

Allegato

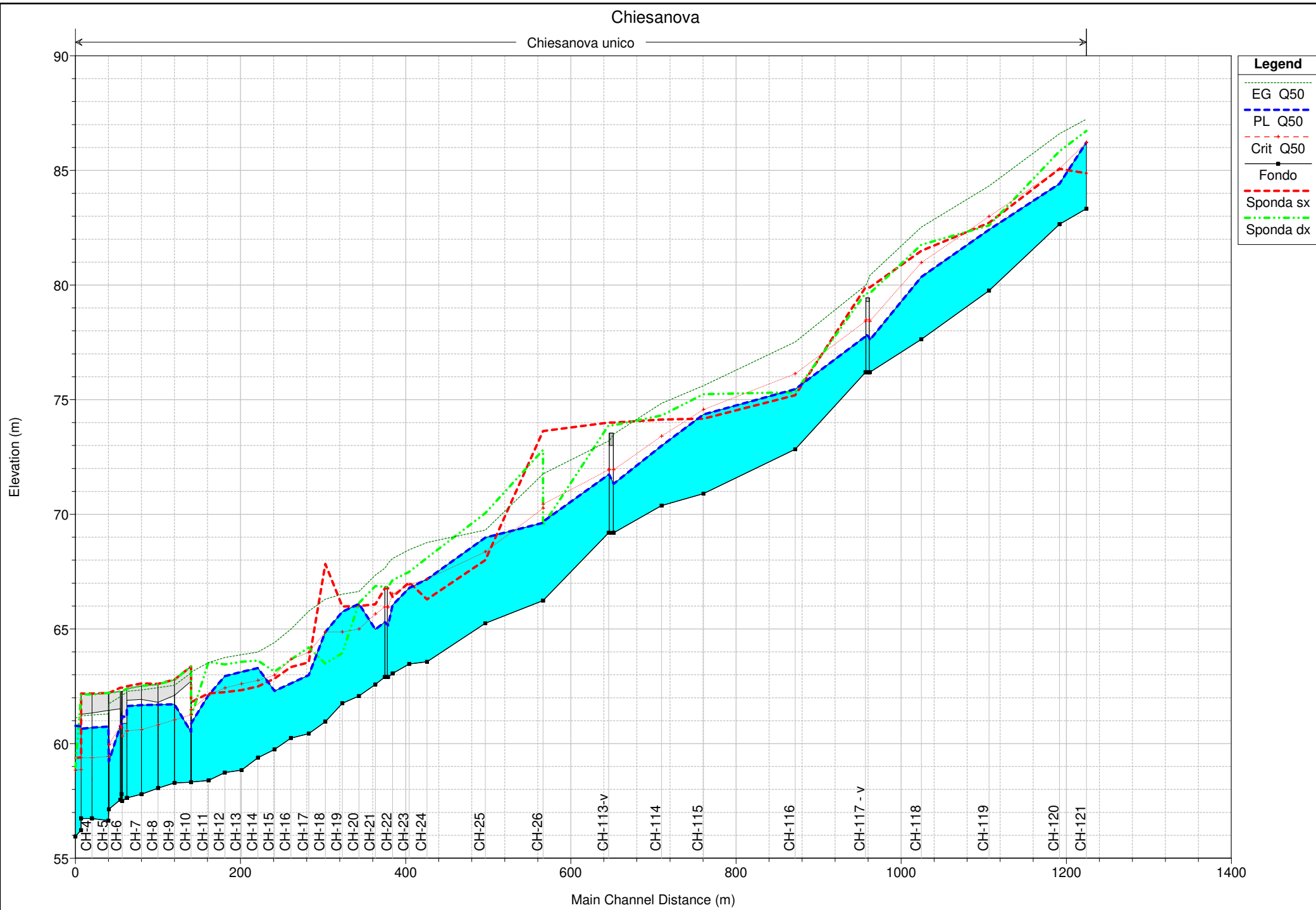
Verifiche idrauliche

Torrente Garibaldo (o Chiesanuova)

- Profilo longitudinale
- Sezioni trasversali
- Tabelle di calcolo

Chiesanova

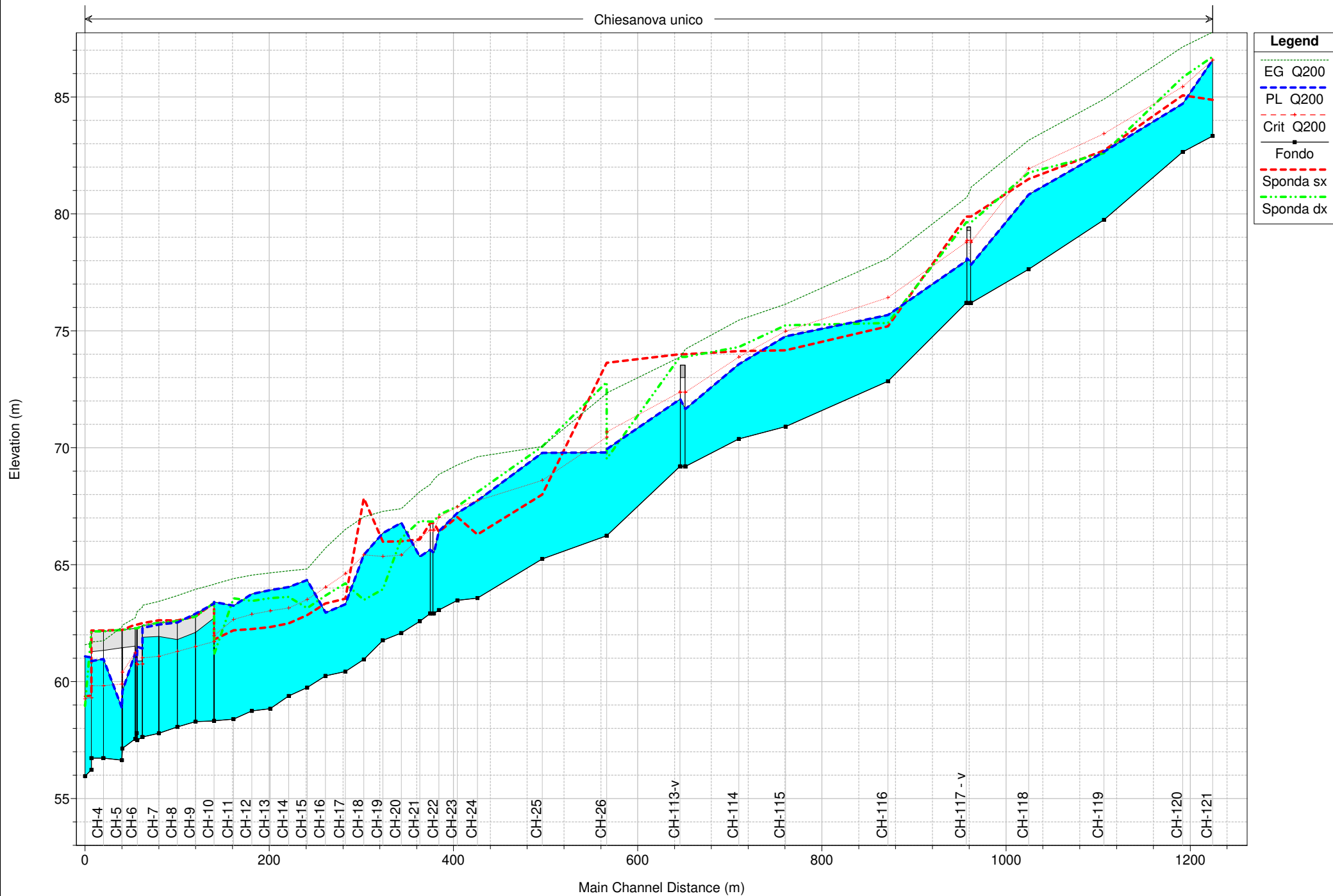
Chiesanova unico



- EG Q50
- PL Q50
- Crit Q50
- Fondo
- Sponda sx
- Sponda dx

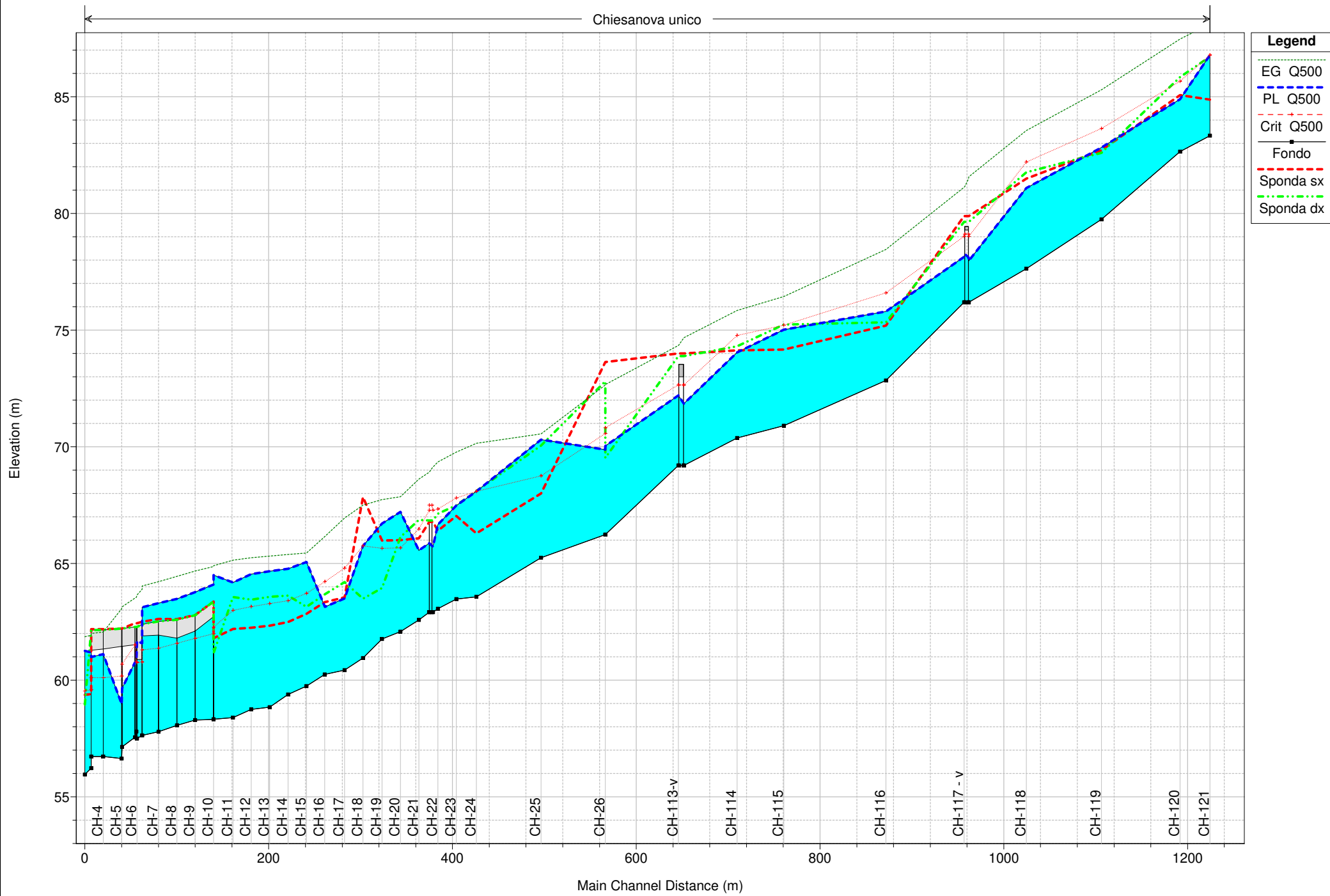
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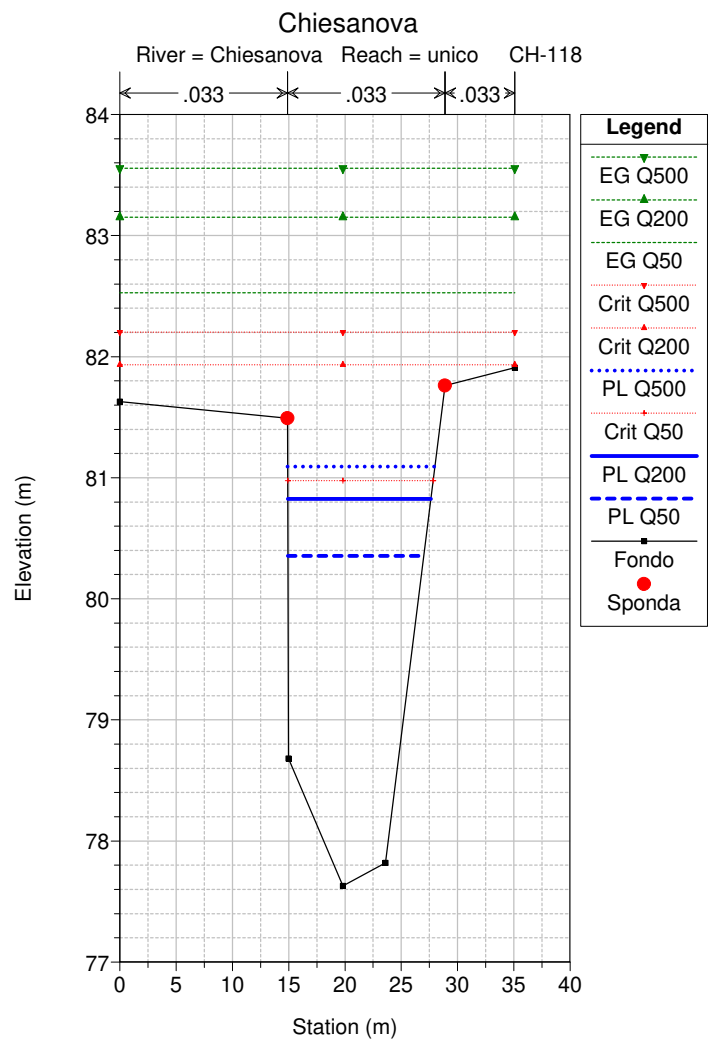
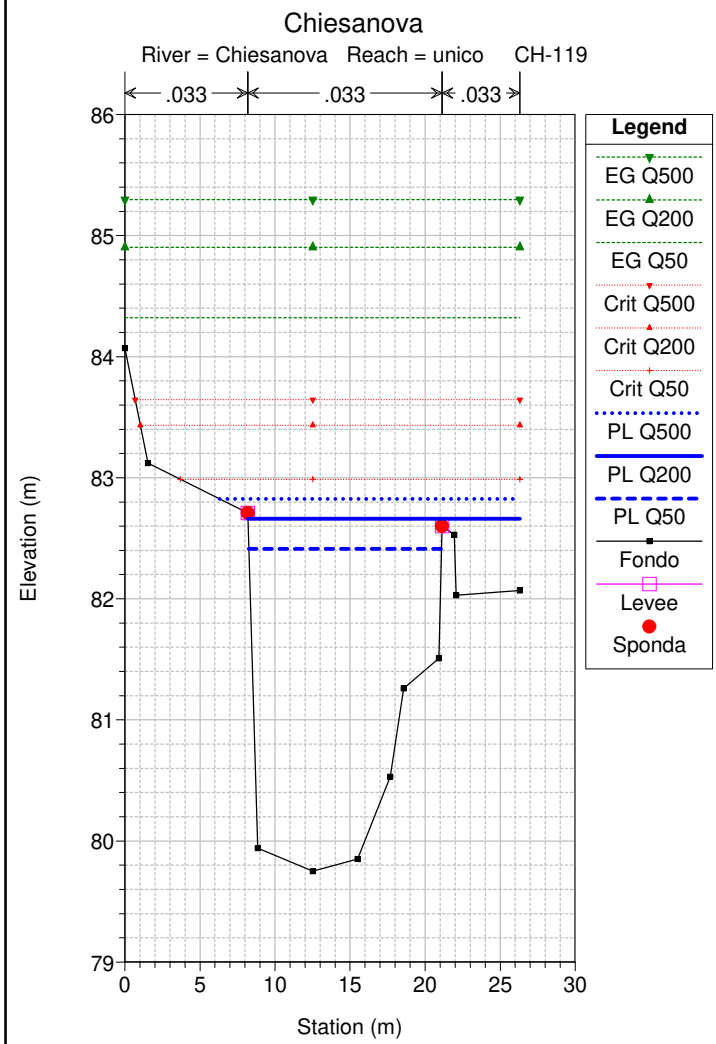
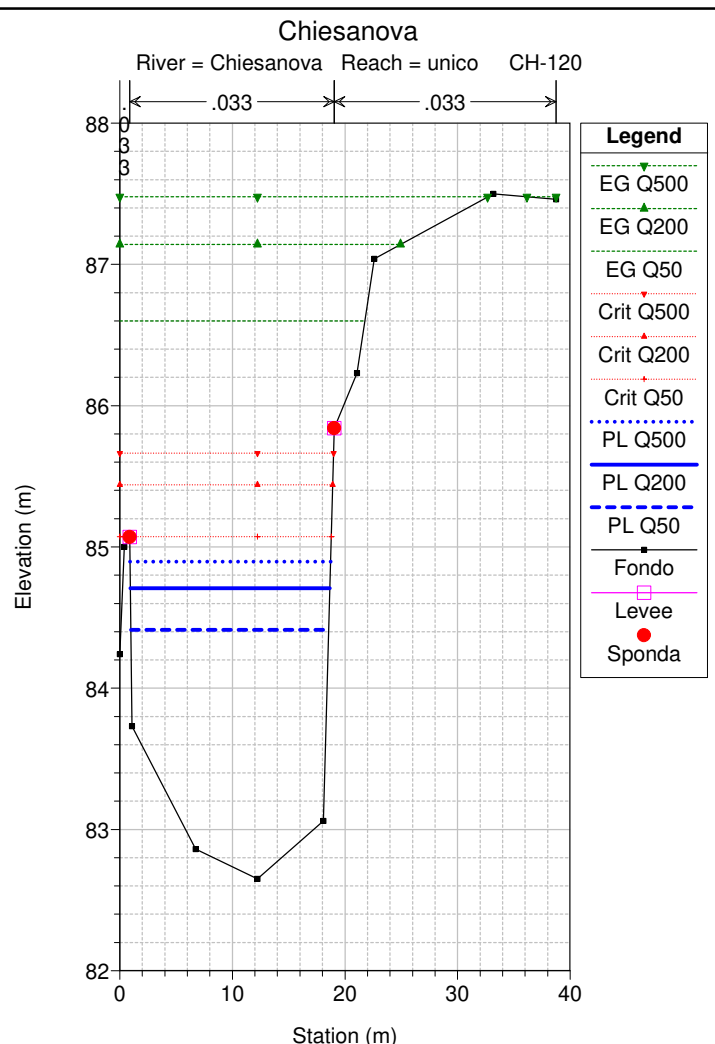
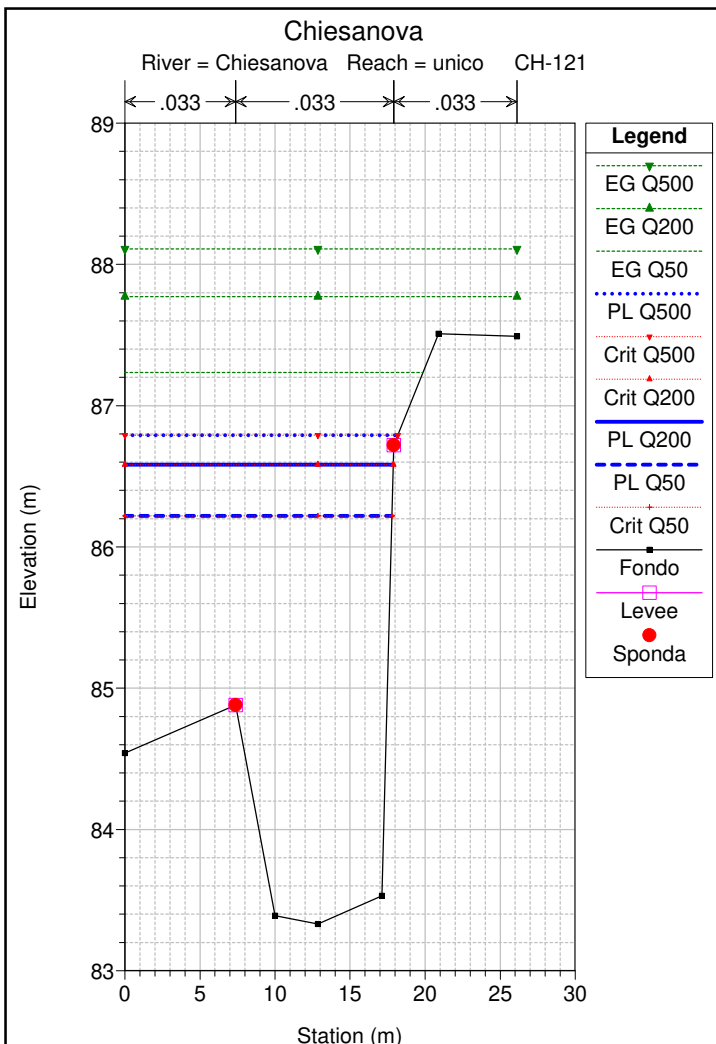
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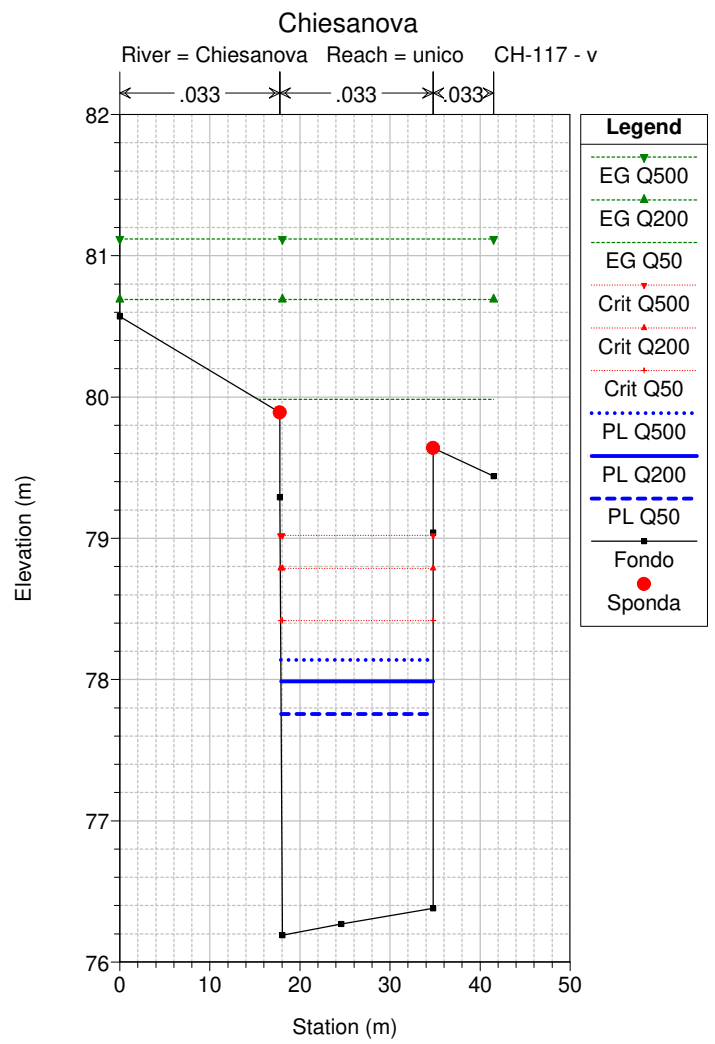
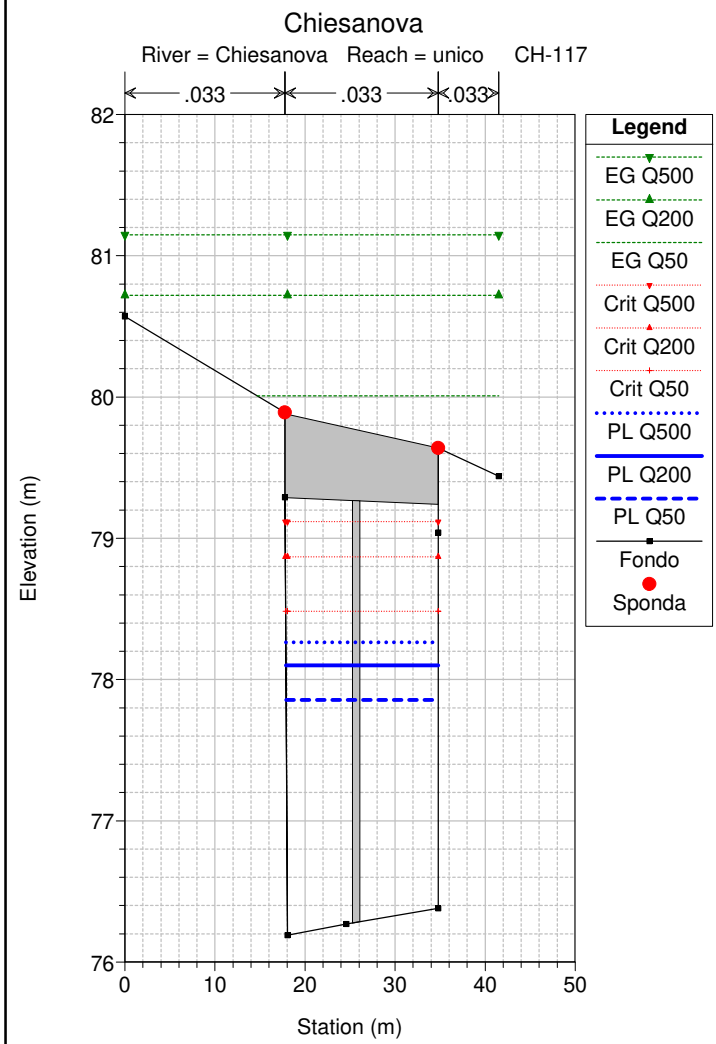
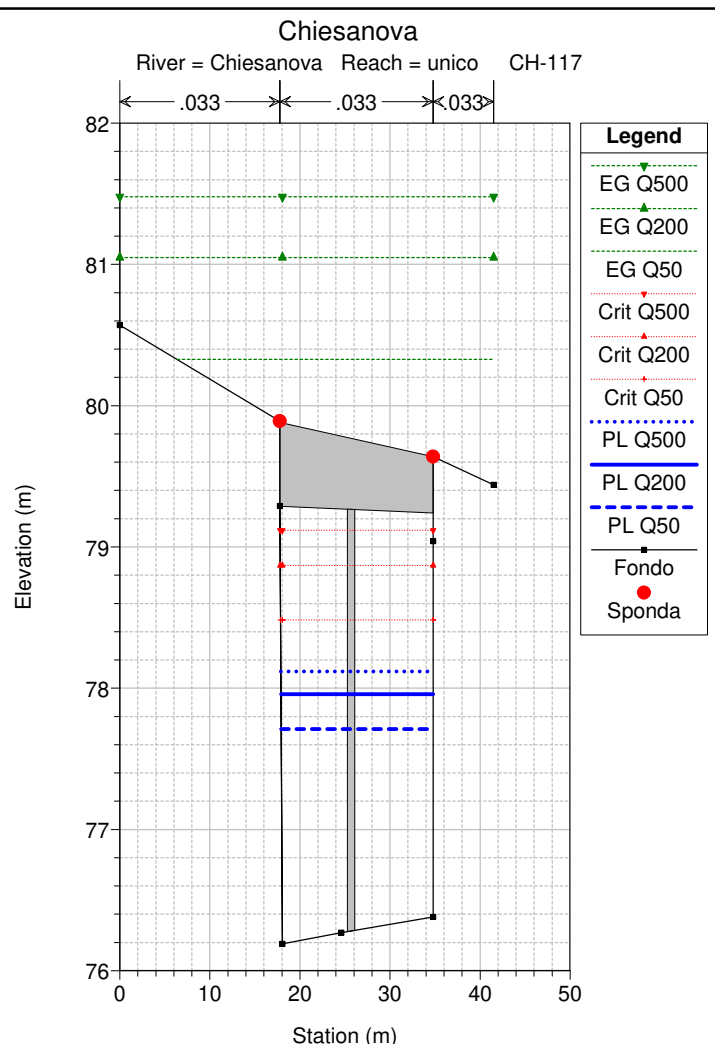
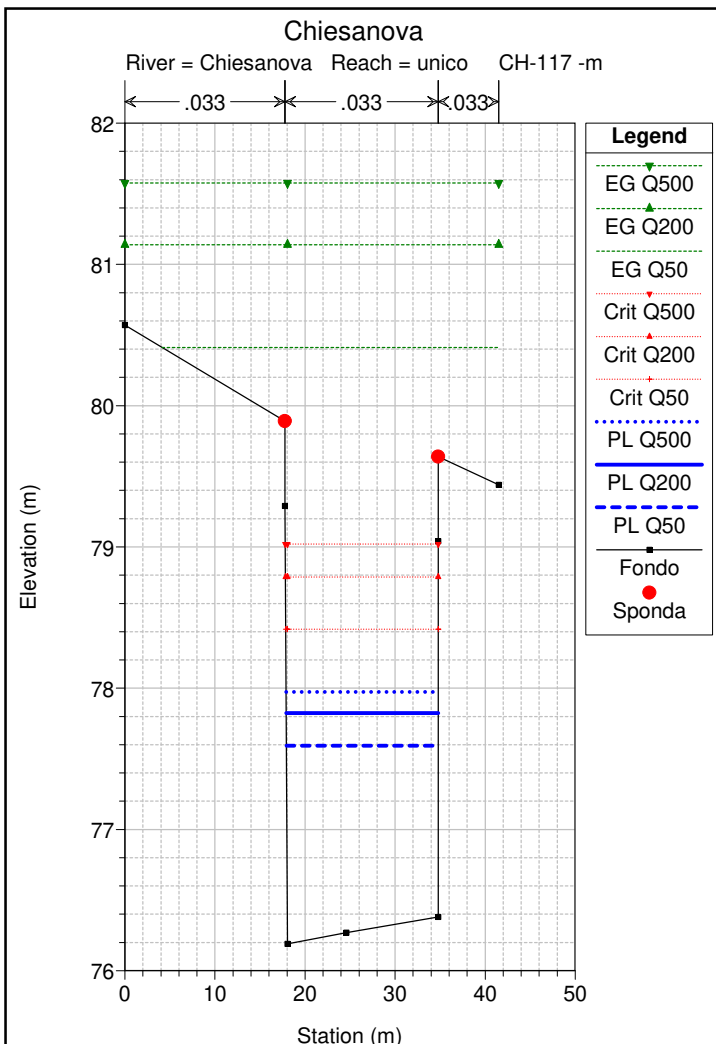


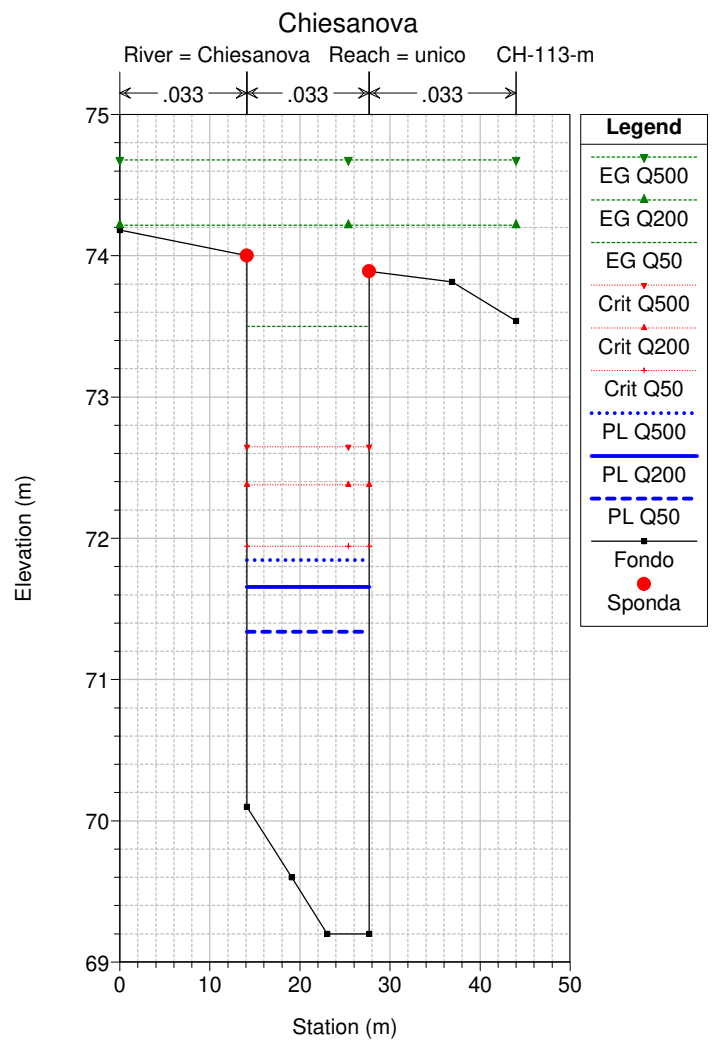
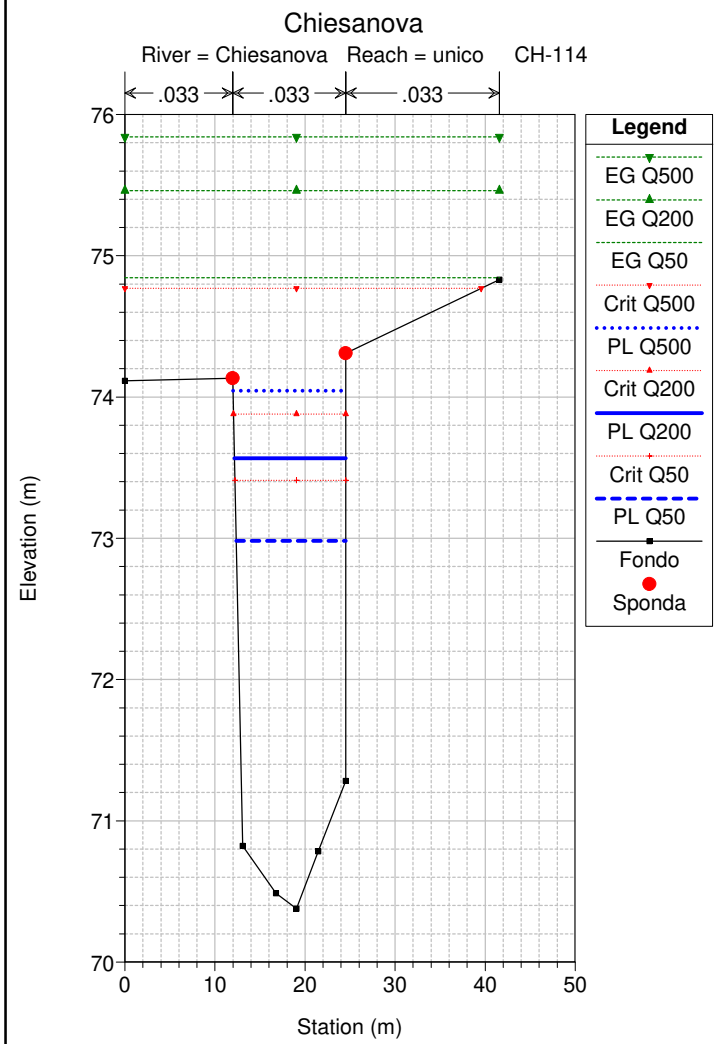
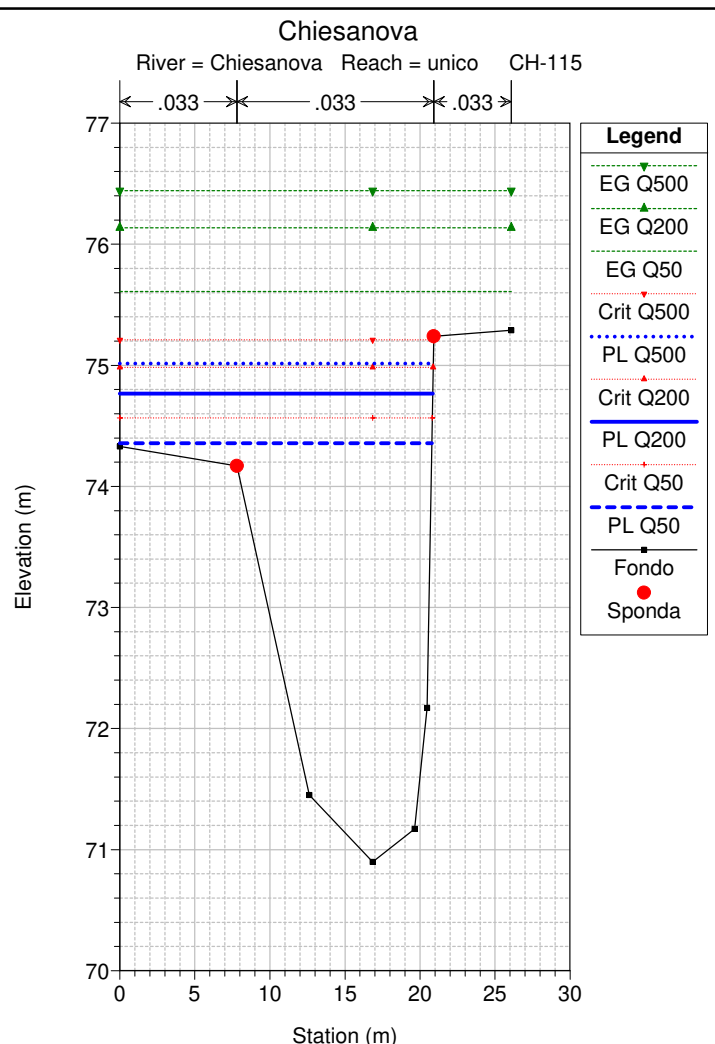
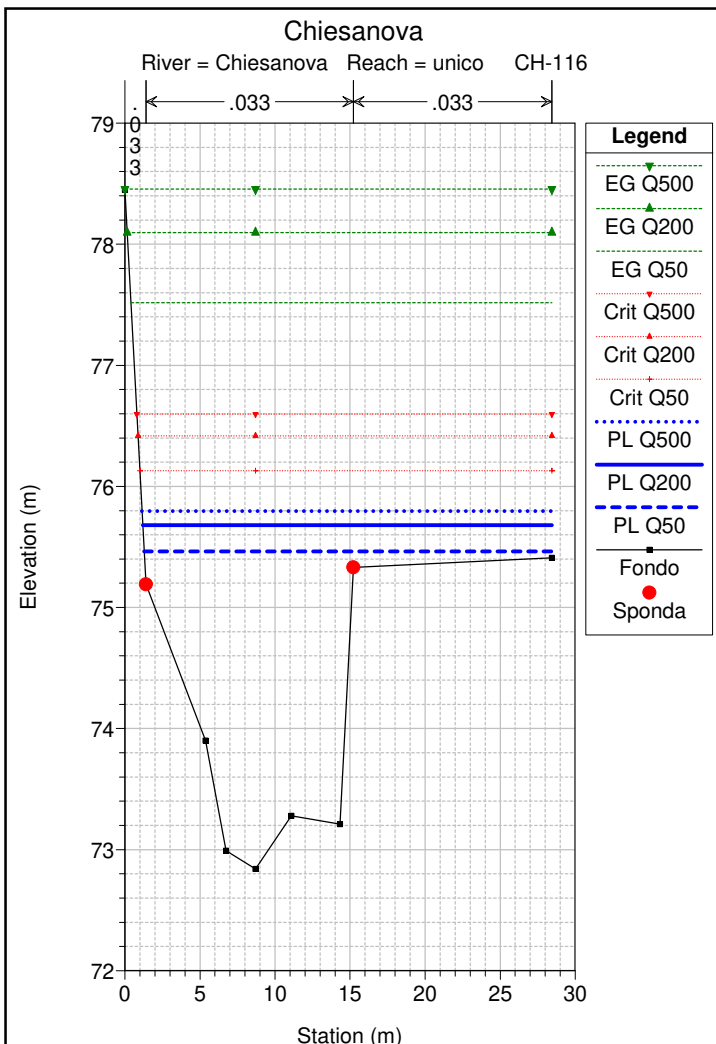
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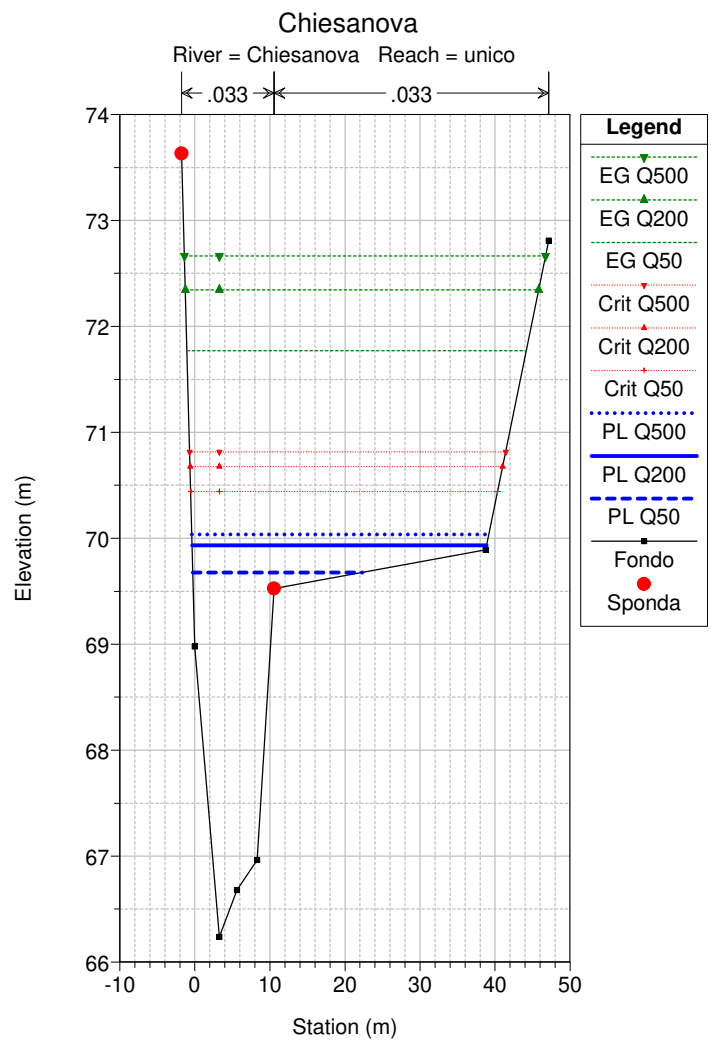
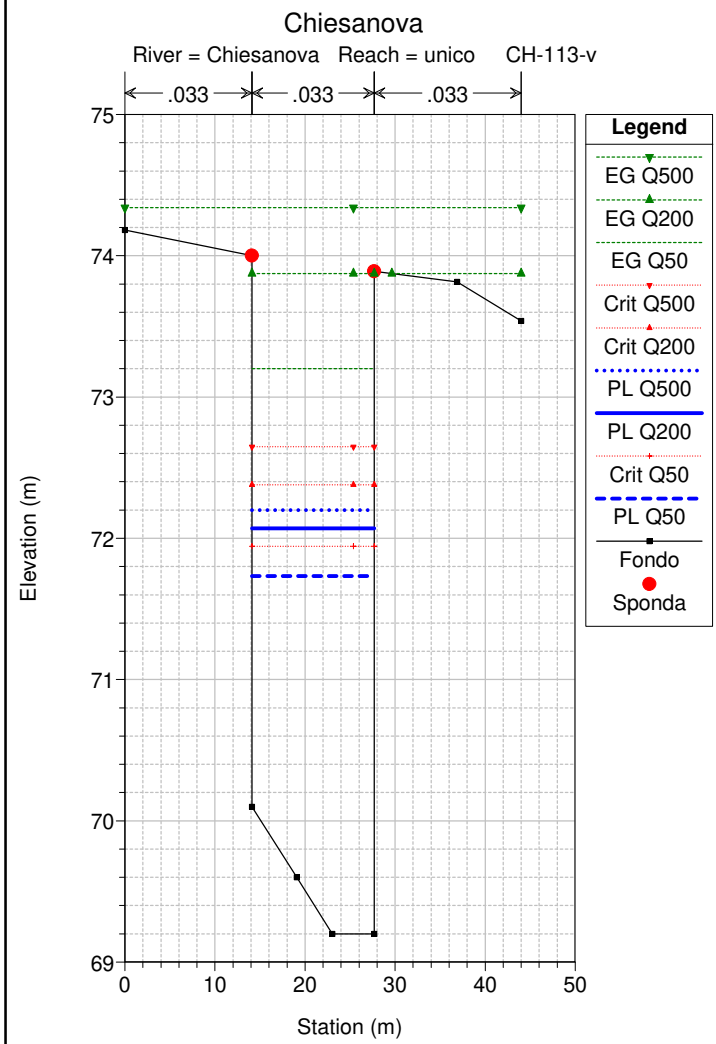
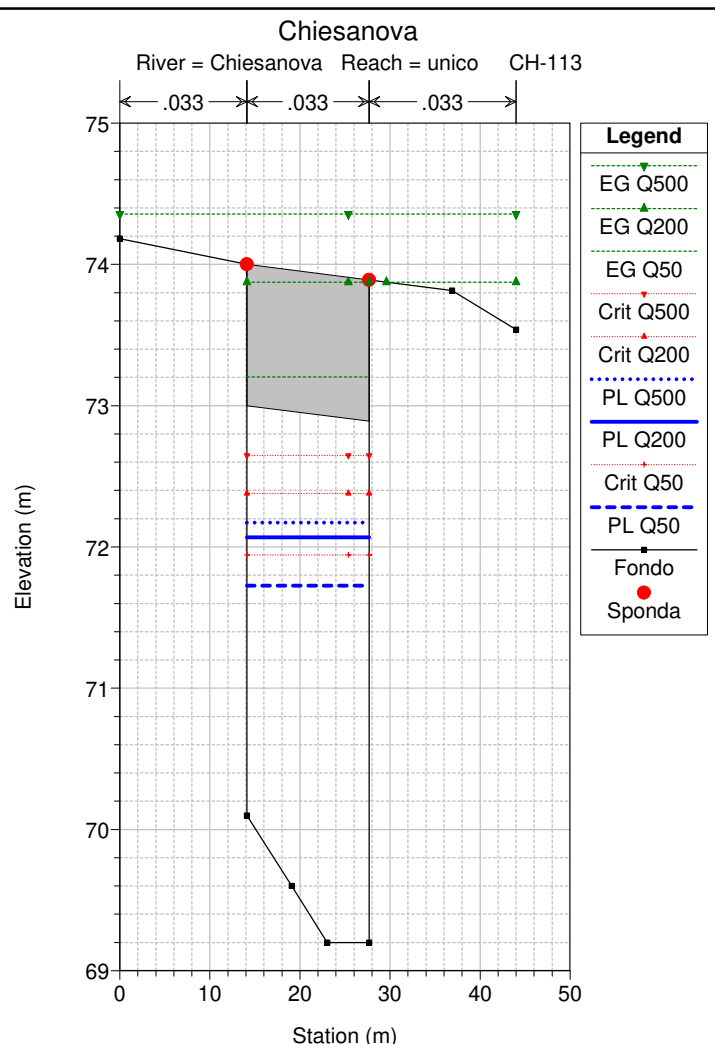
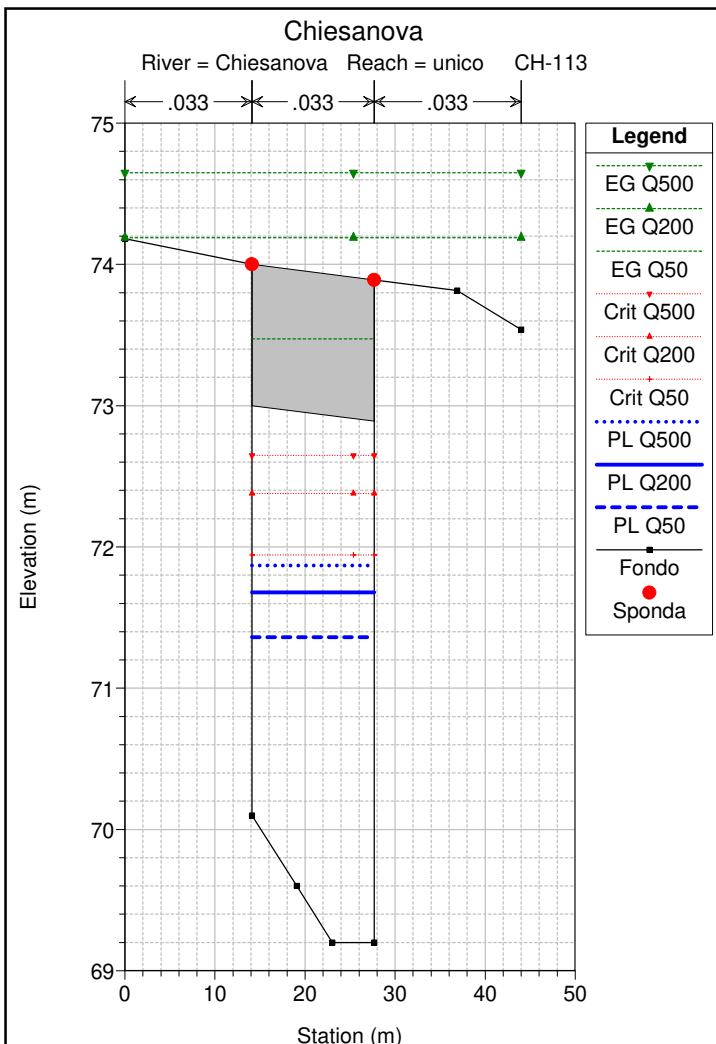
Chiesanova unico

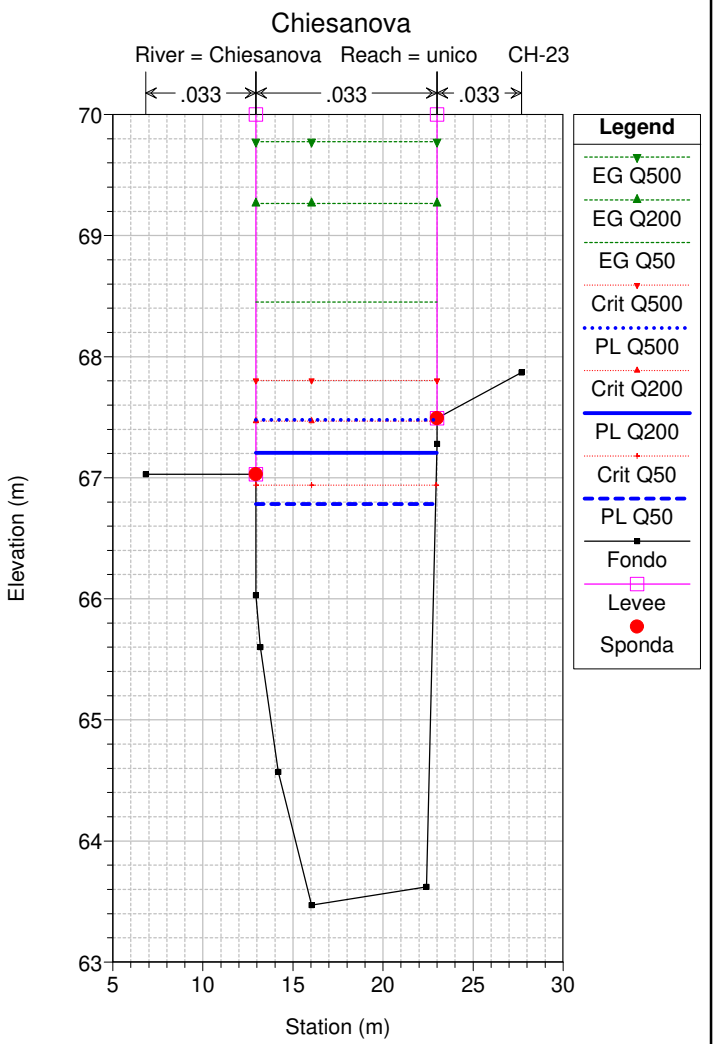
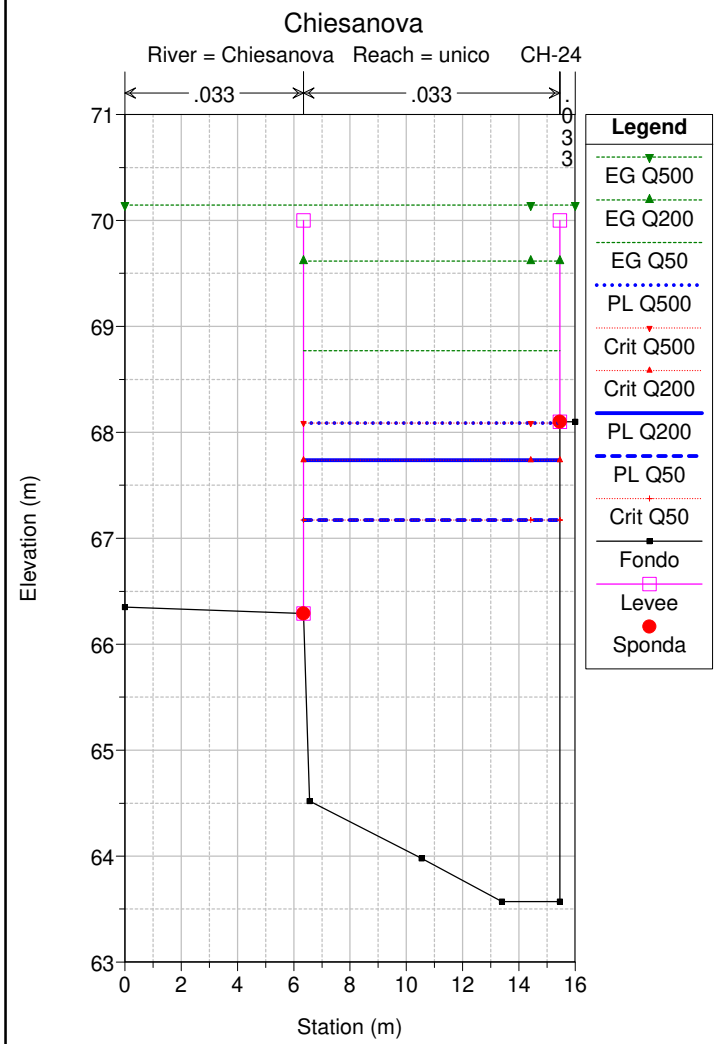
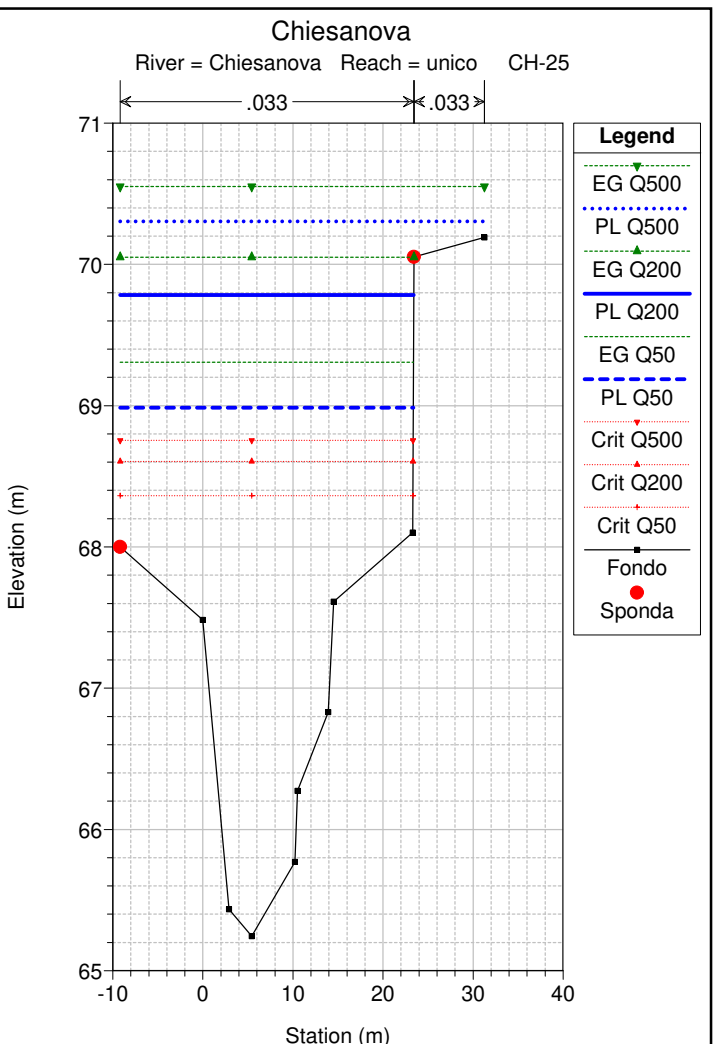
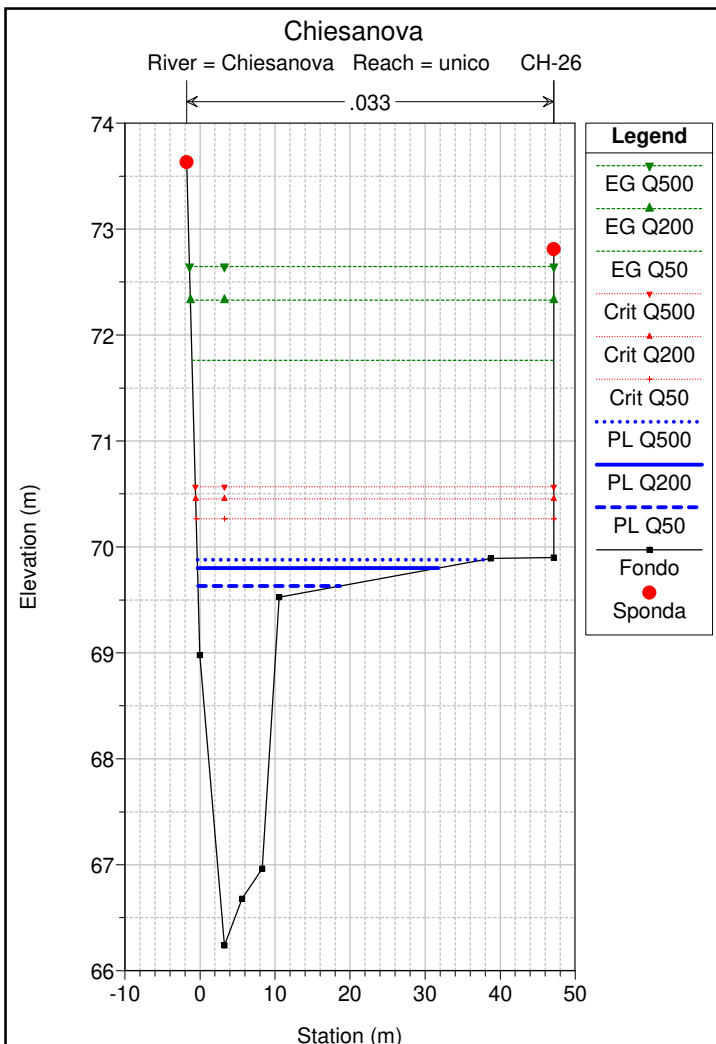


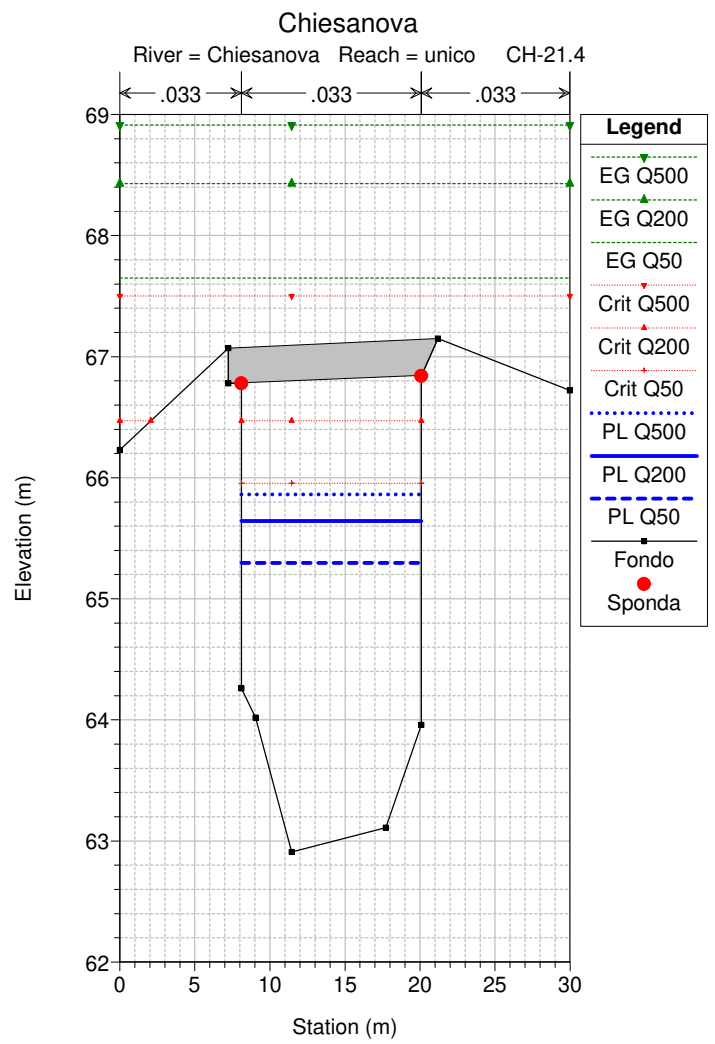
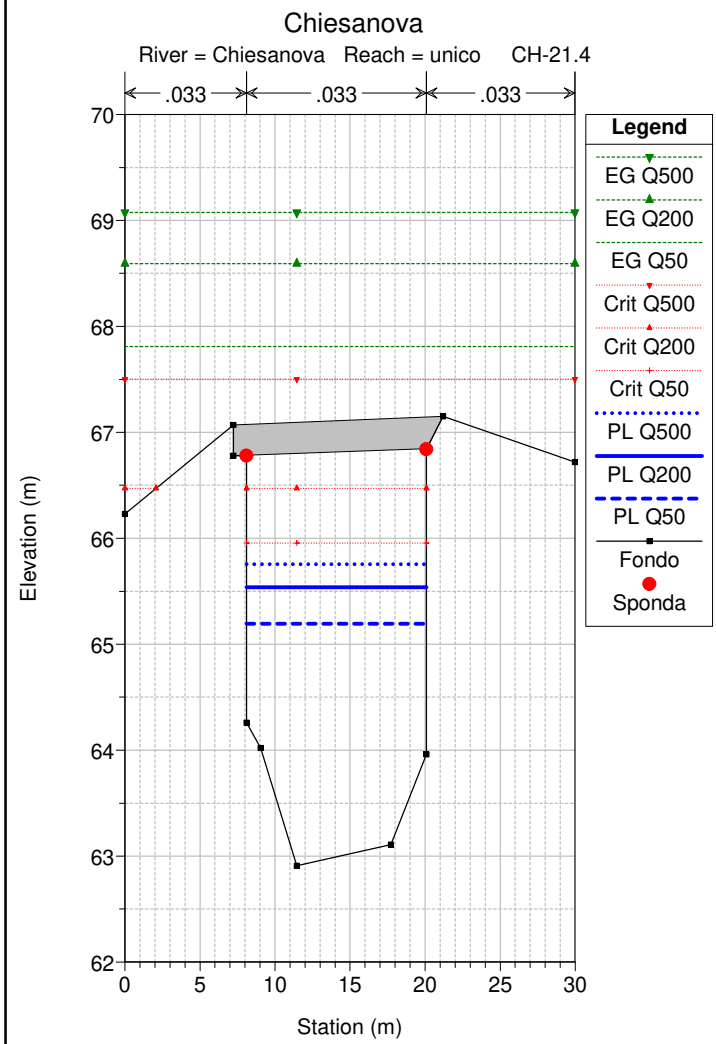
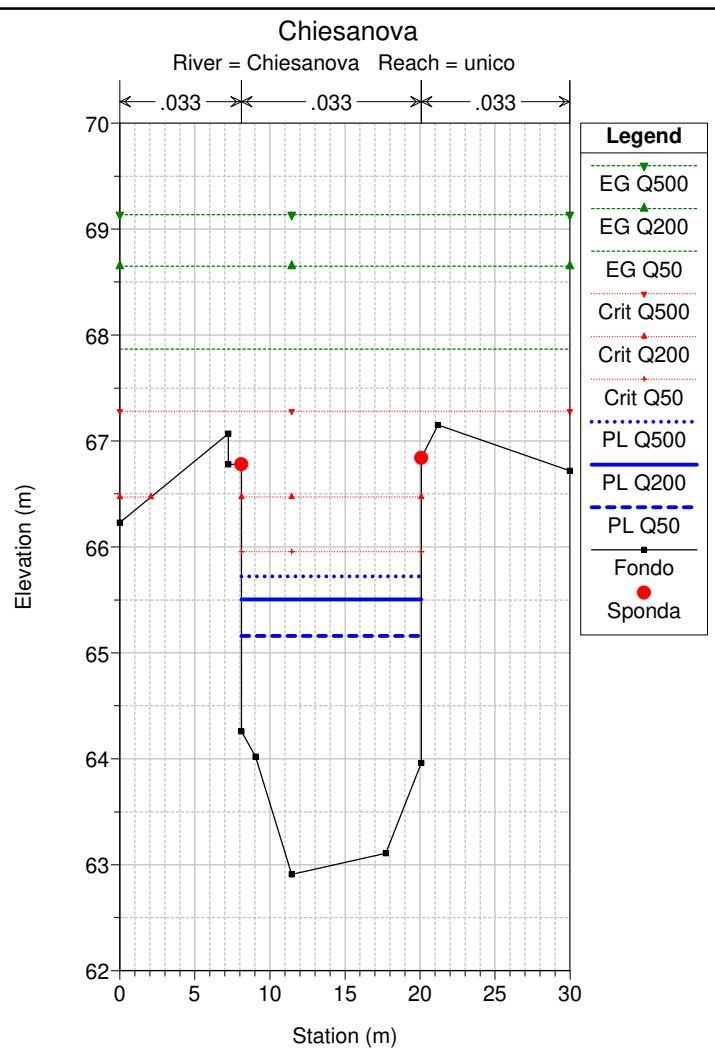
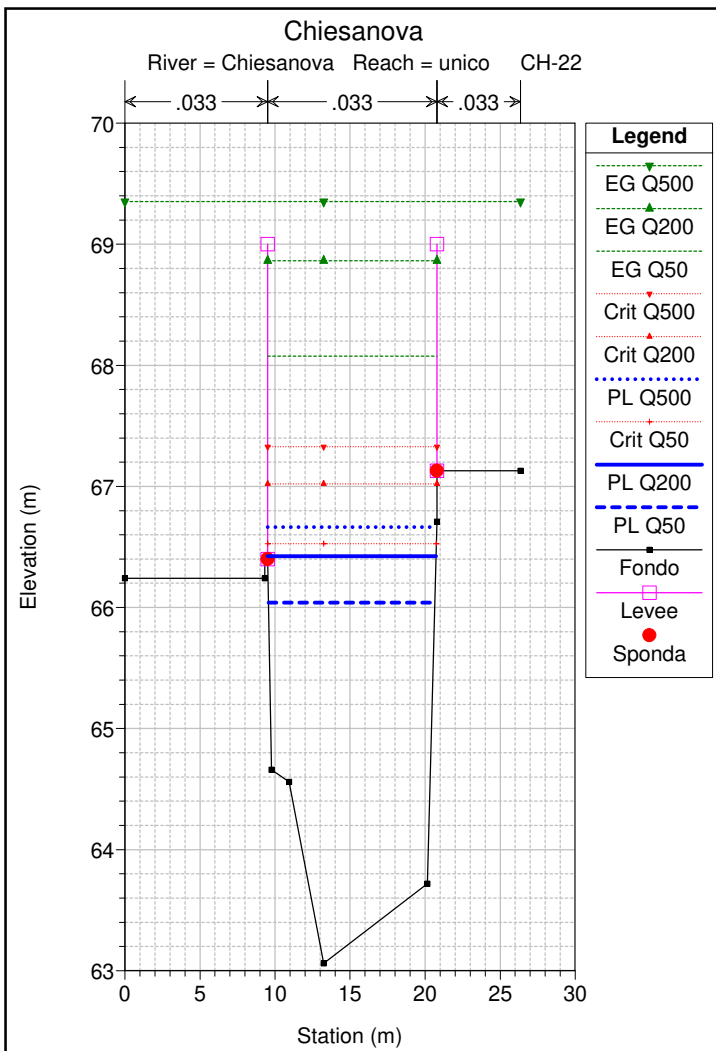


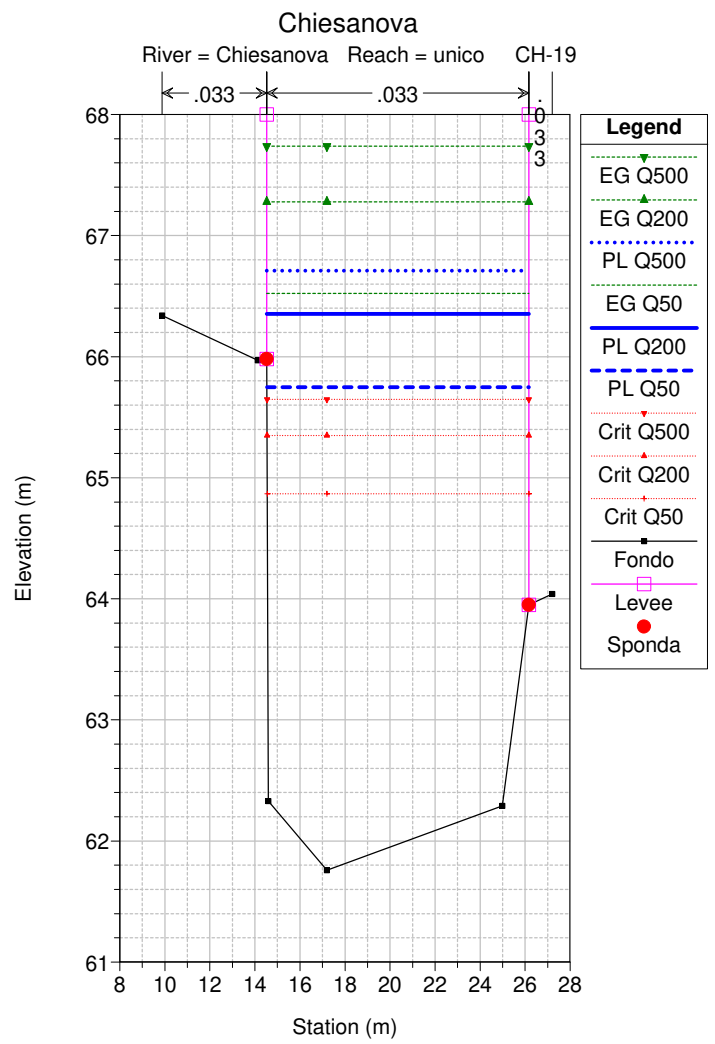
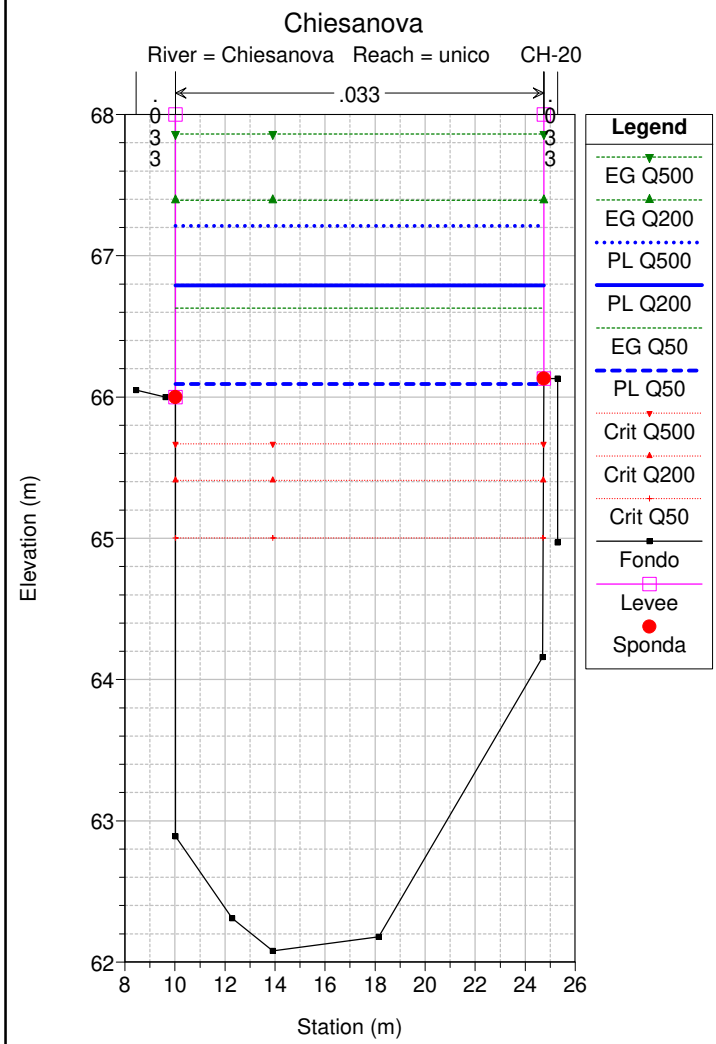
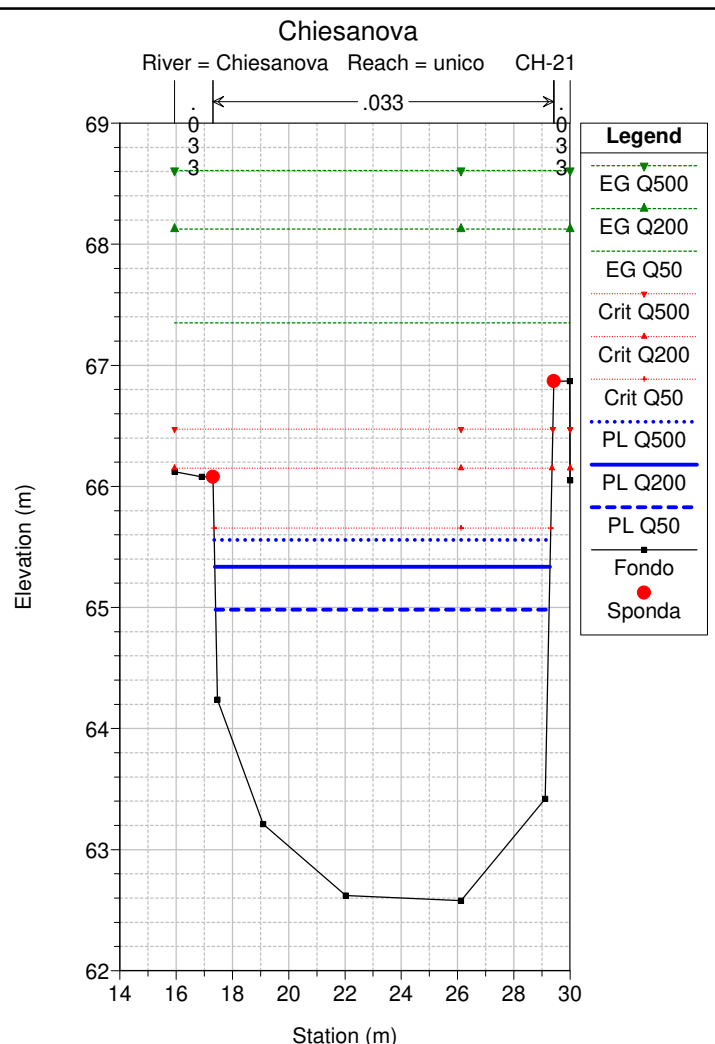
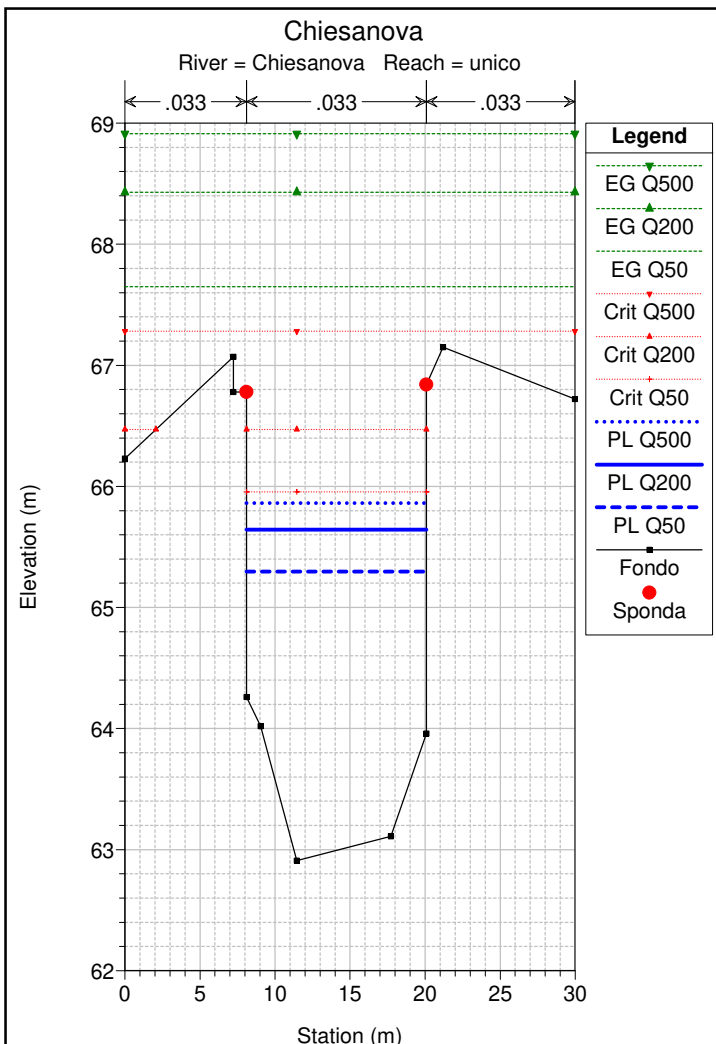


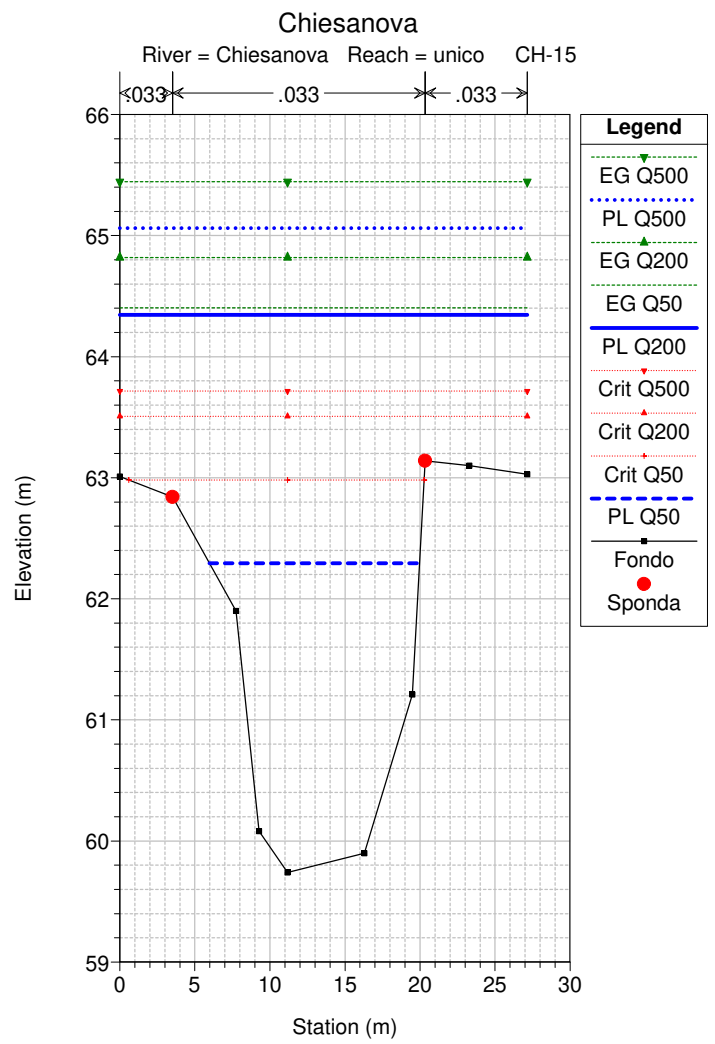
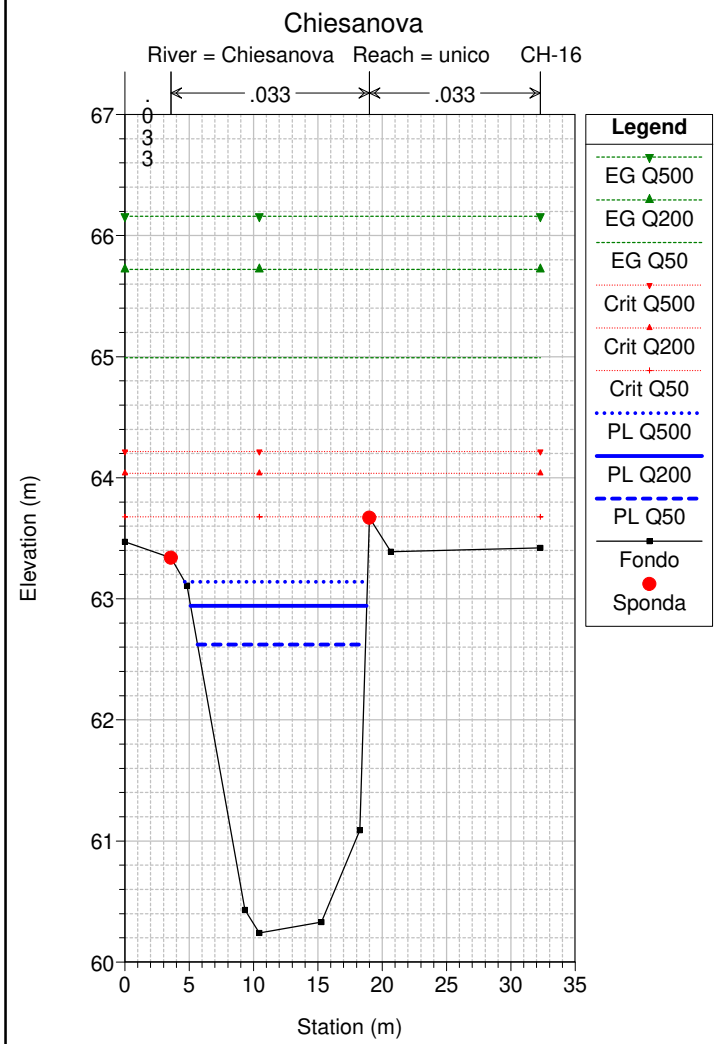
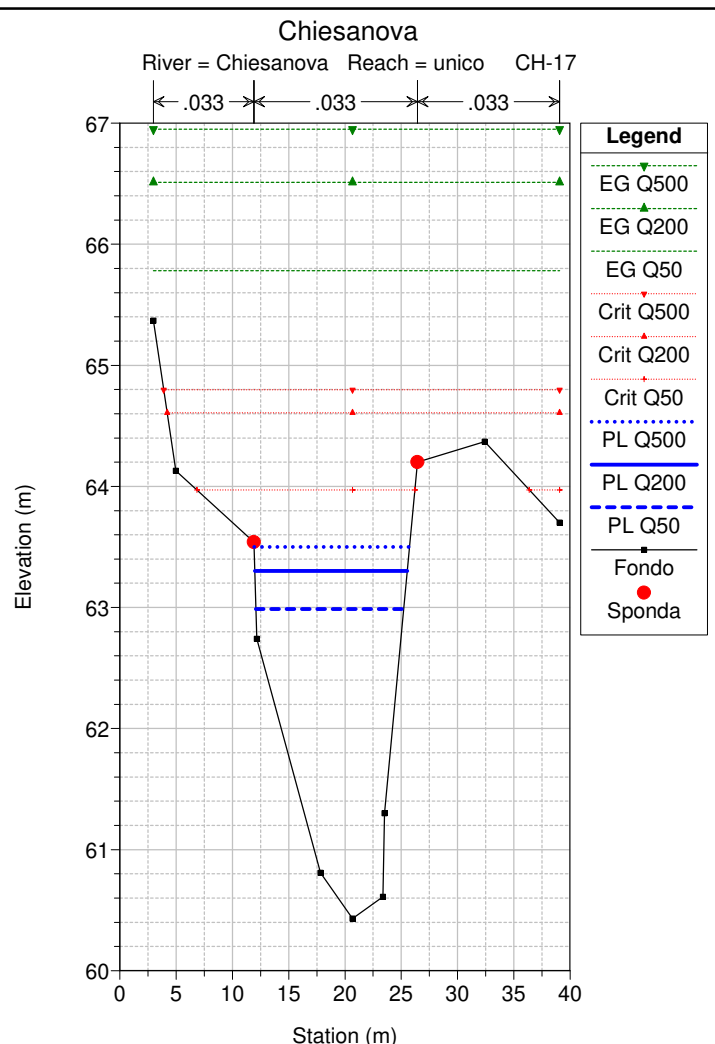
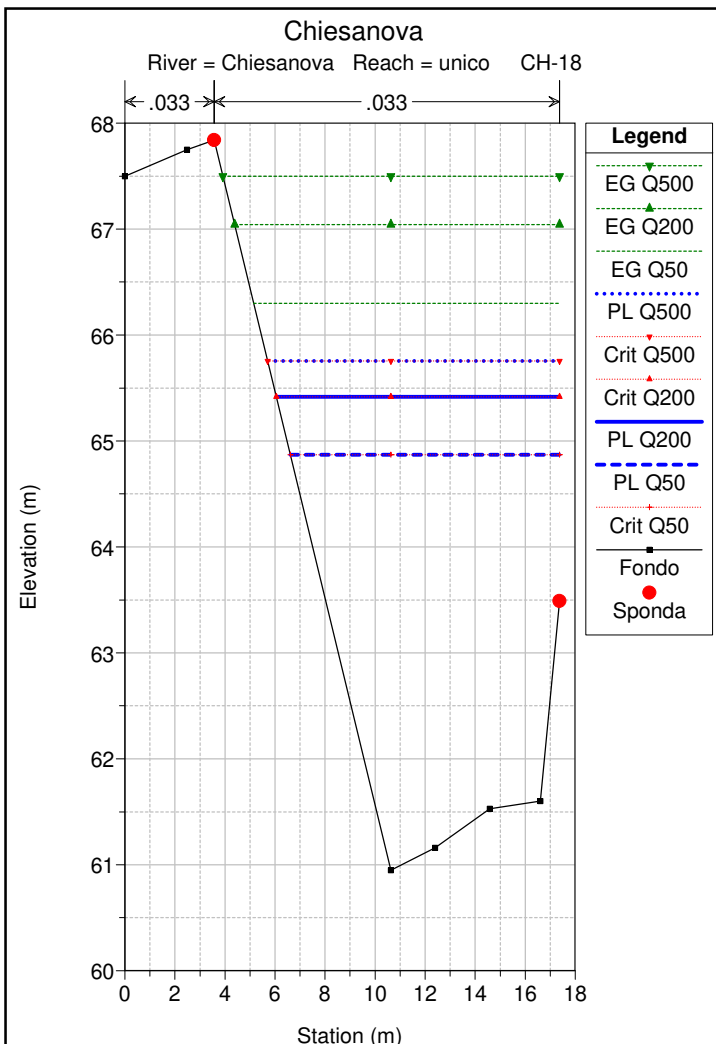


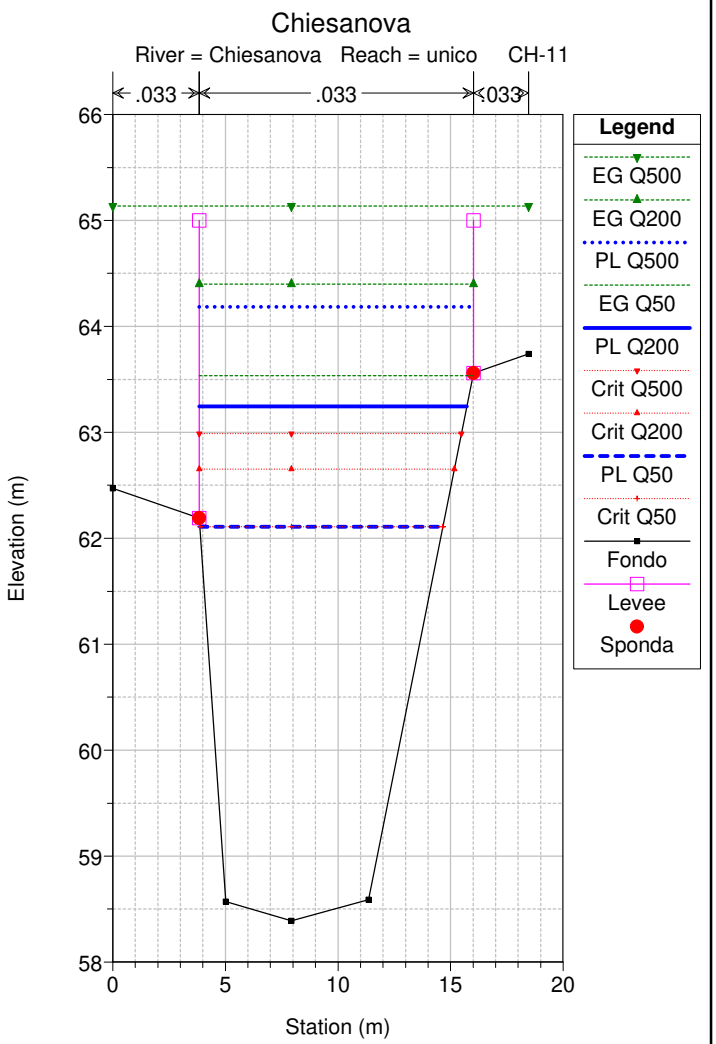
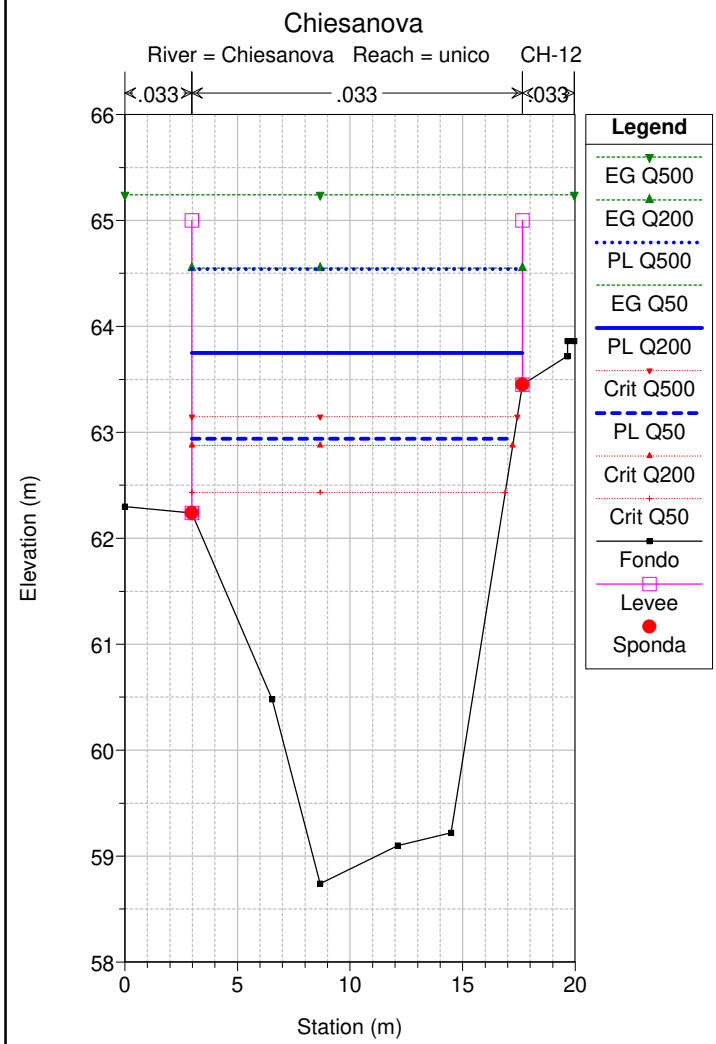
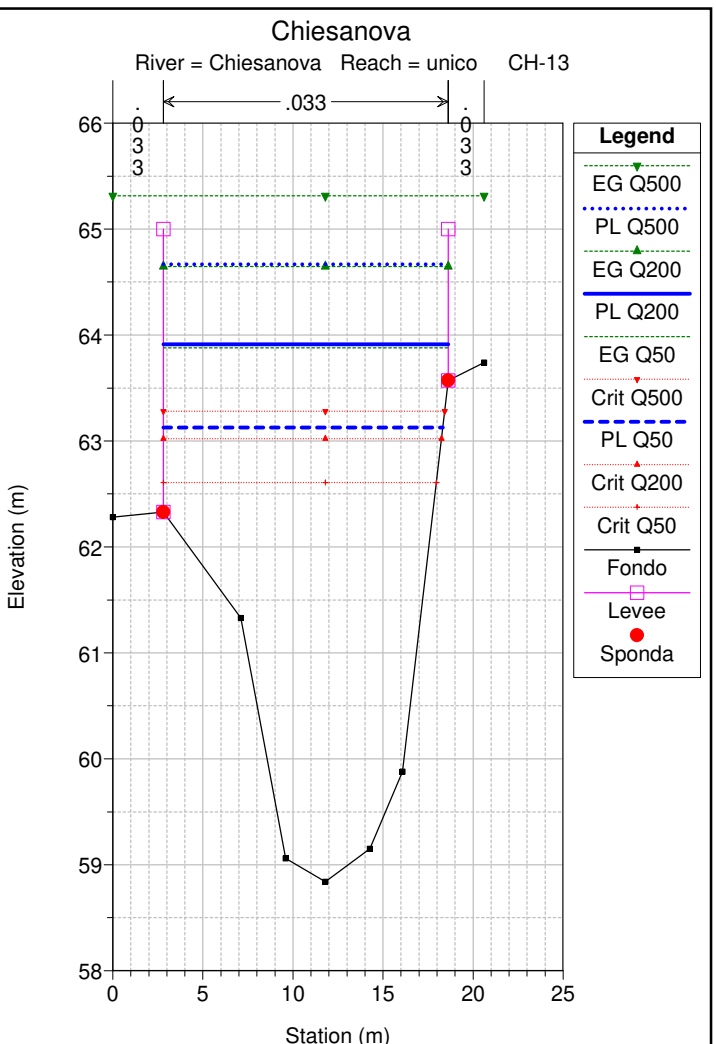
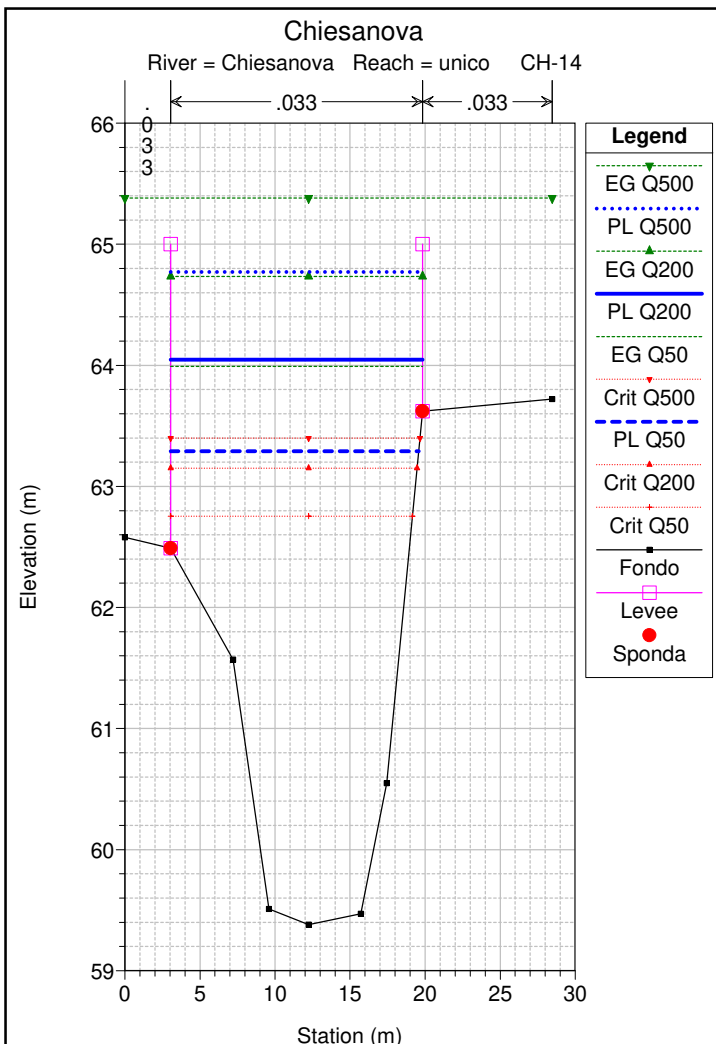


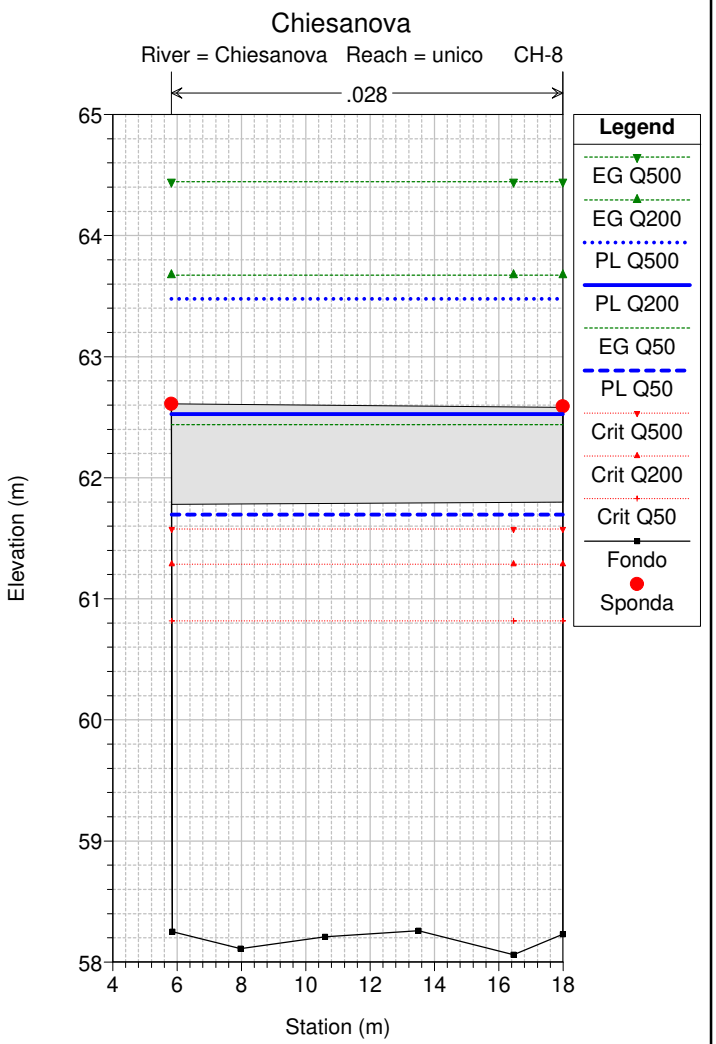
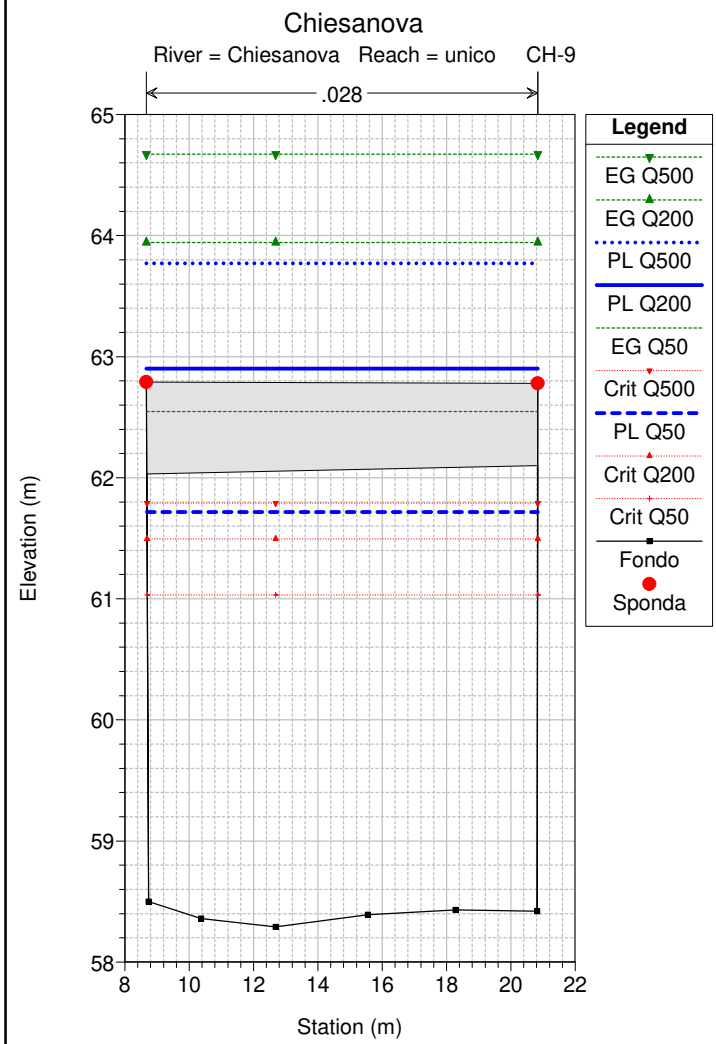
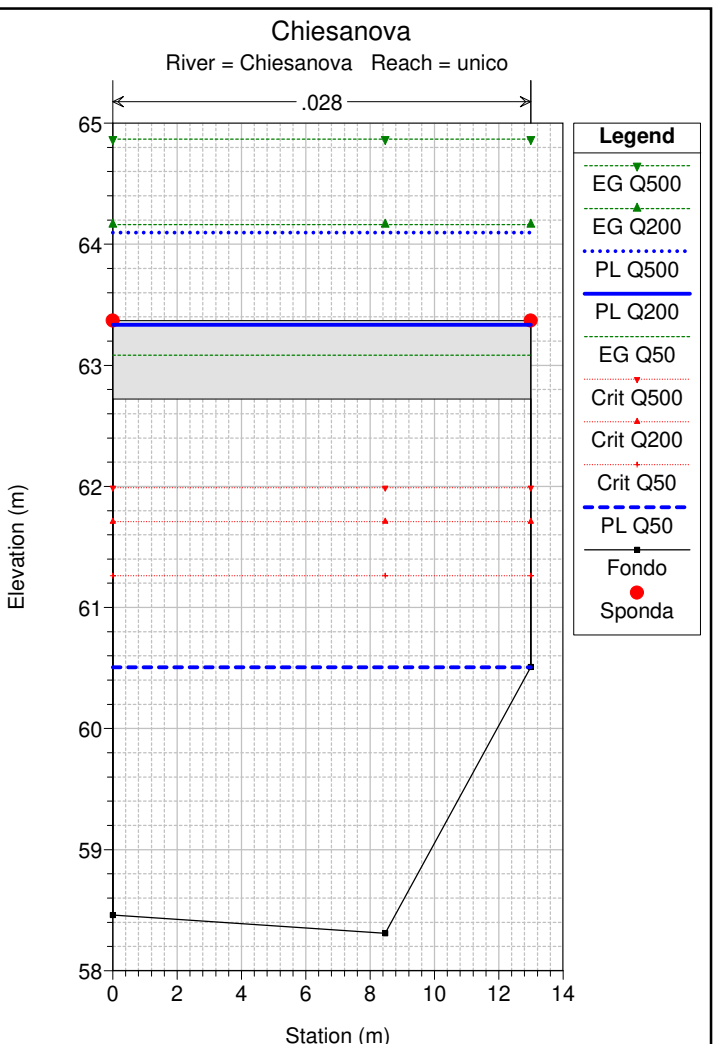
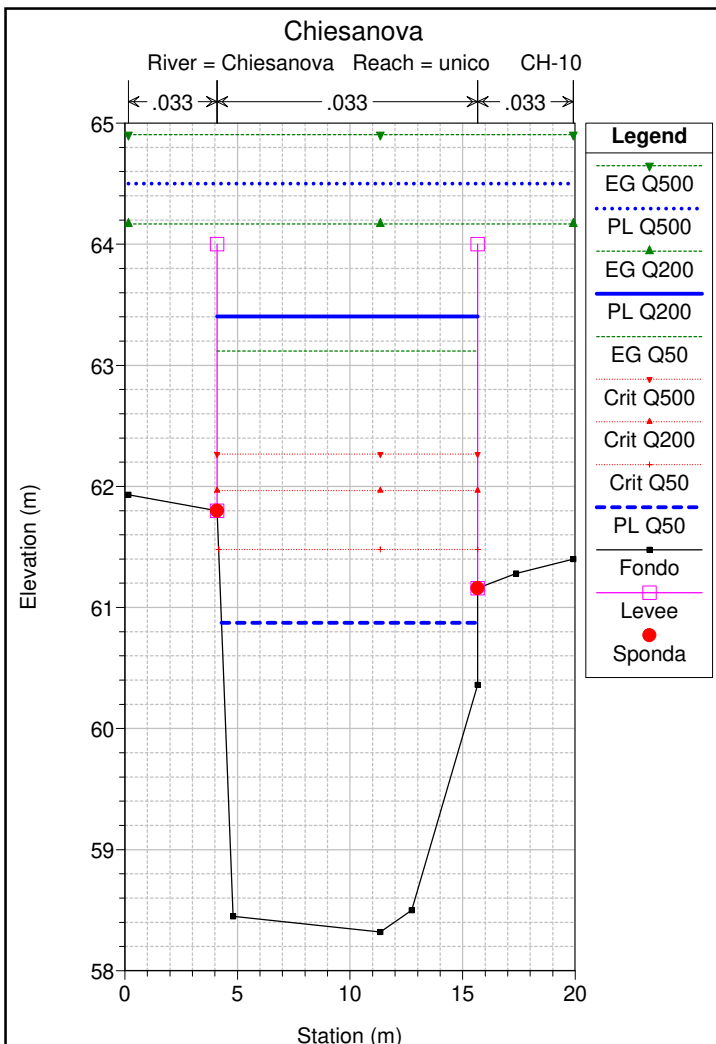


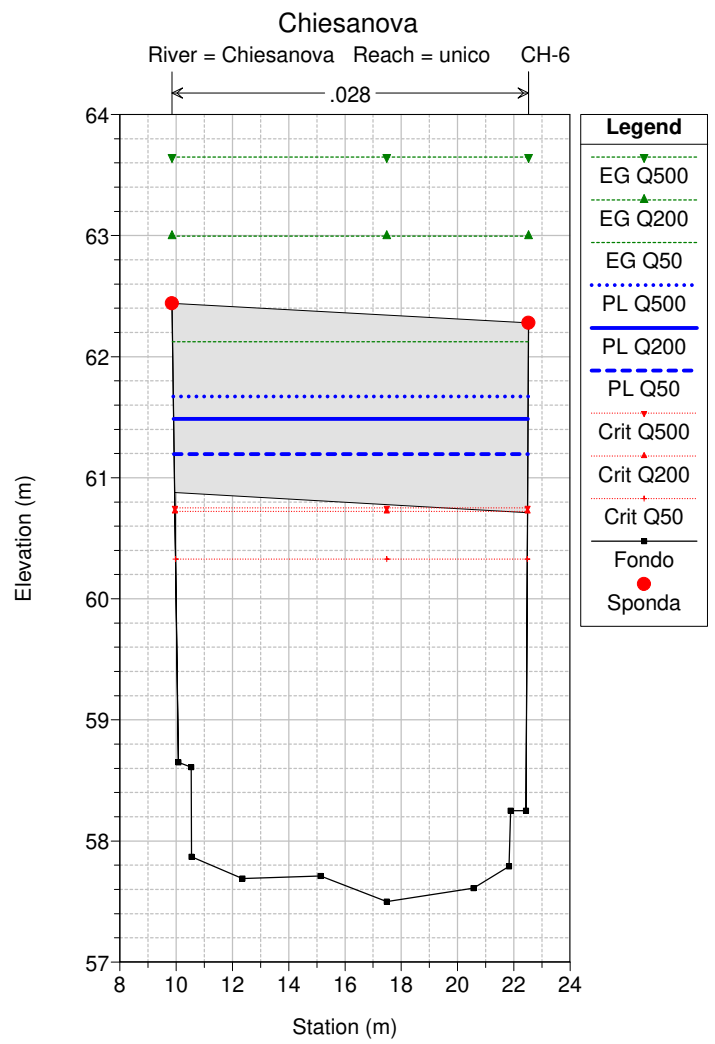
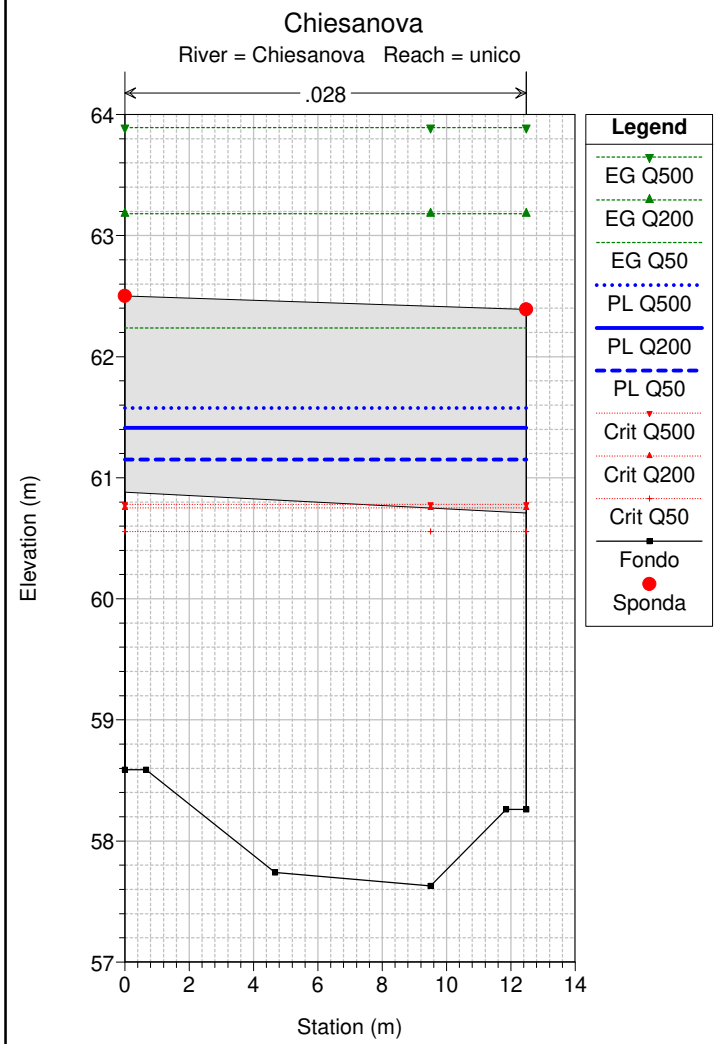
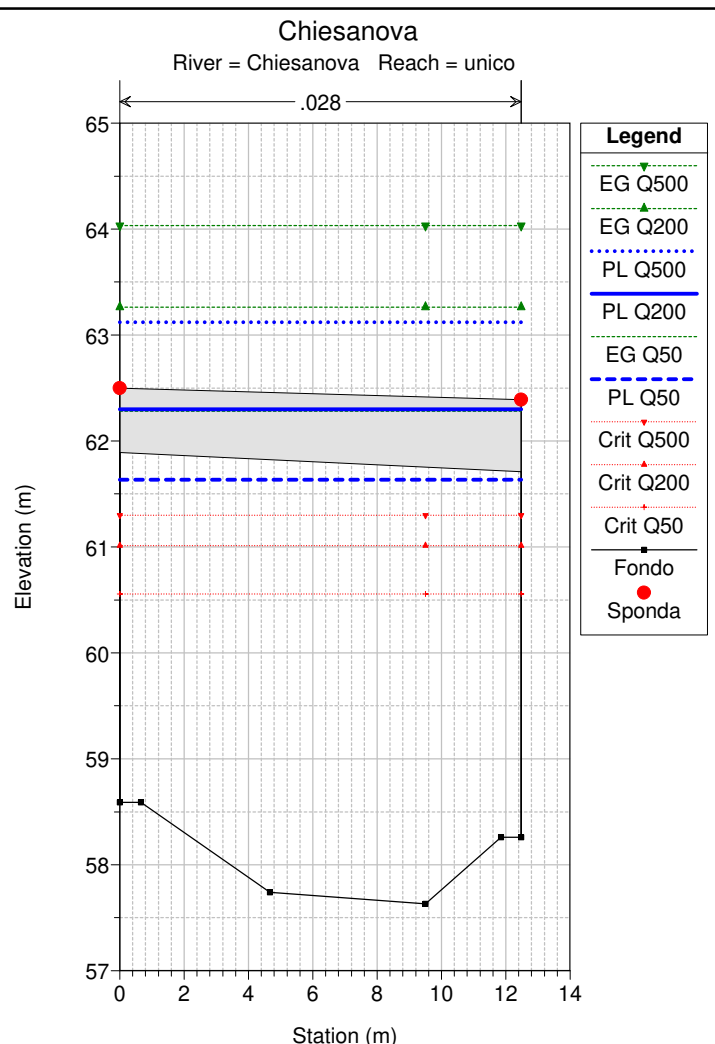
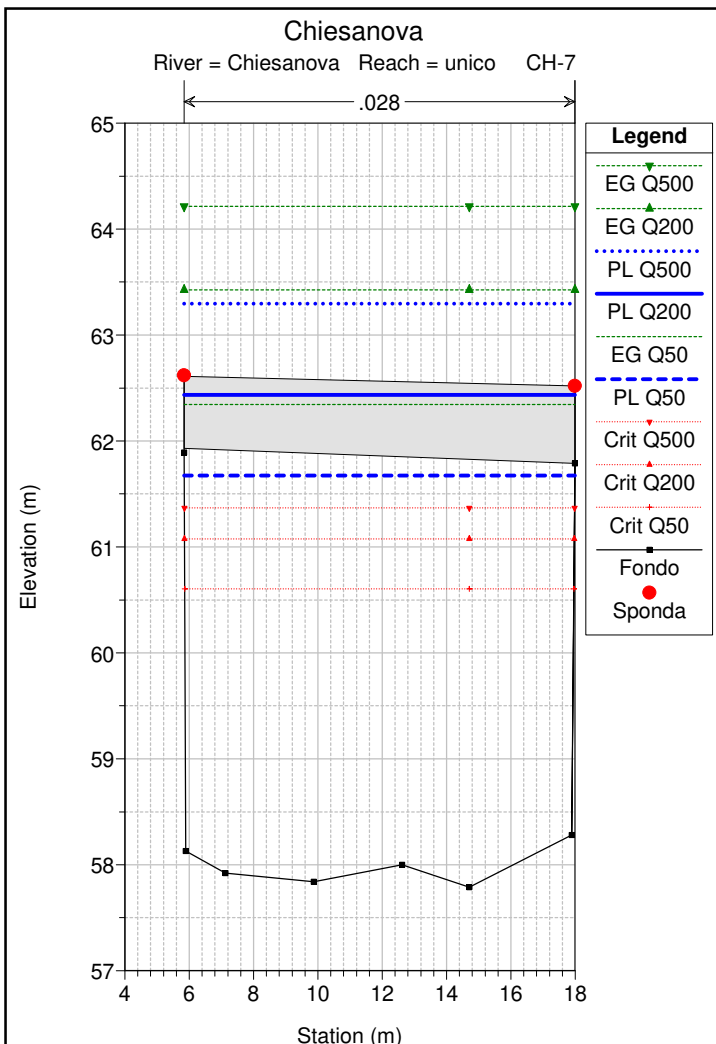


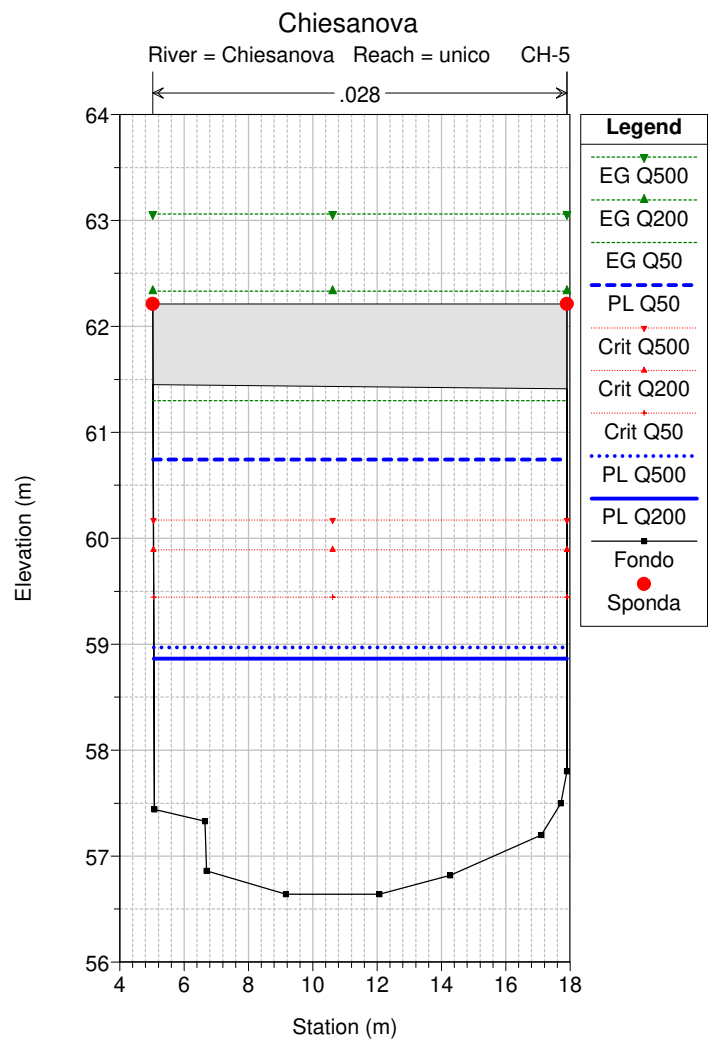
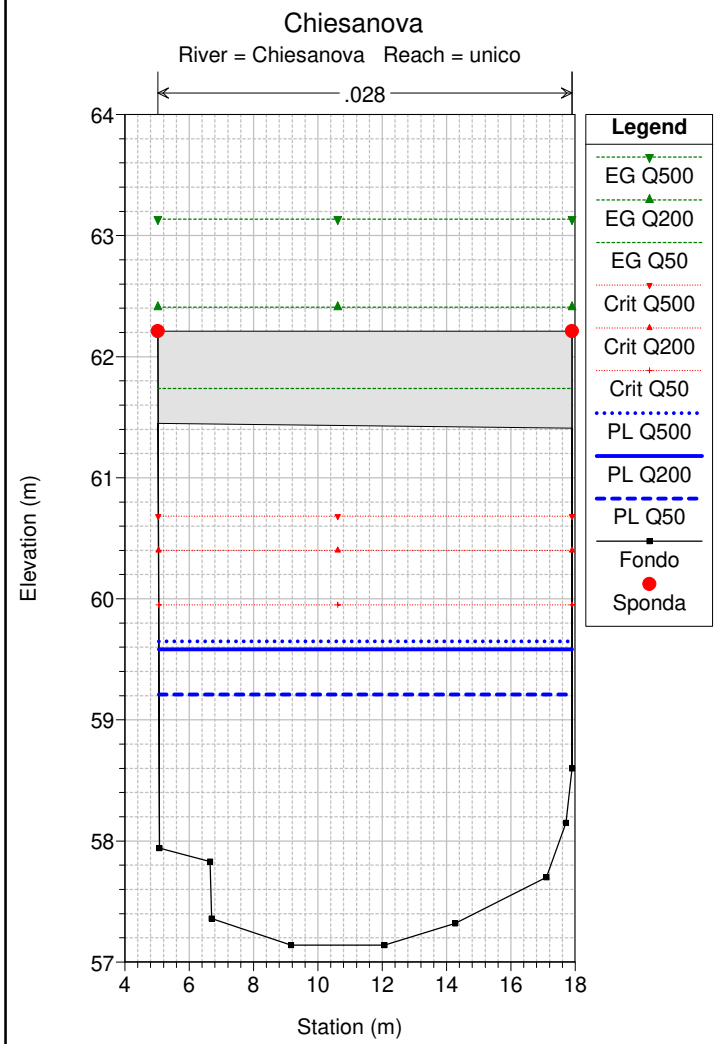
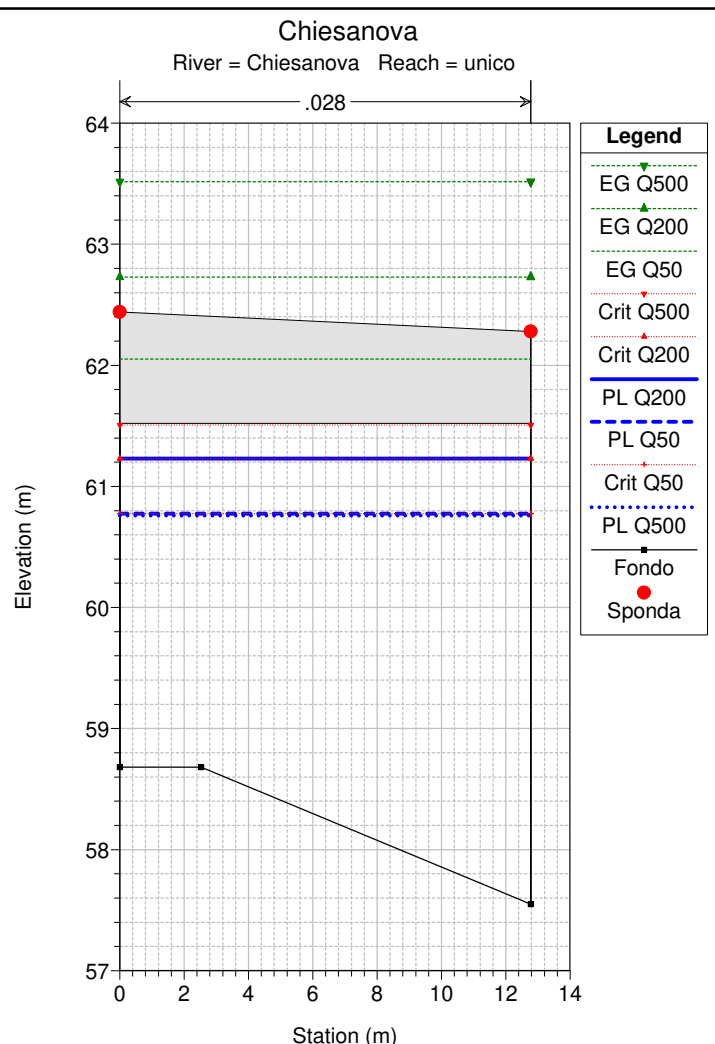
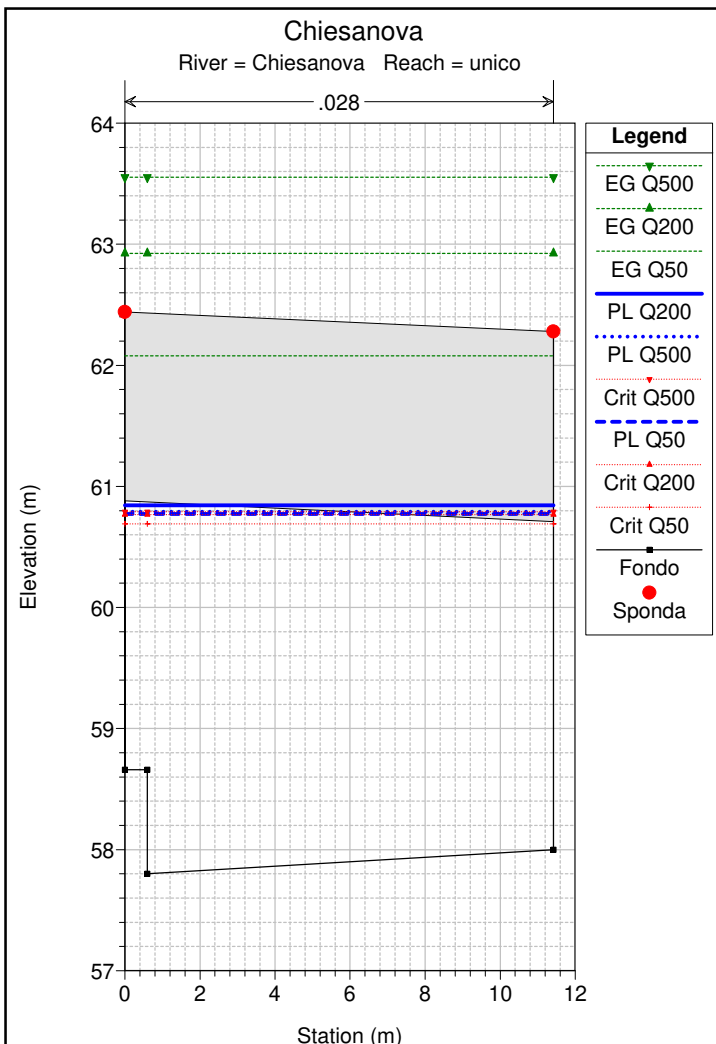


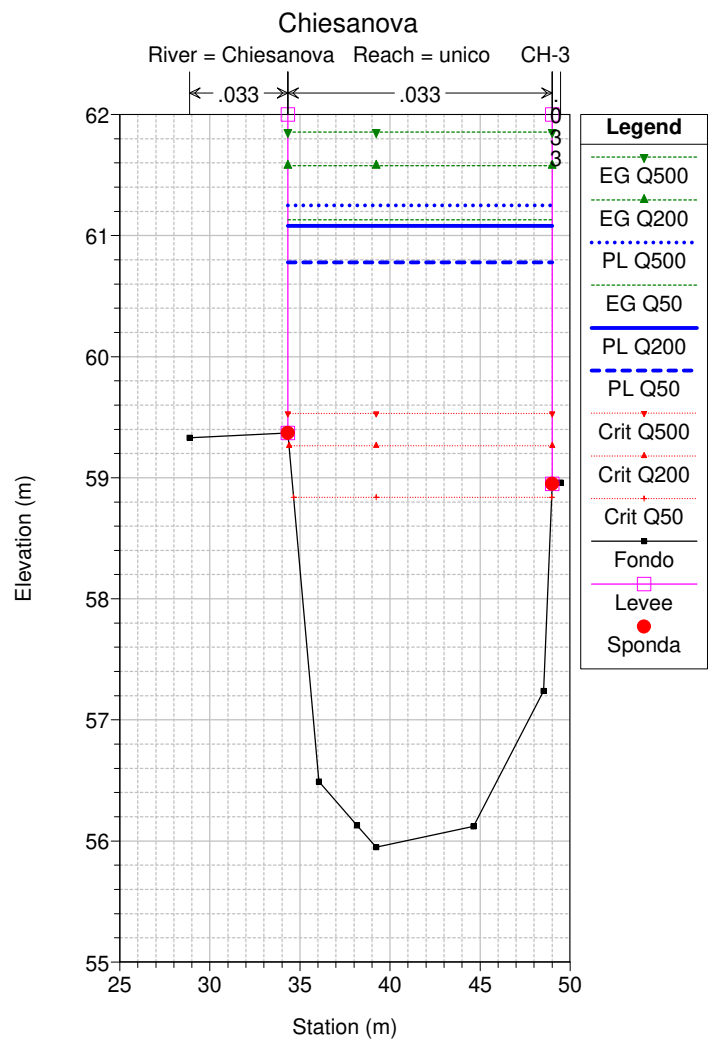
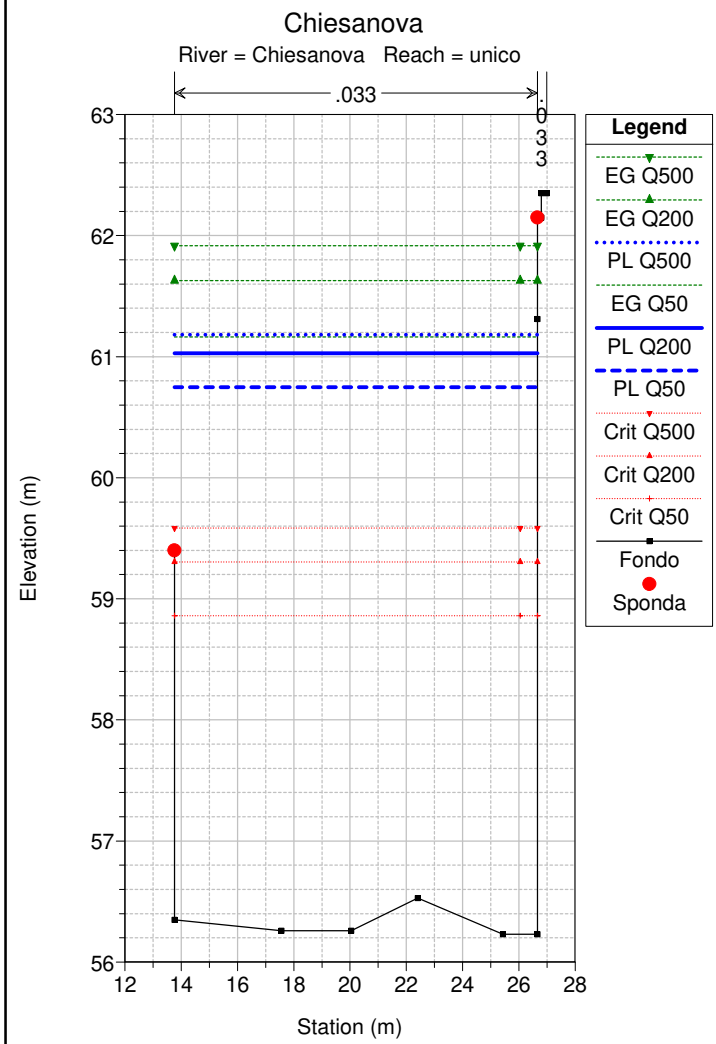
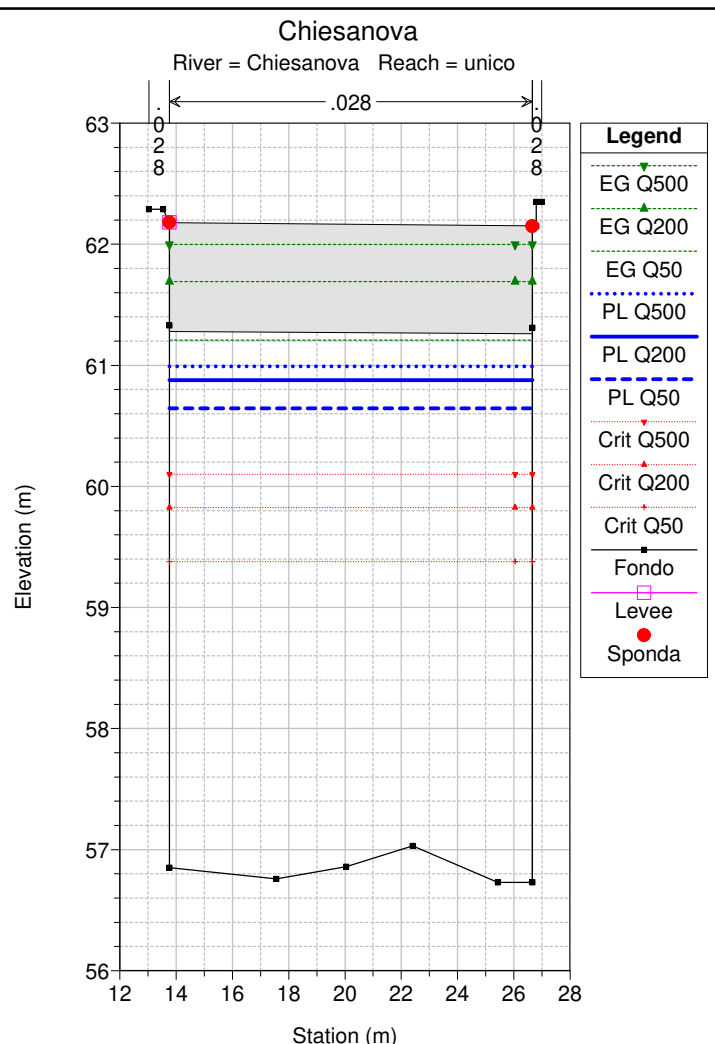
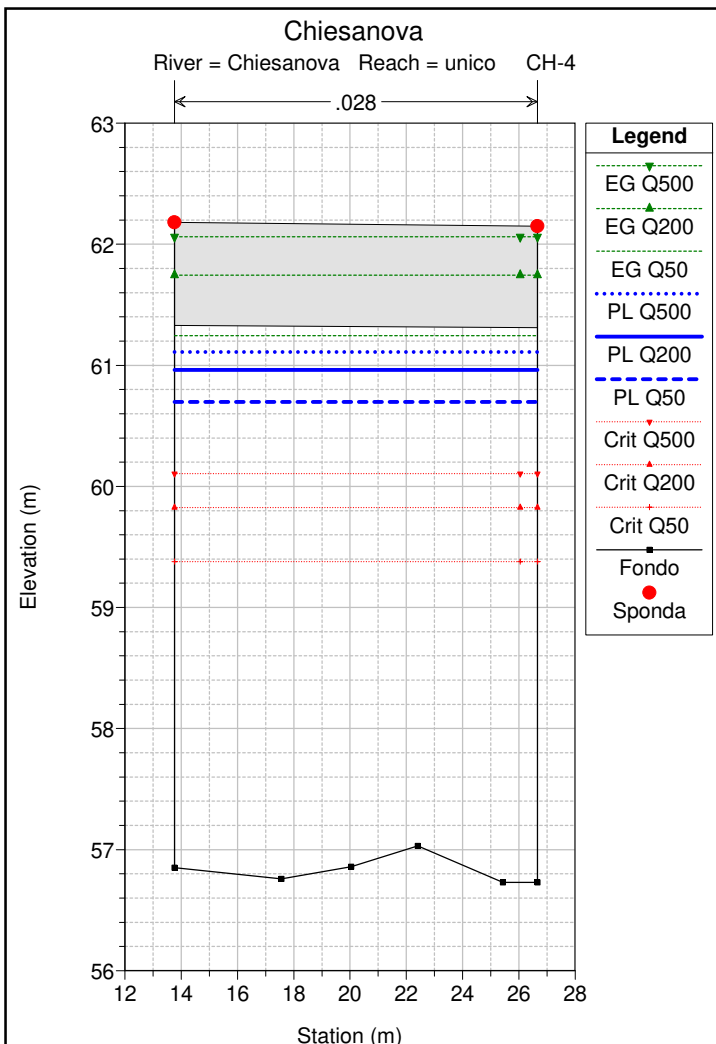












| Reach | River Sta | Profile | Q Total (m3/s) | Min Ch El (m) | W.S. Elev (m) | LOB Elev (m) | L. Freeboard (m) | ROB Elev (m) | R. Freeboard (m) | Crit W.S. (m) | E.G. Elev (m) | E.G. Slope (m/m) | Vel Chnl (m/s) | Flow Area (m2) | Top Width (m) | Froude # Chl |
|-------|-----------------|---------|-------------------|------------------|------------------|-----------------|---------------------|-----------------|---------------------|------------------|------------------|---------------------|-------------------|-------------------|------------------|--------------|
| unico | 121 CH-121 | Q50 | 163.00 | 83.33 | 86.22 | 84.88 | -1.34 | 86.72 | 0.50 | 86.22 | 87.24 | 0.009406 | 4.74 | 37.61 | 17.80 | 0.95 |
| unico | 121 CH-121 | Q200 | 208.00 | 83.33 | 86.58 | 84.88 | -1.70 | 86.72 | 0.14 | 86.58 | 87.77 | 0.009587 | 5.13 | 44.04 | 17.89 | 0.97 |
| unico | 121 CH-121 | Q500 | 238.00 | 83.33 | 86.79 | 84.88 | -1.91 | 86.72 | -0.07 | 86.79 | 88.11 | 0.009808 | 5.40 | 47.79 | 18.19 | 0.98 |
| unico | 120 CH-120 | Q50 | 163.00 | 82.65 | 84.41 | 85.07 | 0.66 | 85.84 | 1.43 | 85.07 | 86.60 | 0.033043 | 6.55 | 24.89 | 17.57 | 1.76 |
| unico | 120 CH-120 | Q200 | 208.00 | 82.65 | 84.71 | 85.07 | 0.36 | 85.84 | 1.13 | 85.44 | 87.14 | 0.029758 | 6.91 | 30.11 | 17.72 | 1.69 |
| unico | 120 CH-120 | Q500 | 238.00 | 82.65 | 84.90 | 85.07 | 0.17 | 85.84 | 0.94 | 85.66 | 87.48 | 0.028184 | 7.12 | 33.44 | 17.81 | 1.66 |
| unico | 119 CH-119 | Q50 | 163.00 | 79.75 | 82.41 | 82.71 | 0.30 | 82.60 | 0.19 | 82.99 | 84.32 | 0.020496 | 6.12 | 26.64 | 12.83 | 1.36 |
| unico | 119 CH-119 | Q200 | 208.00 | 79.75 | 82.66 | 82.71 | 0.05 | 82.60 | -0.06 | 83.43 | 84.90 | 0.022094 | 6.73 | 32.58 | 18.12 | 1.41 |
| unico | 119 CH-119 | Q500 | 238.00 | 79.75 | 82.83 | 82.71 | -0.12 | 82.60 | -0.23 | 83.64 | 85.30 | 0.022539 | 7.10 | 35.64 | 20.00 | 1.44 |
| unico | 118 CH-118 | Q50 | 163.00 | 77.63 | 80.35 | 81.49 | 1.14 | 81.76 | 1.41 | 80.98 | 82.53 | 0.022835 | 6.53 | 24.97 | 12.07 | 1.45 |
| unico | 118 CH-118 | Q200 | 208.00 | 77.63 | 80.83 | 81.49 | 0.66 | 81.76 | 0.93 | 81.93 | 83.15 | 0.020607 | 6.75 | 30.80 | 12.71 | 1.39 |
| unico | 118 CH-118 | Q500 | 238.00 | 77.63 | 81.09 | 81.49 | 0.40 | 81.76 | 0.67 | 82.20 | 83.56 | 0.020121 | 6.95 | 34.22 | 13.08 | 1.37 |
| unico | 117.5 CH-117 -m | Q50 | 163.00 | 76.19 | 77.59 | 79.89 | 2.30 | 79.64 | 2.05 | 78.42 | 80.41 | 0.050933 | 7.43 | 21.93 | 16.85 | 2.08 |
| unico | 117.5 CH-117 -m | Q200 | 208.00 | 76.19 | 77.82 | 79.89 | 2.07 | 79.64 | 1.82 | 78.79 | 81.14 | 0.049823 | 8.07 | 25.79 | 16.87 | 2.08 |
| unico | 117.5 CH-117 -m | Q500 | 238.00 | 76.19 | 77.97 | 79.89 | 1.92 | 79.64 | 1.67 | 79.02 | 81.58 | 0.048739 | 8.41 | 28.31 | 16.88 | 2.07 |
| unico | 117.1 CH-117 | | Bridge | | | | | | | | | | | | | |
| unico | 117 CH-117 - v | Q50 | 163.00 | 76.19 | 77.76 | 79.89 | 2.13 | 79.64 | 1.88 | 78.42 | 79.98 | 0.035169 | 6.61 | 24.67 | 16.86 | 1.74 |
| unico | 117 CH-117 - v | Q200 | 208.00 | 76.19 | 77.99 | 79.89 | 1.90 | 79.64 | 1.65 | 78.79 | 80.69 | 0.036199 | 7.28 | 28.57 | 16.88 | 1.79 |
| unico | 117 CH-117 - v | Q500 | 238.00 | 76.19 | 78.14 | 79.89 | 1.75 | 79.64 | 1.50 | 79.02 | 81.12 | 0.036312 | 7.64 | 31.13 | 16.90 | 1.80 |
| unico | 116 CH-116 | Q50 | 163.00 | 72.84 | 75.46 | 75.19 | -0.27 | 75.33 | -0.13 | 76.13 | 77.52 | 0.023356 | 6.37 | 26.66 | 27.17 | 1.50 |
| unico | 116 CH-116 | Q200 | 208.00 | 72.84 | 75.68 | 75.19 | -0.49 | 75.33 | -0.35 | 76.42 | 78.10 | 0.024485 | 7.02 | 32.51 | 27.26 | 1.56 |
| unico | 116 CH-116 | Q500 | 238.00 | 72.84 | 75.79 | 75.19 | -0.60 | 75.33 | -0.46 | 76.60 | 78.45 | 0.025489 | 7.43 | 35.68 | 27.31 | 1.61 |
| unico | 115 CH-115 | Q50 | 163.00 | 70.90 | 74.36 | 74.17 | -0.19 | 75.24 | 0.88 | 74.57 | 75.61 | 0.010444 | 4.97 | 33.53 | 20.79 | 1.00 |
| unico | 115 CH-115 | Q200 | 208.00 | 70.90 | 74.77 | 74.17 | -0.60 | 75.24 | 0.47 | 74.98 | 76.14 | 0.009925 | 5.27 | 42.09 | 20.85 | 0.98 |
| unico | 115 CH-115 | Q500 | 238.00 | 70.90 | 75.01 | 74.17 | -0.84 | 75.24 | 0.23 | 75.21 | 76.44 | 0.009628 | 5.42 | 47.27 | 20.89 | 0.97 |
| unico | 114 CH-114 | Q50 | 163.00 | 70.38 | 72.98 | 74.13 | 1.15 | 74.31 | 1.33 | 73.41 | 74.85 | 0.019064 | 6.05 | 26.96 | 12.17 | 1.30 |
| unico | 114 CH-114 | Q200 | 208.00 | 70.38 | 73.57 | 74.13 | 0.57 | 74.31 | 0.74 | 73.88 | 75.46 | 0.015628 | 6.09 | 34.13 | 12.36 | 1.17 |
| unico | 114 CH-114 | Q500 | 238.00 | 70.38 | 74.05 | 74.13 | 0.09 | 74.31 | 0.26 | 74.77 | 75.84 | 0.012906 | 5.94 | 40.09 | 12.52 | 1.06 |
| unico | 113.5 CH-113-m | Q50 | 163.00 | 69.20 | 71.34 | 74.00 | 2.66 | 73.89 | 2.55 | 71.94 | 73.50 | 0.027569 | 6.51 | 25.03 | 13.58 | 1.53 |
| unico | 113.5 CH-113-m | Q200 | 208.00 | 69.20 | 71.66 | 74.00 | 2.34 | 73.89 | 2.23 | 72.38 | 74.22 | 0.027737 | 7.09 | 29.35 | 13.58 | 1.54 |
| unico | 113.5 CH-113-m | Q500 | 238.00 | 69.20 | 71.85 | 74.00 | 2.15 | 73.89 | 2.04 | 72.65 | 74.68 | 0.028191 | 7.45 | 31.94 | 13.58 | 1.55 |
| unico | 113.1 CH-113 | | Bridge | | | | | | | | | | | | | |
| unico | 113 CH-113-v | Q50 | 163.00 | 69.20 | 71.73 | 74.00 | 2.27 | 73.89 | 2.16 | 71.94 | 73.20 | 0.015354 | 5.36 | 30.38 | 13.58 | 1.15 |
| unico | 113 CH-113-v | Q200 | 208.00 | 69.20 | 72.07 | 74.00 | 1.93 | 73.89 | 1.82 | 72.38 | 73.87 | 0.016457 | 5.95 | 34.96 | 13.58 | 1.18 |
| unico | 113 CH-113-v | Q500 | 238.00 | 69.20 | 72.20 | 74.00 | 1.80 | 73.89 | 1.69 | 72.65 | 74.34 | 0.018632 | 6.48 | 36.72 | 13.58 | 1.26 |
| unico | 112 | Q50 | 163.00 | 66.24 | 69.68 | 73.63 | 3.95 | 69.52 | -0.15 | 70.44 | 71.77 | 0.019424 | 6.42 | 26.20 | 22.60 | 1.34 |
| unico | 112 | Q200 | 208.00 | 66.24 | 69.93 | 73.63 | 3.70 | 69.52 | -0.41 | 70.68 | 72.34 | 0.020917 | 7.04 | 34.44 | 39.23 | 1.40 |
| unico | 112 | Q500 | 238.00 | 66.24 | 70.04 | 73.63 | 3.59 | 69.52 | -0.51 | 70.82 | 72.66 | 0.022596 | 7.47 | 38.46 | 39.56 | 1.46 |
| unico | 26 CH-26 | Q50 | 163.00 | 66.24 | 69.63 | 73.63 | 4.00 | 72.81 | 3.18 | 70.27 | 71.76 | 0.037016 | 6.47 | 25.21 | 18.91 | 1.79 |
| unico | 26 CH-26 | Q200 | 208.00 | 66.24 | 69.80 | 73.63 | 3.83 | 72.81 | 3.01 | 70.45 | 72.33 | 0.067338 | 7.04 | 29.54 | 32.07 | 2.34 |
| unico | 26 CH-26 | Q500 | 238.00 | 66.24 | 69.88 | 73.63 | 3.75 | 72.81 | 2.93 | 70.57 | 72.65 | 0.081256 | 7.37 | 32.30 | 38.17 | 2.56 |

HEC-RAS Plan: 01_Chiesanova River: Chiesanova Reach: unico (Continued)

| Reach | River Sta | Profile | Q Total (m3/s) | Min Ch El (m) | W.S. Elev (m) | LOB Elev (m) | L. Freeboard (m) | ROB Elev (m) | R. Freeboard (m) | Crit W.S. (m) | E.G. Elev (m) | E.G. Slope (m/m) | Vel Chnl (m/s) | Flow Area (m2) | Top Width (m) | Froude # Chl |
|-------|--------------|---------|-------------------|------------------|------------------|-----------------|---------------------|-----------------|---------------------|------------------|------------------|---------------------|-------------------|-------------------|------------------|--------------|
| unico | 25 CH-25 | Q50 | 163.00 | 65.24 | 68.98 | 68.00 | -0.98 | 70.05 | 1.07 | 68.36 | 69.31 | 0.003130 | 2.52 | 64.76 | 32.56 | 0.57 |
| unico | 25 CH-25 | Q200 | 208.00 | 65.24 | 69.78 | 68.00 | -1.78 | 70.05 | 0.27 | 68.60 | 70.05 | 0.001751 | 2.29 | 90.80 | 32.62 | 0.44 |
| unico | 25 CH-25 | Q500 | 238.00 | 65.24 | 70.30 | 68.00 | -2.30 | 70.05 | -0.25 | 68.75 | 70.55 | 0.001327 | 2.20 | 109.18 | 40.45 | 0.39 |
| unico | 24 CH-24 | Q50 | 163.00 | 63.57 | 67.17 | 66.29 | -0.88 | 68.10 | 0.93 | 67.17 | 68.77 | 0.014369 | 5.60 | 29.12 | 9.11 | 1.00 |
| unico | 24 CH-24 | Q200 | 208.00 | 63.57 | 67.74 | 66.29 | -1.45 | 68.10 | 0.36 | 67.74 | 69.62 | 0.014962 | 6.07 | 34.27 | 9.11 | 1.00 |
| unico | 24 CH-24 | Q500 | 238.00 | 63.57 | 68.09 | 66.29 | -1.80 | 68.10 | 0.01 | 68.09 | 70.15 | 0.015386 | 6.35 | 37.47 | 9.11 | 1.00 |
| unico | 23 CH-23 | Q50 | 163.00 | 63.47 | 66.78 | 67.03 | 0.25 | 67.49 | 0.71 | 66.94 | 68.45 | 0.014352 | 5.72 | 28.50 | 9.97 | 1.08 |
| unico | 23 CH-23 | Q200 | 208.00 | 63.47 | 67.21 | 67.03 | -0.18 | 67.49 | 0.28 | 67.47 | 69.27 | 0.015908 | 6.36 | 32.73 | 10.04 | 1.12 |
| unico | 23 CH-23 | Q500 | 238.00 | 63.47 | 67.48 | 67.03 | -0.45 | 67.49 | 0.01 | 67.80 | 69.78 | 0.016714 | 6.71 | 35.46 | 10.05 | 1.14 |
| unico | 22 CH-22 | Q50 | 163.00 | 63.06 | 66.04 | 66.40 | 0.36 | 67.13 | 1.09 | 66.53 | 68.08 | 0.020375 | 6.32 | 25.80 | 11.06 | 1.32 |
| unico | 22 CH-22 | Q200 | 208.00 | 63.06 | 66.42 | 66.40 | -0.02 | 67.13 | 0.71 | 67.02 | 68.86 | 0.021328 | 6.92 | 30.08 | 11.20 | 1.35 |
| unico | 22 CH-22 | Q500 | 238.00 | 63.06 | 66.66 | 66.40 | -0.26 | 67.13 | 0.47 | 67.33 | 69.35 | 0.021862 | 7.26 | 32.77 | 11.25 | 1.36 |
| unico | 21.6 | Q50 | 163.00 | 62.91 | 65.16 | 66.78 | 1.62 | 66.84 | 1.68 | 65.96 | 67.87 | 0.032459 | 7.29 | 22.37 | 11.98 | 1.70 |
| unico | 21.6 | Q200 | 208.00 | 62.91 | 65.50 | 66.78 | 1.27 | 66.84 | 1.33 | 66.47 | 68.65 | 0.032026 | 7.85 | 26.48 | 11.98 | 1.69 |
| unico | 21.6 | Q500 | 238.00 | 62.91 | 65.72 | 66.78 | 1.06 | 66.84 | 1.12 | 67.28 | 69.13 | 0.031823 | 8.18 | 29.10 | 11.98 | 1.68 |
| unico | 21.4 CH-21.4 | | Bridge | | | | | | | | | | | | | |
| unico | 21.3 | Q50 | 163.00 | 62.91 | 65.30 | 66.78 | 1.48 | 66.84 | 1.54 | 65.96 | 67.65 | 0.026335 | 6.79 | 24.00 | 11.98 | 1.53 |
| unico | 21.3 | Q200 | 208.00 | 62.91 | 65.64 | 66.78 | 1.14 | 66.84 | 1.20 | 66.47 | 68.43 | 0.026810 | 7.39 | 28.14 | 11.98 | 1.54 |
| unico | 21.3 | Q500 | 238.00 | 62.91 | 65.86 | 66.78 | 0.92 | 66.84 | 0.98 | 67.28 | 68.91 | 0.027032 | 7.73 | 30.77 | 11.98 | 1.54 |
| unico | 21 CH-21 | Q50 | 163.00 | 62.58 | 64.98 | 66.08 | 1.10 | 66.87 | 1.89 | 65.65 | 67.35 | 0.025788 | 6.82 | 23.91 | 11.84 | 1.53 |
| unico | 21 CH-21 | Q200 | 208.00 | 62.58 | 65.34 | 66.08 | 0.74 | 66.87 | 1.53 | 66.15 | 68.13 | 0.026078 | 7.40 | 28.13 | 11.91 | 1.54 |
| unico | 21 CH-21 | Q500 | 238.00 | 62.58 | 65.56 | 66.08 | 0.52 | 66.87 | 1.31 | 66.47 | 68.61 | 0.026295 | 7.73 | 30.77 | 11.95 | 1.54 |
| unico | 20 CH-20 | Q50 | 163.00 | 62.08 | 66.09 | 66.00 | -0.09 | 66.13 | 0.04 | 65.00 | 66.63 | 0.003411 | 3.25 | 50.19 | 14.72 | 0.56 |
| unico | 20 CH-20 | Q200 | 208.00 | 62.08 | 66.79 | 66.00 | -0.79 | 66.13 | -0.66 | 65.41 | 67.39 | 0.003263 | 3.44 | 60.47 | 14.72 | 0.54 |
| unico | 20 CH-20 | Q500 | 238.00 | 62.08 | 67.21 | 66.00 | -1.21 | 66.13 | -1.08 | 65.67 | 67.86 | 0.003247 | 3.57 | 66.67 | 14.72 | 0.54 |
| unico | 19 CH-19 | Q50 | 163.00 | 61.76 | 65.75 | 65.98 | 0.23 | 63.95 | -1.80 | 64.87 | 66.52 | 0.005274 | 3.90 | 41.79 | 11.63 | 0.66 |
| unico | 19 CH-19 | Q200 | 208.00 | 61.76 | 66.35 | 65.98 | -0.37 | 63.95 | -2.40 | 65.35 | 67.28 | 0.005580 | 4.26 | 48.84 | 11.63 | 0.66 |
| unico | 19 CH-19 | Q500 | 238.00 | 61.76 | 66.71 | 65.98 | -0.73 | 63.95 | -2.76 | 65.65 | 67.74 | 0.005850 | 4.49 | 52.98 | 11.63 | 0.67 |
| unico | 18 CH-18 | Q50 | 163.00 | 60.95 | 64.87 | 67.84 | 2.97 | 63.49 | -1.38 | 64.87 | 66.30 | 0.011773 | 5.30 | 30.77 | 10.76 | 1.00 |
| unico | 18 CH-18 | Q200 | 208.00 | 60.95 | 65.42 | 67.84 | 2.42 | 63.49 | -1.93 | 65.42 | 67.04 | 0.011796 | 5.65 | 36.83 | 11.32 | 1.00 |
| unico | 18 CH-18 | Q500 | 238.00 | 60.95 | 65.75 | 67.84 | 2.09 | 63.49 | -2.26 | 65.75 | 67.50 | 0.011810 | 5.85 | 40.71 | 11.66 | 1.00 |
| unico | 17 CH-17 | Q50 | 163.00 | 60.43 | 62.99 | 63.54 | 0.55 | 64.20 | 1.21 | 63.97 | 65.78 | 0.035549 | 7.40 | 22.02 | 13.14 | 1.83 |
| unico | 17 CH-17 | Q200 | 208.00 | 60.43 | 63.30 | 63.54 | 0.24 | 64.20 | 0.90 | 64.61 | 66.51 | 0.034639 | 7.93 | 26.22 | 13.55 | 1.82 |
| unico | 17 CH-17 | Q500 | 238.00 | 60.43 | 63.50 | 63.54 | 0.04 | 64.20 | 0.70 | 64.80 | 66.95 | 0.034004 | 8.23 | 28.94 | 13.81 | 1.81 |
| unico | 16 CH-16 | Q50 | 163.00 | 60.24 | 62.62 | 63.34 | 0.72 | 63.67 | 1.05 | 63.68 | 64.99 | 0.026957 | 6.81 | 23.92 | 13.06 | 1.61 |
| unico | 16 CH-16 | Q200 | 208.00 | 60.24 | 62.94 | 63.34 | 0.40 | 63.67 | 0.73 | 64.04 | 65.72 | 0.027601 | 7.38 | 28.18 | 13.69 | 1.64 |
| unico | 16 CH-16 | Q500 | 238.00 | 60.24 | 63.14 | 63.34 | 0.20 | 63.67 | 0.53 | 64.22 | 66.16 | 0.028063 | 7.69 | 30.94 | 14.19 | 1.66 |
| unico | 15 CH-15 | Q50 | 163.00 | 59.74 | 62.29 | 62.84 | 0.55 | 63.14 | 0.85 | 62.98 | 64.40 | 0.024191 | 6.44 | 25.33 | 14.00 | 1.53 |
| unico | 15 CH-15 | Q200 | 208.00 | 59.74 | 64.34 | 62.84 | -1.50 | 63.14 | -1.20 | 63.51 | 64.82 | 0.002467 | 3.17 | 72.56 | 27.15 | 0.54 |
| unico | 15 CH-15 | Q500 | 238.00 | 59.74 | 65.06 | 62.84 | -2.22 | 63.14 | -1.92 | 63.72 | 65.45 | 0.001599 | 2.89 | 92.03 | 27.15 | 0.45 |

HEC-RAS Plan: 01_Chiesanova River: Chiesanova Reach: unico (Continued)

| Reach | River Sta | | Profile | Q Total | Min Ch El | W.S. Elev | LOB Elev | L. Freeboard | ROB Elev | R. Freeboard | Crit W.S. | E.G. Elev | E.G. Slope | Vel Chnl | Flow Area | Top Width | Froude # Chl |
|-------|-----------|-------|---------|---------|-----------|-----------|----------|--------------|----------|--------------|-----------|-----------|------------|----------|-----------|-----------|--------------|
| | | | | (m3/s) | (m) | (m) | (m) | (m) | (m) | (m) | (m) | (m) | (m/m) | (m/s) | (m2) | (m) | |
| unico | 14 | CH-14 | Q50 | 163.00 | 59.38 | 63.29 | 62.49 | -0.80 | 63.62 | 0.33 | 62.75 | 63.99 | 0.005168 | 3.70 | 44.01 | 16.53 | 0.72 |
| unico | 14 | CH-14 | Q200 | 208.00 | 59.38 | 64.05 | 62.49 | -1.56 | 63.62 | -0.43 | 63.15 | 64.73 | 0.004024 | 3.67 | 56.64 | 16.79 | 0.64 |
| unico | 14 | CH-14 | Q500 | 238.00 | 59.38 | 64.77 | 62.49 | -2.28 | 63.62 | -1.15 | 63.40 | 65.38 | 0.003005 | 3.46 | 68.81 | 16.79 | 0.55 |
| unico | 13 | CH-13 | Q50 | 163.00 | 58.84 | 63.13 | 62.33 | -0.80 | 63.57 | 0.44 | 62.61 | 63.88 | 0.005549 | 3.84 | 42.50 | 15.52 | 0.74 |
| unico | 13 | CH-13 | Q200 | 208.00 | 58.84 | 63.91 | 62.33 | -1.58 | 63.57 | -0.34 | 63.02 | 64.65 | 0.004313 | 3.79 | 54.85 | 15.83 | 0.65 |
| unico | 13 | CH-13 | Q500 | 238.00 | 58.84 | 64.67 | 62.33 | -2.34 | 63.57 | -1.10 | 63.28 | 65.31 | 0.003212 | 3.56 | 66.81 | 15.83 | 0.55 |
| unico | 12 | CH-12 | Q50 | 163.00 | 58.74 | 62.94 | 62.24 | -0.70 | 63.45 | 0.51 | 62.43 | 63.76 | 0.005851 | 4.01 | 40.69 | 14.30 | 0.76 |
| unico | 12 | CH-12 | Q200 | 208.00 | 58.74 | 63.75 | 62.24 | -1.51 | 63.45 | -0.30 | 62.88 | 64.55 | 0.004620 | 3.96 | 52.47 | 14.68 | 0.67 |
| unico | 12 | CH-12 | Q500 | 238.00 | 58.74 | 64.54 | 62.24 | -2.30 | 63.45 | -1.09 | 63.15 | 65.24 | 0.003443 | 3.71 | 64.09 | 14.68 | 0.57 |
| unico | 11 | CH-11 | Q50 | 163.00 | 58.39 | 62.11 | 62.19 | 0.08 | 63.56 | 1.45 | 62.11 | 63.54 | 0.011572 | 5.29 | 30.80 | 10.79 | 1.00 |
| unico | 11 | CH-11 | Q200 | 208.00 | 58.39 | 63.24 | 62.19 | -1.05 | 63.56 | 0.32 | 62.65 | 64.40 | 0.007329 | 4.76 | 43.71 | 11.88 | 0.79 |
| unico | 11 | CH-11 | Q500 | 238.00 | 58.39 | 64.18 | 62.19 | -1.99 | 63.56 | -0.62 | 62.99 | 65.14 | 0.005114 | 4.32 | 55.11 | 12.18 | 0.65 |
| unico | 10 | CH-10 | Q50 | 163.00 | 58.32 | 60.87 | 61.80 | 0.93 | 61.16 | 0.29 | 61.48 | 63.12 | 0.023516 | 6.63 | 24.58 | 11.38 | 1.44 |
| unico | 10 | CH-10 | Q200 | 208.00 | 58.32 | 63.40 | 61.80 | -1.60 | 61.16 | -2.24 | 61.97 | 64.17 | 0.004217 | 3.87 | 53.75 | 11.57 | 0.57 |
| unico | 10 | CH-10 | Q500 | 238.00 | 58.32 | 64.50 | 61.80 | -2.70 | 61.16 | -3.34 | 62.27 | 64.90 | 0.002175 | 3.00 | 90.46 | 19.77 | 0.40 |
| unico | 9.9 | | Q50 | 163.00 | 58.31 | 60.51 | 62.72 | 2.21 | 62.72 | 2.21 | 61.26 | 63.08 | 0.023604 | 7.11 | 22.93 | 12.99 | 1.71 |
| unico | 9.9 | | Q200 | 208.00 | 58.31 | 63.34 | 62.72 | -0.62 | 62.72 | -0.62 | 61.71 | 64.16 | 0.006963 | 4.02 | 51.71 | | 0.57 |
| unico | 9.9 | | Q500 | 238.00 | 58.31 | 64.10 | 62.72 | -1.38 | 62.72 | -1.38 | 61.99 | 64.87 | 0.008124 | 3.89 | 61.14 | 13.00 | 0.52 |
| unico | 9 | CH-9 | Q50 | 163.00 | 58.29 | 61.72 | 62.03 | 0.31 | 62.10 | 0.38 | 61.03 | 62.55 | 0.004540 | 4.04 | 40.40 | 12.15 | 0.71 |
| unico | 9 | CH-9 | Q200 | 208.00 | 58.29 | 62.90 | 62.03 | -0.87 | 62.10 | -0.80 | 61.49 | 63.94 | 0.015028 | 4.52 | 46.01 | 12.17 | 0.67 |
| unico | 9 | CH-9 | Q500 | 238.00 | 58.29 | 63.77 | 62.03 | -1.74 | 62.10 | -1.67 | 61.79 | 64.67 | 0.010384 | 4.20 | 56.61 | 12.17 | 0.57 |
| unico | 8 | CH-8 | Q50 | 163.00 | 58.06 | 61.70 | 61.78 | 0.08 | 61.80 | 0.10 | 60.82 | 62.44 | 0.003894 | 3.82 | 42.72 | 12.16 | 0.65 |
| unico | 8 | CH-8 | Q200 | 208.00 | 58.06 | 62.53 | 61.78 | -0.75 | 61.80 | -0.73 | 61.29 | 63.67 | 0.011295 | 4.74 | 43.87 | | 0.72 |
| unico | 8 | CH-8 | Q500 | 238.00 | 58.06 | 63.48 | 61.78 | -1.70 | 61.80 | -1.68 | 61.58 | 64.45 | 0.011627 | 4.36 | 54.61 | 12.17 | 0.60 |
| unico | 7 | CH-7 | Q50 | 163.00 | 57.79 | 61.68 | 61.93 | 0.25 | 61.79 | 0.11 | 60.61 | 62.34 | 0.003267 | 3.62 | 44.98 | 12.14 | 0.60 |
| unico | 7 | CH-7 | Q200 | 208.00 | 57.79 | 62.44 | 61.93 | -0.51 | 61.79 | -0.65 | 61.08 | 63.43 | 0.008879 | 4.40 | 47.22 | | 0.65 |
| unico | 7 | CH-7 | Q500 | 238.00 | 57.79 | 63.30 | 61.93 | -1.37 | 61.79 | -1.51 | 61.37 | 64.21 | 0.010108 | 4.24 | 56.11 | 12.15 | 0.58 |
| unico | 6.2 | | Q50 | 163.00 | 57.63 | 61.64 | 61.89 | 0.25 | 61.71 | 0.07 | 60.55 | 62.28 | 0.003087 | 3.56 | 45.81 | 12.48 | 0.59 |
| unico | 6.2 | | Q200 | 208.00 | 57.63 | 62.30 | 61.89 | -0.41 | 61.71 | -0.59 | 61.01 | 63.26 | 0.008616 | 4.35 | 47.86 | | 0.64 |
| unico | 6.2 | | Q500 | 238.00 | 57.63 | 63.12 | 61.89 | -1.23 | 61.71 | -1.41 | 61.30 | 64.03 | 0.010204 | 4.23 | 56.29 | 12.48 | 0.58 |
| unico | 6.1 | | Q50 | 163.00 | 57.63 | 61.15 | 60.88 | -0.27 | 60.71 | -0.44 | 60.55 | 62.24 | 0.013359 | 4.62 | 35.32 | | 0.79 |
| unico | 6.1 | | Q200 | 208.00 | 57.63 | 61.41 | 60.88 | -0.53 | 60.71 | -0.70 | 60.75 | 63.18 | 0.021753 | 5.89 | 35.32 | | 0.97 |
| unico | 6.1 | | Q500 | 238.00 | 57.63 | 61.58 | 60.88 | -0.70 | 60.71 | -0.87 | 60.78 | 63.89 | 0.028480 | 6.74 | 35.32 | | 1.08 |
| unico | 6 | CH-6 | Q50 | 163.00 | 57.50 | 61.20 | 60.88 | -0.32 | 60.71 | -0.49 | 60.33 | 62.12 | 0.010689 | 4.27 | 38.21 | | 0.71 |
| unico | 6 | CH-6 | Q200 | 208.00 | 57.50 | 61.49 | 60.88 | -0.61 | 60.71 | -0.78 | 60.72 | 63.00 | 0.017406 | 5.44 | 38.21 | | 0.87 |
| unico | 6 | CH-6 | Q500 | 238.00 | 57.50 | 61.67 | 60.88 | -0.79 | 60.71 | -0.96 | 60.75 | 63.65 | 0.022789 | 6.23 | 38.21 | | 0.97 |
| unico | 5.9 | | Q50 | 163.00 | 57.80 | 60.77 | 60.88 | 0.11 | 60.71 | -0.06 | 60.69 | 62.08 | 0.011530 | 5.06 | 32.21 | 7.27 | 0.94 |
| unico | 5.9 | | Q200 | 208.00 | 57.80 | 60.84 | 60.88 | 0.04 | 60.71 | -0.13 | 60.77 | 62.92 | 0.023907 | 6.39 | 32.56 | 2.43 | 1.17 |
| unico | 5.9 | | Q500 | 238.00 | 57.80 | 60.79 | 60.88 | 0.09 | 60.71 | -0.08 | 60.79 | 63.55 | 0.026332 | 7.36 | 32.34 | 5.94 | 1.36 |
| unico | 5.8 | | Q50 | 163.00 | 57.55 | 60.78 | 61.52 | 0.74 | 61.52 | 0.74 | 60.78 | 62.05 | 0.009005 | 5.00 | 32.58 | 12.78 | 1.00 |
| unico | 5.8 | | Q200 | 208.00 | 57.55 | 61.23 | 61.52 | 0.29 | 61.52 | 0.29 | 61.23 | 62.73 | 0.009067 | 5.42 | 38.37 | 12.78 | 1.00 |
| unico | 5.8 | | Q500 | 238.00 | 57.55 | 60.76 | 61.52 | 0.76 | 61.52 | 0.76 | 61.51 | 63.52 | 0.019597 | 7.36 | 32.35 | 12.78 | 1.48 |

HEC-RAS Plan: 01_Chiesanova River: Chiesanova Reach: unico (Continued)

| Reach | River Sta | Profile | Q Total (m3/s) | Min Ch El (m) | W.S. Elev (m) | LOB Elev (m) | L. Freeboard (m) | ROB Elev (m) | R. Freeboard (m) | Crit W.S. (m) | E.G. Elev (m) | E.G. Slope (m/m) | Vel Chnl (m/s) | Flow Area (m2) | Top Width (m) | Froude # Chl |
|-------|-----------|---------|-------------------|------------------|------------------|-----------------|---------------------|-----------------|---------------------|------------------|------------------|---------------------|-------------------|-------------------|------------------|--------------|
| unico | 5.1 | Q50 | 163.00 | 57.14 | 59.21 | 61.45 | 2.24 | 61.41 | 2.20 | 59.95 | 61.74 | 0.023002 | 7.04 | 23.15 | 12.84 | 1.67 |
| unico | 5.1 | Q200 | 208.00 | 57.14 | 59.58 | 61.45 | 1.87 | 61.41 | 1.83 | 60.40 | 62.41 | 0.021311 | 7.44 | 27.94 | 12.85 | 1.61 |
| unico | 5.1 | Q500 | 238.00 | 57.14 | 59.65 | 61.45 | 1.80 | 61.41 | 1.76 | 60.68 | 63.14 | 0.025547 | 8.27 | 28.78 | 12.85 | 1.76 |
| unico | 5 CH-5 | Q50 | 163.00 | 56.64 | 60.74 | 61.45 | 0.71 | 61.41 | 0.67 | 59.44 | 61.30 | 0.002526 | 3.30 | 49.36 | 12.86 | 0.54 |
| unico | 5 CH-5 | Q200 | 208.00 | 56.64 | 58.87 | 61.45 | 2.58 | 61.41 | 2.54 | 59.89 | 62.33 | 0.029121 | 8.25 | 25.22 | 12.84 | 1.88 |
| unico | 5 CH-5 | Q500 | 238.00 | 56.64 | 58.97 | 61.45 | 2.48 | 61.41 | 2.44 | 60.17 | 63.06 | 0.032618 | 8.96 | 26.57 | 12.85 | 1.99 |
| unico | 4 CH-4 | Q50 | 163.00 | 56.73 | 60.70 | 61.33 | 0.63 | 61.31 | 0.61 | 59.38 | 61.24 | 0.002625 | 3.28 | 49.72 | 12.90 | 0.53 |
| unico | 4 CH-4 | Q200 | 208.00 | 56.73 | 60.96 | 61.33 | 0.37 | 61.31 | 0.35 | 59.83 | 61.74 | 0.003540 | 3.91 | 53.15 | 12.90 | 0.62 |
| unico | 4 CH-4 | Q500 | 238.00 | 56.73 | 61.11 | 61.33 | 0.22 | 61.31 | 0.20 | 60.11 | 62.06 | 0.004199 | 4.32 | 55.05 | 12.90 | 0.67 |
| unico | 3.9 | Q50 | 163.00 | 56.73 | 60.64 | 61.28 | 0.63 | 61.26 | 0.62 | 59.38 | 61.21 | 0.002728 | 3.32 | 49.06 | 12.90 | 0.54 |
| unico | 3.9 | Q200 | 208.00 | 56.73 | 60.88 | 61.28 | 0.40 | 61.26 | 0.38 | 59.83 | 61.69 | 0.003754 | 4.00 | 52.06 | 12.90 | 0.64 |
| unico | 3.9 | Q500 | 238.00 | 56.73 | 60.99 | 61.28 | 0.29 | 61.26 | 0.27 | 60.10 | 62.00 | 0.004545 | 4.45 | 53.52 | 12.90 | 0.70 |
| unico | 3.8 | Q50 | 163.00 | 56.23 | 60.75 | 59.40 | -1.35 | 62.15 | 1.40 | 58.86 | 61.16 | 0.002469 | 2.86 | 57.07 | 12.90 | 0.43 |
| unico | 3.8 | Q200 | 208.00 | 56.23 | 61.03 | 59.40 | -1.63 | 62.15 | 1.12 | 59.30 | 61.63 | 0.003388 | 3.43 | 60.69 | 12.90 | 0.50 |
| unico | 3.8 | Q500 | 238.00 | 56.23 | 61.18 | 59.40 | -1.78 | 62.15 | 0.97 | 59.59 | 61.92 | 0.004059 | 3.80 | 62.67 | 12.90 | 0.55 |
| unico | 3 CH-3 | Q50 | 163.00 | 55.95 | 60.78 | 59.37 | -1.41 | 58.95 | -1.83 | 58.84 | 61.13 | 0.001758 | 2.62 | 62.26 | 14.67 | 0.41 |
| unico | 3 CH-3 | Q200 | 208.00 | 55.95 | 61.08 | 59.37 | -1.71 | 58.95 | -2.13 | 59.27 | 61.58 | 0.002367 | 3.12 | 66.66 | 14.67 | 0.47 |
| unico | 3 CH-3 | Q500 | 238.00 | 55.95 | 61.25 | 59.37 | -1.88 | 58.95 | -2.30 | 59.53 | 61.85 | 0.002799 | 3.44 | 69.15 | 14.67 | 0.51 |