

Sun Azimuth & Elevation Intersections for <u>Port Arthur, Texas</u>					(29.88° N, 93.93° W)		Dates & Times-- twice a year for each occurrence:		Standard Time = UTC - 0600		Daylight Time = UTC - 0500								
AXIMUTH	65°		90°		115°		135°		160°		225°		245°		270°		295°		DT = Second Sun in March -- First Sun in November
ALTITUDE																			
80°							05-Jun	07-Jul	19-May	24-Jul	05-Jun	07-Jul							80°
							12:44	12:50	13:12	13:22	13:45	13:51							
75°					07-Jun	05-Jul	15-May	28-Jul	30-Apr	12-Aug	15-May	28-Jul	07-Jun	05-Jul					75°
					12:15	12:21	12:28	12:38	13:13	13:21	13:57	14:07	14:14	14:19					
60°					29-Apr	14-Aug	08-Apr	04-Sep	20-Mar	23-Sep	08-Apr	04-Sep	28-Apr	14-Aug					60°
					11:22	11:29	11:54	11:51	13:23	13:08	14:41	14:39	15:05	15:12					
45°			May-23	Jul-20	03-Apr	09-Sep	08-Mar	05-Oct	07-Feb	03-Nov	08-Mar	05-Oct	02-Apr	09-Sep	23-May	20-Jul			45°
			09:56	10:06	10:39	10:33	10:26	11:04	12:30	11:59	14:27	15:05	15:59	15:54	16:29	16:39			
30°			Apr-29	Aug-14	10-Mar	03-Oct	03-Feb	07-Nov			03-Feb	07-Nov	10-Mar	03-Oct	28-Apr	13-Aug			30°
			09:00	09:07	09:58	09:37	09:51	09:21			15:08	14:38	16:54	16:33	17:27	17:34			
15°			08-Apr	03-Sep	14-Feb	28-Oct							13-Feb	27-Oct	08-Apr	03-Sep			15°
			08:10	08:07	08:14	08:44							16:46	17:15	18:25	18:23			
10°			02-Apr	10-Sep	05-Feb	06-Nov							04-Feb	06-Nov	01-Apr	09-Sep			
			07:54	07:47	07:57	07:27							17:02	16:32	18:45	18:38			10°
5°			26-Mar	17-Sep	25-Jan	16-Nov							25-Jan	16-Nov	26-Mar	16-Sep			
			07:38	07:27	07:38	07:10							17:19	16:51	19:05	18:54			5°
0°	26-May	17-Jul	20-Mar	24-Sep	11-Jan	01-Dec							11-Jan	01-Dec	19-Mar	23-Sep	26-May	16-Jul	0°
	06:18	06:28	07:22	07:06	07:14	06:55							17:34	17:15	19:25	19:10	20:07	20:16	

For: Industrial Site, Port, & Derby Arenas

Gray rectangles indicate the intersections where the sun can never be, at the given location.

The above table is for when you know the azimuth and altitude you have in mind, and want to yield the dates and times. However, if you wish to do the opposite-- that is... you have a specific date and time in mind, and want to know what the correct azimuth and altitude is for a given location (via latitude and longitude)-- then click on the link below to use the calculator in this website:

<https://www.esri.noaa.gov/gmd/grad/solcalc/azel.html>