

PORTS AND PASSES - SECONDARY TIDES AND CURRENTS WORKSHEETS

Worksheet 1

Secondary Tides Calculations (Height difference) (Canada & US)

Reference Station: _____ Date: _____

Secondary Station: _____

	Reference Station		Corrections		Secondary Station	
	Time hr min Column 1	Height ft / metres Column 2	Time difference hr min Column 3	Height [★] difference ft / metres Column 4	Time hr min Column 5	Height ft / metres Column 6
LW			+	+	=	=
			-	-		
HW			+	+	=	=
			-	-		
LW			+	+	=	=
			-	-		
HW			+	+	=	=
			-	-		
LW			+	+	=	=
			-	-		

★ (Canada Only) You should normally use the correction for "Mean Tide". Use the "Large Tide" differences only when the tidal range between LW and HW is very large (during spring tides).

Ports and Passes Tide & Current Guide publishes tables of corrections for secondary stations, which are to be applied to the times and heights of high or low water, or the time and speed of currents. Though a secondary station may have similar characteristics to the reference station, corrections are not considered as accurate as the full predictions for a reference port. However, corrections applied properly will provide reasonably accurate approximations. Some secondary current stations are referenced to a tide station (example, Malibu Rapids referenced to Point Atkinson). Normally, it is not possible to calculate the speed at Max for these stations.

For your convenience, a series of worksheets is provided to assist in applying the secondary corrections. Worksheets and instructions on how to use the worksheets can be found at PortsandPasses.com and at Waggonerguide.com.

Worksheet 2

Secondary Tides Calculation (Height ratio) (US)

Reference Station: _____ Date: _____

Secondary Station: _____

	Reference Station		Corrections		Secondary Station	
	Time hr min Column 1	Height ft / metres Column 2	Time difference hr min Column 3	Height ratio Column 4	Time hr min Column 5	Height ft / metres Column 6
LW			+	x	=	=
			-			
HW			+	x	=	=
			-			
LW			+	x	=	=
			-			
HW			+	x	=	=
			-			
LW			+	x	=	=
			-			

Worksheet 3

Secondary Current Calculation ("Speed ratio" is also called "% ref. rate") (Canada & US)

Reference Station: _____ Date: _____

Secondary Station: _____

	Reference Station		Corrections		Secondary Station	
	Time of Turn hr min Column 1	Speed at Max (knots) Column 2	Time difference hr min Column 3	Speed ratio (% ref rate) Column 4	Time of Turn hr min Column 5	Speed at Max (knots) Column 6
TTF			+	x	=	=
			-			
TTE			+	x	=	=
			-			
TTF			+	x	=	=
			-			
TTE			+	x	=	=
			-			
TTF			+	x	=	=
			-			