14.850	122.79	29.963	22.615	8.285	134.73	6.203
09Jan2019	722.9	78.02	43.54	109.34	153.10	14.858	122.67	29.977	22.439	7.991	134.77	6.207
10Jan2019	722.5	78.02	43.46	109.35	153.08	14.860	122.61	29.981	22.330	7.778	134.78	6.207
11Jan2019	722.1	78.01	43.42	109.34	153.07	14.858	122.58	29.977	22.266	7.625	134.77	6.206
12Jan2019	721.8	77.98	43.41	109.32	153.05	14.853	122.57	29.969	22.231	7.517	134.75	6.204
13Jan2019	728.7	78.68	43.85	110.35	154.53	14.988	123.79	30.246	22.452	7.531	136.02	6.260

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
14Jan2019	745.3	80.39	44.91	112.82	158.08	15.318	126.70	30.917	23.009	7.690	139.08	6.397
15Jan2019	768.8	82.82	46.40	116.32	163.07	15.785	130.78	31.866	23.800	7.948	143.41	6.591
16Jan2019	794.9	85.52	48.06	120.21	168.61	16.304	135.32	32.921	24.681	8.250	148.21	6.807
17Jan2019	814.8	87.58	49.33	123.17	172.84	16.700	138.79	33.725	25.359	8.482	151.87	6.971
18Jan2019	824.6	88.58	49.96	124.62	174.91	16.892	140.49	34.117	25.698	8.595	153.66	7.051
19Jan2019	827.5	88.87	50.16	125.04	175.53	16.948	141.02	34.230	25.812	8.631	154.19	7.074
20Jan2019	826.5	88.74	50.12	124.88	175.33	16.924	140.88	34.184	25.801	8.627	153.99	7.064
21Jan2019	820.0	88.03	49.73	123.89	173.94	16.789	139.77	33.912	25.605	8.561	152.77	7.008
22Jan2019	809.3	86.88	49.08	122.27	171.67	16.570	137.94	33.469	25.272	8.447	150.78	6.916
23Jan2019	797.3	85.59	48.36	120.46	169.12	16.324	135.90	32.973	24.900	8.322	148.54	6.813
24Jan2019	787.0	84.47	47.75	118.89	166.95	16.111	134.17	32.544	24.591	8.222	146.62	6.724
25Jan2019	780.7	83.76	47.39	117.92	165.61	15.976	133.12	32.273	24.419	8.175	145.42	6.668
26Jan2019	783.9	84.03	47.64	118.36	166.29	16.030	133.73	32.387	24.571	8.250	145.97	6.690
27Jan2019	787.1	84.29	47.88	118.79	166.95	16.083	134.32	32.497	24.720	8.325	146.50	6.711
28Jan2019	784.5	83.96	47.76	118.37	166.41	16.023	133.93	32.380	24.677	8.329	146.00	6.685
29Jan2019	786.4	84.09	47.93	118.61	166.81	16.050	134.31	32.439	24.784	8.389	146.30	6.696
30Jan2019	785.7	83.95	47.92	118.46	166.65	16.026	134.23	32.394	24.803	8.418	146.12	6.685
31Jan2019	779.6	83.26	47.58	117.52	165.35	15.895	133.21	32.131	24.640	8.378	144.96	6.631
01Feb2019	773.2	82.54	47.22	116.53	163.99	15.759	132.16	31.858	24.469	8.338	143.75	6.573
02Feb2019	767.5	81.88	46.91	115.64	162.78	15.634	131.22	31.610	24.323	8.307	142.65	6.521
03Feb2019	763.2	81.37	46.69	114.96	161.87	15.539	130.54	31.420	24.230	8.299	141.83	6.481
04Feb2019	759.7	80.92	46.52	114.38	161.12	15.456	129.98	31.257	24.163	8.301	141.12	6.446
05Feb2019	756.6	80.53	46.38	113.88	160.47	15.384	129.52	31.114	24.117	8.311	140.51	6.415
06Feb2019	753.0	80.07	46.21	113.30	159.70	15.299	128.96	30.947	24.052	8.316	139.79	6.379
07Feb2019	749.2	79.59	46.03	112.67	158.89	15.209	128.36	30.771	23.983	8.320	139.04	6.341
08Feb2019	754.6	80.05	46.45	113.42	160.04	15.302	129.38	30.965	24.238	8.451	139.97	6.378
09Feb2019	771.8	81.71	47.62	115.90	163.67	15.625	132.45	31.628	24.903	8.745	143.05	6.511

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
10Feb2019	786.5	83.11	48.64	118.01	166.77	15.898	135.09	32.190	25.487	9.010	145.66	6.624
11Feb2019	794.6	83.84	49.23	119.14	168.47	16.041	136.58	32.488	25.843	9.188	147.08	6.683
12Feb2019	799.7	84.26	49.64	119.83	169.56	16.126	137.56	32.666	26.103	9.331	147.94	6.717
13Feb2019	800.7	84.23	49.78	119.89	169.74	16.126	137.81	32.673	26.222	9.423	148.03	6.716
14Feb2019	798.6	83.90	49.75	119.51	169.30	16.066	137.56	32.559	26.247	9.482	147.58	6.690
15Feb2019	791.4	83.01	49.38	118.34	167.75	15.901	136.40	32.231	26.097	9.478	146.15	6.620
16Feb2019	780.3	81.73	48.79	116.61	165.40	15.659	134.59	31.748	25.828	9.432	144.02	6.518
17Feb2019	778.3	81.32	48.79	116.18	164.95	15.588	134.38	31.615	25.898	9.533	143.51	6.487
18Feb2019	783.4	81.60	49.30	116.79	166.02	15.651	135.47	31.759	26.253	9.765	144.29	6.511
19Feb2019	787.0	81.67	49.74	117.13	166.76	15.675	136.32	31.826	26.593	10.009	144.75	6.518
20Feb2019	787.9	81.35	50.09	117.01	166.93	15.629	136.79	31.757	26.914	10.281	144.64	6.496
21Feb2019	788.6	80.07	51.08	116.29	167.03	15.433	137.98	31.443	27.861	11.071	143.90	6.402
22Feb2019	792.0	77.33	53.53	114.83	167.53	15.020	140.96	30.787	30.231	13.161	142.45	6.203
23Feb2019	794.6	73.26	57.02	112.00	167.00	14.367	144.34	29.685	34.100	17.505	139.40	5.899
24Feb2019	486.8	43.43	35.98	66.64	100.17	8.519	87.98	17.618	23.139	16.773	83.02	3.497
25Feb2019	218.0	23.68	13.01	33.14	46.31	4.508	36.97	9.092	6.566	1.952	40.84	1.884
26Feb2019	218.3	23.72	13.04	33.19	46.39	4.516	37.04	9.107	6.579	1.958	40.90	1.887
27Feb2019	218.3	23.71	13.03	33.18	46.37	4.514	37.03	9.104	6.579	1.960	40.89	1.886
28Feb2019	217.9	23.68	13.02	33.13	46.30	4.508	36.97	9.090	6.570	1.959	40.83	1.883
01Mar2019	216.9	23.57	12.95	32.97	46.08	4.486	36.79	9.047	6.537	1.949	40.63	1.875
02Mar2019	215.6	23.43	12.87	32.78	45.81	4.460	36.57	8.995	6.497	1.936	40.40	1.864
03Mar2019	215.1	23.37	12.85	32.71	45.71	4.450	36.50	8.974	6.485	1.934	40.30	1.859
04Mar2019	214.7	23.33	12.83	32.64	45.62	4.441	36.43	8.956	6.477	1.933	40.23	1.855
05Mar2019	213.8	23.22	12.77	32.50	45.43	4.421	36.28	8.917	6.451	1.926	40.06	1.847
06Mar2019	212.7	23.10	12.71	32.32	45.18	4.397	36.08	8.868	6.416	1.916	39.83	1.837
07Mar2019	211.3	22.94	12.62	32.11	44.89	4.368	35.85	8.810	6.374	1.903	39.57	1.825
08Mar2019	209.8	22.78	12.53	31.89	44.57	4.337	35.60	8.748	6.329	1.889	39.30	1.812

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
09Mar2019	208.3	22.62	12.45	31.67	44.26	4.307	35.35	8.687	6.286	1.875	39.02	1.800
10Mar2019	207.2	22.50	12.38	31.50	44.03	4.284	35.17	8.640	6.254	1.866	38.81	1.790
11Mar2019	206.7	22.43	12.35	31.41	43.91	4.271	35.08	8.615	6.241	1.863	38.71	1.784
12Mar2019	206.7	22.43	12.37	31.41	43.92	4.271	35.10	8.615	6.249	1.868	38.71	1.784
13Mar2019	206.4	22.38	12.35	31.36	43.85	4.263	35.05	8.599	6.244	1.869	38.64	1.781
14Mar2019	200.6	21.77	11.99	30.48	42.61	4.146	34.04	8.362	6.051	1.802	37.57	1.732
15Mar2019	190.9	20.77	11.37	29.04	40.56	3.953	32.36	7.971	5.726	1.687	35.79	1.652
16Mar2019	184.2	20.07	10.95	28.04	39.14	3.819	31.20	7.698	5.504	1.609	34.55	1.596
17Mar2019	180.1	19.64	10.71	27.43	38.28	3.736	30.51	7.532	5.374	1.564	33.80	1.562
18Mar2019	180.4	19.65	10.73	27.46	38.34	3.739	30.57	7.538	5.390	1.571	33.84	1.563
19Mar2019	186.3	20.24	11.12	28.34	39.60	3.854	31.62	7.774	5.603	1.649	34.92	1.610
20Mar2019	194.6	21.07	11.66	29.55	41.35	4.014	33.07	8.101	5.896	1.757	36.42	1.677
21Mar2019	203.3	21.96	12.23	30.84	43.21	4.186	34.61	8.450	6.206	1.872	38.02	1.748
22Mar2019	210.7	22.71	12.71	31.93	44.78	4.330	35.90	8.744	6.467	1.970	39.37	1.808
23Mar2019	215.3	23.18	13.01	32.60	45.74	4.420	36.70	8.927	6.629	2.033	40.20	1.845
24Mar2019	219.0	23.56	13.25	33.16	46.53	4.494	37.35	9.076	6.761	2.084	40.88	1.875
25Mar2019	222.5	23.92	13.47	33.67	47.26	4.562	37.95	9.215	6.882	2.132	41.52	1.904
26Mar2019	225.7	24.25	13.68	34.14	47.94	4.626	38.51	9.345	6.996	2.177	42.11	1.930
27Mar2019	228.1	24.49	13.83	34.50	48.45	4.673	38.93	9.441	7.082	2.212	42.54	1.950
28Mar2019	230.2	24.71	13.97	34.81	48.89	4.714	39.29	9.524	7.157	2.243	42.92	1.967
29Mar2019	232.7	24.96	14.13	35.18	49.43	4.764	39.74	9.625	7.249	2.281	43.39	1.988
30Mar2019	234.6	25.16	14.26	35.46	49.83	4.800	40.07	9.700	7.320	2.311	43.73	2.003
31Mar2019	235.3	25.22	14.31	35.56	49.98	4.813	40.20	9.727	7.348	2.325	43.86	2.008
01Apr2019	236.0	25.28	14.35	35.65	50.11	4.825	40.31	9.751	7.373	2.338	43.97	2.013
02Apr2019	236.8	25.36	14.41	35.76	50.28	4.840	40.46	9.782	7.407	2.354	44.11	2.019
03Apr2019	236.7	25.34	14.41	35.75	50.26	4.837	40.44	9.777	7.409	2.358	44.09	2.018
04Apr2019	235.4	25.21	14.33	35.55	49.98	4.811	40.22	9.723	7.368	2.346	43.85	2.007

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
05Apr2019	233.6	25.01	14.21	35.27	49.59	4.774	39.91	9.648	7.310	2.327	43.51	1.992
06Apr2019	232.4	24.88	14.15	35.10	49.35	4.750	39.71	9.600	7.275	2.317	43.29	1.982
07Apr2019	231.2	24.75	14.08	34.92	49.10	4.725	39.51	9.549	7.241	2.307	43.07	1.971
08Apr2019	229.1	24.53	13.95	34.60	48.65	4.682	39.15	9.463	7.174	2.285	42.68	1.953
09Apr2019	226.9	24.29	13.81	34.26	48.18	4.636	38.77	9.370	7.104	2.262	42.26	1.934
10Apr2019	224.6	24.04	13.67	33.92	47.70	4.589	38.38	9.276	7.033	2.238	41.84	1.914
11Apr2019	222.0	23.76	13.52	33.53	47.15	4.536	37.94	9.169	6.951	2.210	41.35	1.892
12Apr2019	218.9	23.43	13.33	33.06	46.49	4.473	37.41	9.042	6.852	2.176	40.78	1.866
13Apr2019	215.8	23.10	13.13	32.59	45.82	4.409	36.87	8.912	6.750	2.141	40.19	1.839
14Apr2019	213.1	22.81	12.97	32.18	45.25	4.354	36.42	8.801	6.666	2.112	39.70	1.816
15Apr2019	211.2	22.60	12.86	31.89	44.85	4.314	36.09	8.720	6.609	2.094	39.34	1.800
16Apr2019	210.8	22.55	12.85	31.83	44.77	4.305	36.05	8.702	6.607	2.096	39.26	1.796
17Apr2019	212.0	22.65	12.94	32.00	45.03	4.326	36.27	8.747	6.661	2.120	39.47	1.804
18Apr2019	213.9	22.83	13.07	32.27	45.44	4.361	36.62	8.819	6.740	2.154	39.81	1.819
19Apr2019	217.7	23.20	13.33	32.81	46.23	4.432	37.29	8.965	6.884	2.214	40.49	1.848
20Apr2019	224.8	23.90	13.80	33.85	47.73	4.568	38.55	9.243	7.145	2.319	41.77	1.904
21Apr2019	235.3	24.96	14.49	35.40	49.97	4.773	40.41	9.661	7.530	2.472	43.69	1.989
22Apr2019	246.2	26.05	15.21	36.99	52.26	4.983	42.31	10.090	7.925	2.632	45.66	2.076
23Apr2019	253.9	26.83	15.72	38.13	53.90	5.134	43.68	10.397	8.209	2.749	47.07	2.139
24Apr2019	259.4	27.38	16.08	38.92	55.05	5.239	44.63	10.611	8.409	2.835	48.05	2.182
25Apr2019	262.8	27.72	16.30	39.42	55.77	5.305	45.23	10.746	8.538	2.892	48.67	2.210
26Apr2019	264.3	27.87	16.41	39.64	56.09	5.335	45.50	10.806	8.598	2.922	48.94	2.222
27Apr2019	264.8	27.92	16.44	39.71	56.20	5.344	45.59	10.825	8.622	2.937	49.03	2.226
28Apr2019	263.8	27.81	16.38	39.55	55.97	5.322	45.41	10.781	8.591	2.931	48.83	2.217
29Apr2019	261.4	27.56	16.23	39.20	55.47	5.275	45.01	10.686	8.514	2.905	48.40	2.197
30Apr2019	258.4	27.24	16.04	38.74	54.82	5.214	44.48	10.561	8.413	2.870	47.83	2.172
01May2019	254.6	26.84	15.80	38.18	54.02	5.138	43.82	10.407	8.286	2.824	47.13	2.140

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
02May2019	250.7	26.43	15.56	37.59	53.19	5.058	43.14	10.247	8.155	2.777	46.41	2.107
03May2019	247.0	26.05	15.33	37.05	52.42	4.985	42.52	10.099	8.038	2.736	45.74	2.076
04May2019	243.8	25.69	15.13	36.55	51.73	4.918	41.97	9.964	7.934	2.700	45.13	2.048
05May2019	240.7	25.36	14.95	36.09	51.08	4.855	41.44	9.836	7.838	2.667	44.56	2.022
06May2019	237.9	25.06	14.78	35.67	50.49	4.798	40.98	9.721	7.753	2.639	44.04	1.998
07May2019	236.4	24.89	14.70	35.43	50.17	4.765	40.73	9.655	7.715	2.630	43.75	1.984
08May2019	236.4	24.86	14.72	35.42	50.17	4.761	40.75	9.649	7.731	2.642	43.73	1.982
09May2019	237.6	24.95	14.81	35.57	50.41	4.780	40.97	9.688	7.788	2.672	43.93	1.990
10May2019	239.5	25.12	14.95	35.84	50.82	4.814	41.32	9.759	7.874	2.713	44.26	2.004
11May2019	242.0	25.35	15.13	36.19	51.34	4.859	41.78	9.852	7.980	2.763	44.70	2.022
12May2019	246.4	25.78	15.44	36.83	52.28	4.941	42.57	10.022	8.157	2.842	45.49	2.056
13May2019	252.6	26.37	15.86	37.72	53.58	5.057	43.67	10.260	8.398	2.948	46.59	2.104
14May2019	257.1	26.81	16.17	38.36	54.53	5.142	44.48	10.433	8.579	3.031	47.40	2.139
15May2019	258.6	26.94	16.28	38.57	54.84	5.168	44.76	10.487	8.648	3.069	47.65	2.150
16May2019	259.6	27.03	16.36	38.71	55.06	5.185	44.95	10.523	8.700	3.098	47.83	2.157
17May2019	261.6	27.20	16.51	38.98	55.47	5.220	45.31	10.596	8.788	3.143	48.17	2.171
18May2019	262.4	27.27	16.58	39.10	55.65	5.233	45.48	10.625	8.835	3.172	48.31	2.176
19May2019	261.1	27.12	16.50	38.89	55.36	5.205	45.25	10.567	8.801	3.166	48.06	2.164
20May2019	258.7	26.86	16.36	38.53	54.86	5.156	44.85	10.468	8.729	3.144	47.61	2.144
21May2019	256.6	26.63	16.24	38.20	54.40	5.111	44.49	10.378	8.666	3.126	47.21	2.125
22May2019	256.4	26.59	16.25	38.16	54.37	5.104	44.48	10.365	8.681	3.142	47.17	2.122
23May2019	261.5	27.06	16.61	38.88	55.44	5.196	45.41	10.556	8.894	3.243	48.06	2.160
24May2019	270.3	27.89	17.22	40.14	57.30	5.359	46.99	10.891	9.253	3.411	49.62	2.227
25May2019	278.3	28.65	17.79	41.28	58.98	5.507	48.43	11.195	9.583	3.568	51.04	2.288
26May2019	285.3	29.30	18.28	42.27	60.45	5.635	49.69	11.459	9.873	3.710	52.27	2.341
27May2019	290.1	29.75	18.62	42.95	61.47	5.722	50.57	11.640	10.082	3.817	53.12	2.376
28May2019	292.3	29.93	18.79	43.25	61.92	5.759	50.97	11.716	10.189	3.880	53.49	2.391

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
29May2019	293.5	30.02	18.90	43.40	62.17	5.778	51.22	11.756	10.263	3.929	53.69	2.399
30May2019	295.8	30.21	19.08	43.70	62.64	5.815	51.64	11.834	10.377	3.996	54.06	2.414
31May2019	300.0	30.59	19.39	44.30	63.53	5.890	52.42	11.990	10.571	4.100	54.80	2.444
01Jun2019	304.9	31.03	19.76	44.98	64.56	5.976	53.32	12.169	10.794	4.220	55.65	2.480
02Jun2019	309.1	31.39	20.07	45.55	65.43	6.048	54.10	12.318	10.993	4.331	56.37	2.509
03Jun2019	312.2	31.64	20.32	45.97	66.09	6.099	54.69	12.426	11.153	4.427	56.89	2.530
04Jun2019	314.8	31.84	20.53	46.30	66.61	6.139	55.18	12.511	11.292	4.514	57.31	2.546
05Jun2019	317.4	32.04	20.75	46.64	67.15	6.180	55.68	12.598	11.436	4.605	57.73	2.562
06Jun2019	320.9	32.32	21.03	47.10	67.88	6.236	56.34	12.717	11.619	4.715	58.32	2.585
07Jun2019	324.3	32.59	21.31	47.56	68.60	6.292	57.00	12.834	11.805	4.830	58.89	2.607
08Jun2019	325.7	32.65	21.45	47.70	68.87	6.306	57.29	12.868	11.912	4.910	59.08	2.613
09Jun2019	324.8	32.50	21.45	47.54	68.69	6.279	57.20	12.817	11.938	4.954	58.88	2.601
10Jun2019	322.6	32.21	21.36	47.17	68.21	6.225	56.86	12.710	11.913	4.976	58.43	2.578
11Jun2019	319.4	31.81	21.20	46.64	67.52	6.150	56.35	12.562	11.853	4.983	57.78	2.546
12Jun2019	314.9	31.28	20.96	45.94	66.56	6.052	55.62	12.366	11.748	4.971	56.92	2.505
13Jun2019	309.8	30.69	20.69	45.13	65.47	5.940	54.78	12.143	11.622	4.950	55.94	2.458
14Jun2019	304.7	30.09	20.42	44.33	64.39	5.827	53.96	11.918	11.506	4.936	54.95	2.410
15Jun2019	299.7	29.48	20.16	43.52	63.31	5.713	53.15	11.691	11.397	4.928	53.96	2.362
16Jun2019	294.8	28.87	19.92	42.73	62.26	5.599	52.37	11.466	11.306	4.935	52.99	2.314
17Jun2019	290.0	28.26	19.71	41.95	61.25	5.487	51.64	11.246	11.231	4.952	52.04	2.266
18Jun2019	285.8	27.61	19.60	41.19	60.35	5.371	51.08	11.022	11.245	5.039	51.13	2.216
19Jun2019	282.2	26.65	19.79	40.28	59.54	5.207	50.90	10.725	11.547	5.371	50.07	2.143
20Jun2019	279.3	25.59	20.16	39.35	58.84	5.030	50.97	10.409	12.023	5.871	49.00	2.063
21Jun2019	276.5	24.42	20.64	38.32	58.10	4.834	51.13	10.059	12.644	6.549	47.83	1.974
22Jun2019	272.7	22.98	21.21	36.99	57.05	4.589	51.19	9.617	13.422	7.480	46.29	1.865
23Jun2019	266.7	21.11	21.82	35.11	55.36	4.264	50.94	9.014	14.416	8.833	44.09	1.721
24Jun2019	257.7	18.59	22.58	32.35	52.64	3.812	50.23	8.162	15.859	11.143	40.83	1.525

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
25Jun2019	242.0	14.63	23.51	27.51	47.25	3.081	48.02	6.737	18.441	16.623	35.01	1.214
26Jun2019	137.7	5.57	14.03	11.41	21.24	1.203	24.11	2.692	14.288	27.975	14.69	0.467
27Jun2019	19.1	1.76	1.33	2.57	3.77	0.339	3.25	0.692	0.921	1.130	3.19	0.141
28Jun2019	14.6	1.59	0.87	2.22	3.10	0.302	2.48	0.609	0.445	0.145	2.74	0.126
29Jun2019	14.2	1.54	0.85	2.15	3.01	0.293	2.40	0.591	0.431	0.139	2.65	0.122
30Jun2019	13.8	1.49	0.82	2.09	2.92	0.284	2.33	0.573	0.418	0.135	2.57	0.119
01Jul2019	13.4	1.45	0.80	2.03	2.84	0.276	2.26	0.557	0.407	0.131	2.50	0.115
02Jul2019	13.0	1.41	0.78	1.97	2.75	0.268	2.20	0.541	0.395	0.127	2.43	0.112
03Jul2019	12.6	1.37	0.75	1.91	2.67	0.260	2.13	0.525	0.383	0.123	2.36	0.109
04Jul2019	12.2	1.33	0.73	1.85	2.59	0.252	2.07	0.509	0.371	0.120	2.28	0.105
05Jul2019	11.8	1.28	0.71	1.80	2.51	0.244	2.01	0.493	0.360	0.116	2.21	0.102
06Jul2019	11.5	1.24	0.68	1.74	2.43	0.237	1.94	0.477	0.348	0.112	2.14	0.099
07Jul2019	11.1	1.20	0.66	1.68	2.35	0.229	1.88	0.462	0.337	0.109	2.07	0.096
08Jul2019	10.9	1.19	0.65	1.66	2.32	0.226	1.85	0.456	0.333	0.107	2.05	0.095
09Jul2019	11.0	1.19	0.66	1.67	2.33	0.227	1.86	0.457	0.334	0.108	2.05	0.095
10Jul2019	11.0	1.19	0.66	1.66	2.32	0.226	1.86	0.456	0.333	0.107	2.05	0.095
11Jul2019	10.9	1.18	0.65	1.65	2.30	0.224	1.84	0.452	0.330	0.106	2.03	0.094
12Jul2019	10.7	1.16	0.64	1.63	2.27	0.222	1.82	0.447	0.326	0.105	2.01	0.093
13Jul2019	10.6	1.15	0.63	1.61	2.25	0.219	1.80	0.442	0.323	0.104	1.98	0.092
14Jul2019	10.5	1.14	0.63	1.59	2.22	0.216	1.77	0.436	0.318	0.102	1.96	0.090
15Jul2019	10.3	1.12	0.62	1.56	2.18	0.213	1.75	0.429	0.313	0.101	1.93	0.089
16Jul2019	10.2	1.10	0.61	1.54	2.16	0.210	1.72	0.423	0.309	0.099	1.90	0.088
17Jul2019	10.1	1.10	0.60	1.53	2.14	0.209	1.71	0.421	0.307	0.099	1.89	0.087
18Jul2019	10.1	1.09	0.60	1.53	2.13	0.208	1.70	0.419	0.306	0.099	1.88	0.087
19Jul2019	10.0	1.08	0.60	1.51	2.12	0.206	1.69	0.416	0.303	0.098	1.87	0.086
20Jul2019	9.9	1.07	0.59	1.50	2.09	0.204	1.67	0.411	0.300	0.097	1.84	0.085
21Jul2019	9.7	1.06	0.58	1.48	2.06	0.201	1.65	0.405	0.296	0.095	1.82	0.084

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
22Jul2019	9.6	1.04	0.58	1.46	2.04	0.199	1.63	0.401	0.293	0.094	1.80	0.083
23Jul2019	9.5	1.03	0.57	1.45	2.02	0.197	1.61	0.397	0.290	0.093	1.78	0.082
24Jul2019	9.4	1.02	0.56	1.43	2.00	0.195	1.60	0.392	0.286	0.092	1.76	0.081
25Jul2019	9.1	0.99	0.55	1.39	1.94	0.189	1.55	0.381	0.278	0.090	1.71	0.079
26Jul2019	8.5	0.92	0.51	1.29	1.81	0.176	1.44	0.355	0.259	0.083	1.59	0.074
27Jul2019	7.9	0.85	0.47	1.19	1.67	0.163	1.33	0.328	0.239	0.077	1.47	0.068
28Jul2019	7.6	0.83	0.46	1.16	1.62	0.158	1.30	0.318	0.232	0.075	1.43	0.066
29Jul2019	7.9	0.85	0.47	1.19	1.67	0.163	1.33	0.328	0.239	0.077	1.47	0.068
30Jul2019	8.3	0.90	0.50	1.26	1.76	0.171	1.40	0.345	0.252	0.081	1.55	0.072
31Jul2019	8.4	0.91	0.50	1.27	1.78	0.173	1.42	0.350	0.255	0.082	1.57	0.073
01Aug2019	8.0	0.87	0.48	1.22	1.70	0.166	1.36	0.335	0.244	0.079	1.50	0.069
02Aug2019	7.5	0.82	0.45	1.14	1.60	0.156	1.28	0.314	0.229	0.074	1.41	0.065
03Aug2019	7.2	0.79	0.43	1.10	1.54	0.150	1.23	0.302	0.220	0.071	1.35	0.063
04Aug2019	7.1	0.77	0.42	1.07	1.50	0.146	1.20	0.295	0.215	0.069	1.32	0.061
05Aug2019	7.2	0.78	0.43	1.09	1.52	0.148	1.22	0.299	0.218	0.070	1.34	0.062
06Aug2019	7.7	0.84	0.46	1.17	1.63	0.159	1.31	0.321	0.234	0.075	1.44	0.067
07Aug2019	8.4	0.91	0.50	1.27	1.78	0.173	1.42	0.349	0.255	0.082	1.57	0.072
08Aug2019	9.0	0.98	0.54	1.37	1.91	0.186	1.53	0.375	0.274	0.088	1.68	0.078
09Aug2019	9.5	1.03	0.57	1.44	2.02	0.196	1.61	0.396	0.289	0.093	1.78	0.082
10Aug2019	9.8	1.06	0.59	1.49	2.08	0.202	1.66	0.408	0.298	0.096	1.83	0.085
11Aug2019	9.9	1.07	0.59	1.50	2.10	0.204	1.68	0.412	0.301	0.097	1.85	0.085
12Aug2019	9.9	1.08	0.59	1.50	2.10	0.205	1.68	0.413	0.301	0.097	1.85	0.086
13Aug2019	9.9	1.07	0.59	1.50	2.10	0.204	1.68	0.412	0.301	0.097	1.85	0.085
14Aug2019	9.9	1.07	0.59	1.50	2.09	0.204	1.67	0.411	0.300	0.097	1.85	0.085
15Aug2019	10.0	1.08	0.60	1.51	2.11	0.206	1.69	0.415	0.303	0.098	1.86	0.086
16Aug2019	10.1	1.10	0.61	1.54	2.15	0.210	1.72	0.422	0.308	0.099	1.90	0.088
17Aug2019	10.3	1.11	0.61	1.56	2.18	0.212	1.74	0.427	0.312	0.100	1.92	0.089

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
18Aug2019	10.3	1.12	0.62	1.56	2.18	0.213	1.74	0.429	0.313	0.101	1.92	0.089
19Aug2019	10.3	1.11	0.61	1.56	2.17	0.212	1.74	0.427	0.312	0.100	1.92	0.089
20Aug2019	10.2	1.11	0.61	1.55	2.16	0.211	1.73	0.425	0.310	0.100	1.91	0.088
21Aug2019	10.1	1.10	0.61	1.54	2.15	0.209	1.71	0.422	0.308	0.099	1.89	0.087
22Aug2019	10.0	1.09	0.60	1.52	2.13	0.207	1.70	0.418	0.305	0.098	1.87	0.087
23Aug2019	9.9	1.08	0.59	1.50	2.10	0.205	1.68	0.413	0.301	0.097	1.85	0.086
24Aug2019	9.8	1.06	0.59	1.49	2.08	0.202	1.66	0.408	0.298	0.096	1.83	0.085
25Aug2019	9.7	1.05	0.58	1.47	2.05	0.200	1.64	0.403	0.295	0.095	1.81	0.084
26Aug2019	9.5	1.03	0.57	1.44	2.02	0.196	1.61	0.396	0.289	0.093	1.78	0.082
27Aug2019	9.4	1.02	0.56	1.43	1.99	0.194	1.59	0.392	0.286	0.092	1.76	0.081
28Aug2019	9.5	1.03	0.57	1.45	2.02	0.197	1.61	0.397	0.290	0.093	1.78	0.082
29Aug2019	9.7	1.05	0.58	1.47	2.06	0.200	1.64	0.404	0.295	0.095	1.81	0.084
30Aug2019	9.7	1.06	0.58	1.48	2.07	0.201	1.65	0.406	0.296	0.095	1.82	0.084
31Aug2019	9.7	1.05	0.58	1.47	2.06	0.201	1.64	0.404	0.295	0.095	1.82	0.084
01Sep2019	9.6	1.05	0.58	1.46	2.05	0.199	1.63	0.402	0.293	0.094	1.80	0.083
02Sep2019	9.7	1.05	0.58	1.47	2.05	0.200	1.64	0.403	0.294	0.095	1.81	0.084
03Sep2019	10.0	1.08	0.60	1.51	2.11	0.206	1.69	0.415	0.303	0.098	1.86	0.086
04Sep2019	10.3	1.12	0.62	1.56	2.18	0.213	1.74	0.429	0.313	0.101	1.93	0.089
05Sep2019	10.4	1.13	0.62	1.58	2.21	0.216	1.77	0.435	0.317	0.102	1.95	0.090
06Sep2019	10.5	1.14	0.63	1.59	2.23	0.217	1.78	0.438	0.320	0.103	1.97	0.091
07Sep2019	10.7	1.16	0.64	1.62	2.27	0.221	1.81	0.445	0.325	0.105	2.00	0.092
08Sep2019	11.1	1.20	0.66	1.68	2.35	0.229	1.88	0.462	0.337	0.109	2.07	0.096
09Sep2019	11.5	1.25	0.69	1.75	2.44	0.238	1.95	0.479	0.350	0.113	2.15	0.099
10Sep2019	11.7	1.27	0.70	1.77	2.47	0.241	1.97	0.485	0.354	0.114	2.18	0.101
11Sep2019	11.6	1.26	0.70	1.77	2.47	0.241	1.97	0.485	0.354	0.114	2.18	0.101
12Sep2019	11.6	1.26	0.69	1.76	2.46	0.240	1.97	0.483	0.353	0.114	2.17	0.100
13Sep2019	11.6	1.26	0.69	1.76	2.46	0.240	1.97	0.484	0.353	0.114	2.17	0.100

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
14Sep2019	11.6	1.26	0.69	1.76	2.46	0.240	1.97	0.483	0.353	0.114	2.17	0.100
15Sep2019	11.5	1.25	0.69	1.75	2.44	0.238	1.95	0.479	0.350	0.113	2.15	0.099
16Sep2019	11.4	1.24	0.68	1.73	2.42	0.235	1.93	0.474	0.346	0.112	2.13	0.098
17Sep2019	11.3	1.23	0.68	1.72	2.41	0.234	1.92	0.472	0.345	0.111	2.12	0.098
18Sep2019	11.5	1.25	0.69	1.74	2.44	0.237	1.95	0.479	0.350	0.113	2.15	0.099
19Sep2019	11.8	1.28	0.71	1.79	2.50	0.244	2.00	0.492	0.359	0.116	2.21	0.102
20Sep2019	12.1	1.31	0.72	1.84	2.56	0.250	2.05	0.504	0.368	0.118	2.26	0.104
21Sep2019	12.4	1.35	0.74	1.88	2.63	0.256	2.10	0.517	0.378	0.122	2.32	0.107
22Sep2019	12.7	1.38	0.76	1.93	2.70	0.263	2.16	0.530	0.387	0.125	2.38	0.110
23Sep2019	13.0	1.41	0.77	1.97	2.75	0.268	2.20	0.540	0.394	0.127	2.42	0.112
24Sep2019	13.1	1.43	0.79	2.00	2.79	0.272	2.23	0.548	0.400	0.129	2.46	0.114
25Sep2019	13.3	1.44	0.79	2.02	2.82	0.275	2.25	0.554	0.404	0.130	2.49	0.115
26Sep2019	13.4	1.45	0.80	2.03	2.83	0.276	2.26	0.557	0.406	0.131	2.50	0.115
27Sep2019	13.4	1.45	0.80	2.03	2.84	0.276	2.27	0.557	0.407	0.131	2.50	0.116
28Sep2019	13.3	1.45	0.80	2.02	2.82	0.275	2.26	0.555	0.405	0.130	2.49	0.115
29Sep2019	13.4	1.45	0.80	2.03	2.84	0.276	2.27	0.557	0.407	0.131	2.50	0.116
30Sep2019	14.0	1.52	0.84	2.13	2.97	0.289	2.37	0.584	0.426	0.137	2.62	0.121
01Oct2019	15.3	1.67	0.92	2.33	3.25	0.317	2.60	0.639	0.467	0.150	2.87	0.132
02Oct2019	17.1	1.85	1.02	2.59	3.62	0.353	2.89	0.711	0.519	0.167	3.19	0.147
03Oct2019	18.5	2.01	1.11	2.81	3.93	0.383	3.14	0.771	0.563	0.181	3.46	0.160
04Oct2019	19.2	2.08	1.15	2.91	4.06	0.396	3.25	0.798	0.583	0.188	3.58	0.165
05Oct2019	19.3	2.10	1.16	2.93	4.10	0.399	3.27	0.805	0.588	0.189	3.61	0.167
06Oct2019	19.3	2.09	1.15	2.92	4.08	0.398	3.26	0.802	0.586	0.189	3.60	0.166
07Oct2019	19.0	2.07	1.14	2.89	4.04	0.393	3.23	0.793	0.579	0.186	3.56	0.164
08Oct2019	18.8	2.04	1.12	2.85	3.98	0.388	3.18	0.782	0.571	0.184	3.51	0.162
09Oct2019	18.5	2.01	1.11	2.81	3.93	0.383	3.14	0.772	0.564	0.181	3.47	0.160
10Oct2019	18.4	1.99	1.10	2.79	3.90	0.380	3.11	0.765	0.559	0.180	3.44	0.159

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
11Oct2019	18.3	1.99	1.10	2.78	3.89	0.379	3.11	0.764	0.558	0.180	3.43	0.158
12Oct2019	18.5	2.01	1.11	2.81	3.93	0.383	3.14	0.772	0.564	0.182	3.47	0.160
13Oct2019	18.7	2.03	1.12	2.83	3.96	0.386	3.16	0.778	0.568	0.183	3.49	0.161
14Oct2019	18.5	2.01	1.11	2.81	3.93	0.383	3.14	0.772	0.564	0.181	3.47	0.160
15Oct2019	18.3	1.98	1.09	2.77	3.87	0.377	3.09	0.761	0.555	0.179	3.42	0.158
16Oct2019	17.9	1.94	1.07	2.72	3.80	0.370	3.04	0.746	0.545	0.175	3.35	0.155
17Oct2019	17.6	1.91	1.05	2.67	3.74	0.364	2.98	0.734	0.536	0.172	3.29	0.152
18Oct2019	17.6	1.91	1.05	2.67	3.74	0.364	2.99	0.734	0.536	0.173	3.30	0.152
19Oct2019	18.2	1.98	1.09	2.77	3.87	0.377	3.09	0.759	0.554	0.178	3.41	0.157
20Oct2019	19.1	2.07	1.14	2.90	4.05	0.395	3.24	0.796	0.581	0.187	3.57	0.165
21Oct2019	19.8	2.15	1.19	3.01	4.21	0.410	3.36	0.827	0.604	0.194	3.71	0.171
22Oct2019	20.5	2.23	1.23	3.11	4.35	0.424	3.47	0.854	0.623	0.201	3.83	0.177
23Oct2019	21.0	2.29	1.26	3.19	4.46	0.435	3.57	0.877	0.640	0.206	3.94	0.182
24Oct2019	21.3	2.32	1.28	3.24	4.53	0.441	3.62	0.889	0.649	0.209	3.99	0.184
25Oct2019	21.5	2.33	1.28	3.26	4.55	0.444	3.64	0.894	0.653	0.210	4.01	0.185
26Oct2019	21.6	2.35	1.29	3.28	4.59	0.447	3.67	0.901	0.658	0.212	4.05	0.187
27Oct2019	21.7	2.36	1.30	3.30	4.61	0.449	3.68	0.905	0.661	0.213	4.06	0.188
28Oct2019	21.6	2.34	1.29	3.27	4.57	0.445	3.65	0.898	0.655	0.211	4.03	0.186
29Oct2019	21.2	2.31	1.27	3.23	4.51	0.439	3.60	0.885	0.646	0.208	3.97	0.183
30Oct2019	20.9	2.27	1.25	3.17	4.43	0.431	3.54	0.869	0.635	0.204	3.90	0.180
31Oct2019	20.4	2.21	1.22	3.10	4.33	0.421	3.46	0.850	0.620	0.200	3.82	0.176
01Nov2019	19.9	2.16	1.19	3.02	4.22	0.411	3.37	0.829	0.605	0.195	3.72	0.172
02Nov2019	19.5	2.11	1.16	2.96	4.13	0.402	3.30	0.811	0.592	0.191	3.64	0.168
03Nov2019	19.1	2.07	1.14	2.90	4.05	0.394	3.23	0.795	0.580	0.187	3.57	0.165
04Nov2019	18.6	2.02	1.12	2.83	3.96	0.385	3.16	0.777	0.567	0.183	3.49	0.161
05Nov2019	18.2	1.98	1.09	2.77	3.87	0.377	3.09	0.760	0.555	0.179	3.41	0.158
06Nov2019	17.8	1.94	1.07	2.71	3.78	0.368	3.02	0.743	0.542	0.175	3.34	0.154

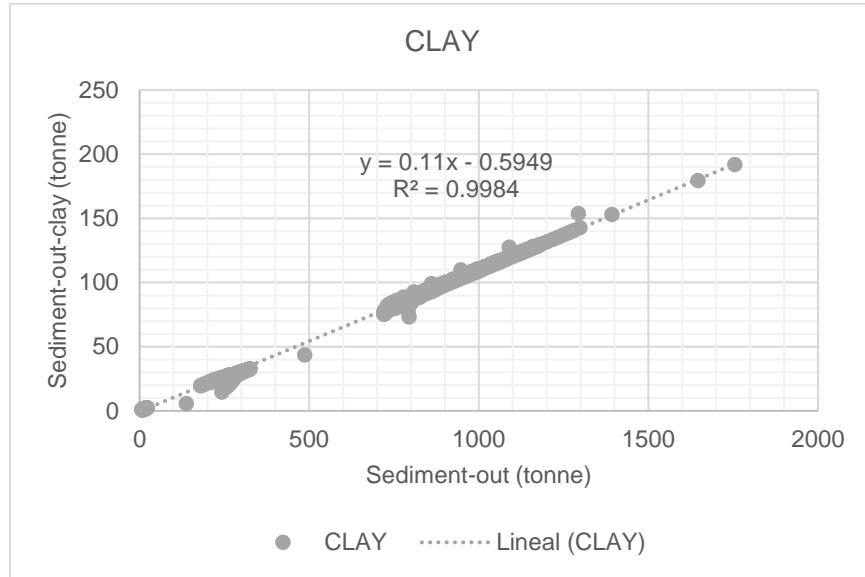
	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
07Nov2019	17.4	1.89	1.04	2.64	3.69	0.359	2.95	0.724	0.529	0.170	3.25	0.150
08Nov2019	16.9	1.84	1.01	2.57	3.59	0.350	2.87	0.706	0.515	0.166	3.17	0.146
09Nov2019	16.5	1.79	0.99	2.51	3.50	0.341	2.80	0.688	0.503	0.162	3.09	0.143
10Nov2019	16.1	1.75	0.96	2.45	3.42	0.333	2.73	0.672	0.491	0.158	3.02	0.139
11Nov2019	15.9	1.72	0.95	2.41	3.37	0.328	2.69	0.661	0.483	0.155	2.97	0.137
12Nov2019	16.1	1.75	0.96	2.44	3.42	0.333	2.73	0.671	0.490	0.158	3.01	0.139
13Nov2019	17.1	1.86	1.02	2.60	3.63	0.354	2.90	0.713	0.520	0.168	3.20	0.148
14Nov2019	18.5	2.00	1.10	2.80	3.92	0.381	3.13	0.769	0.561	0.181	3.45	0.159
15Nov2019	19.4	2.11	1.16	2.95	4.12	0.401	3.29	0.809	0.591	0.190	3.63	0.168
16Nov2019	19.9	2.16	1.19	3.02	4.22	0.411	3.37	0.828	0.605	0.195	3.72	0.172
17Nov2019	20.0	2.17	1.19	3.03	4.23	0.412	3.38	0.831	0.607	0.195	3.73	0.172
18Nov2019	19.7	2.14	1.18	3.00	4.19	0.408	3.34	0.822	0.600	0.193	3.69	0.170
19Nov2019	19.4	2.11	1.16	2.95	4.12	0.401	3.29	0.808	0.590	0.190	3.63	0.168
20Nov2019	19.0	2.06	1.14	2.89	4.03	0.393	3.22	0.792	0.578	0.186	3.56	0.164
21Nov2019	18.6	2.02	1.11	2.82	3.94	0.384	3.15	0.774	0.565	0.182	3.47	0.160
22Nov2019	18.1	1.97	1.08	2.75	3.85	0.375	3.07	0.755	0.551	0.178	3.39	0.157
23Nov2019	17.9	1.94	1.07	2.72	3.80	0.370	3.03	0.745	0.544	0.175	3.35	0.155
24Nov2019	18.2	1.98	1.09	2.76	3.86	0.376	3.09	0.759	0.554	0.178	3.41	0.157
25Nov2019	18.6	2.02	1.11	2.82	3.95	0.384	3.15	0.775	0.566	0.182	3.48	0.161
26Nov2019	18.6	2.02	1.11	2.82	3.95	0.384	3.15	0.775	0.566	0.182	3.48	0.161
27Nov2019	18.4	2.00	1.10	2.79	3.90	0.380	3.12	0.767	0.560	0.180	3.44	0.159
28Nov2019	18.1	1.96	1.08	2.74	3.83	0.373	3.06	0.753	0.550	0.177	3.38	0.156
29Nov2019	17.7	1.92	1.06	2.68	3.74	0.365	2.99	0.735	0.537	0.173	3.30	0.152
30Nov2019	17.2	1.87	1.03	2.61	3.65	0.355	2.91	0.716	0.523	0.168	3.22	0.149
01Dec2019	16.7	1.82	1.00	2.54	3.55	0.346	2.84	0.697	0.509	0.164	3.13	0.144
02Dec2019	16.3	1.77	0.97	2.47	3.45	0.336	2.76	0.678	0.495	0.159	3.04	0.141
03Dec2019	15.9	1.72	0.95	2.41	3.37	0.328	2.69	0.661	0.483	0.155	2.97	0.137

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
04Dec2019	15.6	1.69	0.93	2.37	3.31	0.322	2.64	0.650	0.474	0.153	2.92	0.135
05Dec2019	15.4	1.67	0.92	2.33	3.26	0.317	2.60	0.640	0.467	0.150	2.87	0.133
06Dec2019	15.1	1.64	0.90	2.29	3.20	0.312	2.56	0.629	0.459	0.148	2.82	0.130
07Dec2019	14.8	1.61	0.89	2.25	3.14	0.306	2.51	0.617	0.450	0.145	2.77	0.128
08Dec2019	14.5	1.58	0.87	2.20	3.08	0.300	2.46	0.604	0.441	0.142	2.71	0.125
09Dec2019	14.2	1.54	0.85	2.15	3.01	0.293	2.40	0.591	0.431	0.139	2.65	0.122
10Dec2019	13.9	1.51	0.83	2.10	2.94	0.287	2.35	0.578	0.422	0.136	2.59	0.120
11Dec2019	13.6	1.47	0.81	2.06	2.88	0.280	2.30	0.565	0.412	0.133	2.54	0.117
12Dec2019	13.4	1.45	0.80	2.03	2.83	0.276	2.26	0.556	0.406	0.131	2.50	0.115
13Dec2019	13.2	1.44	0.79	2.01	2.81	0.273	2.24	0.551	0.402	0.130	2.47	0.114
14Dec2019	13.1	1.42	0.78	1.99	2.78	0.271	2.22	0.546	0.399	0.128	2.45	0.113
15Dec2019	13.2	1.43	0.79	2.00	2.79	0.272	2.23	0.549	0.401	0.129	2.46	0.114
16Dec2019	13.3	1.44	0.79	2.01	2.81	0.274	2.25	0.552	0.403	0.130	2.48	0.114
17Dec2019	13.2	1.43	0.79	2.00	2.80	0.273	2.24	0.550	0.402	0.129	2.47	0.114
18Dec2019	13.1	1.42	0.78	1.99	2.77	0.270	2.22	0.545	0.398	0.128	2.45	0.113
19Dec2019	12.9	1.40	0.77	1.96	2.74	0.267	2.19	0.539	0.393	0.127	2.42	0.112
20Dec2019	12.8	1.39	0.76	1.94	2.71	0.264	2.16	0.532	0.388	0.125	2.39	0.110
21Dec2019	12.6	1.37	0.75	1.91	2.67	0.260	2.14	0.525	0.383	0.123	2.36	0.109
22Dec2019	12.4	1.35	0.74	1.89	2.63	0.257	2.10	0.517	0.378	0.122	2.32	0.107
23Dec2019	12.2	1.33	0.73	1.85	2.59	0.252	2.07	0.509	0.371	0.120	2.28	0.105
24Dec2019	12.0	1.30	0.72	1.82	2.54	0.248	2.03	0.500	0.365	0.117	2.24	0.104
25Dec2019	11.9	1.30	0.71	1.81	2.53	0.247	2.02	0.497	0.363	0.117	2.23	0.103
26Dec2019	12.3	1.33	0.74	1.87	2.61	0.254	2.08	0.512	0.374	0.120	2.30	0.106
27Dec2019	12.8	1.39	0.76	1.94	2.71	0.264	2.16	0.532	0.389	0.125	2.39	0.110
28Dec2019	13.1	1.42	0.78	1.99	2.78	0.271	2.22	0.546	0.399	0.128	2.45	0.113
29Dec2019	13.3	1.44	0.79	2.02	2.82	0.275	2.25	0.554	0.404	0.130	2.49	0.115
30Dec2019	13.3	1.44	0.79	2.02	2.82	0.275	2.25	0.554	0.404	0.130	2.49	0.115

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
31Dec2019	13.2	1.43	0.79	2.00	2.80	0.273	2.24	0.550	0.401	0.129	2.47	0.114
01Jan2020	13.2	1.43	0.79	2.00	2.80	0.273	2.24	0.550	0.402	0.129	2.47	0.114
02Jan2020	13.3	1.44	0.80	2.02	2.82	0.275	2.25	0.554	0.405	0.130	2.49	0.115
03Jan2020	13.3	1.45	0.80	2.02	2.83	0.276	2.26	0.556	0.406	0.131	2.50	0.115
04Jan2020	13.3	1.45	0.80	2.02	2.83	0.276	2.26	0.555	0.406	0.131	2.49	0.115
05Jan2020	13.3	1.45	0.80	2.02	2.83	0.275	2.26	0.555	0.405	0.130	2.49	0.115
06Jan2020	13.3	1.44	0.79	2.01	2.81	0.274	2.25	0.552	0.403	0.130	2.48	0.114
07Jan2020	13.1	1.42	0.78	1.98	2.77	0.270	2.22	0.545	0.398	0.128	2.45	0.113
08Jan2020	12.8	1.39	0.77	1.95	2.72	0.265	2.17	0.534	0.390	0.126	2.40	0.111
09Jan2020	12.5	1.36	0.75	1.90	2.66	0.259	2.13	0.522	0.381	0.123	2.35	0.108
10Jan2020	12.3	1.33	0.73	1.86	2.60	0.253	2.08	0.511	0.373	0.120	2.29	0.106
11Jan2020	11.9	1.29	0.71	1.81	2.53	0.246	2.02	0.497	0.363	0.117	2.23	0.103
12Jan2020	11.6	1.26	0.69	1.76	2.46	0.240	1.97	0.483	0.353	0.114	2.17	0.100
13Jan2020	11.4	1.24	0.68	1.73	2.42	0.236	1.93	0.476	0.347	0.112	2.14	0.099
14Jan2020	11.0	1.20	0.66	1.68	2.34	0.228	1.87	0.460	0.336	0.108	2.07	0.095
15Jan2020	10.5	1.14	0.63	1.59	2.23	0.217	1.78	0.437	0.319	0.103	1.96	0.091
16Jan2020	10.0	1.09	0.60	1.52	2.12	0.207	1.69	0.417	0.304	0.098	1.87	0.086
17Jan2020	9.3	1.00	0.55	1.41	1.96	0.191	1.57	0.386	0.282	0.091	1.73	0.080
18Jan2020	8.5	0.92	0.51	1.28	1.79	0.175	1.43	0.352	0.257	0.083	1.58	0.073
19Jan2020	7.9	0.86	0.47	1.21	1.68	0.164	1.35	0.331	0.241	0.078	1.48	0.069
20Jan2020	7.9	0.85	0.47	1.19	1.67	0.163	1.33	0.328	0.239	0.077	1.47	0.068

A partir de esto, se obtuvieron las toneladas por tipo de partícula para determinados valores estándares de carga total, como se muestra a continuación:

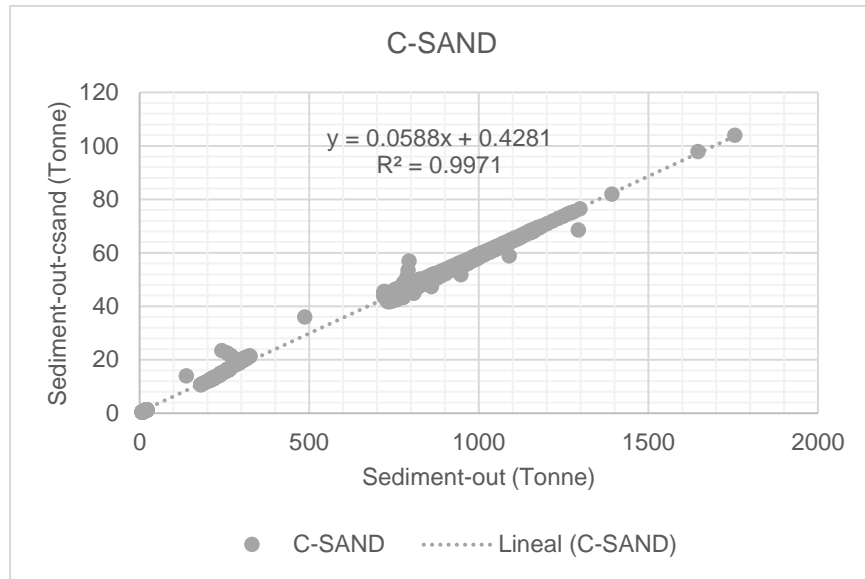
- Arcilla



a	0.11
b	-0.5949

Total Load (Tonne)	Particle Load (Tonne)
10	0.51
110	11.51
210	22.51
310	33.51
410	44.51
510	55.51
610	66.51
710	77.51
810	88.51
910	99.51
1010	110.51
1110	121.51
1210	132.51
1310	143.51
1410	154.51
1510	165.51
1610	176.51
1710	187.51

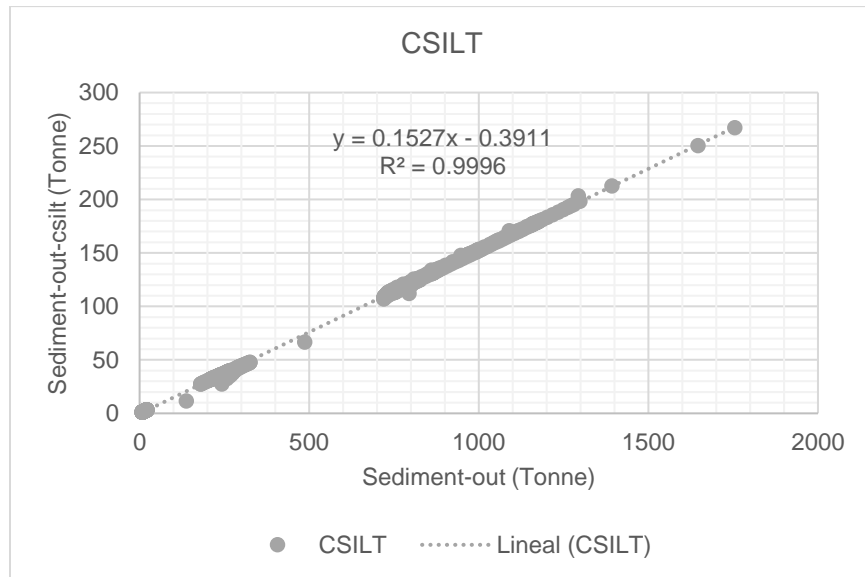
- Arena gruesa



a	0.0588
b	0.4281

Total Load (Tonne)	Particle Load (Tonne)
10	1.02
110	6.90
210	12.78
310	18.66
410	24.54
510	30.42
610	36.30
710	42.18
810	48.06
910	53.94
1010	59.82
1110	65.70
1210	71.58
1310	77.46
1410	83.34
1510	89.22
1610	95.10
1710	100.98

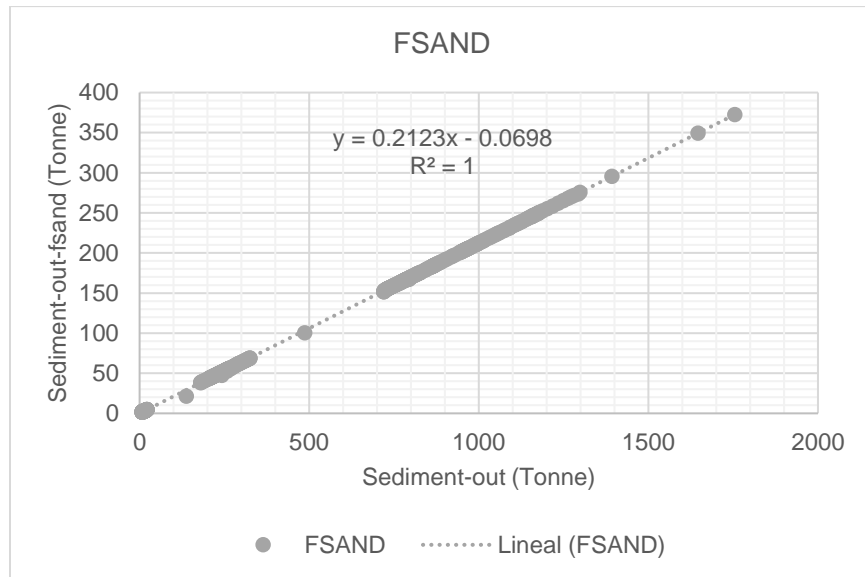
- Limo grueso



a	0.1527
b	-0.3911

Total Load (Tonne)	Particle Load (Tonne)
10	1.14
110	16.41
210	31.68
310	46.95
410	62.22
510	77.49
610	92.76
710	108.03
810	123.30
910	138.57
1010	153.84
1110	169.11
1210	184.38
1310	199.65
1410	214.92
1510	230.19
1610	245.46
1710	260.73

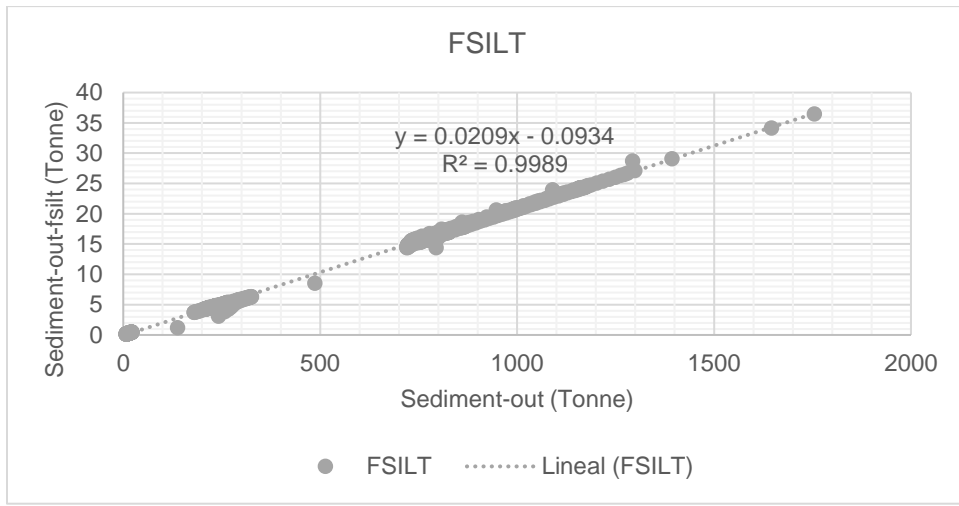
- Arena fina



a	0.2123
b	-0.0698

Total Load (Tonne)	Particle Load (Tonne)
10	2.05
110	23.28
210	44.51
310	65.74
410	86.97
510	108.20
610	129.43
710	150.66
810	171.89
910	193.12
1010	214.35
1110	235.58
1210	256.81
1310	278.04
1410	299.27
1510	320.50
1610	341.73
1710	362.96

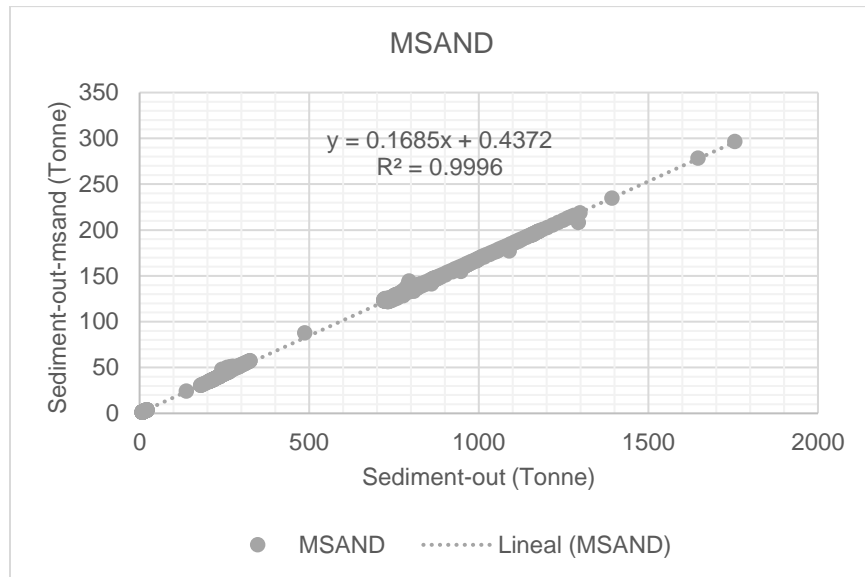
- Limo fino



a	0.0209
b	-0.0934

Total Load (Tonne)	Particle Load (Tonne)
10	0.12
110	2.21
210	4.30
310	6.39
410	8.48
510	10.57
610	12.66
710	14.75
810	16.84
910	18.93
1010	21.02
1110	23.11
1210	25.20
1310	27.29
1410	29.38
1510	31.47
1610	33.56
1710	35.65

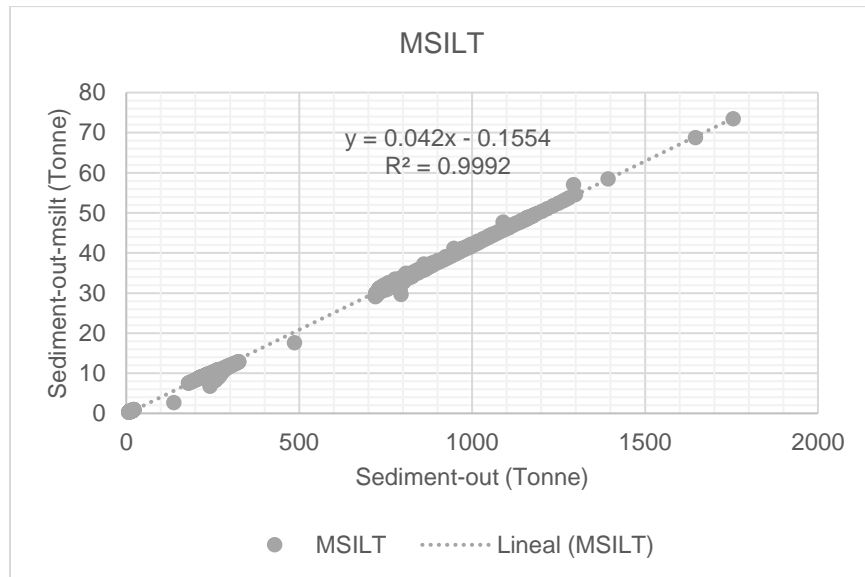
- Arena media



a	0.1685
b	0.4372

Total Load (Tonne)	Particle Load (Tonne)
10	2.12
110	18.97
210	35.82
310	52.67
410	69.52
510	86.37
610	103.22
710	120.07
810	136.92
910	153.77
1010	170.62
1110	187.47
1210	204.32
1310	221.17
1410	238.02
1510	254.87
1610	271.72
1710	288.57

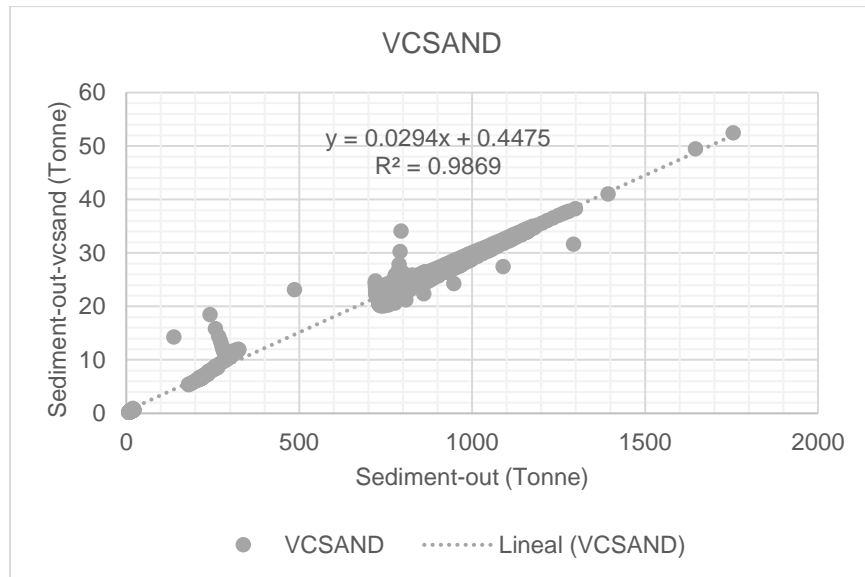
- Limo medio



a	0.042
b	-0.1554

Total Load (Tonne)	Particle Load (Tonne)
10	0.26
110	4.46
210	8.66
310	12.86
410	17.06
510	21.26
610	25.46
710	29.66
810	33.86
910	38.06
1010	42.26
1110	46.46
1210	50.66
1310	54.86
1410	59.06
1510	63.26
1610	67.46
1710	71.66

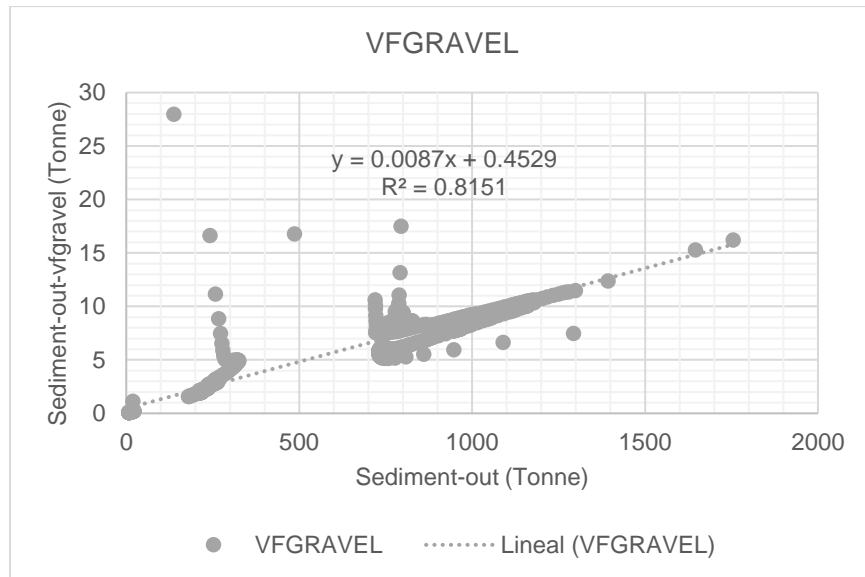
- Arena muy gruesa



a	0.0294
b	0.4475

Total Load (Tonne)	Particle Load (Tonne)
10	0.74
110	3.68
210	6.62
310	9.56
410	12.50
510	15.44
610	18.38
710	21.32
810	24.26
910	27.20
1010	30.14
1110	33.08
1210	36.02
1310	38.96
1410	41.90
1510	44.84
1610	47.78
1710	50.72

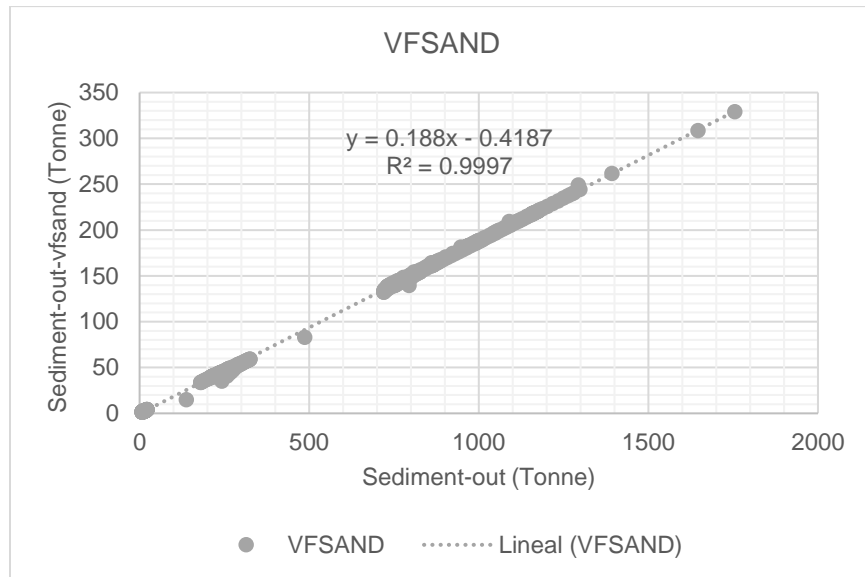
- Grava muy fina



a	0.0087
b	0.4529

Total Load (Tonne)	Particle Load (Tonne)
10	0.54
110	1.41
210	2.28
310	3.15
410	4.02
510	4.89
610	5.76
710	6.63
810	7.50
910	8.37
1010	9.24
1110	10.11
1210	10.98
1310	11.85
1410	12.72
1510	13.59
1610	14.46
1710	15.33

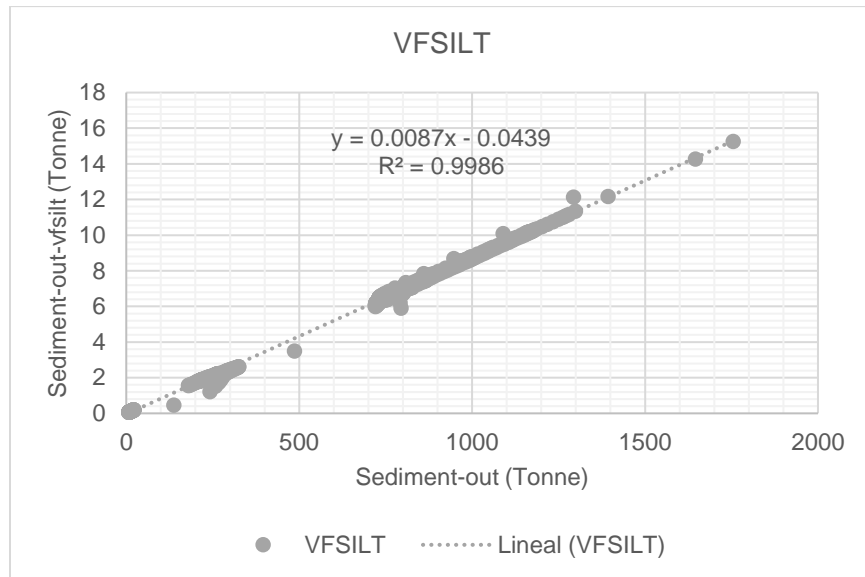
- Arena muy fina



a	0.188
b	-0.4187

Total Load (Tonne)	Particle Load (Tonne)
10	1.46
110	20.26
210	39.06
310	57.86
410	76.66
510	95.46
610	114.26
710	133.06
810	151.86
910	170.66
1010	189.46
1110	208.26
1210	227.06
1310	245.86
1410	264.66
1510	283.46
1610	302.26
1710	321.06

- Limo muy fino



a	0.0087
b	-0.0439

Total Load (Tonnes)	Particle Load (Tonnes)
10	0.04
110	0.91
210	1.78
310	2.65
410	3.52
510	4.39
610	5.26
710	6.13
810	7.00
910	7.87
1010	8.74
1110	9.61
1210	10.48
1310	11.35
1410	12.22
1510	13.09
1610	13.96
1710	14.83

En la Tabla 3 se muestran los porcentajes en cada caso, los cuales se ingresan a HEC-RAS como información de entrada:

2. Modelo 2 – Validación (2020-2021):

En la Tabla 2 se encuentra la carga de sedimentos total y por clase de sedimento obtenida a la salida de la cuenca que vierte al río Tona.

Tabla 4. Carga de sedimentos a la salida de la cuenca en el elemento Junction-1 del Modelo 2 (2020-2021) en HMS

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
21ene.2020	1294.0	153.65	68.66	203.53	273.50	28.712	208.38	57.040	31.620	7.479	249.29	12.128
22ene.2020	1090.6	127.62	58.94	170.74	230.95	23.931	177.24	47.670	27.450	6.647	209.35	10.088
23ene.2020	947.1	109.74	51.80	147.81	200.81	20.627	154.84	41.170	24.290	5.951	181.37	8.683
24ene.2020	860.3	99.01	47.45	133.97	182.56	18.640	141.24	37.250	22.360	5.525	164.46	7.840
25ene.2020	808.3	92.55	44.88	125.66	171.62	17.444	133.13	34.890	21.240	5.290	154.31	7.332
26ene.2020	778.4	88.75	43.46	120.82	165.32	16.743	128.53	33.510	20.650	5.188	148.41	7.033
27ene.2020	766.6	87.07	43.02	118.81	162.85	16.439	126.87	32.930	20.520	5.206	145.98	6.903
28ene.2020	767.6	86.87	43.29	118.79	163.09	16.413	127.30	32.890	20.730	5.317	145.99	6.888
29ene.2020	770.7	86.96	43.66	119.13	163.78	16.439	128.06	32.960	20.990	5.437	146.44	6.897
30ene.2020	772.3	86.91	43.91	119.23	164.11	16.438	128.51	32.970	21.180	5.537	146.59	6.895
31ene.2020	773.1	86.82	44.10	119.25	164.29	16.427	128.81	32.960	21.330	5.624	146.63	6.888
01feb.2020	773.0	86.64	44.21	119.12	164.25	16.398	128.92	32.910	21.440	5.698	146.50	6.875
02feb.2020	772.0	86.39	44.26	118.89	164.05	16.356	128.89	32.840	21.510	5.762	146.23	6.856
03feb.2020	770.7	86.10	44.29	118.60	163.76	16.306	128.77	32.740	21.570	5.820	145.88	6.834
04feb.2020	768.9	85.77	44.28	118.24	163.38	16.248	128.58	32.630	21.620	5.872	145.46	6.809
05feb.2020	766.7	85.40	44.25	117.83	162.92	16.182	128.33	32.510	21.650	5.922	144.97	6.780
06feb.2020	763.0	84.85	44.14	117.18	162.13	16.083	127.82	32.320	21.640	5.960	144.18	6.737
07feb.2020	755.2	83.85	43.78	115.90	160.47	15.897	126.62	31.950	21.500	5.963	142.62	6.658
08feb.2020	745.7	82.65	43.33	114.36	158.46	15.675	125.16	31.520	21.330	5.957	140.74	6.564
09feb.2020	739.1	81.70	43.09	113.22	157.05	15.503	124.21	31.180	21.270	5.993	139.36	6.490
10feb.2020	734.8	80.85	43.11	112.35	156.16	15.356	123.81	30.910	21.400	6.136	138.34	6.425
11feb.2020	732.5	80.68	42.94	112.01	155.61	15.319	123.34	30.830	21.330	6.165	137.90	6.411
12feb.2020	731.6	81.14	42.53	112.15	155.34	15.382	122.70	30.920	21.020	6.011	138.01	6.443
13feb.2020	731.1	81.42	42.27	112.25	155.20	15.423	122.33	30.980	20.800	5.893	138.10	6.463
14feb.2020	733.9	81.91	42.29	112.78	155.77	15.509	122.62	31.140	20.750	5.833	138.73	6.501

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
15feb.2020	740.9	82.79	42.63	113.92	157.27	15.672	123.72	31.460	20.880	5.835	140.12	6.570
16feb.2020	747.2	83.54	42.95	114.93	158.62	15.813	124.74	31.740	21.010	5.846	141.36	6.629
17feb.2020	750.7	83.96	43.13	115.49	159.38	15.892	125.31	31.900	21.090	5.843	142.05	6.663
18feb.2020	751.4	84.06	43.16	115.62	159.54	15.911	125.42	31.940	21.080	5.824	142.20	6.671
19feb.2020	749.4	83.85	43.02	115.32	159.11	15.871	125.06	31.860	21.010	5.786	141.83	6.654
20feb.2020	747.1	83.61	42.88	114.98	158.62	15.825	124.66	31.760	20.930	5.752	141.41	6.635
21feb.2020	747.3	83.64	42.89	115.01	158.67	15.829	124.70	31.770	20.930	5.746	141.45	6.637
22feb.2020	750.5	83.98	43.08	115.50	159.36	15.895	125.25	31.900	21.030	5.771	142.05	6.664
23feb.2020	754.1	84.36	43.30	116.04	160.12	15.968	125.86	32.050	21.140	5.803	142.72	6.695
24feb.2020	756.2	84.59	43.43	116.36	160.57	16.011	126.23	32.140	21.210	5.822	143.11	6.712
25feb.2020	755.1	84.47	43.37	116.19	160.34	15.989	126.05	32.090	21.180	5.813	142.91	6.703
26feb.2020	748.8	83.78	43.00	115.23	159.00	15.858	124.98	31.830	20.990	5.756	141.73	6.648
27feb.2020	741.5	82.98	42.56	114.12	157.44	15.706	123.74	31.520	20.770	5.689	140.35	6.585
28feb.2020	737.0	82.49	42.30	113.44	156.50	15.612	122.99	31.340	20.640	5.651	139.51	6.546
29feb.2020	734.4	82.19	42.15	113.03	155.94	15.556	122.55	31.220	20.570	5.630	139.01	6.522
01mar.2020	733.3	82.06	42.09	112.85	155.70	15.531	122.38	31.170	20.540	5.624	138.79	6.511
02mar.2020	733.7	82.09	42.13	112.91	155.80	15.538	122.46	31.190	20.570	5.633	138.87	6.514
03mar.2020	734.5	82.16	42.18	113.02	155.97	15.552	122.61	31.220	20.600	5.646	139.01	6.520
04mar.2020	734.4	82.14	42.19	113.00	155.95	15.549	122.61	31.210	20.600	5.650	138.99	6.518
05mar.2020	733.4	82.01	42.13	112.84	155.73	15.525	122.44	31.170	20.580	5.645	138.79	6.509
06mar.2020	732.2	81.87	42.07	112.65	155.48	15.499	122.25	31.110	20.550	5.639	138.56	6.497
07mar.2020	731.5	81.78	42.04	112.54	155.33	15.482	122.14	31.080	20.540	5.637	138.42	6.490
08mar.2020	731.0	81.73	42.02	112.47	155.24	15.472	122.08	31.060	20.530	5.638	138.33	6.486
09mar.2020	730.8	81.69	42.01	112.42	155.18	15.464	122.04	31.050	20.530	5.641	138.27	6.483
10mar.2020	730.6	81.66	42.01	112.39	155.15	15.460	122.03	31.040	20.540	5.644	138.24	6.481
11mar.2020	735.1	82.13	42.29	113.06	156.11	15.550	122.80	31.220	20.680	5.691	139.07	6.518
12mar.2020	742.1	82.88	42.72	114.12	157.60	15.694	124.00	31.510	20.900	5.763	140.38	6.578

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
13mar.2020	743.9	83.07	42.83	114.39	157.97	15.730	124.31	31.580	20.960	5.784	140.71	6.593
14mar.2020	740.7	82.72	42.64	113.90	157.29	15.663	123.76	31.450	20.870	5.758	140.10	6.565
15mar.2020	736.5	82.25	42.39	113.25	156.39	15.574	123.05	31.270	20.740	5.722	139.31	6.528
16mar.2020	734.0	81.97	42.25	112.87	155.86	15.521	122.64	31.160	20.670	5.702	138.83	6.506
17mar.2020	732.5	81.80	42.17	112.64	155.55	15.488	122.39	31.100	20.630	5.693	138.55	6.492
18mar.2020	731.6	81.69	42.12	112.49	155.36	15.468	122.25	31.060	20.620	5.689	138.38	6.484
19mar.2020	731.1	81.62	42.10	112.41	155.25	15.455	122.17	31.030	20.610	5.689	138.27	6.478
20mar.2020	735.9	82.13	42.40	113.13	156.27	15.553	123.00	31.230	20.760	5.740	139.16	6.519
21mar.2020	749.3	83.57	43.22	115.16	159.13	15.828	125.30	31.790	21.180	5.873	141.67	6.633
22mar.2020	760.7	84.79	43.90	116.87	161.53	16.060	127.23	32.260	21.530	5.986	143.78	6.730
23mar.2020	767.1	85.48	44.29	117.85	162.89	16.192	128.32	32.520	21.730	6.051	144.98	6.786
24mar.2020	771.6	85.97	44.56	118.53	163.85	16.286	129.08	32.710	21.870	6.097	145.82	6.825
25mar.2020	772.8	86.10	44.63	118.72	164.11	16.311	129.29	32.760	21.910	6.111	146.05	6.835
26mar.2020	771.7	85.98	44.57	118.54	163.87	16.287	129.10	32.710	21.880	6.103	145.84	6.825
27mar.2020	768.8	85.66	44.40	118.10	163.25	16.226	128.61	32.590	21.790	6.078	145.29	6.800
28mar.2020	766.3	85.38	44.25	117.72	162.73	16.174	128.20	32.490	21.720	6.059	144.83	6.778
29mar.2020	763.0	85.02	44.06	117.21	162.02	16.104	127.64	32.350	21.630	6.031	144.20	6.749
30mar.2020	758.2	84.48	43.78	116.47	161.00	16.003	126.83	32.140	21.480	5.989	143.29	6.706
31mar.2020	756.3	84.26	43.67	116.18	160.60	15.962	126.52	32.060	21.440	5.976	142.93	6.689
01abr.2020	760.5	84.70	43.94	116.81	161.50	16.047	127.26	32.230	21.570	6.022	143.71	6.724
02abr.2020	767.4	85.43	44.37	117.85	162.96	16.186	128.44	32.520	21.790	6.094	144.99	6.782
03abr.2020	775.5	86.29	44.86	119.07	164.68	16.351	129.83	32.850	22.050	6.177	146.49	6.851
04abr.2020	785.5	87.36	45.47	120.58	166.81	16.555	131.55	33.260	22.370	6.279	148.36	6.936
05abr.2020	793.0	88.16	45.94	121.71	168.40	16.707	132.83	33.570	22.610	6.356	149.75	6.999
06abr.2020	795.5	88.42	46.09	122.08	168.94	16.757	133.27	33.670	22.690	6.386	150.21	7.020
07abr.2020	794.8	88.34	46.06	121.97	168.78	16.741	133.15	33.640	22.680	6.384	150.07	7.014
08abr.2020	786.6	87.44	45.57	120.72	167.04	16.572	131.76	33.300	22.430	6.309	148.53	6.943

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
09abr.2020	770.2	85.67	44.58	118.22	163.54	16.233	128.96	32.610	21.930	6.154	145.46	6.801
10abr.2020	754.8	84.00	43.66	115.89	160.28	15.916	126.35	31.970	21.460	6.010	142.58	6.669
11abr.2020	744.8	82.91	43.07	114.37	158.15	15.708	124.66	31.550	21.160	5.919	140.71	6.582
12abr.2020	738.8	82.24	42.72	113.45	156.89	15.582	123.66	31.300	20.990	5.867	139.58	6.529
13abr.2020	735.2	81.84	42.51	112.90	156.13	15.506	123.07	31.150	20.890	5.838	138.91	6.497
14abr.2020	733.1	81.59	42.40	112.57	155.69	15.460	122.72	31.060	20.830	5.824	138.50	6.478
15abr.2020	731.9	81.44	42.33	112.37	155.42	15.431	122.53	31.000	20.810	5.818	138.25	6.465
16abr.2020	731.1	81.34	42.30	112.25	155.26	15.413	122.41	30.970	20.790	5.817	138.10	6.458
17abr.2020	730.7	81.27	42.29	112.17	155.17	15.401	122.35	30.940	20.790	5.819	138.01	6.452
18abr.2020	734.9	81.71	42.55	112.80	156.07	15.485	123.09	31.110	20.930	5.866	138.79	6.487
19abr.2020	758.8	84.26	44.02	116.41	161.16	15.973	127.19	32.100	21.680	6.106	143.25	6.691
20abr.2020	795.4	88.17	46.24	121.93	168.92	16.719	133.44	33.610	22.830	6.472	150.05	7.002
21abr.2020	821.2	90.93	47.81	125.83	174.40	17.246	137.85	34.670	23.630	6.732	154.86	7.222
22abr.2020	837.3	92.67	48.79	128.26	177.81	17.576	140.59	35.340	24.140	6.895	157.86	7.360
23abr.2020	847.0	93.72	49.37	129.73	179.87	17.777	142.24	35.740	24.440	6.994	159.67	7.444
24abr.2020	849.3	93.98	49.51	130.09	180.36	17.826	142.62	35.840	24.510	7.019	160.11	7.465
25abr.2020	846.3	93.67	49.32	129.63	179.70	17.765	142.09	35.720	24.410	6.990	159.54	7.439
26abr.2020	837.1	92.70	48.76	128.25	177.76	17.580	140.52	35.340	24.120	6.902	157.84	7.362
27abr.2020	820.9	90.97	47.77	125.80	174.31	17.249	137.74	34.670	23.620	6.743	154.82	7.224
28abr.2020	805.2	89.28	46.81	123.42	170.96	16.927	135.05	34.020	23.130	6.590	151.88	7.089
29abr.2020	802.4	88.97	46.65	123.00	170.39	16.869	134.60	33.910	23.050	6.567	151.37	7.065
30abr.2020	814.3	90.22	47.39	124.79	172.91	17.109	136.63	34.390	23.430	6.690	153.57	7.165
01may.2020	828.9	91.77	48.29	126.98	176.01	17.404	139.15	34.990	23.890	6.842	156.28	7.288
02may.2020	836.5	92.57	48.76	128.12	177.63	17.557	140.46	35.300	24.140	6.924	157.69	7.352
03may.2020	835.7	92.47	48.72	127.99	177.46	17.539	140.33	35.270	24.120	6.921	157.53	7.344
04may.2020	830.1	91.86	48.39	127.15	176.27	17.424	139.39	35.030	23.950	6.870	156.49	7.296
05may.2020	819.7	90.74	47.76	125.57	174.07	17.211	137.62	34.600	23.640	6.771	154.55	7.207

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
06may.2020	806.2	89.29	46.94	123.52	171.19	16.932	135.31	34.040	23.220	6.641	152.02	7.091
07may.2020	796.0	88.17	46.33	121.97	169.02	16.721	133.57	33.620	22.910	6.545	150.10	7.003
08may.2020	788.5	87.36	45.89	120.83	167.44	16.566	132.32	33.300	22.690	6.478	148.71	6.938
09may.2020	781.9	86.62	45.50	119.82	166.03	16.426	131.20	33.020	22.490	6.420	147.46	6.879
10may.2020	775.0	85.86	45.10	118.76	164.57	16.282	130.05	32.730	22.290	6.360	146.16	6.819
11may.2020	766.9	84.97	44.63	117.53	162.86	16.113	128.70	32.390	22.060	6.288	144.64	6.748
12may.2020	761.7	84.38	44.33	116.73	161.76	16.002	127.83	32.170	21.910	6.245	143.66	6.701
13may.2020	763.8	84.57	44.48	117.02	162.20	16.040	128.21	32.250	21.990	6.276	144.03	6.717
14may.2020	768.2	85.02	44.76	117.68	163.14	16.127	128.99	32.430	22.140	6.329	144.84	6.753
15may.2020	772.9	85.51	45.06	118.38	164.15	16.220	129.81	32.620	22.300	6.385	145.71	6.792
16may.2020	780.1	86.25	45.51	119.45	165.66	16.363	131.05	32.910	22.540	6.464	147.03	6.851
17may.2020	783.8	86.63	45.75	120.00	166.45	16.436	131.69	33.050	22.670	6.509	147.70	6.881
18may.2020	782.0	86.43	45.65	119.72	166.07	16.397	131.40	32.980	22.620	6.498	147.36	6.865
19may.2020	777.8	85.97	45.41	119.08	165.18	16.310	130.70	32.800	22.500	6.463	146.58	6.829
20may.2020	772.1	85.34	45.07	118.21	163.97	16.191	129.73	32.560	22.330	6.413	145.50	6.779
21may.2020	771.6	85.26	45.05	118.12	163.86	16.177	129.66	32.540	22.330	6.415	145.39	6.773
22may.2020	780.8	86.22	45.63	119.49	165.82	16.361	131.26	32.910	22.630	6.517	147.09	6.849
23may.2020	792.0	87.39	46.33	121.17	168.19	16.586	133.19	33.360	23.000	6.638	149.16	6.943
24may.2020	795.3	87.74	46.54	121.66	168.90	16.652	133.78	33.500	23.110	6.680	149.77	6.970
25may.2020	788.7	87.02	46.15	120.66	167.50	16.516	132.66	33.220	22.920	6.621	148.54	6.913
26may.2020	784.7	86.58	45.92	120.05	166.65	16.432	131.98	33.060	22.800	6.587	147.79	6.878
27may.2020	791.1	87.25	46.31	121.00	167.99	16.559	133.08	33.310	23.010	6.659	148.95	6.931
28may.2020	801.2	88.31	46.94	122.52	170.15	16.763	134.83	33.730	23.340	6.770	150.83	7.016
29may.2020	813.6	89.62	47.71	124.37	172.78	17.013	136.96	34.230	23.740	6.905	153.13	7.120
30may.2020	827.1	91.05	48.55	126.41	175.65	17.287	139.29	34.790	24.180	7.053	155.63	7.234
31may.2020	839.0	92.29	49.29	128.18	178.16	17.526	141.33	35.270	24.570	7.184	157.83	7.334
01jun.2020	847.7	93.21	49.83	129.49	180.01	17.701	142.83	35.630	24.850	7.284	159.44	7.407

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
02jun.2020	853.4	93.81	50.19	130.34	181.23	17.816	143.82	35.860	25.050	7.354	160.50	7.455
03jun.2020	855.1	93.98	50.31	130.59	181.58	17.849	144.12	35.930	25.110	7.382	160.80	7.468
04jun.2020	853.3	93.78	50.20	130.31	181.20	17.811	143.82	35.850	25.060	7.373	160.46	7.452
05jun.2020	850.2	93.44	50.02	129.83	180.52	17.745	143.28	35.720	24.970	7.350	159.86	7.425
06jun.2020	846.7	93.06	49.82	129.30	179.79	17.673	142.70	35.570	24.880	7.324	159.21	7.395
07jun.2020	843.8	92.73	49.65	128.84	179.16	17.610	142.20	35.450	24.790	7.302	158.65	7.369
08jun.2020	842.7	92.60	49.60	128.68	178.95	17.587	142.05	35.400	24.770	7.302	158.45	7.359
09jun.2020	846.0	92.93	49.81	129.16	179.64	17.650	142.62	35.530	24.890	7.346	159.05	7.385
10jun.2020	853.2	93.67	50.27	130.23	181.17	17.793	143.87	35.820	25.130	7.432	160.37	7.444
11jun.2020	862.4	94.63	50.84	131.61	183.13	17.978	145.47	36.200	25.440	7.538	162.07	7.521
12jun.2020	875.4	95.99	51.65	133.55	185.87	18.239	147.70	36.720	25.860	7.683	164.47	7.630
13jun.2020	888.4	97.37	52.46	135.51	188.65	18.503	149.95	37.260	26.280	7.829	166.89	7.740
14jun.2020	896.7	98.25	52.97	136.75	190.40	18.670	151.37	37.600	26.550	7.925	168.42	7.809
15jun.2020	904.1	99.03	53.44	137.86	191.97	18.819	152.65	37.900	26.800	8.011	169.79	7.871
16jun.2020	913.3	99.99	54.01	139.24	193.92	19.004	154.23	38.270	27.100	8.117	171.49	7.948
17jun.2020	920.2	100.71	54.44	140.26	195.37	19.141	155.41	38.550	27.320	8.198	172.75	8.005
18jun.2020	922.7	100.97	54.60	140.64	195.91	19.192	155.85	38.650	27.410	8.233	173.22	8.026
19jun.2020	925.1	101.22	54.76	140.99	196.42	19.239	156.27	38.750	27.500	8.267	173.66	8.046
20jun.2020	926.8	101.38	54.87	141.24	196.78	19.271	156.58	38.820	27.570	8.295	173.96	8.059
21jun.2020	926.7	101.35	54.88	141.20	196.75	19.265	156.57	38.810	27.570	8.304	173.92	8.057
22jun.2020	925.8	101.23	54.84	141.06	196.57	19.244	156.44	38.760	27.560	8.308	173.75	8.048
23jun.2020	924.1	101.02	54.76	140.78	196.20	19.204	156.17	38.690	27.530	8.304	173.41	8.031
24jun.2020	920.7	100.63	54.57	140.26	195.48	19.131	155.61	38.540	27.440	8.284	172.77	8.000
25jun.2020	914.3	99.93	54.20	139.28	194.12	18.997	154.54	38.270	27.260	8.231	171.56	7.944
26jun.2020	906.6	99.08	53.75	138.11	192.50	18.837	153.25	37.950	27.030	8.164	170.12	7.877
27jun.2020	898.9	98.22	53.29	136.92	190.85	18.674	151.94	37.620	26.800	8.096	168.65	7.809
28jun.2020	891.4	97.40	52.86	135.78	189.27	18.518	150.69	37.310	26.590	8.032	167.25	7.743

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	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
29jun.2020	885.3	96.71	52.50	134.83	187.96	18.387	149.66	37.040	26.410	7.981	166.09	7.689
30jun.2020	878.2	95.93	52.09	133.75	186.46	18.239	148.47	36.750	26.210	7.920	164.76	7.627
01jul.2020	870.3	95.06	51.62	132.55	184.78	18.075	147.14	36.420	25.970	7.849	163.27	7.558
02jul.2020	866.1	94.59	51.39	131.90	183.90	17.985	146.45	36.240	25.860	7.818	162.48	7.520
03jul.2020	865.7	94.50	51.38	131.81	183.80	17.970	146.41	36.210	25.870	7.829	162.37	7.513
04jul.2020	864.9	94.37	51.37	131.66	183.64	17.947	146.31	36.170	25.870	7.838	162.20	7.504
05jul.2020	860.6	93.88	51.13	131.00	182.73	17.854	145.60	35.980	25.760	7.810	161.38	7.464
06jul.2020	853.8	93.13	50.73	129.96	181.29	17.712	144.46	35.690	25.560	7.753	160.10	7.405
07jul.2020	845.9	92.26	50.27	128.75	179.61	17.548	143.13	35.360	25.330	7.681	158.62	7.336
08jul.2020	843.8	92.01	50.16	128.41	179.15	17.500	142.79	35.270	25.280	7.672	158.20	7.316
09jul.2020	848.5	92.47	50.48	129.11	180.17	17.590	143.64	35.450	25.460	7.741	159.07	7.353
10jul.2020	852.1	92.81	50.73	129.62	180.93	17.656	144.30	35.590	25.610	7.802	159.70	7.380
11jul.2020	854.1	92.96	50.89	129.88	181.35	17.687	144.67	35.660	25.700	7.848	160.03	7.393
12jul.2020	855.3	93.05	51.01	130.04	181.61	17.705	144.93	35.700	25.780	7.887	160.23	7.400
13jul.2020	854.7	92.93	51.00	129.92	181.48	17.685	144.86	35.660	25.790	7.906	160.09	7.391
14jul.2020	851.4	92.55	50.83	129.40	180.78	17.613	144.33	35.510	25.720	7.895	159.45	7.361
15jul.2020	847.0	92.04	50.58	128.71	179.84	17.518	143.60	35.320	25.600	7.869	158.61	7.321
16jul.2020	842.6	91.54	50.34	128.03	178.90	17.422	142.87	35.130	25.490	7.843	157.76	7.280
17jul.2020	839.2	91.14	50.16	127.50	178.19	17.349	142.32	34.980	25.410	7.828	157.12	7.250
18jul.2020	834.7	90.63	49.91	126.80	177.23	17.252	141.58	34.790	25.290	7.799	156.26	7.209
19jul.2020	823.8	89.44	49.25	125.13	174.90	17.025	139.72	34.330	24.960	7.697	154.20	7.114
20jul.2020	816.9	88.67	48.86	124.07	173.44	16.879	138.57	34.040	24.760	7.642	152.90	7.053
21jul.2020	821.5	89.10	49.18	124.74	174.42	16.964	139.41	34.220	24.950	7.718	153.73	7.088
22jul.2020	825.8	89.51	49.48	125.36	175.33	17.044	140.19	34.380	25.120	7.790	154.49	7.121
23jul.2020	827.2	89.62	49.59	125.54	175.62	17.066	140.45	34.430	25.190	7.827	154.72	7.129
24jul.2020	831.8	90.06	49.91	126.21	176.61	17.153	141.29	34.610	25.370	7.904	155.55	7.165
25jul.2020	842.1	91.09	50.59	127.71	178.77	17.350	143.09	35.010	25.750	8.049	157.41	7.247

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	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
26jul.2020	854.3	92.31	51.39	129.50	181.36	17.587	145.24	35.490	26.190	8.221	159.63	7.345
27jul.2020	868.7	93.77	52.33	131.62	184.41	17.868	147.77	36.060	26.700	8.421	162.25	7.461
28jul.2020	881.8	95.10	53.19	133.55	187.20	18.125	150.08	36.590	27.180	8.609	164.65	7.568
29jul.2020	888.9	95.79	53.67	134.58	188.69	18.259	151.34	36.860	27.450	8.727	165.92	7.624
30jul.2020	892.2	96.09	53.92	135.04	189.39	18.318	151.95	36.990	27.600	8.803	166.50	7.648
31jul.2020	895.2	96.34	54.14	135.44	190.00	18.368	152.50	37.090	27.740	8.876	167.00	7.668
01ago.2020	897.1	96.49	54.30	135.69	190.40	18.397	152.86	37.150	27.850	8.936	167.31	7.680
02ago.2020	896.8	96.41	54.33	135.62	190.35	18.385	152.87	37.130	27.880	8.972	167.23	7.674
03ago.2020	898.6	96.53	54.48	135.84	190.71	18.409	153.22	37.180	27.990	9.034	167.51	7.684
04ago.2020	903.3	96.95	54.83	136.50	191.71	18.493	154.10	37.360	28.200	9.138	168.33	7.718
05ago.2020	908.9	97.44	55.24	137.27	192.88	18.590	155.12	37.560	28.450	9.256	169.30	7.758
06ago.2020	915.6	98.05	55.73	138.22	194.29	18.711	156.34	37.810	28.740	9.393	170.47	7.807
07ago.2020	923.0	98.75	56.26	139.27	195.86	18.846	157.70	38.090	29.050	9.542	171.78	7.863
08ago.2020	927.0	99.08	56.57	139.80	196.69	18.912	158.44	38.230	29.250	9.650	172.45	7.890
09ago.2020	928.2	99.11	56.72	139.92	196.93	18.921	158.72	38.250	29.360	9.730	172.61	7.893
10ago.2020	927.7	98.93	56.78	139.77	196.82	18.892	158.74	38.200	29.440	9.802	172.44	7.879
11ago.2020	925.1	98.49	56.74	139.28	196.27	18.814	158.43	38.050	29.470	9.867	171.85	7.845
12ago.2020	920.4	97.71	56.64	138.41	195.26	18.676	157.83	37.790	29.500	9.950	170.80	7.785
13ago.2020	914.0	96.60	56.56	137.18	193.90	18.479	157.09	37.420	29.590	10.098	169.34	7.699
14ago.2020	906.8	95.26	56.56	135.73	192.34	18.242	156.34	36.970	29.810	10.365	167.61	7.596
15ago.2020	899.2	93.73	56.68	134.06	190.58	17.971	155.57	36.460	30.210	10.863	165.62	7.478
16ago.2020	890.4	92.06	56.84	131.95	188.14	17.659	154.39	35.850	30.940	12.117	163.08	7.345
17ago.2020	881.4	91.71	55.84	130.63	185.58	17.553	151.82	35.570	30.630	13.358	161.35	7.311
18ago.2020	875.4	92.45	54.34	130.59	184.32	17.647	149.53	35.680	29.360	12.963	161.15	7.361
19ago.2020	874.6	93.19	53.61	131.18	184.52	17.770	148.94	35.890	28.460	11.795	161.80	7.417
20ago.2020	879.2	94.14	53.51	132.32	185.79	17.945	149.52	36.230	28.070	11.016	163.16	7.492
21ago.2020	885.6	95.08	53.69	133.55	187.37	18.120	150.55	36.580	27.940	10.493	164.66	7.566

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
22ago.2020	892.4	95.93	54.00	134.73	188.96	18.282	151.72	36.910	27.960	10.148	166.11	7.634
23ago.2020	901.8	96.97	54.54	136.23	191.05	18.483	153.37	37.310	28.160	9.967	167.95	7.717
24ago.2020	911.9	98.06	55.16	137.79	193.28	18.692	155.16	37.740	28.440	9.890	169.89	7.804
25ago.2020	920.4	98.95	55.70	139.09	195.14	18.865	156.68	38.090	28.690	9.858	171.50	7.876
26ago.2020	926.9	99.62	56.12	140.07	196.54	18.993	157.83	38.350	28.900	9.849	172.71	7.929
27ago.2020	930.6	99.99	56.38	140.62	197.35	19.065	158.51	38.500	29.030	9.841	173.39	7.959
28ago.2020	930.1	99.91	56.37	140.53	197.25	19.051	158.46	38.480	29.030	9.805	173.29	7.953
29ago.2020	925.1	99.36	56.08	139.77	196.20	18.947	157.63	38.270	28.890	9.733	172.35	7.909
30ago.2020	917.7	98.54	55.64	138.64	194.63	18.791	156.38	37.950	28.670	9.643	170.96	7.844
31ago.2020	909.4	97.63	55.16	137.38	192.88	18.619	154.99	37.610	28.420	9.554	169.41	7.772
01sept.2020	903.4	96.95	54.82	136.45	191.61	18.491	154.00	37.350	28.260	9.500	168.27	7.718
02sept.2020	903.3	96.88	54.85	136.40	191.57	18.479	154.02	37.330	28.290	9.524	168.21	7.712
03sept.2020	909.8	97.51	55.31	137.34	192.97	18.602	155.21	37.580	28.550	9.637	169.38	7.763
04sept.2020	922.2	98.74	56.13	139.15	195.59	18.840	157.40	38.070	29.010	9.824	171.63	7.861
05sept.2020	936.1	100.12	57.04	141.18	198.52	19.107	159.83	38.610	29.510	10.031	174.13	7.972
06sept.2020	944.1	100.91	57.59	142.35	200.22	19.261	161.27	38.930	29.820	10.165	175.58	8.035
07sept.2020	950.2	101.49	58.01	143.22	201.51	19.374	162.36	39.160	30.060	10.276	176.67	8.082
08sept.2020	961.4	102.60	58.76	144.85	203.88	19.589	164.34	39.600	30.480	10.455	178.69	8.171
09sept.2020	973.0	103.74	59.53	146.54	206.33	19.810	166.39	40.050	30.920	10.642	180.78	8.263
10sept.2020	978.9	104.30	59.94	147.38	207.57	19.919	167.45	40.280	31.160	10.757	181.82	8.307
11sept.2020	979.8	104.33	60.04	147.47	207.75	19.927	167.65	40.300	31.230	10.809	181.95	8.310
12sept.2020	980.6	104.35	60.14	147.55	207.91	19.933	167.83	40.310	31.310	10.864	182.05	8.312
13sept.2020	979.6	104.18	60.13	147.36	207.70	19.902	167.72	40.260	31.330	10.901	181.82	8.299
14sept.2020	973.1	103.43	59.77	146.35	206.32	19.761	166.66	39.970	31.160	10.867	180.58	8.239
15sept.2020	964.1	102.41	59.26	144.95	204.40	19.568	165.15	39.590	30.910	10.804	178.86	8.158
16sept.2020	954.2	101.30	58.70	143.43	202.31	19.359	163.52	39.170	30.640	10.734	177.00	8.070
17sept.2020	944.9	100.23	58.18	141.98	200.33	19.158	161.98	38.760	30.400	10.674	175.21	7.986

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
18sept.2020	940.6	99.68	57.98	141.27	199.41	19.055	161.31	38.560	30.330	10.686	174.35	7.942
19sept.2020	947.6	100.28	58.52	142.24	200.90	19.176	162.63	38.820	30.650	10.858	175.56	7.991
20sept.2020	967.7	102.21	59.89	145.13	205.13	19.552	166.21	39.590	31.440	11.212	179.15	8.146
21sept.2020	985.9	103.95	61.14	147.74	208.97	19.891	169.48	40.290	32.160	11.549	182.39	8.286
22sept.2020	992.3	104.49	61.65	148.62	210.33	19.999	170.71	40.510	32.490	11.730	183.49	8.330
23sept.2020	993.5	104.46	61.83	148.69	210.56	19.998	171.01	40.520	32.630	11.847	183.60	8.328
24sept.2020	990.5	103.99	61.77	148.15	209.92	19.913	170.63	40.360	32.650	11.922	182.94	8.292
25sept.2020	983.4	103.06	61.45	146.96	208.39	19.742	169.53	40.020	32.550	11.954	181.50	8.219
26sept.2020	973.8	101.85	61.00	145.41	206.36	19.518	168.05	39.580	32.380	11.974	179.60	8.124
27sept.2020	962.6	100.43	60.47	143.57	203.96	19.254	166.30	39.060	32.180	11.998	177.36	8.012
28sept.2020	950.3	98.82	59.93	141.54	201.33	18.958	164.42	38.480	32.000	12.053	174.88	7.885
29sept.2020	937.1	96.92	59.46	139.24	198.50	18.613	162.54	37.810	31.920	12.204	172.11	7.737
30sept.2020	921.6	92.99	60.12	135.53	195.16	17.946	161.70	36.600	33.000	13.366	167.78	7.439
01oct.2020	905.1	87.26	62.03	130.38	191.13	16.983	161.80	34.870	35.540	16.211	161.85	7.005
02oct.2020	778.7	70.11	57.13	107.75	161.74	13.766	141.39	28.480	35.740	22.727	134.23	5.648
03oct.2020	264.4	28.69	15.82	40.15	56.12	5.462	44.85	11.010	8.030	2.527	49.47	2.282
04oct.2020	265.3	28.82	15.85	40.32	56.35	5.486	45.01	11.060	8.020	2.438	49.69	2.292
05oct.2020	270.0	29.29	16.16	41.01	57.34	5.577	45.82	11.250	8.180	2.498	50.54	2.330
06oct.2020	278.2	30.14	16.68	42.23	59.09	5.740	47.25	11.580	8.460	2.599	52.05	2.398
07oct.2020	286.2	30.96	17.18	43.41	60.77	5.898	48.64	11.900	8.730	2.699	53.51	2.463
08oct.2020	290.9	31.45	17.49	44.11	61.77	5.992	49.46	12.090	8.900	2.761	54.38	2.502
09oct.2020	292.9	31.65	17.61	44.41	62.19	6.031	49.80	12.170	8.970	2.790	54.74	2.519
10oct.2020	292.3	31.59	17.58	44.32	62.07	6.019	49.71	12.150	8.950	2.788	54.64	2.514
11oct.2020	290.2	31.37	17.45	44.01	61.63	5.977	49.35	12.060	8.890	2.767	54.25	2.496
12oct.2020	287.4	31.07	17.28	43.58	61.03	5.919	48.86	11.950	8.800	2.738	53.72	2.472
13oct.2020	285.1	30.82	17.14	43.23	60.53	5.872	48.47	11.850	8.730	2.716	53.29	2.452
14oct.2020	283.7	30.67	17.06	43.02	60.24	5.843	48.24	11.790	8.690	2.705	53.03	2.440

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
15oct.2020	282.3	30.50	16.98	42.79	59.93	5.812	47.99	11.730	8.650	2.693	52.75	2.427
16oct.2020	281.0	30.36	16.90	42.59	59.66	5.784	47.78	11.670	8.610	2.683	52.51	2.416
17oct.2020	280.8	30.33	16.90	42.56	59.62	5.779	47.75	11.660	8.610	2.686	52.46	2.413
18oct.2020	283.3	30.58	17.06	42.93	60.15	5.828	48.20	11.760	8.700	2.721	52.92	2.434
19oct.2020	287.3	30.99	17.33	43.53	61.01	5.907	48.91	11.920	8.840	2.776	53.66	2.466
20oct.2020	289.4	31.20	17.47	43.83	61.45	5.947	49.28	12.010	8.920	2.808	54.04	2.483
21oct.2020	289.3	31.18	17.46	43.81	61.43	5.944	49.26	12.000	8.920	2.812	54.02	2.482
22oct.2020	288.7	31.11	17.43	43.72	61.30	5.931	49.16	11.970	8.910	2.809	53.90	2.476
23oct.2020	288.0	31.03	17.39	43.60	61.15	5.915	49.05	11.940	8.890	2.806	53.76	2.470
24oct.2020	287.0	30.92	17.34	43.45	60.94	5.894	48.89	11.900	8.860	2.800	53.58	2.461
25oct.2020	286.0	30.80	17.28	43.29	60.72	5.872	48.71	11.860	8.840	2.792	53.38	2.451
26oct.2020	284.2	30.61	17.17	43.02	60.34	5.835	48.41	11.780	8.780	2.776	53.04	2.436
27oct.2020	281.6	30.32	17.02	42.63	59.79	5.781	47.97	11.670	8.700	2.750	52.56	2.413
28oct.2020	280.3	30.17	16.94	42.42	59.50	5.753	47.74	11.620	8.660	2.740	52.30	2.402
29oct.2020	285.1	30.66	17.25	43.13	60.52	5.846	48.59	11.810	8.840	2.805	53.18	2.440
30oct.2020	297.5	31.93	18.05	44.96	63.15	6.091	50.75	12.300	9.270	2.967	55.45	2.542
31oct.2020	340.6	36.51	20.70	51.44	72.29	6.966	58.14	14.070	10.650	3.446	63.44	2.907
01nov.2020	364.4	39.00	22.20	55.01	77.35	7.444	62.26	15.040	11.450	3.740	67.85	3.106
02nov.2020	354.8	37.89	21.67	53.50	75.29	7.235	60.67	14.630	11.200	3.688	65.99	3.018
03nov.2020	354.5	37.84	21.66	53.44	75.22	7.225	60.63	14.610	11.210	3.705	65.92	3.014
04nov.2020	355.1	37.91	21.71	53.53	75.36	7.238	60.74	14.630	11.240	3.721	66.04	3.019
05nov.2020	354.0	37.80	21.64	53.37	75.12	7.217	60.55	14.590	11.200	3.711	65.84	3.010
06nov.2020	352.6	37.65	21.55	53.16	74.82	7.188	60.31	14.530	11.160	3.699	65.58	2.998
07nov.2020	353.9	37.77	21.64	53.34	75.09	7.212	60.53	14.580	11.210	3.724	65.80	3.008
08nov.2020	358.7	38.25	21.95	54.05	76.11	7.305	61.38	14.770	11.380	3.794	66.68	3.047
09nov.2020	362.4	38.62	22.19	54.58	76.88	7.376	62.02	14.920	11.510	3.850	67.34	3.076
10nov.2020	363.4	38.71	22.26	54.72	77.09	7.394	62.20	14.950	11.560	3.872	67.52	3.084

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
11nov.2020	364.8	38.85	22.36	54.92	77.39	7.420	62.46	15.010	11.610	3.899	67.77	3.094
12nov.2020	367.9	39.15	22.57	55.37	78.04	7.479	63.00	15.130	11.730	3.951	68.32	3.118
13nov.2020	370.2	39.37	22.73	55.70	78.53	7.522	63.42	15.220	11.820	3.994	68.73	3.136
14nov.2020	369.0	39.24	22.67	55.52	78.28	7.497	63.23	15.170	11.800	3.989	68.51	3.126
15nov.2020	366.4	38.95	22.51	55.12	77.72	7.442	62.79	15.050	11.720	3.967	68.02	3.103
16nov.2020	375.5	39.93	23.07	56.50	79.66	7.629	64.34	15.430	12.000	4.063	69.72	3.181
17nov.2020	380.0	40.38	23.36	57.16	80.60	7.716	65.12	15.610	12.160	4.126	70.53	3.217
18nov.2020	3855.1	417.55	231.26	584.59	817.74	79.496	654.15	160.340	117.980	38.256	720.47	33.214
19nov.2020	4168.7	455.05	247.61	634.27	884.33	86.507	704.57	174.270	125.210	39.406	781.31	36.175
20nov.2020	1313.1	137.91	81.81	196.53	278.46	26.413	226.26	53.530	43.130	15.347	242.69	10.997
21nov.2020	483.2	51.33	29.70	72.65	102.45	9.809	82.78	19.840	15.480	5.389	89.65	4.089
22nov.2020	407.9	43.16	25.21	61.23	86.50	8.254	70.05	16.710	13.200	4.577	75.58	3.440
23nov.2020	390.4	41.27	24.16	58.58	82.78	7.893	67.07	15.980	12.660	4.401	72.30	3.289
24nov.2020	383.6	40.55	23.74	57.56	81.35	7.756	65.91	15.700	12.440	4.323	71.05	3.232
25nov.2020	375.7	39.71	23.25	56.38	79.67	7.596	64.55	15.380	12.190	4.230	69.59	3.165
26nov.2020	367.4	38.84	22.74	55.14	77.92	7.429	63.13	15.040	11.920	4.132	68.06	3.095
27nov.2020	359.6	38.01	22.26	53.97	76.27	7.271	61.79	14.720	11.660	4.042	66.61	3.029
28nov.2020	354.3	37.43	21.94	53.16	75.14	7.161	60.89	14.500	11.500	3.985	65.62	2.984
29nov.2020	352.5	37.22	21.84	52.87	74.76	7.120	60.60	14.420	11.460	3.976	65.27	2.966
30nov.2020	350.3	36.96	21.72	52.53	74.29	7.072	60.24	14.320	11.400	3.963	64.84	2.946
01dic.2020	345.6	36.45	21.44	51.81	73.29	6.975	59.44	14.130	11.250	3.915	63.96	2.905
02dic.2020	339.5	35.80	21.06	50.89	72.00	6.850	58.40	13.880	11.060	3.848	62.83	2.853
03dic.2020	332.3	35.03	20.62	49.81	70.48	6.705	57.17	13.580	10.830	3.766	61.50	2.793
04dic.2020	324.5	34.21	20.14	48.65	68.83	6.547	55.84	13.260	10.580	3.675	60.06	2.727
05dic.2020	316.4	33.36	19.64	47.44	67.12	6.384	54.45	12.930	10.310	3.579	58.57	2.659
06dic.2020	308.4	32.51	19.15	46.23	65.42	6.221	53.07	12.600	10.050	3.484	57.08	2.591
07dic.2020	300.6	31.67	18.66	45.05	63.76	6.062	51.73	12.280	9.800	3.391	55.62	2.525

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
08dic.2020	292.8	30.85	18.18	43.89	62.11	5.905	50.39	11.960	9.540	3.298	54.18	2.459
09dic.2020	285.0	30.03	17.70	42.72	60.46	5.748	49.06	11.650	9.290	3.206	52.75	2.394
10dic.2020	277.4	29.22	17.23	41.58	58.85	5.594	47.75	11.330	9.040	3.115	51.33	2.330
11dic.2020	269.9	28.43	16.76	40.45	57.26	5.442	46.46	11.030	8.800	3.025	49.95	2.266
12dic.2020	262.5	27.65	16.31	39.35	55.70	5.293	45.20	10.720	8.560	2.937	48.59	2.204
13dic.2020	255.3	26.89	15.86	38.27	54.17	5.148	43.96	10.430	8.320	2.850	47.25	2.144
14dic.2020	248.2	26.14	15.42	37.21	52.68	5.005	42.75	10.140	8.090	2.765	45.94	2.084
15dic.2020	241.3	25.41	14.99	36.17	51.20	4.864	41.55	9.860	7.860	2.681	44.66	2.026
16dic.2020	234.4	24.68	14.56	35.14	49.74	4.725	40.37	9.570	7.630	2.597	43.38	1.968
17dic.2020	227.5	23.96	14.13	34.11	48.29	4.588	39.19	9.300	7.410	2.513	42.12	1.910
18dic.2020	220.7	23.24	13.71	33.09	46.84	4.450	38.01	9.020	7.180	2.429	40.86	1.853
19dic.2020	213.8	22.52	13.27	32.06	45.38	4.311	36.82	8.740	6.950	2.343	39.58	1.795
20dic.2020	207.1	21.82	12.86	31.06	43.97	4.178	35.68	8.470	6.730	2.260	38.36	1.740
21dic.2020	201.0	21.18	12.48	30.16	42.69	4.056	34.63	8.220	6.530	2.185	37.23	1.689
22dic.2020	195.6	20.61	12.14	29.34	41.53	3.946	33.70	8.000	6.350	2.120	36.23	1.643
23dic.2020	190.4	20.06	11.82	28.56	40.44	3.841	32.81	7.780	6.180	2.059	35.27	1.599
24dic.2020	185.6	19.55	11.53	27.85	39.43	3.744	31.99	7.590	6.030	2.004	34.38	1.559
25dic.2020	184.3	19.38	11.46	27.63	39.14	3.713	31.78	7.530	6.000	1.998	34.12	1.546
26dic.2020	183.9	19.32	11.46	27.56	39.06	3.701	31.74	7.500	6.000	2.005	34.03	1.541
27dic.2020	181.6	19.06	11.32	27.20	38.56	3.652	31.34	7.400	5.930	1.982	33.59	1.520
28dic.2020	178.7	18.75	11.15	26.77	37.97	3.594	30.86	7.290	5.850	1.953	33.07	1.496
29dic.2020	177.1	18.56	11.06	26.52	37.62	3.559	30.60	7.220	5.800	1.942	32.75	1.481
30dic.2020	177.1	18.54	11.08	26.50	37.62	3.554	30.62	7.210	5.830	1.958	32.74	1.479
31dic.2020	176.3	18.43	11.05	26.36	37.45	3.534	30.50	7.170	5.820	1.961	32.57	1.470
01ene.2021	174.9	18.26	10.97	26.14	37.14	3.503	30.27	7.110	5.780	1.953	32.29	1.457
02ene.2021	173.2	18.07	10.88	25.88	36.79	3.467	29.99	7.040	5.740	1.940	31.98	1.442
03ene.2021	171.4	17.86	10.77	25.60	36.40	3.428	29.68	6.960	5.680	1.925	31.63	1.426

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
04ene.2021	169.1	17.62	10.64	25.26	35.93	3.382	29.31	6.870	5.620	1.904	31.21	1.406
05ene.2021	162.6	16.96	10.21	24.29	34.54	3.254	28.16	6.600	5.380	1.813	30.01	1.353
06ene.2021	152.0	15.90	9.51	22.74	32.29	3.050	26.28	6.190	4.990	1.655	28.09	1.269
07ene.2021	143.6	15.06	8.96	21.51	30.52	2.887	24.81	5.860	4.690	1.532	26.57	1.202
08ene.2021	138.1	14.50	8.60	20.70	29.35	2.779	23.85	5.640	4.490	1.456	25.57	1.157
09ene.2021	134.3	14.11	8.36	20.14	28.55	2.703	23.19	5.480	4.360	1.407	24.87	1.125
10ene.2021	134.9	14.14	8.42	20.21	28.68	2.711	23.32	5.500	4.400	1.426	24.97	1.128
11ene.2021	137.0	14.31	8.59	20.50	29.13	2.746	23.73	5.570	4.510	1.475	25.33	1.142
12ene.2021	133.5	13.94	8.38	19.97	28.39	2.674	23.13	5.430	4.400	1.439	24.67	1.112
13ene.2021	128.0	13.36	8.03	19.14	27.21	2.564	22.17	5.200	4.210	1.369	23.65	1.066
14ene.2021	123.4	12.89	7.74	18.47	26.25	2.473	21.39	5.020	4.060	1.313	22.82	1.028
15ene.2021	119.1	12.44	7.47	17.83	25.34	2.388	20.64	4.850	3.910	1.258	22.03	0.993
16ene.2021	115.4	12.06	7.23	17.27	24.55	2.314	19.99	4.700	3.780	1.209	21.34	0.962
17ene.2021	112.9	11.79	7.08	16.90	24.02	2.264	19.57	4.590	3.700	1.179	20.88	0.941
18ene.2021	111.2	11.61	6.98	16.65	23.67	2.229	19.28	4.520	3.650	1.161	20.57	0.927
19ene.2021	110.0	11.48	6.91	16.46	23.41	2.203	19.08	4.470	3.610	1.150	20.34	0.916
20ene.2021	109.1	11.37	6.86	16.32	23.22	2.183	18.94	4.430	3.590	1.144	20.17	0.908
21ene.2021	108.4	11.28	6.82	16.20	23.06	2.166	18.82	4.400	3.580	1.140	20.02	0.900
22ene.2021	107.7	11.19	6.79	16.09	22.92	2.151	18.72	4.370	3.560	1.137	19.89	0.894
23ene.2021	107.1	11.12	6.76	16.00	22.80	2.137	18.62	4.340	3.550	1.135	19.77	0.888
24ene.2021	106.6	11.04	6.74	15.90	22.68	2.123	18.54	4.320	3.540	1.134	19.66	0.882
25ene.2021	106.0	10.97	6.71	15.82	22.56	2.110	18.46	4.290	3.530	1.134	19.55	0.877
26ene.2021	105.5	10.91	6.69	15.73	22.45	2.098	18.38	4.270	3.530	1.133	19.45	0.871
27ene.2021	105.0	10.84	6.67	15.65	22.35	2.086	18.30	4.240	3.520	1.132	19.35	0.866
28ene.2021	104.5	10.79	6.64	15.58	22.24	2.076	18.22	4.220	3.500	1.129	19.26	0.862
29ene.2021	104.0	10.74	6.61	15.50	22.14	2.066	18.14	4.200	3.490	1.126	19.17	0.858
30ene.2021	103.6	10.68	6.59	15.43	22.04	2.056	18.07	4.180	3.480	1.124	19.08	0.854

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
31ene.2021	103.1	10.63	6.56	15.35	21.94	2.045	17.99	4.160	3.470	1.122	18.99	0.849
01feb.2021	102.7	10.57	6.54	15.28	21.85	2.034	17.92	4.140	3.460	1.121	18.89	0.845
02feb.2021	102.2	10.51	6.52	15.20	21.75	2.023	17.85	4.120	3.450	1.121	18.80	0.840
03feb.2021	101.7	10.45	6.50	15.13	21.65	2.012	17.78	4.100	3.450	1.121	18.71	0.835
04feb.2021	101.3	10.39	6.49	15.05	21.56	2.001	17.72	4.070	3.440	1.122	18.62	0.830
05feb.2021	100.8	10.33	6.47	14.98	21.46	1.990	17.65	4.050	3.440	1.123	18.53	0.825
06feb.2021	100.4	10.26	6.45	14.90	21.37	1.978	17.59	4.030	3.440	1.125	18.43	0.821
07feb.2021	100.0	10.20	6.44	14.82	21.28	1.967	17.53	4.010	3.430	1.127	18.34	0.816
08feb.2021	99.5	10.13	6.43	14.75	21.19	1.955	17.47	3.990	3.430	1.130	18.25	0.811
09feb.2021	99.2	10.08	6.42	14.68	21.12	1.945	17.43	3.970	3.430	1.135	18.18	0.806
10feb.2021	100.6	10.18	6.54	14.87	21.42	1.967	17.71	4.010	3.510	1.171	18.41	0.815
11feb.2021	107.9	10.84	7.08	15.89	22.96	2.096	19.07	4.280	3.830	1.314	19.69	0.868
12feb.2021	117.7	11.71	7.81	17.26	25.03	2.268	20.88	4.640	4.270	1.516	21.39	0.938
13feb.2021	124.4	12.29	8.32	18.18	26.45	2.384	22.14	4.880	4.590	1.666	22.55	0.985
14feb.2021	129.8	12.74	8.74	18.92	27.58	2.475	23.15	5.070	4.840	1.791	23.47	1.022
15feb.2021	133.7	13.05	9.05	19.44	28.40	2.538	23.90	5.210	5.040	1.895	24.12	1.047
16feb.2021	135.8	13.16	9.26	19.68	28.83	2.563	24.34	5.260	5.190	1.978	24.43	1.057
17feb.2021	136.5	13.08	9.41	19.69	28.97	2.553	24.59	5.250	5.320	2.064	24.46	1.052
18feb.2021	135.1	12.80	9.43	19.41	28.68	2.505	24.47	5.160	5.370	2.119	24.12	1.030
19feb.2021	128.4	12.07	9.04	18.39	27.27	2.365	23.35	4.880	5.180	2.048	22.87	0.972
20feb.2021	119.2	11.14	8.44	17.03	25.32	2.185	21.73	4.520	4.840	1.903	21.19	0.897
21feb.2021	113.1	10.48	8.06	16.11	24.03	2.060	20.69	4.260	4.640	1.827	20.06	0.845
22feb.2021	107.9	9.91	7.77	15.32	22.94	1.952	19.84	4.050	4.500	1.779	19.08	0.799
23feb.2021	103.2	9.36	7.52	14.58	21.94	1.849	19.07	3.840	4.390	1.749	18.18	0.756
24feb.2021	99.7	8.90	7.36	13.99	21.18	1.764	18.53	3.670	4.340	1.754	17.46	0.720
25feb.2021	97.8	8.58	7.34	13.63	20.76	1.707	18.30	3.560	4.370	1.806	17.02	0.695
26feb.2021	96.7	8.33	7.39	13.37	20.51	1.662	18.22	3.480	4.450	1.884	16.72	0.676

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
27feb.2021	94.1	7.97	7.30	12.91	19.94	1.596	17.84	3.350	4.450	1.917	16.16	0.647
28feb.2021	91.3	7.60	7.19	12.44	19.33	1.528	17.42	3.220	4.430	1.945	15.59	0.619
01mar.2021	89.4	7.30	7.16	12.07	18.89	1.472	17.16	3.110	4.470	2.002	15.14	0.595
02mar.2021	87.9	7.03	7.17	11.75	18.54	1.423	16.99	3.010	4.530	2.085	14.76	0.574
03mar.2021	86.6	6.77	7.21	11.46	18.23	1.377	16.87	2.920	4.630	2.190	14.41	0.554
04mar.2021	85.5	6.52	7.26	11.17	17.93	1.330	16.77	2.840	4.740	2.318	14.07	0.534
05mar.2021	84.3	6.25	7.33	10.87	17.62	1.282	16.67	2.740	4.880	2.472	13.71	0.513
06mar.2021	83.1	5.97	7.41	10.54	17.29	1.231	16.56	2.650	5.030	2.655	13.32	0.491
07mar.2021	81.9	5.67	7.49	10.19	16.91	1.177	16.43	2.540	5.210	2.876	12.90	0.468
08mar.2021	80.4	5.35	7.57	9.79	16.47	1.117	16.26	2.420	5.410	3.145	12.42	0.442
09mar.2021	78.5	4.99	7.62	9.31	15.90	1.048	15.98	2.290	5.610	3.459	11.84	0.414
10mar.2021	78.6	4.75	7.89	9.04	15.68	1.003	16.08	2.200	6.020	4.018	11.52	0.394
11mar.2021	84.0	4.74	8.76	9.22	16.32	1.007	17.18	2.220	7.050	5.301	11.79	0.394
12mar.2021	89.6	4.58	9.76	9.16	16.64	0.981	18.16	2.180	8.440	7.503	11.75	0.382
13mar.2021	88.4	3.97	10.01	8.11	15.19	0.855	17.34	1.910	9.570	10.623	10.45	0.332
14mar.2021	78.9	3.00	8.80	5.98	11.41	0.636	13.72	1.410	9.900	16.020	7.72	0.249
15mar.2021	59.5	2.09	4.31	3.41	5.78	0.414	6.45	0.870	6.210	25.480	4.31	0.169
16mar.2021	23.1	1.86	1.26	2.63	3.74	0.355	3.12	0.720	1.000	5.000	3.25	0.148
17mar.2021	17.3	1.85	1.02	2.58	3.61	0.352	2.89	0.710	0.530	0.400	3.18	0.147
18mar.2021	17.1	1.86	1.02	2.60	3.63	0.354	2.90	0.710	0.520	0.168	3.20	0.148
19mar.2021	17.3	1.88	1.04	2.63	3.68	0.358	2.94	0.720	0.530	0.170	3.25	0.150
20mar.2021	17.8	1.93	1.06	2.70	3.77	0.367	3.01	0.740	0.540	0.174	3.32	0.153
21mar.2021	19.0	2.06	1.14	2.89	4.03	0.393	3.22	0.790	0.580	0.186	3.56	0.164
22mar.2021	21.1	2.29	1.26	3.20	4.47	0.436	3.57	0.880	0.640	0.207	3.95	0.182
23mar.2021	23.0	2.50	1.37	3.49	4.88	0.475	3.90	0.960	0.700	0.225	4.30	0.199
24mar.2021	24.3	2.64	1.45	3.69	5.16	0.502	4.12	1.010	0.740	0.238	4.55	0.210
25mar.2021	25.4	2.76	1.52	3.86	5.40	0.526	4.31	1.060	0.770	0.249	4.76	0.220

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
26mar.2021	26.6	2.89	1.59	4.04	5.64	0.549	4.51	1.110	0.810	0.260	4.97	0.230
27mar.2021	27.7	3.01	1.65	4.20	5.87	0.572	4.69	1.150	0.840	0.271	5.18	0.239
28mar.2021	28.4	3.08	1.70	4.31	6.02	0.586	4.81	1.180	0.860	0.278	5.31	0.245
29mar.2021	28.6	3.10	1.71	4.34	6.06	0.590	4.84	1.190	0.870	0.280	5.35	0.247
30mar.2021	28.5	3.09	1.70	4.32	6.04	0.588	4.82	1.190	0.870	0.279	5.32	0.246
31mar.2021	28.1	3.05	1.68	4.27	5.96	0.581	4.76	1.170	0.860	0.275	5.26	0.243
01abr.2021	27.7	3.00	1.65	4.20	5.87	0.572	4.69	1.150	0.840	0.271	5.18	0.239
02abr.2021	27.4	2.97	1.64	4.15	5.81	0.565	4.64	1.140	0.830	0.268	5.12	0.236
03abr.2021	27.5	2.99	1.65	4.18	5.84	0.569	4.67	1.150	0.840	0.270	5.15	0.238
04abr.2021	28.1	3.05	1.68	4.27	5.97	0.581	4.77	1.170	0.860	0.275	5.26	0.243
05abr.2021	29.1	3.16	1.74	4.41	6.17	0.601	4.93	1.210	0.880	0.285	5.44	0.251
06abr.2021	30.2	3.28	1.81	4.59	6.41	0.624	5.12	1.260	0.920	0.296	5.65	0.261
07abr.2021	31.4	3.40	1.87	4.76	6.65	0.648	5.31	1.310	0.950	0.307	5.86	0.271
08abr.2021	32.5	3.53	1.94	4.93	6.89	0.671	5.50	1.350	0.990	0.318	6.08	0.280
09abr.2021	33.8	3.67	2.02	5.13	7.17	0.698	5.73	1.410	1.030	0.331	6.32	0.292
10abr.2021	34.8	3.78	2.08	5.29	7.39	0.719	5.90	1.450	1.060	0.341	6.51	0.301
11abr.2021	35.0	3.80	2.09	5.32	7.43	0.724	5.94	1.460	1.070	0.343	6.55	0.302
12abr.2021	34.8	3.78	2.08	5.28	7.38	0.719	5.89	1.450	1.060	0.340	6.50	0.300
13abr.2021	34.3	3.73	2.05	5.21	7.28	0.709	5.81	1.430	1.040	0.336	6.42	0.296
14abr.2021	33.8	3.67	2.02	5.13	7.17	0.699	5.73	1.410	1.030	0.331	6.32	0.292
15abr.2021	33.3	3.61	1.99	5.05	7.06	0.688	5.64	1.390	1.010	0.326	6.22	0.287
16abr.2021	32.6	3.54	1.95	4.95	6.92	0.674	5.53	1.360	0.990	0.319	6.10	0.282
17abr.2021	31.8	3.46	1.90	4.83	6.75	0.658	5.40	1.330	0.970	0.312	5.96	0.275
18abr.2021	31.1	3.37	1.86	4.72	6.59	0.642	5.27	1.290	0.950	0.304	5.81	0.268
19abr.2021	30.3	3.29	1.81	4.60	6.43	0.626	5.14	1.260	0.920	0.297	5.67	0.262
20abr.2021	29.5	3.21	1.77	4.48	6.26	0.610	5.00	1.230	0.900	0.289	5.52	0.255
21abr.2021	28.7	3.12	1.72	4.36	6.09	0.594	4.87	1.200	0.870	0.281	5.37	0.248

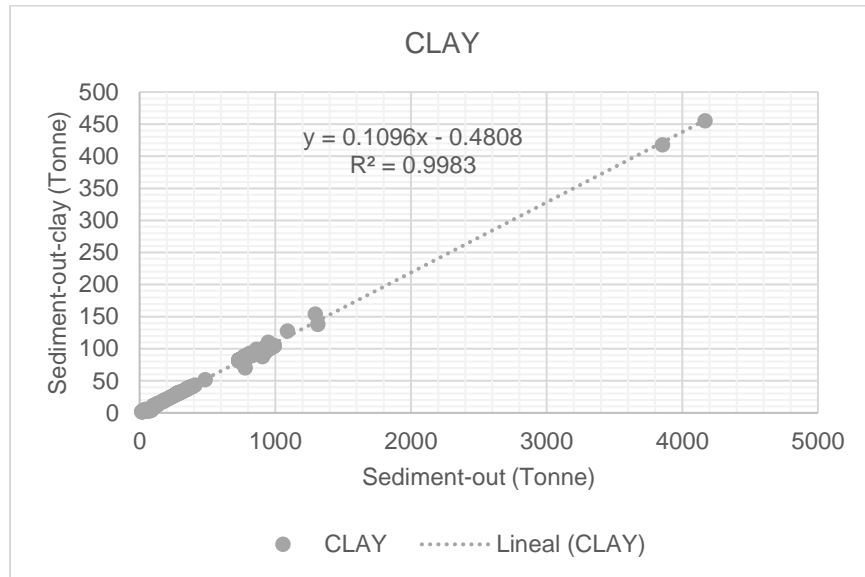
	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
22abr.2021	27.9	3.03	1.67	4.24	5.92	0.577	4.73	1.160	0.850	0.273	5.22	0.241
23abr.2021	27.1	2.94	1.62	4.11	5.75	0.560	4.59	1.130	0.820	0.265	5.07	0.234
24abr.2021	26.4	2.86	1.58	4.01	5.60	0.545	4.47	1.100	0.800	0.258	4.94	0.228
25abr.2021	25.7	2.79	1.54	3.91	5.46	0.532	4.36	1.070	0.780	0.252	4.81	0.222
26abr.2021	25.2	2.73	1.50	3.82	5.34	0.520	4.26	1.050	0.770	0.246	4.71	0.217
27abr.2021	24.8	2.69	1.48	3.77	5.26	0.513	4.21	1.030	0.750	0.243	4.64	0.214
28abr.2021	25.0	2.71	1.49	3.79	5.29	0.516	4.23	1.040	0.760	0.244	4.67	0.216
29abr.2021	25.4	2.76	1.52	3.85	5.38	0.524	4.30	1.060	0.770	0.249	4.75	0.219
30abr.2021	26.1	2.83	1.56	3.96	5.53	0.539	4.42	1.090	0.790	0.255	4.88	0.225
01may.2021	27.0	2.93	1.61	4.10	5.73	0.558	4.58	1.130	0.820	0.264	5.05	0.233
02may.2021	28.7	3.11	1.71	4.35	6.08	0.592	4.86	1.190	0.870	0.281	5.36	0.247
03may.2021	31.7	3.45	1.90	4.82	6.73	0.656	5.38	1.320	0.970	0.311	5.94	0.274
04may.2021	35.0	3.80	2.09	5.32	7.43	0.724	5.94	1.460	1.070	0.343	6.55	0.303
05may.2021	37.6	4.08	2.25	5.71	7.97	0.777	6.37	1.570	1.140	0.368	7.03	0.325
06may.2021	40.1	4.35	2.40	6.08	8.50	0.828	6.79	1.670	1.220	0.392	7.49	0.346
07may.2021	42.5	4.61	2.54	6.44	9.01	0.877	7.19	1.770	1.290	0.416	7.94	0.367
08may.2021	44.2	4.80	2.64	6.71	9.38	0.913	7.49	1.840	1.340	0.433	8.27	0.382
09may.2021	45.2	4.91	2.70	6.86	9.59	0.934	7.66	1.880	1.380	0.443	8.46	0.391
10may.2021	45.7	4.96	2.73	6.93	9.69	0.944	7.74	1.900	1.390	0.447	8.54	0.394
11may.2021	45.6	4.95	2.73	6.92	9.67	0.942	7.73	1.900	1.390	0.446	8.53	0.394
12may.2021	45.0	4.88	2.69	6.82	9.54	0.929	7.62	1.870	1.370	0.440	8.41	0.388
13may.2021	44.0	4.77	2.63	6.67	9.32	0.908	7.45	1.830	1.340	0.430	8.22	0.380
14may.2021	42.7	4.64	2.56	6.49	9.06	0.883	7.24	1.780	1.300	0.418	7.99	0.369
15may.2021	41.5	4.51	2.48	6.31	8.81	0.858	7.04	1.730	1.260	0.407	7.77	0.359
16may.2021	40.6	4.41	2.43	6.16	8.61	0.839	6.88	1.690	1.240	0.398	7.60	0.351
17may.2021	40.0	4.34	2.39	6.07	8.48	0.826	6.77	1.660	1.220	0.391	7.48	0.345
18may.2021	39.4	4.28	2.36	5.98	8.36	0.814	6.68	1.640	1.200	0.386	7.37	0.340

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
19may.2021	38.8	4.21	2.32	5.89	8.23	0.802	6.57	1.620	1.180	0.380	7.26	0.335
20may.2021	38.2	4.15	2.28	5.80	8.10	0.789	6.47	1.590	1.160	0.374	7.14	0.330
21may.2021	37.8	4.11	2.26	5.74	8.03	0.782	6.41	1.580	1.150	0.370	7.08	0.327
22may.2021	37.5	4.07	2.24	5.70	7.96	0.775	6.36	1.560	1.140	0.367	7.02	0.324
23may.2021	37.0	4.02	2.21	5.62	7.85	0.765	6.27	1.540	1.130	0.362	6.92	0.320
24may.2021	36.4	3.95	2.18	5.53	7.72	0.752	6.17	1.520	1.110	0.356	6.81	0.314
25may.2021	35.7	3.88	2.13	5.42	7.57	0.738	6.05	1.490	1.090	0.350	6.68	0.308
26may.2021	35.0	3.80	2.09	5.31	7.42	0.723	5.93	1.460	1.060	0.342	6.54	0.302
27may.2021	34.3	3.72	2.05	5.20	7.27	0.708	5.81	1.430	1.040	0.336	6.41	0.296
28may.2021	34.0	3.69	2.03	5.16	7.20	0.702	5.75	1.410	1.030	0.333	6.35	0.293
29may.2021	34.2	3.72	2.05	5.20	7.26	0.707	5.80	1.430	1.040	0.335	6.40	0.296
30may.2021	34.8	3.78	2.08	5.29	7.39	0.720	5.91	1.450	1.060	0.341	6.52	0.301
31may.2021	35.6	3.87	2.13	5.41	7.56	0.736	6.04	1.480	1.080	0.349	6.66	0.308
01jun.2021	37.1	4.02	2.22	5.63	7.86	0.766	6.28	1.540	1.130	0.363	6.93	0.320
02jun.2021	39.0	4.23	2.33	5.92	8.27	0.806	6.61	1.620	1.190	0.382	7.29	0.337
03jun.2021	40.4	4.38	2.41	6.13	8.57	0.834	6.84	1.680	1.230	0.395	7.55	0.349
04jun.2021	41.4	4.50	2.48	6.28	8.78	0.855	7.02	1.720	1.260	0.405	7.74	0.358
05jun.2021	42.1	4.58	2.52	6.40	8.94	0.871	7.14	1.760	1.280	0.413	7.88	0.364
06jun.2021	42.6	4.63	2.55	6.47	9.04	0.880	7.22	1.770	1.300	0.417	7.97	0.368
07jun.2021	42.7	4.64	2.55	6.48	9.06	0.882	7.24	1.780	1.300	0.418	7.99	0.369
08jun.2021	42.3	4.60	2.53	6.43	8.98	0.875	7.17	1.760	1.290	0.415	7.92	0.366
09jun.2021	42.0	4.56	2.51	6.38	8.91	0.868	7.12	1.750	1.280	0.411	7.86	0.363
10jun.2021	41.7	4.53	2.49	6.33	8.84	0.861	7.06	1.740	1.270	0.408	7.80	0.360
11jun.2021	41.4	4.50	2.48	6.29	8.79	0.856	7.02	1.730	1.260	0.406	7.75	0.358
12jun.2021	41.4	4.49	2.47	6.28	8.77	0.855	7.01	1.720	1.260	0.405	7.74	0.357
13jun.2021	41.2	4.47	2.46	6.25	8.74	0.851	6.98	1.720	1.250	0.403	7.71	0.356
14jun.2021	40.9	4.45	2.45	6.22	8.68	0.846	6.94	1.710	1.250	0.401	7.66	0.354

	SEDIMEN T-OUT	SEDIMEN T-OUT- CLAY	SEDIMEN T-OUT- CSAND	SEDIMEN T-OUT- CSILT	SEDIMEN T-OUT- FSAND	SEDIMEN T-OUT- FSILT	SEDIMEN T-OUT- MSAND	SEDIMEN T-OUT- MSILT	SEDIMEN T-OUT- VCSAND	SEDIMEN T-OUT- VFGRAVE L	SEDIMEN T-OUT- VFSAND	SEDIMEN T-OUT- VFSILT
	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE	TONNE
	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM	PER-CUM
15jun.2021	40.5	4.40	2.42	6.15	8.59	0.837	6.86	1.690	1.230	0.396	7.57	0.350
16jun.2021	39.8	4.32	2.38	6.04	8.44	0.822	6.74	1.660	1.210	0.390	7.44	0.344
17jun.2021	39.2	4.26	2.34	5.95	8.31	0.810	6.64	1.630	1.190	0.384	7.33	0.338
18jun.2021	39.1	4.24	2.33	5.93	8.28	0.807	6.62	1.630	1.190	0.382	7.30	0.337
19jun.2021	39.1	4.25	2.34	5.94	8.30	0.809	6.63	1.630	1.190	0.383	7.32	0.338
20jun.2021	38.9	4.23	2.33	5.91	8.26	0.804	6.60	1.620	1.180	0.381	7.28	0.336
21jun.2021	38.5	4.18	2.30	5.84	8.16	0.795	6.52	1.600	1.170	0.377	7.19	0.332
22jun.2021	37.9	4.11	2.26	5.75	8.03	0.782	6.42	1.580	1.150	0.371	7.08	0.327
23jun.2021	37.3	4.05	2.23	5.67	7.92	0.772	6.33	1.560	1.140	0.366	6.99	0.322
24jun.2021	37.2	4.04	2.23	5.65	7.89	0.769	6.31	1.550	1.130	0.364	6.96	0.321
25jun.2021	37.6	4.08	2.25	5.70	7.97	0.776	6.37	1.570	1.140	0.368	7.03	0.324
26jun.2021	38.4	4.17	2.29	5.82	8.14	0.793	6.50	1.600	1.170	0.376	7.18	0.331
27jun.2021	39.0	4.24	2.33	5.93	8.28	0.807	6.62	1.630	1.190	0.382	7.30	0.337

A partir de esto, se obtuvieron las toneladas por tipo de partícula para determinados valores estándares de carga total, como se muestra a continuación:

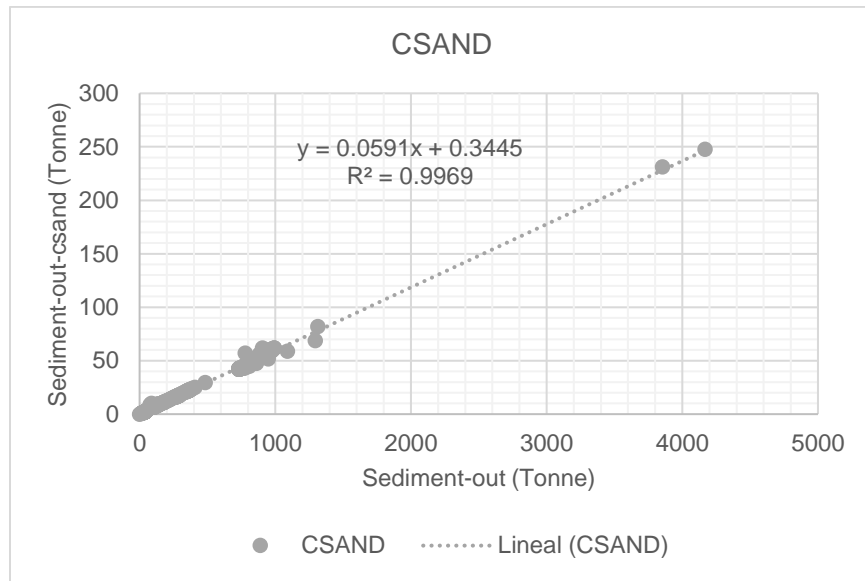
- Arcilla



a	0.1096
b	-0.4808

Total Load (Tonne)	Particle Load (Tonne)
10	0.62
110	11.58
210	22.54
310	33.50
410	44.46
510	55.42
610	66.38
710	77.34
810	88.30
910	99.26
1010	110.22
1110	121.18
1210	132.14
1310	143.10
1410	154.06
1510	165.02
1610	175.98
1710	186.94
2000	218.72
3000	328.32
4000	437.92

- Arena gruesa



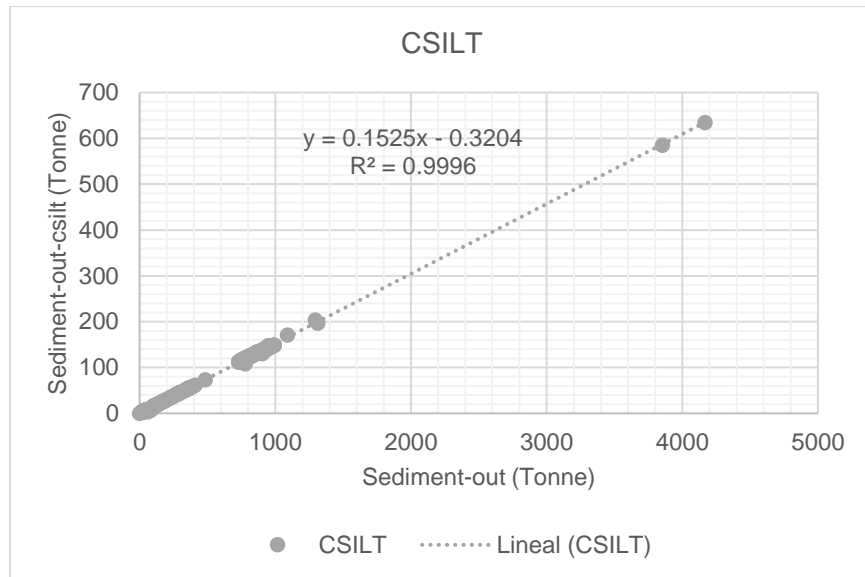
a	0.0591
b	0.3445

Total Load (Tonne)	Particle Load (Tonne)
10	0.94
110	6.85
210	12.76
310	18.67
410	24.58
510	30.49
610	36.40
710	42.31
810	48.22
910	54.13
1010	60.04
1110	65.95
1210	71.86
1310	77.77
1410	83.68
1510	89.59
1610	95.50
1710	101.41
2000	118.54
3000	177.64

4000

236.74

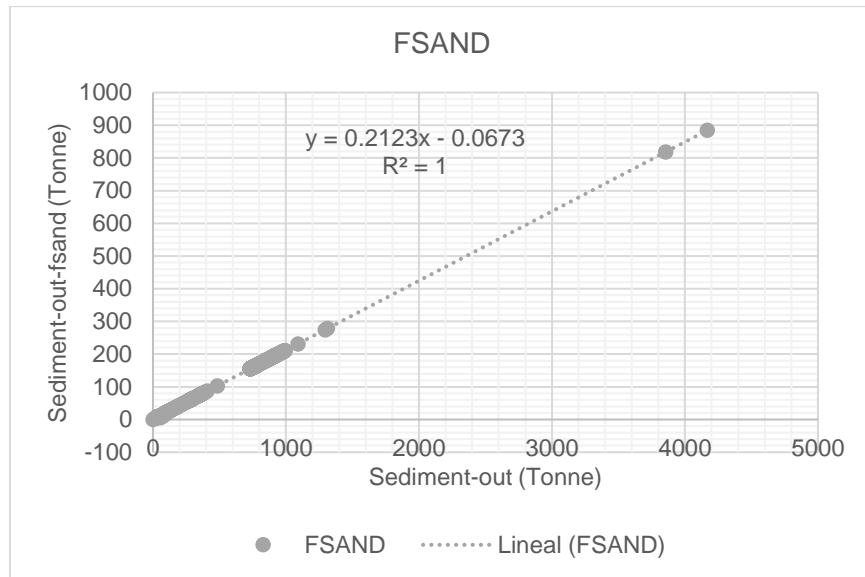
- Limo grueso



a	0.1525
b	-0.3204

Total Load (Tonne)	Particle Load (Tonne)
10	1.20
110	16.45
210	31.70
310	46.95
410	62.20
510	77.45
610	92.70
710	107.95
810	123.20
910	138.45
1010	153.70
1110	168.95
1210	184.20
1310	199.45
1410	214.70
1510	229.95
1610	245.20
1710	260.45
2000	304.68
3000	457.18
4000	609.68

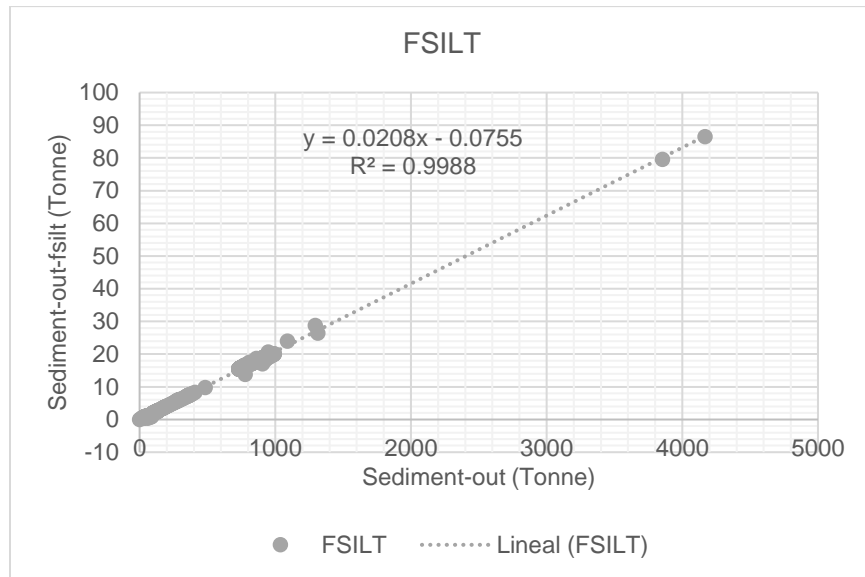
- Arena fina



a	0.2123
b	-0.0673

Total Load (Tonne)	Particle Load (Tonne)
10	2.06
110	23.29
210	44.52
310	65.75
410	86.98
510	108.21
610	129.44
710	150.67
810	171.90
910	193.13
1010	214.36
1110	235.59
1210	256.82
1310	278.05
1410	299.28
1510	320.51
1610	341.74
1710	362.97
2000	424.53
3000	636.83
4000	849.13

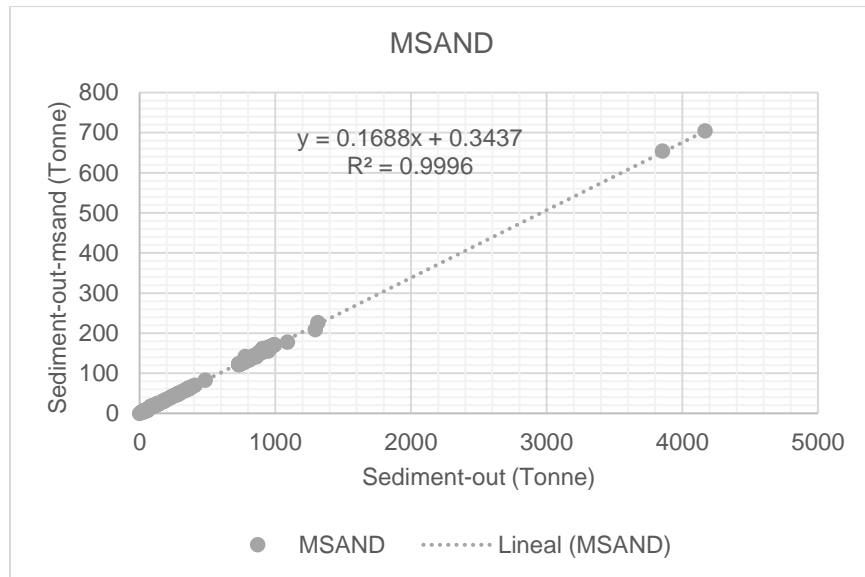
- Limo fino



a	0.0208
b	-0.0755

Total Load (Tonne)	Particle Load (Tonne)
10	0.13
110	2.21
210	4.29
310	6.37
410	8.45
510	10.53
610	12.61
710	14.69
810	16.77
910	18.85
1010	20.93
1110	23.01
1210	25.09
1310	27.17
1410	29.25
1510	31.33
1610	33.41
1710	35.49
2000	41.52
3000	62.32
4000	83.12

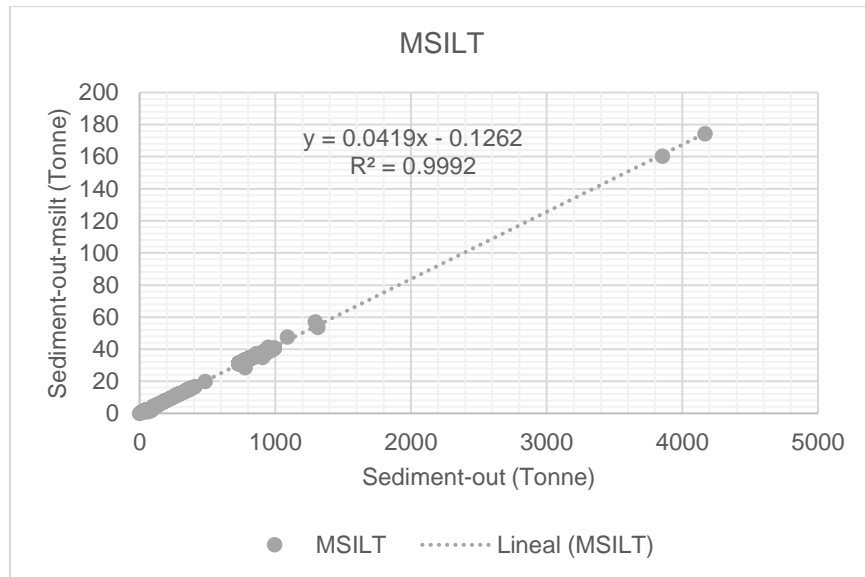
- Arena media



a	0.1688
b	0.3437

Total Load (Tonne)	Particle Load (Tonne)
10	2.03
110	18.91
210	35.79
310	52.67
410	69.55
510	86.43
610	103.31
710	120.19
810	137.07
910	153.95
1010	170.83
1110	187.71
1210	204.59
1310	221.47
1410	238.35
1510	255.23
1610	272.11
1710	288.99
2000	337.94
3000	506.74
4000	675.54

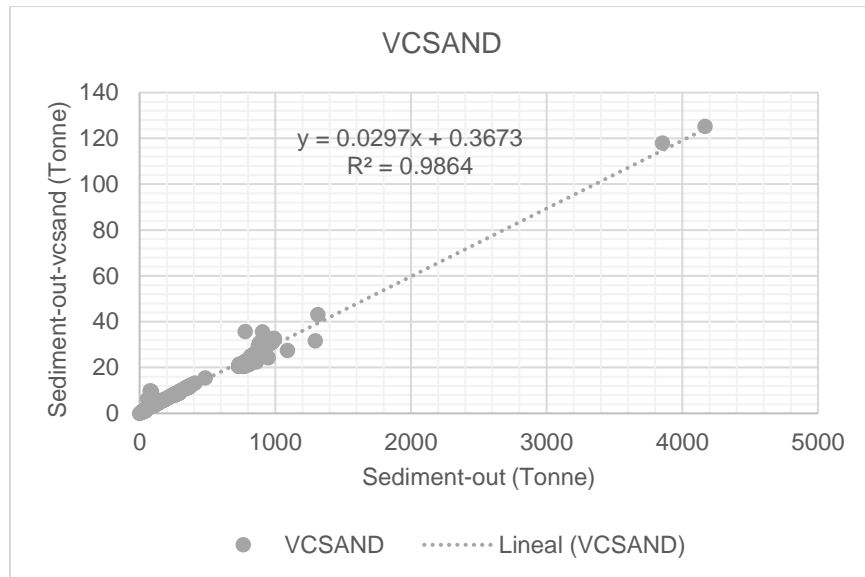
- Limo medio



a	0.0419
b	-0.1262

Total Load (Tonne)	Particle Load (Tonne)
10	0.29
110	4.48
210	8.67
310	12.86
410	17.05
510	21.24
610	25.43
710	29.62
810	33.81
910	38.00
1010	42.19
1110	46.38
1210	50.57
1310	54.76
1410	58.95
1510	63.14
1610	67.33
1710	71.52
2000	83.67
3000	125.57
4000	167.47

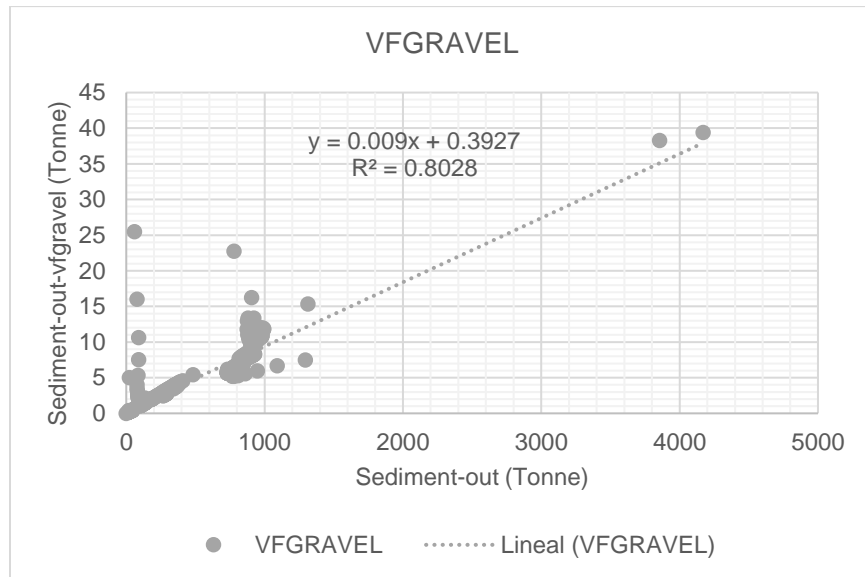
- Arena muy gruesa



a	0.0297
b	0.3673

Total Load (Tonne)	Particle Load (Tonne)
10	0.66
110	3.63
210	6.60
310	9.57
410	12.54
510	15.51
610	18.48
710	21.45
810	24.42
910	27.39
1010	30.36
1110	33.33
1210	36.30
1310	39.27
1410	42.24
1510	45.21
1610	48.18
1710	51.15
2000	59.77
3000	89.47
4000	119.17

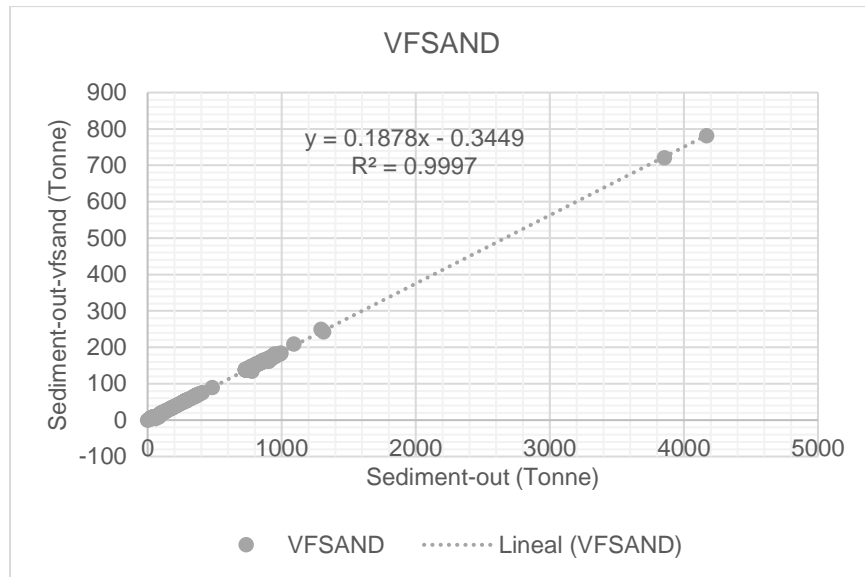
- Grava muy fina



a	0.009
b	0.3927

Total Load (Tonne)	Particle Load (Tonne)
10	0.48
110	1.38
210	2.28
310	3.18
410	4.08
510	4.98
610	5.88
710	6.78
810	7.68
910	8.58
1010	9.48
1110	10.38
1210	11.28
1310	12.18
1410	13.08
1510	13.98
1610	14.88
1710	15.78
2000	18.39
3000	27.39
4000	36.39

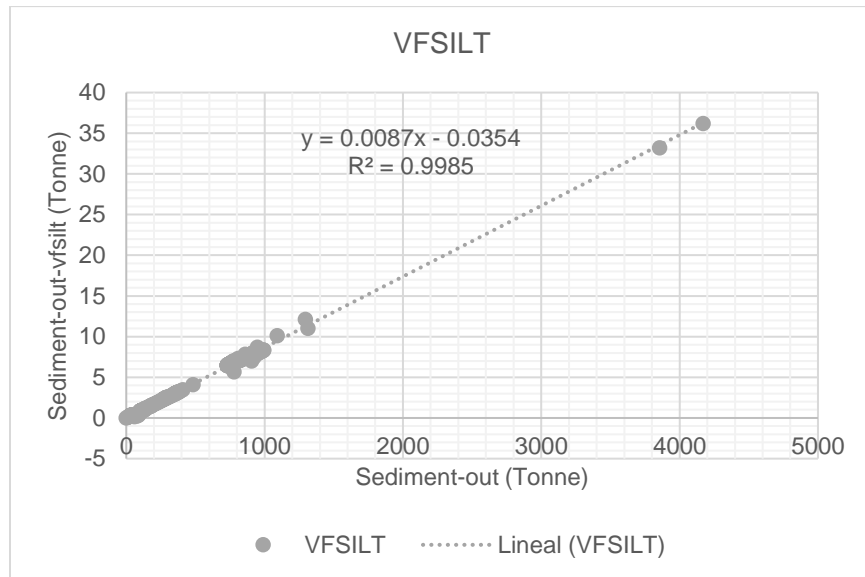
- Arena muy fina



a	0.1878
b	0.3449

Total Load (Tonne)	Particle Load (Tonne)
10	2.22
110	21.00
210	39.78
310	58.56
410	77.34
510	96.12
610	114.90
710	133.68
810	152.46
910	171.24
1010	190.02
1110	208.80
1210	227.58
1310	246.36
1410	265.14
1510	283.92
1610	302.70
1710	321.48
2000	375.94
3000	563.74
4000	751.54

- Limo muy fino



a	0.0087
b	-0.0354

Total Load (Tonnes)	Particle Load (Tonnes)
10	0.05
110	0.92
210	1.79
310	2.66
410	3.53
510	4.40
610	5.27
710	6.14
810	7.01
910	7.88
1010	8.75
1110	9.62
1210	10.49
1310	11.36
1410	12.23
1510	13.10
1610	13.97
1710	14.84
2000	17.36
3000	26.06
4000	34.76

En la Tabla 5 se muestran los porcentajes en cada caso, los cuales se ingresan a HEC-RAS como información de entrada:

Tabla 5. Curvas de clasificación granulométrica como condición de contorno del Modelo 1 (2018-2020)

Total Load	10	110	210	310	410	510	610	710	810	910	1010	1110	1210	1310	1410	1510	1610	1710
CLAY	0.055	0.105	0.107	0.108	0.108	0.109	0.109	0.109	0.109	0.109	0.109	0.109	0.109	0.109	0.109	0.109	0.109	0.109
VFM	0.005	0.008	0.008	0.008	0.008	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
FM	0.007	0.020	0.020	0.020	0.020	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021
MM	0.023	0.040	0.041	0.041	0.041	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042
CM	0.114	0.149	0.151	0.151	0.152	0.152	0.152	0.152	0.152	0.152	0.152	0.152	0.152	0.152	0.152	0.152	0.152	0.152
VFS	0.216	0.190	0.189	0.189	0.188	0.188	0.188	0.188	0.188	0.188	0.188	0.188	0.188	0.188	0.188	0.188	0.188	0.188
FS	0.199	0.211	0.212	0.212	0.212	0.212	0.212	0.212	0.212	0.212	0.212	0.212	0.212	0.212	0.212	0.212	0.212	0.212
MS	0.197	0.171	0.170	0.170	0.169	0.169	0.169	0.169	0.169	0.169	0.169	0.169	0.169	0.169	0.169	0.169	0.169	0.169
CS	0.087	0.062	0.060	0.060	0.060	0.060	0.060	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059
VCS	0.060	0.032	0.031	0.031	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030
VFG	0.042	0.012	0.011	0.010	0.010	0.010	0.010	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009

Total Load	2000	3000	4000
CLAY	0.109	0.109	0.109
VFM	0.009	0.009	0.009
FM	0.021	0.021	0.021
MM	0.042	0.042	0.042
CM	0.152	0.152	0.152
VFS	0.188	0.188	0.188
FS	0.212	0.212	0.212
MS	0.169	0.169	0.169
CS	0.059	0.059	0.059
VCS	0.030	0.030	0.030
VFG	0.009	0.009	0.009

ANEXO 8. RESULTADOS MODELACIÓN HEC-RAS 2D

A continuación, se muestran los resultados obtenidos en las modelaciones 2D llevadas a cabo en HEC-RAS para cada escenario. De manera general, en la Figura 1 se observa el esquema de los perfiles que se mostrarán a lo largo del presente anexo para la representación de resultados.



Figura 1. Esquema de perfil longitudinal y secciones transversales propuesto
Fuente: Elaboración propia

1. Modelo 1 – 2018/2020 (Escenario de calibración):

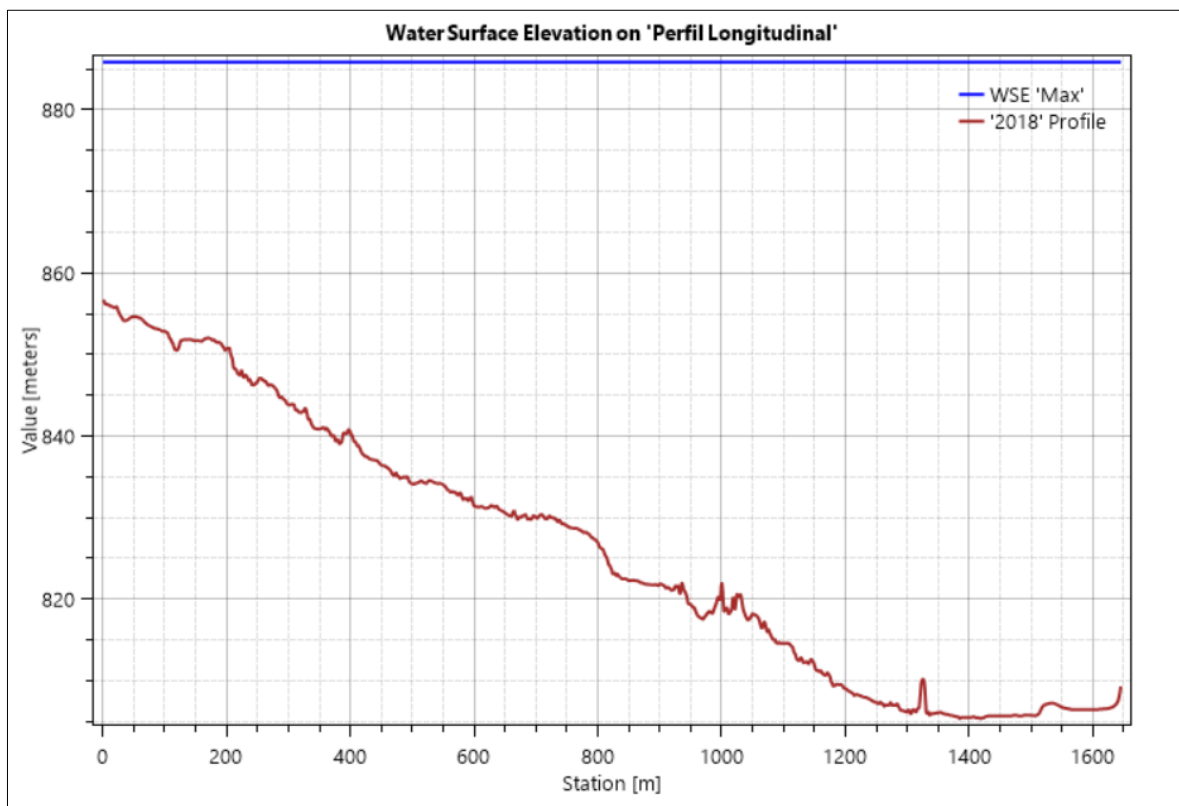


Figura 2.. Elevación de la superficie del agua máxima (WSE Max) sobre el perfil longitudinal – Modelo 1
Fuente: HEC-RAS 6.3.1

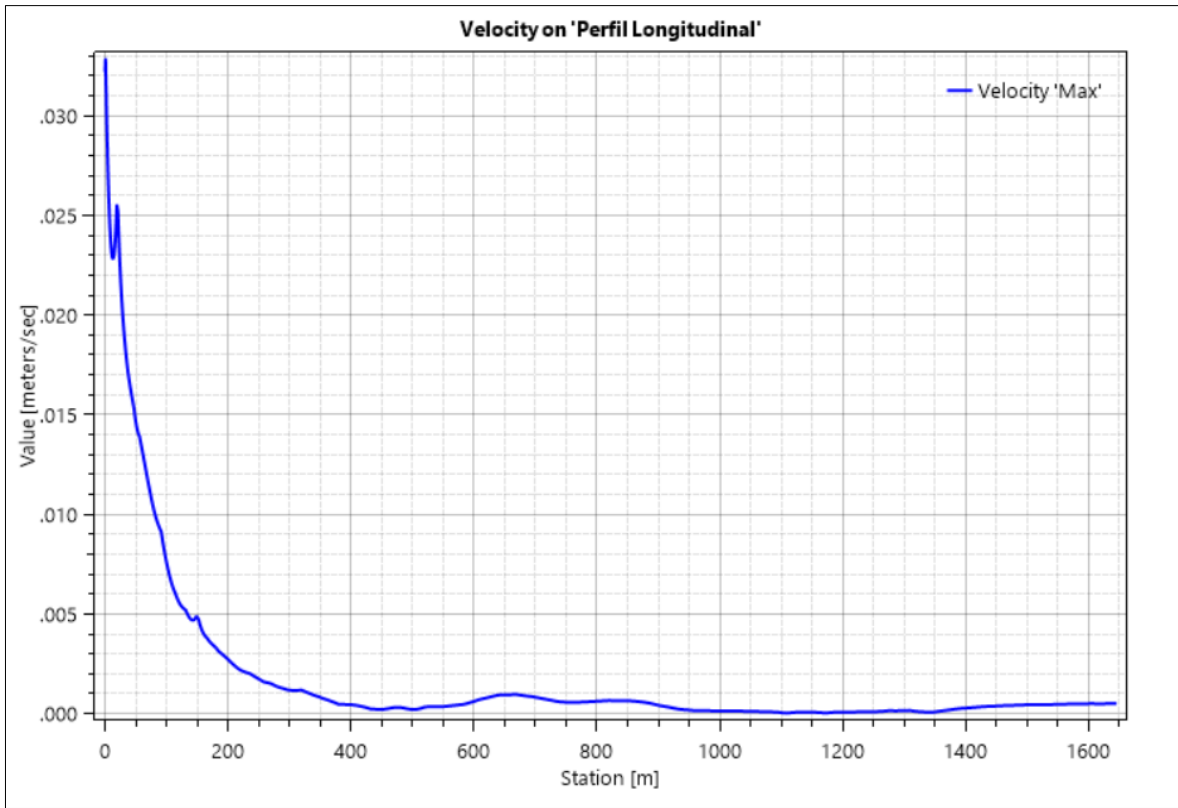


Figura 3. Velocidades máximas presentadas en el perfil longitudinal – Modelo 1
Fuente: HEC-RAS 6.3.1

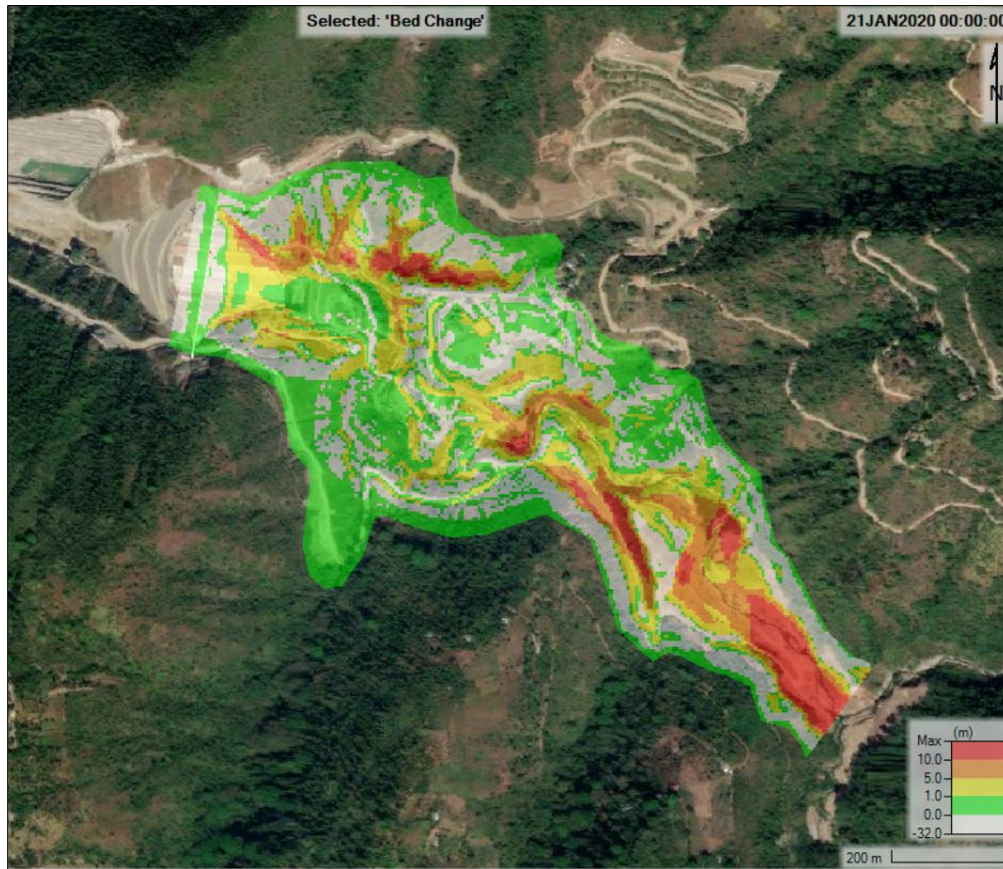


Figura 4. Profundidad estimada de deposición de sedimentos en el fondo del embalse para el periodo modelado 2018-2020 (Tamaño de celda 5x5m)
Fuente: HEC-RAS 6.3.1

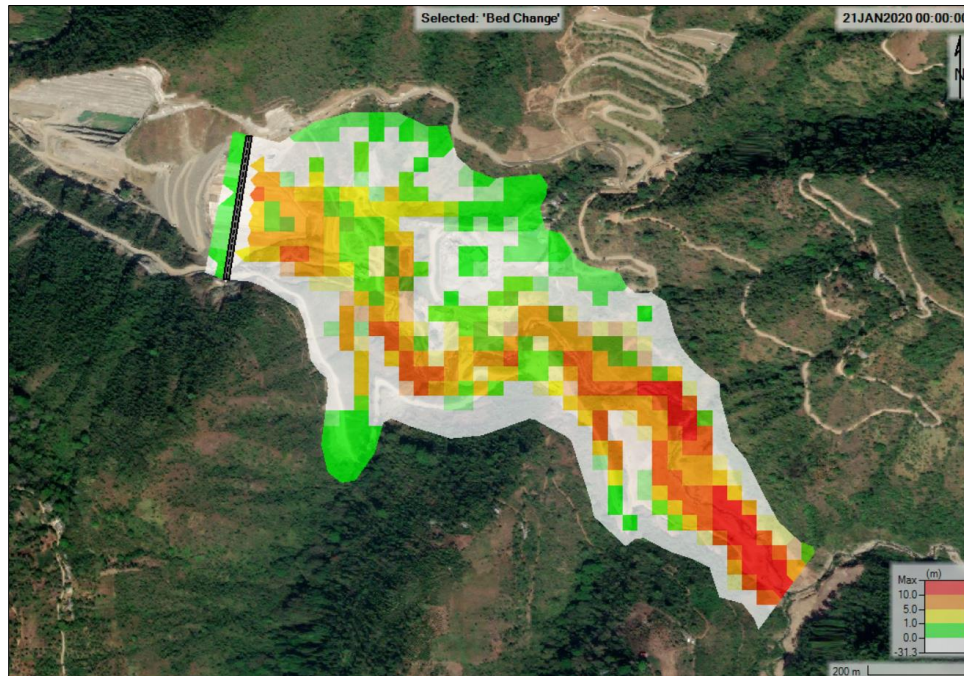


Figura 5. Profundidad estimada de deposición de sedimentos en el fondo del embalse para un periodo de 10 años con base en la batimetría del 2018 (Tamaño de celda 30x30m)
Fuente: HEC-RAS 6.3.1

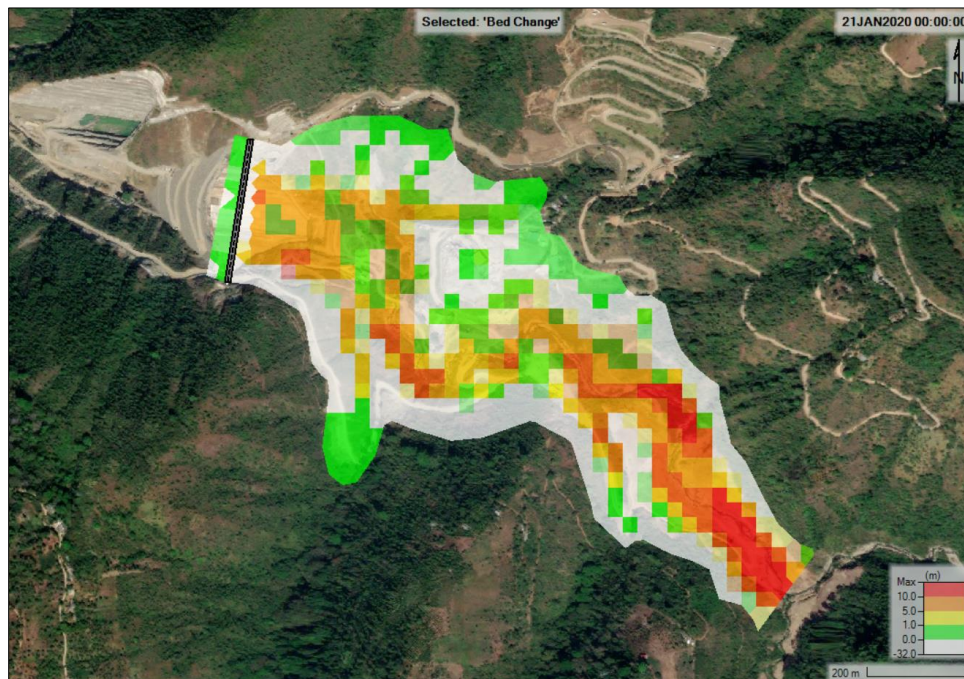


Figura 6. Profundidad estimada de deposición de sedimentos en el fondo del embalse para un periodo de 20 años con base en la batimetría del 2018 (Tamaño de celda 30x30m)
Fuente: HEC-RAS 6.3.1

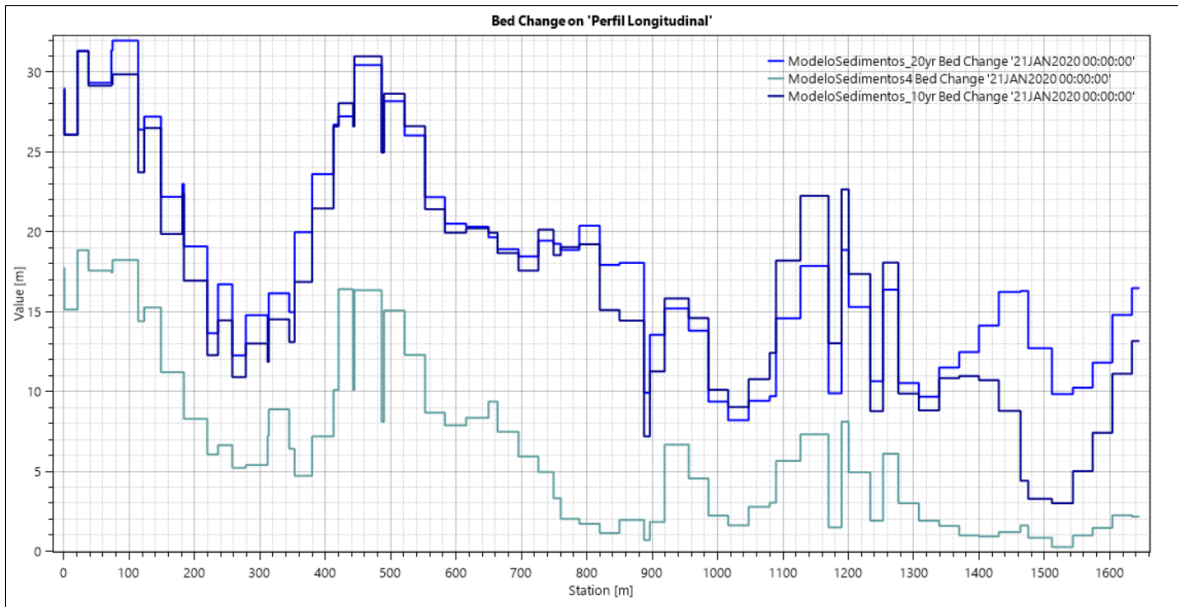


Figura 7. Cambio en el fondo del embalse para los escenarios 2018-2020, 10 años y 20 años sobre el perfil longitudinal
Fuente: HEC-RAS 6.3.1

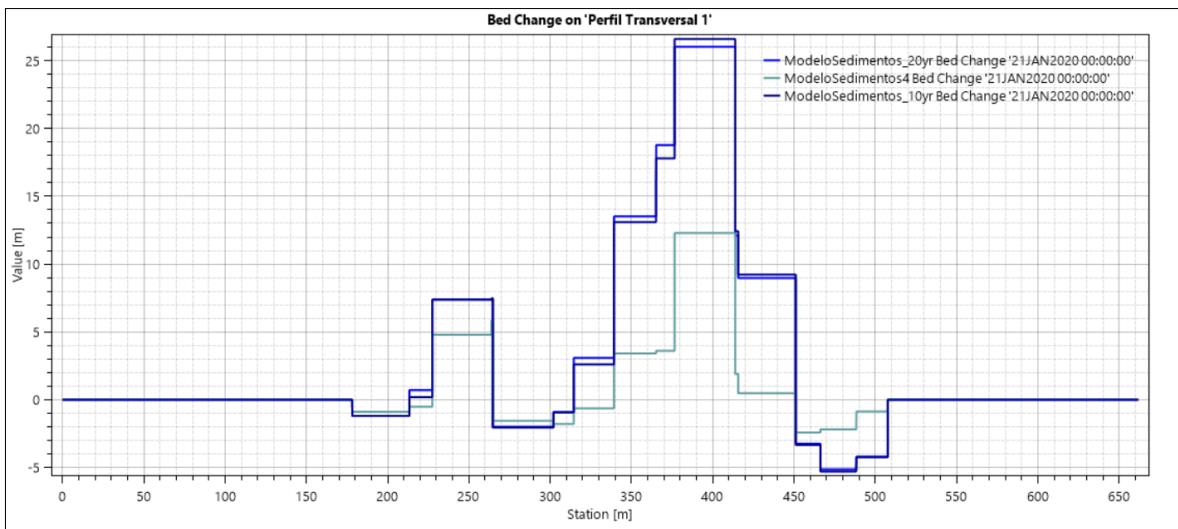


Figura 8. Cambio en el fondo del embalse para los escenarios 2018-2020, 10 años y 20 años sobre el perfil transversal 1
Fuente: HEC-RAS 6.3.1

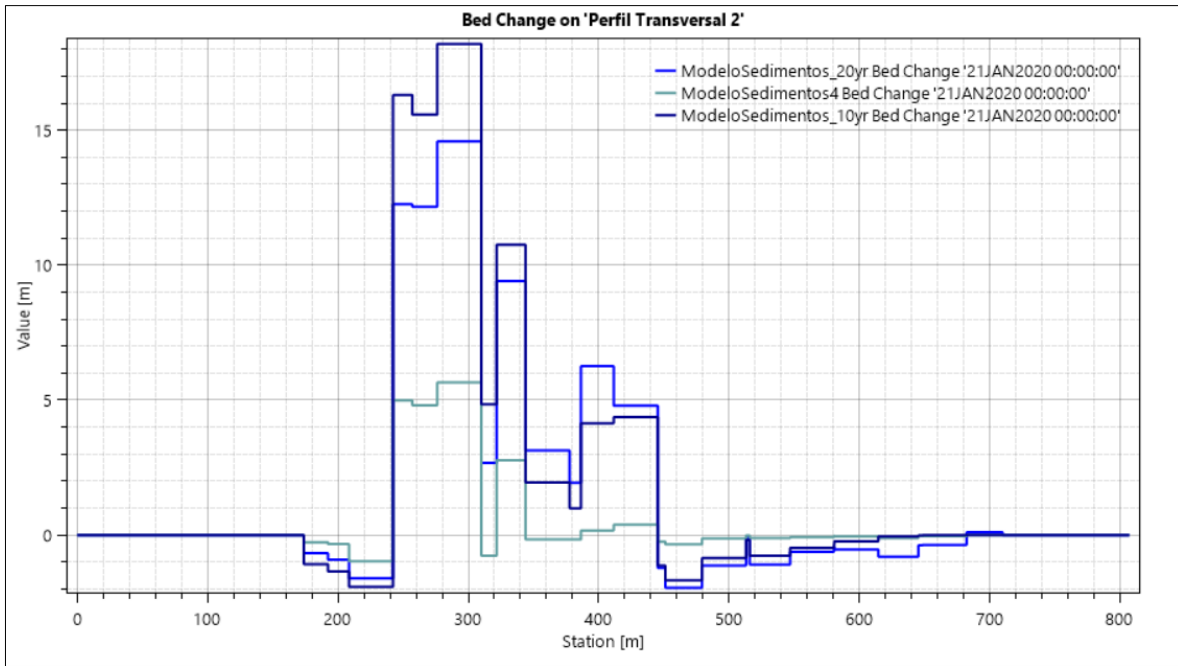


Figura 9. Cambio en el fondo del embalse para los escenarios 2018-2020, 10 años y 20 años sobre el perfil transversal 2
Fuente: HEC-RAS 6.3.1

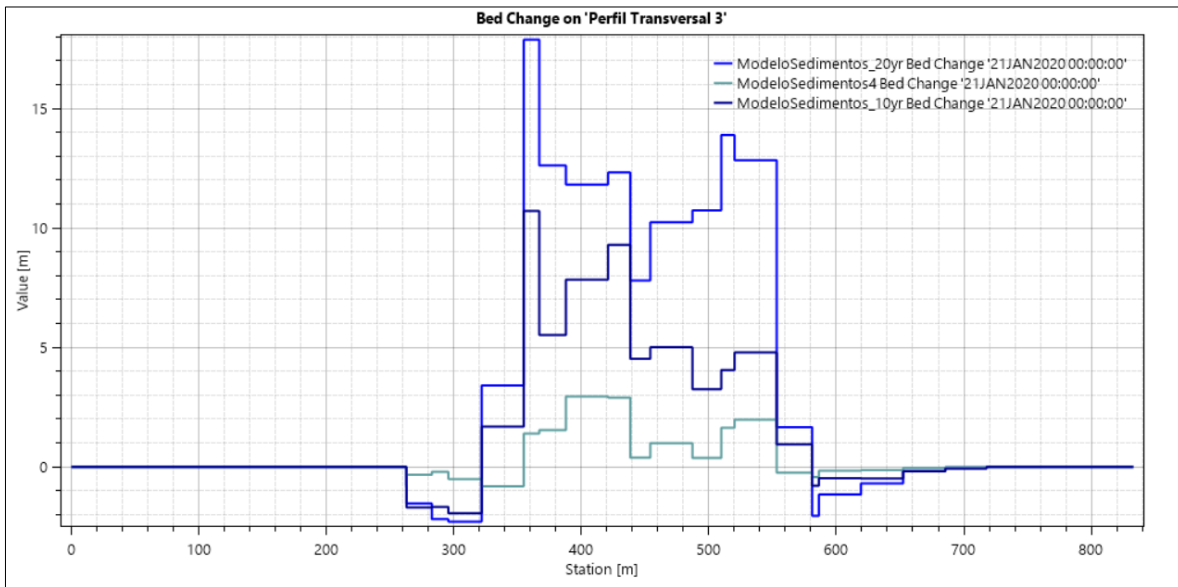


Figura 10. Cambio en el fondo del embalse para los escenarios 2018-2020, 10 años y 20 años sobre el perfil transversal 3
Fuente: HEC-RAS 6.3.1

2. Modelo 2 – 2020/2021 (Escenario de validación):

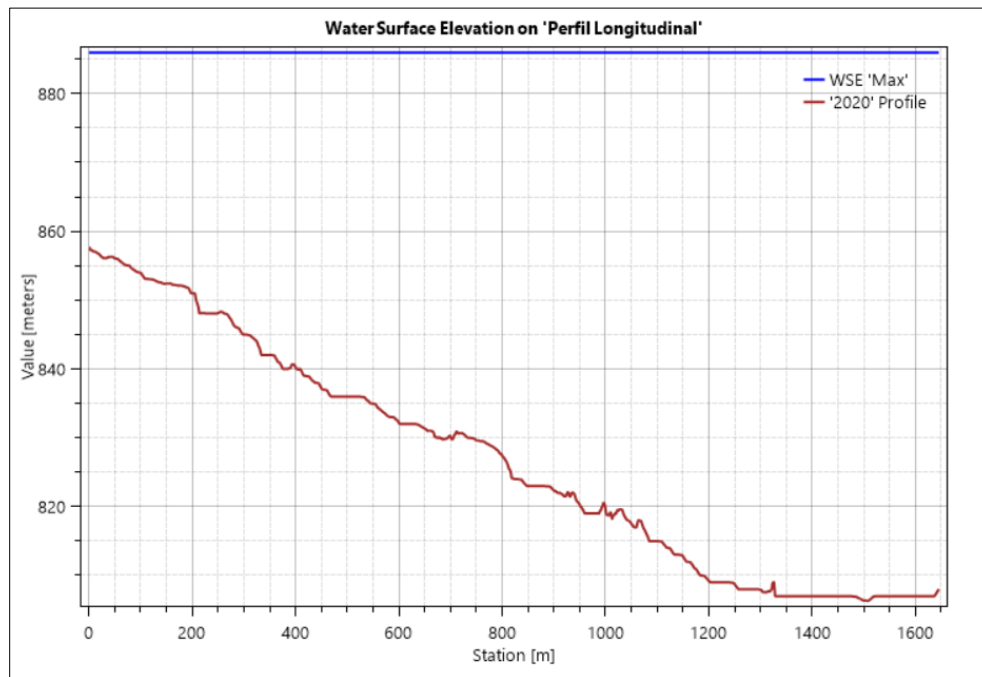


Figura 11. Elevación de la superficie del agua máxima (WSE Max) sobre el perfil longitudinal – Modelo 2
Fuente: HEC-RAS 6.3.1

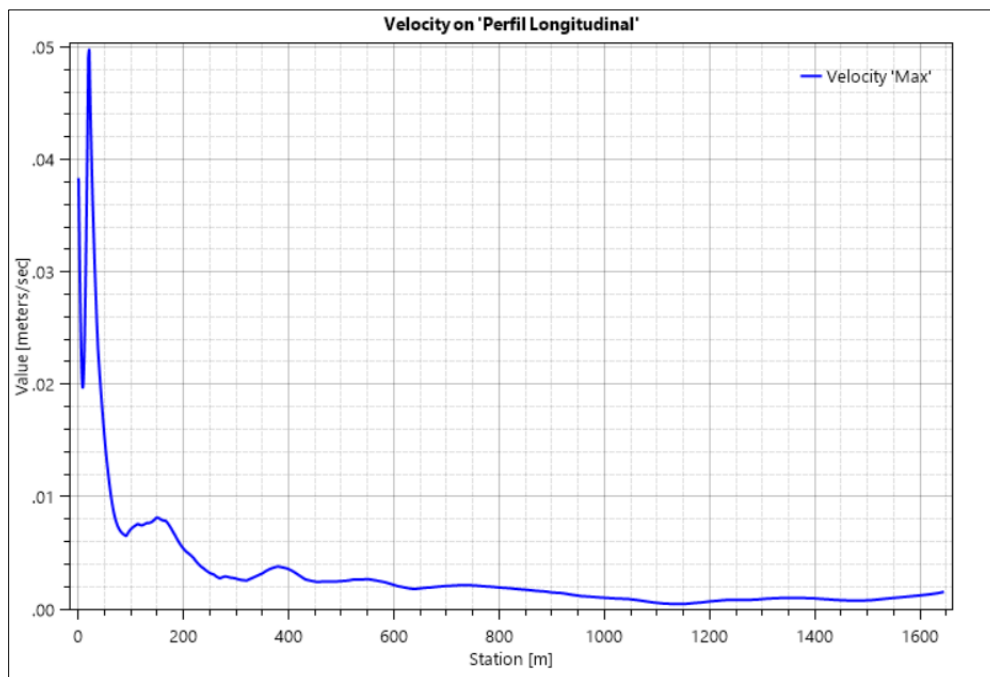


Figura 12. Velocidades máximas presentadas en el perfil longitudinal – Modelo 2
Fuente: HEC-RAS 6.3.1

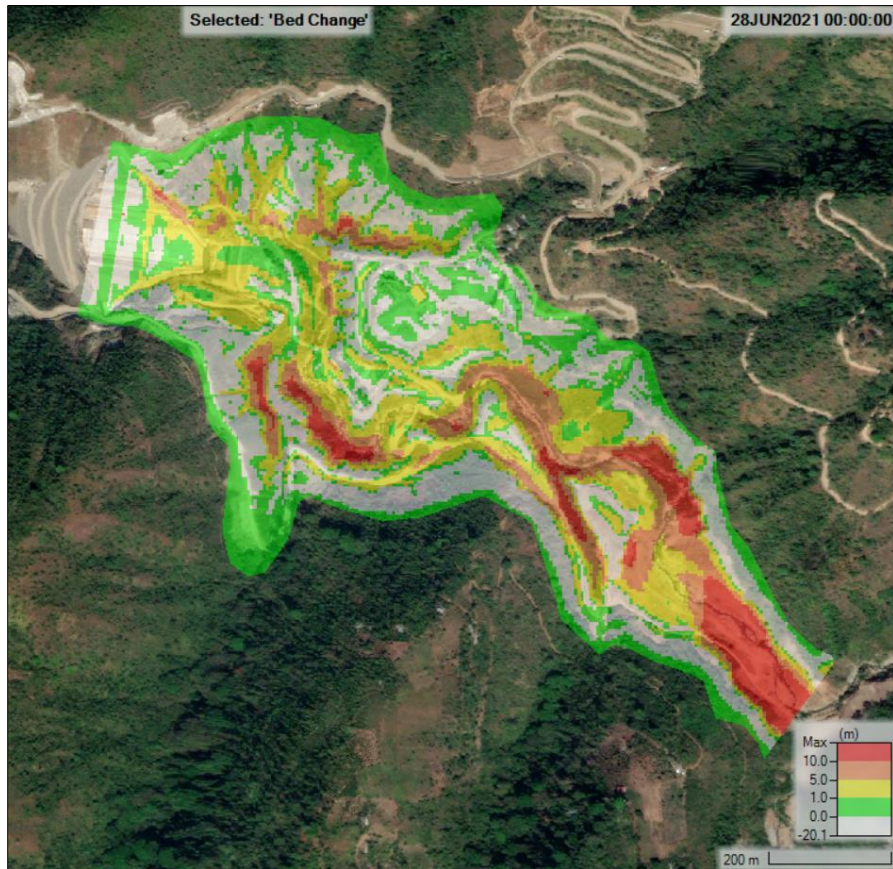


Figura 13. Profundidad estimada de deposición de sedimentos en el fondo del embalse para el periodo modelado 2020-2021 (Tamaño de celda 5x5m)
Fuente: HEC-RAS 6.3.1

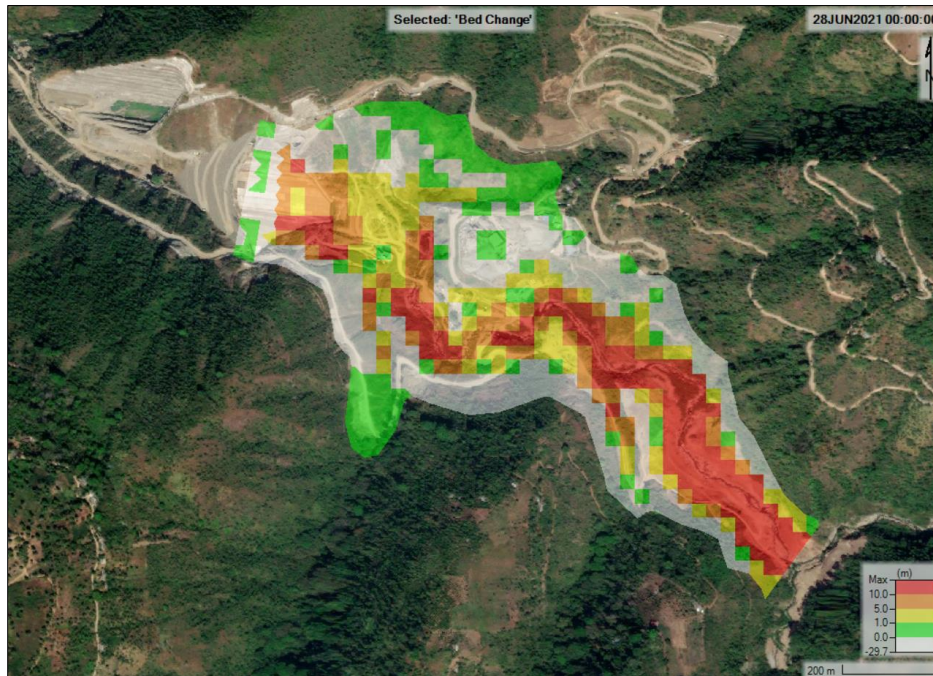


Figura 14. Profundidad estimada de deposición de sedimentos en el fondo del embalse para un periodo de 10 años con base en la batimetría del 2020 (Tamaño de celda 30x30m)
Fuente: HEC-RAS 6.3.1

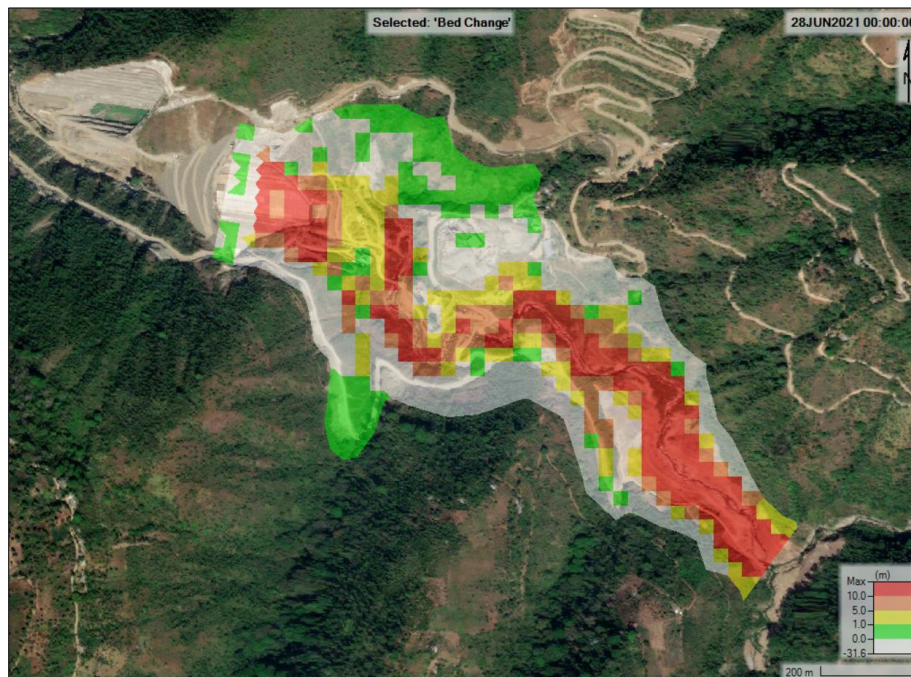


Figura 15. Profundidad estimada de deposición de sedimentos en el fondo del embalse para un periodo de 20 años con base en la batimetría del 2020 (Tamaño de celda 30x30m)
Fuente: HEC-RAS 6.3.1

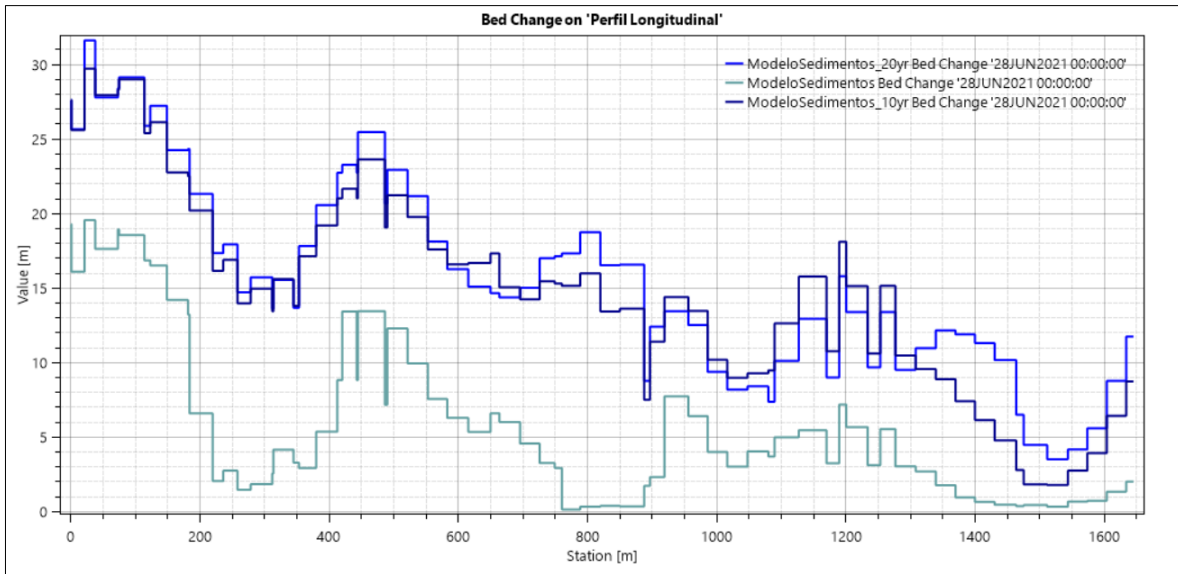


Figura 16. Cambio en el fondo del embalse para los escenarios 2020-2021, 10 años y 20 años sobre el perfil longitudinal
Fuente: HEC-RAS 6.3.1

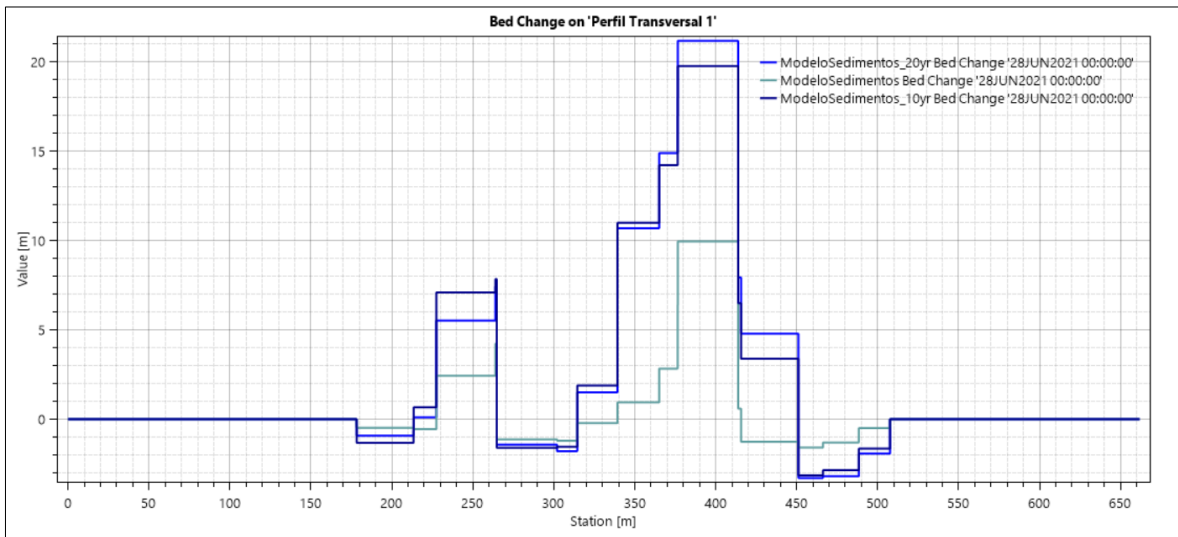


Figura 17. Cambio en el fondo del embalse para los escenarios 2020-2021, 10 años y 20 años sobre el perfil transversal 1
Fuente: HEC-RAS 6.3.1

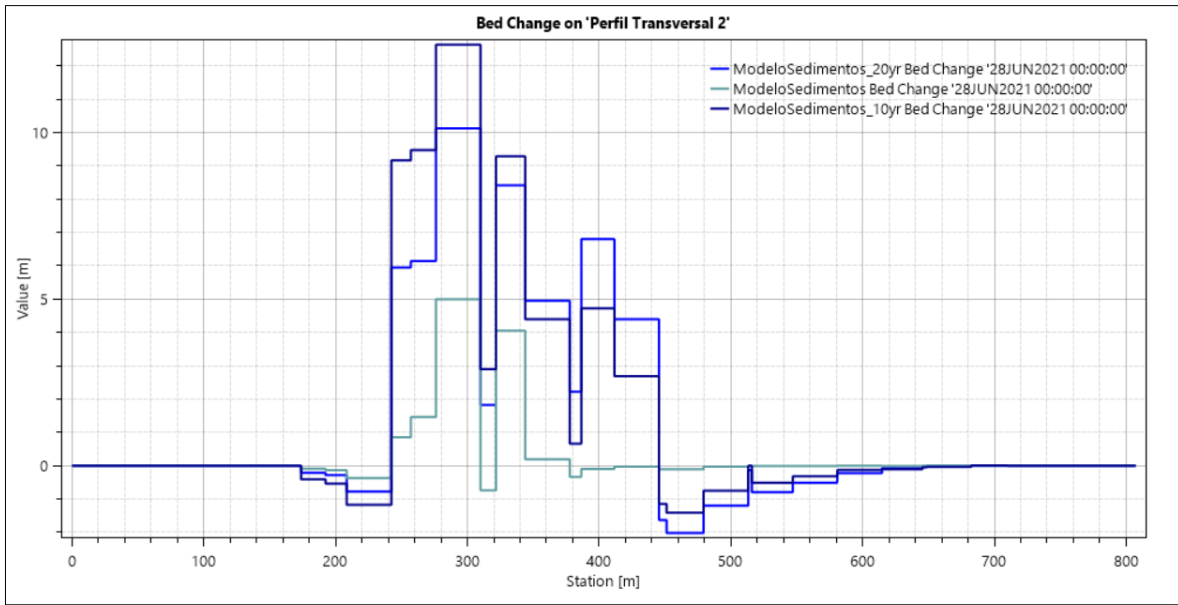


Figura 18. Cambio en el fondo del embalse para los escenarios 2020-2021, 10 años y 20 años sobre el perfil transversal 2
Fuente: HEC-RAS 6.3.1

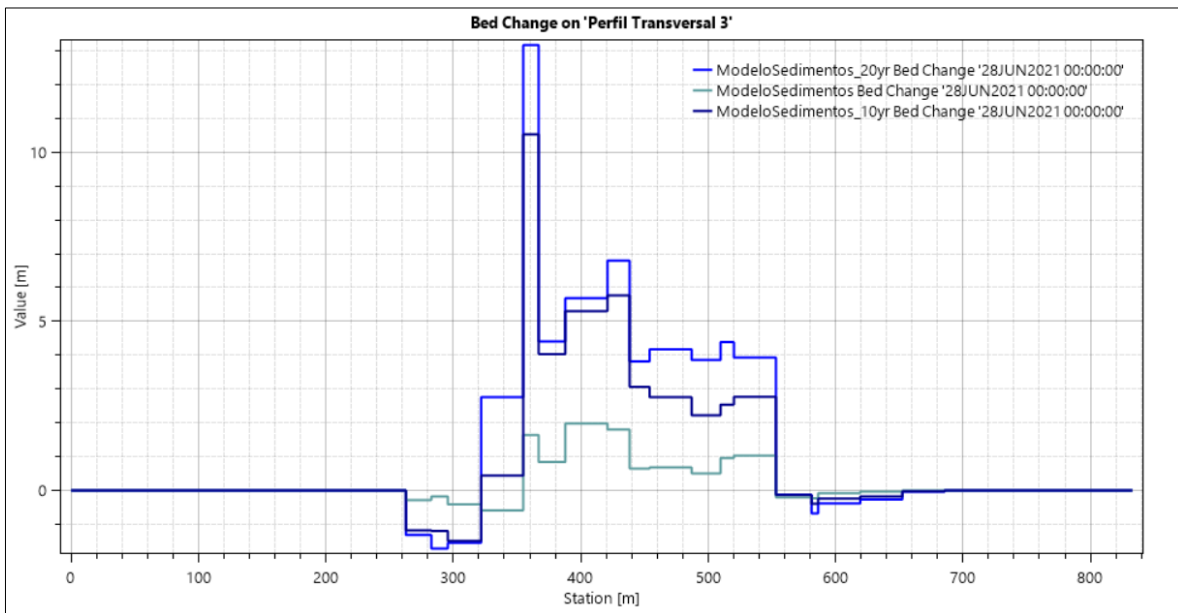


Figura 19. Cambio en el fondo del embalse para los escenarios 2020-2021, 10 años y 20 años sobre el perfil transversal 3
Fuente: HEC-RAS 6.3.1