*Supplementary Materials*

**Relationships between sediment transport and various hydrological and hydraulic characteristics of flood events on Trotuș River (Romania)**

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“*Each piece of information, each measured flood, is fairly unique and has to be treated as a gem that gives insight … For the geomorphologist, hydrologist and sedimentologist, this remains pioneering territory*”[1].

**Table S1.** Classification of flood events based on duration and some energy parameters.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Gauging station** | **Flood event**  (DD/MM/YYYY) | **Abbrev.** | **Duration** | **1Max ω** | **2Max energy** | **3SAP** | **Flood type** |
| Lunca de Sus | 27/3 – 8/4/2000 | 2000 | 288 | 99 | 17 | 6 | D |
| 21 – 28/7/2001 | 2001 | 168 | 228 | 16 | 4 | D |
| 27/7 – 1/8/2002 | 2002a | 120 | 144 | 8 | 2 | D |
| 15 – 24/8/2002 | 2002b | 216 | 135 | 13 | 3 | D |
| 9 – 18/7/2005 | 2005a | 216 | 338 | 32 | 6 | C |
| 4 – 9/8/2005 | 2005b | 120 | 254 | 8 | 2 | D |
| 25/3 – 7/4/2006 | 2006a | 312 | 175 | 23 | 4 | D |
| 7 –14/8/2006 | 2006b | 168 | 141 | 16 | 3 | D |
| 23 – 29/10/2007 | 2007 | 144 | 141 | 17 | 4 | D |
| 22/6 – 12/7/2008 | 2008 | 480 | 166 | 17 | 4 | D |
| 20/6 – 3/7/2010 | 2010a | 312 | 259 | 31 | 4 | C |
| 6 –17/7/2010 | 2010b | 264 | 136 | 18 | 3 | D |
| 20/6 –17/7/2014 | 2014 | 684 | 318 | 34 | 10 | C |
| 31/5 –15/6/2016 | 2016 | 360 | 345 | 38 | 9 | C |
| Goioasa | 17 – 30/6/2001 | 2001 | 312 | 216 | 25 | 7 | D |
| 3 –12/8/2002 | 2002a | 216 | 408 | 45 | 7 | C |
| 15 – 24/8/2002 | 2002b | 216 | 158 | 23 | 3 | D |
| 25/7– 3/8/2004 | 2004 | 216 | 829 | 80 | 15 | B |
| 6 –19/5/2005 | 2005a | 312 | 169 | 22 | 2 | D |
| 25/6 – 5/7/2005 | 2005b | 240 | 163 | 18 | 2 | D |
| 8 – 31/7/2005 | 2005c | 552 | 777 | 89 | 9 | B |
| 15/8 – 14/9/2005 | 2005d | 480 | 430 | 53 | 5 | C |
| 25/3 – 16/4/2006 | 2006a | 528 | 186 | 25 | 4 | D |
| 31/5 – 14/6/2006 | 2006b | 336 | 155 | 19 | 3 | D |
| 3 – 10/8/2006 | 2006c | 168 | 148 | 16 | 2 | D |
| 22 – 31/3/2007 | 2007a | 216 | 186 | 21 | 4 | D |
| 22 – 31/10/2007 | 2007b | 216 | 317 | 37 | 7 | C |
| 12 – 21/4/2008 | 2008a | 216 | 149 | 17 | 3 | D |
| 21/7 – 4/8/2008 | 2008b | 336 | 222 | 26 | 5 | D |
| 28/5 – 9/6/2009 | 2009a | 288 | 204 | 24 | 5 | D |
| 9 – 18/7/2009 | 2009b | 216 | 177 | 20 | 4 | D |
| 19/5 –12/6/2010 | 2010a | 576 | 221 | 32 | 4 | D |
| 20/6 – 8/7/2010 | 2010b | 432 | 694 | 77 | 9 | B |
| 28/5 – 5/6/2012 | 2012 | 192 | 188 | 24 | 7 | D |
| 30/5 – 9/6/2016 | 2016 | 240 | 566 | 64 | 12 | B |
| 29/5 – 3/6/2017 | 2017 | 120 | 237 | 27 | 7 | D |
| Târgu Ocna | 18 – 26/7/2001 | 2001 | 192 | 209 | 26 | 8 | D |
| 1 - 23/8/2002 | 2002 | 528 | 276 | 31 | 5 | D |
| 29/3 – 4/4/2003 | 2003 | 144 | 190 | 20 | 5 | D |
| 12 – 25/4/2004 | 2004a | 312 | 213 | 25 | 4 | D |
| 26 – 31/7/2004 | 2004b | 120 | 709 | 60 | 11 | A |
| 6 –19/5/2005 | 2005a | 312 | 213 | 29 | 3 | D |
| 9 – 30/7/2005 | 2005b | 504 | 1549 | 154 | 15 | B |
| 16 – 30/8/2005 | 2005c | 336 | 339 | 44 | 4 | C |
| 27/3 – 11/4/2006 | 2006a | 360 | 177 | 25 | 3 | D |
| 31/5 – 14/6/2006 | 2006b | 336 | 177 | 21 | 3 | D |
| 21 – 29/3/2007 | 2007a | 192 | 192 | 24 | 5 | D |
| 21 – 27/10/2007 | 2007b | 144 | 344 | 40 | 8 | A |
| 21 – 27/7/2008 | 2008 | 144 | 203 | 25 | 5 | D |
| 10 – 19/7/2009 | 2009 | 216 | 185 | 21 | 4 | D |
| 18 – 28/5/2010 | 2010a | 240 | 197 | 27 | 3 | D |
| 22 – 29/6/2010 | 2010b | 168 | 609 | 70 | 8 | B |
| 30/6 –13/7/2010 | 2010c | 312 | 324 | 39 | 5 | C |
| 22/5 – 5/6/2012 | 2012 | 336 | 227 | 25 | 7 | D |
| 21 – 31/7/2014 | 2014 | 240 | 186 | 22 | 6 | D |
| 23/5 –10/6/2016 | 2016 | 432 | 713 | 75 | 12 | B |
| Vrânceni | 7 – 14/8/2002 | 2002 | 432 | 166 | 18 | 6 | D |
| 12 – 21/4/2004 | 2004a | 288 | 231 | 24 | 7 | D |
| 27 – 31/6/2004 | 2004b | 312 | 371 | 36 | 11 | C |
| 27/4 –11/5/2005 | 2005a | 336 | 221 | 25 | 4 | D |
| 22/6 –1/7/2005 | 2005b | 216 | 103 | 12 | 2 | D |
| 9 – 23/7/2005 | 2005c | 336 | 930 | 109 | 17 | B |
| 16 – 28/8/2005 | 2005d | 288 | 215 | 24 | 4 | D |
| 22/3 –1/4/2007 | 2007a | 240 | 206 | 21 | 7 | D |
| 22 – 30/10/2007 | 2007b | 192 | 294 | 32 | 11 | D |
| 14 – 28/4/2008 | 2008 | 336 | 106 | 13 | 4 | D |
| 18 – 29/5/2010 | 2010a | 264 | 156 | 20 | 3 | D |
| 21/6 – 13/7/2010 | 2010b | 528 | 512 | 55 | 9 | B |
| 19/7– 6/8/2010 | 2010c | 432 | 429 | 42 | 7 | B |
| 12 – 25/4/2011 | 2011a | 312 | 114 | 13 | 4 | D |
| 8 – 17/6/2011 | 2011b | 216 | 106 | 12 | 4 | D |
| 23/5 – 9/6/2012 | 2012 | 408 | 387 | 36 | 15 | B |
| 13 – 21/5/2014 | 2014a | 192 | 257 | 25 | 9 | D |
| 21 – 28 /7/2014 | 2014b | 168 | 163 | 16 | 6 | D |
| 9 –17/4/2016 | 2016a | 192 | 121 | 14 | 3 | D |
| 23 – 29/5/2016 | 2016b | 144 | 458 | 47 | 9 | A |
| 31/5 –12/6/2016 | 2016c | 480 | 825 | 94 | 18 | B |

1Max ω – maximum flood stream power (Wm-2); 2Max energy - maximum energy expended per unit area in a day associated with annual peak flood (MJ); 3SAP - Share of annual peak flood in the total energy expended (%).

**Table S2.** Data regarding the flow discharge, suspended sediment load, bedload, and sediment yield for each flood event.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Gauging station** | **Flood event**  (DD/MM/YYYY) | **1Q mean** | **2Q peak** | **3Qs max** | **4SSY flood** | **5%SSY total** | **6BSY flood** | **7%BSY total** | **8TSY**  **flood** | **9%TSY total** |
| Lunca de Sus | 27/3 – 8/4/2000 | 5.2 | 11.6 | 12.8 | 4.6 | 82 | 2.1 | 99 | 6.7 | 87 |
| 21 – 28/7/2001 | 5.3 | 15.5 | 35.1 | 5.8 | 48 | 2.9 | 94 | 8.7 | 57 |
| 27/7 – 1/8/2002 | 3.1 | 9.8 | 10.6 | 1.2 | 7 | 0.5 | 38 | 1.7 | 10 |
| 15 – 24/8/2002 | 3.6 | 9.2 | 13.4 | 4.1 | 26 | 0.7 | 48 | 4.8 | 28 |
| 9 – 18/7/2005 | 6.8 | 23 | 155.0 | 21.0 | 57 | 5.2 | 66 | 26.2 | 59 |
| 4 – 9/8/2005 | 4.7 | 17.3 | 30.2 | 3.4 | 9 | 2.2 | 28 | 5.6 | 13 |
| 25/3 – 7/4/2006 | 4.6 | 11.9 | 26.8 | 6.6 | 34 | 1.6 | 67 | 8.2 | 38 |
| 7 –14/8/2006 | 3.2 | 9.6 | 30.7 | 4.5 | 23 | 0.6 | 24 | 5.1 | 23 |
| 23 – 29/10/2007 | 3.9 | 9.6 | 43.5 | 4.6 | 52 | 0.6 | 92 | 5.2 | 54 |
| 22/6 – 12/7/2008 | 2.5 | 11.3 | 64.5 | 11.7 | 52 | 0.6 | 81 | 12.3 | 53 |
| 20/6 – 3/7/2010 | 6.0 | 17.6 | 124.0 | 23.1 | 43 | 6.0 | 60 | 29.1 | 45 |
| 6 –17/7/2010 | 4.7 | 9.3 | 12.3 | 6.8 | 13 | 1.1 | 11 | 7.9 | 12 |
| 20/6 –17/7/2014 | 2.7 | 21.6 | 55.7 | 12.8 | 68 | 2.8 | 96 | 15.6 | 72 |
| 31/5 –15/6/2016 | 4.8 | 23.5 | 71.5 | 9.4 | 94 | 3.5 | 98 | 13.0 | 95 |
| Goioasa | 17 – 30/6/2001 | 20.3 | 91.9 | 395.0 | 66.0 | 70 | 10.2 | 98 | 76.1 | 73 |
| 3 –12/8/2002 | 47.7 | 174.0 | 940.0 | 156.1 | 49 | 13.1 | 50 | 169.2 | 49 |
| 15 – 24/8/2002 | 29.6 | 67.2 | 370.0 | 72.7 | 23 | 11.3 | 43 | 84.0 | 24 |
| 25/7– 3/8/2004 | 61.2 | 353.0 | 2870.0 | 272.7 | 81 | 41.4 | 96 | 314.1 | 83 |
| 6 –19/5/2005 | 25.9 | 71.6 | 262.0 | 60.7 | 7 | 11.0 | 6 | 71.7 | 7 |
| 25/6 – 5/7/2005 | 18.7 | 69.3 | 131.0 | 20.9 | 2 | 9.8 | 5 | 30.7 | 3 |
| 8 – 31/7/2005 | 43.7 | 331.0 | 2290.0 | 388.8 | 46 | 87.8 | 49 | 476.6 | 46 |
| 15/8 – 14/9/2005 | 41.0 | 183.0 | 768.0 | 279.0 | 33 | 70.4 | 39 | 349.5 | 34 |
| 25/3 – 16/4/2006 | 32.6 | 79.1 | 232.0 | 63.6 | 35 | 15.3 | 52 | 78.9 | 38 |
| 31/5 – 14/6/2006 | 23.2 | 65.9 | 450.0 | 54.8 | 31 | 11.6 | 39 | 66.4 | 32 |
| 3 – 10/8/2006 | 22.9 | 63.0 | 122.5 | 14.9 | 8 | 1.3 | 4 | 16.2 | 8 |
| 22 – 31/3/2007 | 22.5 | 79.1 | 297.0 | 49.6 | 18 | 9.9 | 45 | 59.4 | 20 |
| 22 – 31/10/2007 | 37.2 | 135.0 | 1390.0 | 158.7 | 58 | 11.6 | 53 | 170.3 | 57 |
| 12 – 21/4/2008 | 21.5 | 63.5 | 124.9 | 30.9 | 10 | 1.3 | 8 | 32.2 | 10 |
| 21/7 – 4/8/2008 | 35.1 | 94.5 | 706.0 | 192.0 | 60 | 14.7 | 88 | 206.7 | 62 |
| 28/5 – 9/6/2009 | 27.8 | 86.7 | 734.0 | 98.5 | 35 | 19.9 | 61 | 118.5 | 38 |
| 9 – 18/7/2009 | 25.0 | 75.2 | 186.5 | 39.6 | 14 | 11.0 | 34 | 50.6 | 16 |
| 19/5 –12/6/2010 | 24.6 | 94.5 | 202.0 | 72.4 | 14 | 21.5 | 22 | 93.9 | 15 |
| 20/6 – 8/7/2010 | 59.2 | 296.0 | 2400.0 | 356.9 | 70 | 73.7 | 76 | 430.6 | 71 |
| 28/5 – 5/6/2012 | 33.9 | 80.3 | 334.0 | 61.6 | 80 | 12.4 | 93 | 73.9 | 82 |
| 30/5 – 9/6/2016 | 61.1 | 241.2 | 2961.4 | 309.7 | 66 | 59.1 | 94 | 368.8 | 70 |
| 29/5 – 3/6/2017 | 33.6 | 101.0 | 375.5 | 37.9 | 69 | 10.1 | 94 | 47.9 | 73 |
| Târgu Ocna | 18 – 26/7/2001 | 65.0 | 201 | 771.0 | 120.9 | 23 | 18.0 | 94 | 138.9 | 26 |
| 1 - 23/8/2002 | 68.0 | 266 | 1470.0 | 334.9 | 58 | 37.0 | 95 | 371.9 | 60 |
| 29/3 – 4/4/2003 | 55.0 | 183 | 798.0 | 87.9 | 33 | 15.2 | 89 | 103.2 | 37 |
| 12 – 25/4/2004 | 60.2 | 205 | 426.0 | 59.0 | 8 | 18.3 | 6 | 77.3 | 7 |
| 26 – 31/7/2004 | 150.6 | 682 | 2515.0 | 229.9 | 30 | 267.3 | 91 | 497.1 | 47 |
| 6 –19/5/2005 | 73.6 | 205 | 954.0 | 462.8 | 14 | 21.4 | 3 | 484.2 | 12 |
| 9 – 30/7/2005 | 154.5 | 1490 | 6242.0 | 1593.6 | 48 | 571.0 | 88 | 2164.6 | 55 |
| 16 – 30/8/2005 | 79.7 | 326 | 1404.0 | 286.3 | 9 | 47.5 | 7 | 333.8 | 8 |
| 27/3 – 11/4/2006 | 74.4 | 170 | 114.0 | 63.5 | 3 | 22.4 | 49 | 85.9 | 3 |
| 31/5 – 14/6/2006 | 47.1 | 170 | 2220.0 | 427.5 | 17 | 16.7 | 36 | 444.1 | 17 |
| 21 – 29/3/2007 | 62.1 | 185 | 694.0 | 102.7 | 44 | 17.0 | 6 | 119.8 | 23 |
| 21 – 27/10/2007 | 97.0 | 331 | 746.0 | 89.3 | 39 | 269.1 | 94 | 358.4 | 69 |
| 21 – 27/7/2008 | 77.5 | 196 | 181.0 | 50.7 | 19 | 18.0 | 80 | 68.8 | 24 |
| 10 – 19/7/2009 | 51.3 | 178 | 860.0 | 146.1 | 30 | 15.9 | 80 | 162.0 | 32 |
| 18 – 28/5/2010 | 68.0 | 189 | 1640.0 | 348.7 | 13 | 18.1 | 5 | 366.8 | 12 |
| 22 – 29/6/2010 | 200.0 | 586 | 4900.0 | 914.5 | 33 | 315.4 | 88 | 1229.9 | 39 |
| 30/6 –13/7/2010 | 84.7 | 312 | 2150.0 | 536.5 | 19 | 21.0 | 6 | 557.6 | 18 |
| 22/5 – 5/6/2012 | 67.8 | 218 | 970.0 | 163.0 | 63 | 20.8 | 89 | 183.7 | 66 |
| 21 – 31/7/2014 | 51.6 | 179 | 325.0 | 69.0 | 24 | 17.5 | 88 | 86.5 | 28 |
| 23/5 –10/6/2016 | 126.5 | 686 | 6798.0 | 1711.9 | 77 | 321.6 | 99 | 2033.5 | 79 |
| Vrânceni | 7 – 14/8/2002 | 123 | 508 | 1440.0 | 594.7 | 65 | 76.3 | 94 | 666.3 | 67 |
| 12 – 21/4/2004 | 139 | 705 | 4225.0 | 427.0 | 27 | 142.9 | 47 | 494.7 | 28 |
| 27 – 31/6/2004 | 174 | 1136 | 7112.0 | 984.2 | 62 | 142.9 | 48 | 1053.2 | 60 |
| 27/4 –11/5/2005 | 171 | 675 | 1774.0 | 469.8 | 5 | 834.5 | 16 | 604.3 | 6 |
| 22/6 –1/7/2005 | 121 | 315 | 689.0 | 106.3 | 1 | 834.5 | 9 | 177.8 | 2 |
| 9 – 23/7/2005 | 468 | 2845 | 52000.0 | 7034.2 | 81 | 834.5 | 65 | 7576.2 | 79 |
| 16 – 28/8/2005 | 148 | 657 | 3550.0 | 762.0 | 9 | 834.5 | 9 | 838.0 | 9 |
| 22/3 –1/4/2007 | 127 | 629 | 8250.0 | 780.7 | 51 | 135.0 | 47 | 844.1 | 50 |
| 22 – 30/10/2007 | 192 | 900 | 6400.0 | 689.4 | 45 | 135.0 | 52 | 759.5 | 45 |
| 14 – 28/4/2008 | 106 | 325 | 1290.0 | 138.4 | 48 | 75.0 | 87 | 203.5 | 56 |
| 18 – 29/5/2010 | 145 | 478 | 2400.0 | 324.3 | 9 | 816.4 | 15 | 449.3 | 10 |
| 21/6 – 13/7/2010 | 260 | 1567 | 7750.0 | 1433.7 | 41 | 816.4 | 58 | 1903.7 | 44 |
| 19/7– 6/8/2010 | 172 | 1312 | 13000.0 | 1605.3 | 46 | 816.4 | 26 | 1820.7 | 42 |
| 12 – 25/4/2011 | 96 | 350 | 3320.0 | 340.1 | 47 | 135.6 | 46 | 403.1 | 47 |
| 8 – 17/6/2011 | 98 | 325 | 1320.0 | 188.6 | 26 | 135.6 | 48 | 254.0 | 29 |
| 23/5 – 9/6/2012 | 184 | 1185 | 18600.0 | 1884.0 | 83 | 193.8 | 96 | 2070.0 | 84 |
| 13 – 21/5/2014 | 153 | 786 | 4500.0 | 439.9 | 39 | 129.6 | 48 | 502.1 | 40 |
| 21 – 28 /7/2014 | 125 | 499 | 4400.0 | 466.2 | 41 | 129.6 | 48 | 528.3 | 42 |
| 9 –17/4/2016 | 103 | 371 | 1358.0 | 190.4 | 3 | 815.0 | 8 | 255.3 | 4 |
| 23 – 29/5/2016 | 328 | 1400 | 10750.0 | 1218.4 | 19 | 815.0 | 33 | 1484.7 | 21 |
| 31/5 –12/6/2016 | 435 | 2524 | 23635.7 | 4430.8 | 70 | 815.0 | 58 | 4899.9 | 68 |

1 **Qmean** – flood event mean discharge (m3s-1); 2**Qpeak** – flood event peak discharge (m3s-1); 3**Qsmax** – flood event suspended sediment load (kgs-1); 4**SSY**flood – flood event suspended sediment yield (tx103); 5**%SSY** total – share of **SSY**flood in the annual suspended sediment yield (%); 6**BSY**flood – bedload sediment yield (tx103); 7**%BSY**total – share of **BSY**flood in the annual bedload sediment yield (%); 8**TSY**flood – total sediment yield (tx103); 9**%TSY** total– share of **TSY**flood in the annual total sediment yield (%).

**Table S3.** Total sediment yield at Qmid for rising limb and falling limb, hysteresis index (HI) and hysteresis pattern for all flood events.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Gauging station** | **Flood Event**  (DD/MM/YYYY) | **Qmid**  (m3s-1) | **TSY at Qmid**  (tx103) | | | **HI** | **Hysteresis**  **pattern** |
| **Rising limb** | **Falling limb** | |
| Lunca de Sus | 27/3 – 8/4/2000 | 6.6 | 0.44 | | 0.72 | -0.623 | AC |
| 21 – 28/7/2001 | 8.3 | 1.57 | | 2.25 | -0.429 | AC |
| 27/7 – 1/8/2002 | 5.5 | 0.33 | | 0.34 | -0.026 | AC |
| 15 – 24/8/2002 | 5.4 | 1.14 | | 0.66 | 0.737 | C |
| 9 – 18/7/2005 | 12.6 | 6.91 | | 4.32 | 0.600 | C |
| 4 – 9/8/2005 | 9.3 | 1.51 | | 1.21 | 0.250 | C |
| 25/3 – 7/4/2006 | 6.5 | 0.84 | | 0.95 | -0.134 | AC |
| 7 –14/8/2006 | 5.3 | 0.88 | | 0.86 | 0.020 | C |
| 23 – 29/10/2007 | 5.9 | 1.90 | | 1.21 | 0.364 | C |
| 22/6 – 12/7/2008 | 5.9 | 2.94 | | 2.16 | 0.360 | C |
| 20/6 – 3/7/2010 | 9.3 | 5.18 | | 1.73 | 2.000 | C |
| 6 –17/7/2010 | 6.1 | 0.71 | | 0.82 | -0.137 | AC |
| 20/6 –17/7/2014 | 11.2 | 2.42 | | 2.16 | 0.120 | C |
| 31/5 –15/6/2016 | 12.6 | 3.11 | | 1.81 | 0.714 | C |
| Goioasa | 17 – 30/6/2001 | 47 | 20.74 | | 13.82 | 0.500 | C |
| 3 –12/8/2002 | 96 | 31.97 | | 38.02 | -0.189 | AC |
| 15 – 24/8/2002 | 41 | 16.42 | | 6.91 | 1.375 | C |
| 25/7– 3/8/2004 | 182 | 116.64 | | 104.54 | 0.116 | C |
| 6 –19/5/2005 | 42 | 22.90 | | 6.48 | 2.533 | C |
| 25/6 – 5/7/2005 | 39 | 6.22 | | 5.44 | 0.143 | C |
| 8 – 31/7/2005 | 171 | 112.32 | | 102.82 | 0.092 | C |
| 15/8 – 14/9/2005 | 97 | 43.20 | | 32.83 | 0.316 | C |
| 25/3 – 16/4/2006 | 47 | 8.64 | | 4.32 | 1.000 | C |
| 31/5 – 14/6/2006 | 37 | 20.74 | | 3.46 | 5.000 | C |
| 3 – 10/8/2006 | 36 | 5.18 | | 3.46 | 0.500 | C |
| 22 – 31/3/2007 | 45 | 14.69 | | 12.10 | 0.214 | C |
| 22 – 31/10/2007 | 70 | 44.93 | | 21.60 | 1.080 | C |
| 12 – 21/4/2008 | 38 | 5.18 | | 6.91 | -0.333 | AC |
| 21/7 – 4/8/2008 | 49 | 42.34 | | 25.92 | 0.633 | Complex |
| 28/5 – 9/6/2009 | 46 | 38.02 | | 29.38 | *0.294* | Complex |
| 9 – 18/7/2009 | 42 | 5.18 | | 10.37 | -1.000 | AC |
| 19/5 –12/6/2010 | 52 | 6.91 | | 6.91 | 0.000 | L |
| 20/6 – 8/7/2010 | 155 | 102.64 | | 81.91 | 0.253 | Complex |
| 28/5 – 5/6/2012 | 46 | 21.60 | | 4.32 | 4.000 | C |
| 30/5 – 9/6/2016 | 131 | 129.60 | | 43.20 | 2.000 | C |
| 29/5 – 3/6/2017 | 56 | 14.69 | | 8.64 | 0.700 | C |
| Târgu Ocna | 18 – 26/7/2001 | 103 | 50.11 | | 9.16 | 4.472 | C |
| 1 - 23/8/2002 | 148 | 57.89 | | 56.16 | 0.031 | Complex |
| 29/3 – 4/4/2003 | 105 | 30.24 | | 36.29 | -0.200 | AC |
| 12 – 25/4/2004 | 112 | 23.76 | | 5.18 | 3.583 | C |
| 26 – 31/7/2004 | 348 | 108.00 | | 90.72 | 0.190 | C |
| 6 –19/5/2005 | 115 | 64.80 | | 51.84 | 0.250 | C |
| 9 – 30/7/2005 | 753 | 241.92 | | 596.16 | -1.464 | AC |
| 16 – 30/8/2005 | 339 | 51.84 | | 51.84 | 0.000 | L |
| 27/3 – 11/4/2006 | 103 | 5.01 | | 3.28 | 0.526 | Complex |
| 31/5 – 14/6/2006 | 93 | 4.49 | | 4.49 | 0.000 | L |
| 21 – 29/3/2007 | 96 | 39.74 | | 10.37 | 2.833 | C |
| 21 – 27/10/2007 | 168 | 25.06 | | 17.28 | 0.450 | C |
| 21 – 27/7/2008 | 102 | 8.64 | | 12.96 | -0.500 | AC |
| 10 – 19/7/2009 | 99 | 38.88 | | 31.97 | 0.216 | C |
| 18 – 28/5/2010 | 109 | 73.44 | | 19.01 | 2.864 | C |
| 22 – 29/6/2010 | 337 | 241.92 | | 224.64 | 0.077 | C |
| 30/6 –13/7/2010 | 176 | 86.40 | | 86.40 | 0.000 | L |
| 22/5 – 5/6/2012 | 119 | 38.02 | | 38.88 | -0.023 | AC |
| 21 – 31/7/2014 | 98 | 14.69 | | 13.82 | 0.0625 | C |
| 23/5 –10/6/2016 | 351 | 276.48 | | 380.16 | -0.375 | Complex |
| Vrânceni | 7 – 14/8/2002 | 279 | 127.87 | | 53.57 | 1.387 | Complex |
| 12 – 21/4/2004 | 366 | 172.80 | | 129.60 | 0.333 | C |
| 27 – 31/6/2004 | 578 | 259.20 | | 345.60 | -0.333 | AC |
| 27/4 –11/5/2005 | 367 | 133.92 | | 64.80 | 1.067 | Complex |
| 22/6 –1/7/2005 | 172 | 31.10 | | 3.46 | 8.000 | C |
| 9 – 23/7/2005 | 1435 | 1728.00 | | 2160.00 | -0.250 | AC |
| 16 – 28/8/2005 | 345 | 164.16 | | 172.80 | -0.053 | AC |
| 22/3 –1/4/2007 | 323 | 354.24 | | 259.20 | 0.367 | C |
| 22 – 30/10/2007 | 458 | 241.92 | | 181.44 | 0.333 | C |
| 14 – 28/4/2008 | 182 | 38.02 | | 19.01 | 1.000 | Complex |
| 18 – 29/5/2010 | 259 | 51.84 | | 69.12 | -0.333 | AC |
| 21/6 – 13/7/2010 | 800 | 328.32 | | 259.20 | 0.267 | C |
| 19/7– 6/8/2010 | 674 | 535.68 | | 388.80 | 0.378 | C |
| 12 – 25/4/2011 | 190 | 116.64 | | 86.40 | 0.350 | C |
| 8 – 17/6/2011 | 172 | 55.30 | | 27.65 | 1.000 | C |
| 23/5 – 9/6/2012 | 604 | 794.88 | | 725.76 | 0.095 | Complex |
| 13 – 21/5/2014 | 403 | 198.72 | | 172.80 | 0.150 | C |
| 21 – 28 /7/2014 | 265 | 181.44 | | 155.52 | 0.167 | C |
| 9 –17/4/2016 | 191 | 60.48 | | 27.65 | 1.188 | C |
| 23 – 29/5/2016 | 712 | 414.72 | | 388.80 | 0.067 | C |
| 31/5 –12/6/2016 | 1302 | 1036.80 | | 2073.60 | -1.000 | AC |

**References**

1. Frostick, L.E.; Reid, I.; Layman, J.T. Changing size distribution of suspended sediment in arid-zone flash floods. *Int. Assoc. Sed.* **1983**, 6, 97–106.

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