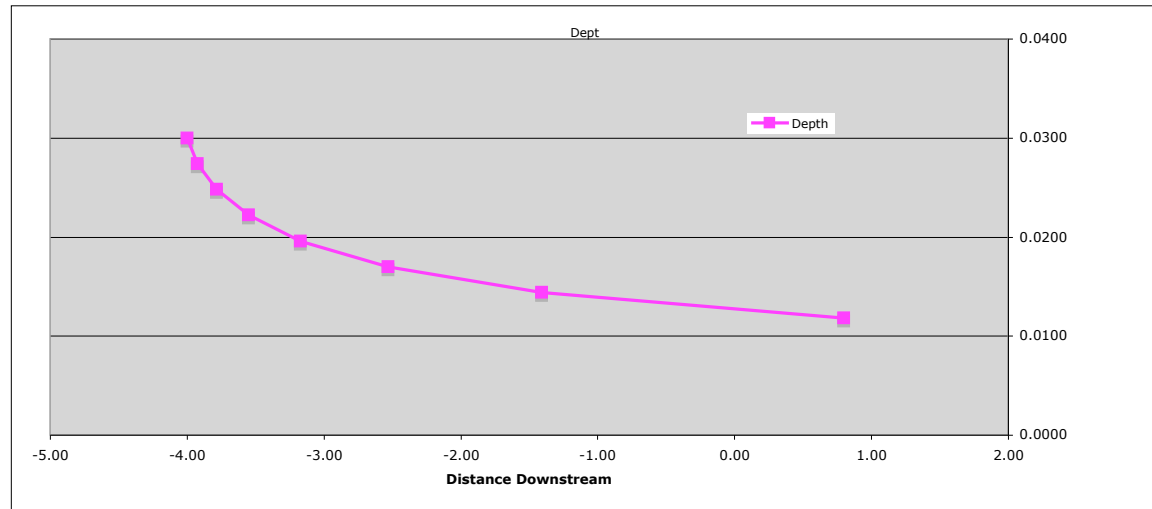


Gradually Varied Flow Profiles, Using direct step method, S2 profile

Parameter	Units	Value
M2, delta y	m	-0.0026
Q	L/s	1.5000
Channel Width	m	0.0750
Bed Slope	-	0.0250
n	-	0.0020
Gravity	m/s ²	9.8100
Manning eqn fctr	-	1.0000
Control depth	m	0.0300

Adjust values in green



Reach	x up	x dn	y up	y dn	Fr dn	V up	V down	Equation 3.139 numerator		R_up	R_dn	Eq. 3.136		Sfavg	Eq. 3.139 delta L
								E up	E dn			Sf_up	Sf_dn		
1	-4.00	-3.92	0.0300	0.0274	1.4079	0.67	0.73	5.265E-02	5.456E-02	0.017	0.016	4.18E-04	5.36E-04	4.69E-04	0.078
2	-3.92	-3.78	0.0274	0.0248	1.6350	0.73	0.81	5.456E-02	5.795E-02	0.016	0.015	5.36E-04	7.08E-04	6.10E-04	0.139
3	-3.78	-3.55	0.0248	0.0222	1.9305	0.81	0.90	5.795E-02	6.357E-02	0.015	0.014	7.08E-04	9.67E-04	8.17E-04	0.232
4	-3.55	-3.17	0.0222	0.0196	2.3271	0.90	1.02	6.357E-02	7.267E-02	0.014	0.013	9.67E-04	1.38E-03	1.14E-03	0.381
5	-3.17	-2.53	0.0196	0.0170	2.8809	1.02	1.18	7.267E-02	8.754E-02	0.013	0.012	1.38E-03	2.09E-03	1.66E-03	0.637
6	-2.53	-1.41	0.0170	0.0144	3.6953	1.18	1.39	8.754E-02	1.127E-01	0.012	0.010	2.09E-03	3.40E-03	2.58E-03	1.123
7	-1.41	0.80	0.0144	0.0118	4.9816	1.39	1.69	1.127E-01	1.582E-01	0.010	0.009	3.40E-03	6.16E-03	4.38E-03	2.207
8	0.80	6.33	0.0118	0.0092	7.2363	1.69	2.17	1.582E-01	2.501E-01	0.009	0.007	6.16E-03	1.31E-02	8.39E-03	5.529

Notes

- up and dn refer to upstream and downstream locations
- y = water depth
- Fr = Froude number
- V = velocity
- E = specific energy
- R = hydraulic radius
- Sf = friction slope
- delta l = distance to upstream location