

STANDARD ASTRONOMICAL REFRACTION TABLES (A) and (B) [-1°, 0°]

Tables (A) and (B) here-under have been built upon the sole data from the **Standard Astronomical Refraction Tables for heights above the Astronomical Horizon** published in both the **ÉPHÉMÉRIDES NAUTIQUES (EN)** and the **pre-2004 NAUTICAL ALMANAC (NAL)**.

Since **Tables (A) and (B)** are based on slightly different assumptions, their respective results slightly differ.

Nonetheless given the **acknowledged and well-known ever increasing scatter in Astronomical Refractions further away from the Observer's zenith**, such differences cannot be considered as being really significant.

This fact can be easily confirmed through comparing the **0° refraction** value at **-33.8'** for the **EN** while it is listed as **-34.5'** in the **NAL**.

In fact, the **EN (A) Table** and the **NAL (B) Table** are extremely similar, and incidentally they both share the preference of the Author.

ÉPHÉMÉRIDES NAUTIQUES (EN)			
Table étendue de Réfractions Astronomiques (A)			
[0°, -1°] sous l'Horizon Astronomique			
Conditions standard $P = 760 \text{ mm Hg}, T = +10^\circ\text{C}$	<i>h'</i>	<i>R'</i>	Dispersion standard
	0°00'	-33,8'	0,7'
	-10'	-35,9'	1,1'
	-20'	-38,1'	1,2'
	-0°30'	-40,5'	1,5'
	-40'	-43,1'	2,0'
	-50'	-46,0'	2,4'
	-1°00'	-49,0'	3,1'

pre-2004 NAUTICAL ALMANAC (NAL)			
Astronomical Refractions Augmented Table (A)			
[0°, -1°] under the Astronomical Horizon			
Standard conditions $P = 1,013 \text{ hPa}, T = +10^\circ\text{C}$	<i>h'</i>	<i>R'</i>	Standard scatter
	0°00'	-34.5'	0.7'
	-10'	-37.0'	1.1'
	-20'	-39.3'	1.2'
	-0°30'	-42.0'	1.5'
	-40'	-45.1'	2.0'
	-50'	-48.4'	2.4'
	-1°00'	-52.1'	3.1'

Au Roc Saint Luc, le 26 Juin 2024, Antoine M. Couëtte, antoine.m.couette@club-internet.fr

ÉPHÉMÉRIDES NAUTIQUES (EN)			
Table étendue de Réfractions Astronomiques (B)			
[0°, -1°] sous l'Horizon Astronomique			
Conditions standard $P = 760 \text{ mm Hg}, T = +10^\circ\text{C}$	<i>h'</i>	<i>R'</i>	Dispersion standard
	0°00'	-33,8'	0,7'
	-10'	-35,7'	0,9'
	-20'	-37,7'	1,1'
	-0°30'	-39,8'	1,3'
	-40'	-42,0'	1,6'
	-50'	-44,4'	1,8'
	-1°00'	-46,9'	2,1'

NAUTICAL ALMANAC (NAL)			
Astronomical Refractions Augmented Table (B)			
[0°, -1°] under the Astronomical Horizon			
Standard conditions $P = 1,013 \text{ hPa}, T = +10^\circ\text{C}$	<i>h'</i>	<i>R'</i>	Standard scatter
	0°00'	-34.5'	0.7'
	-10'	-36.6'	0.9'
	-20'	-38.8'	1.1'
	-0°30'	-41.1'	1.3'
	-40'	-43.6'	1.6'
	-50'	-46.2'	1.8'
	-1°00'	-49.0'	2.1'

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