GEN 2.7 ANFANG DER BÜRGERLICHEN MORGENDÄMMERUNG / SONNENAUFGANG / SONNENUNTERGANG / ENDE DER BÜRGERLICHEN ABENDDÄMMERUNG

1. ALLGEMEINES

1.1. Die Tabellen auf den folgenden Seiten wurden vom Institut für Astrophysik der Universität Graz erstellt und werden hier mit deren Genehmigung wiedergegeben.

1.2. Sonnenauf- und untergang sind für einen theoretischen astronomischen Horizont (unter durchschnittlichen atmosphärischen Bedingungen) berechnet und nicht für die realen Horizonte, welche die Flughäfen umgeben.

1.3. Die bürgerliche Morgendämmerung beginnt und die bürgerliche Abenddämmerung endet, wenn sich der Sonnenmittelpunkt (bei klarem Himmel und unter der theoretischen Annahme, sich auf mittlerer Meereshöhe zu befinden) 6° unter dem theoretischen astronomischen Horizont befindet.

1.4. Die Tabellen sind für ein durchschnittliches Jahr berechnet. Unter Berücksichtigung der Absätze 1.2 und 1.3 weichen die Zeiten eines beliebigen Jahres weniger als 3 Minuten von den in der Tabelle angegebenen Zeiten eines durchschnittlichen Jahres ab.

1.5. Die Tabellen enthalten internationale Flughäfen. Die Zeiten in den Tabellen sind in UTC angegeben.

1.6. Für andere Flugplätze in Österreich können die entsprechenden Zeiten näherungsweise ermittelt werden, indem man einen in den Tabellen enthaltenen - idealerweise auf gleicher geografischer Breite liegenden - internationalen Flughafen auswählt, die geografische Längendifferenz zu diesem berechnet und diese dann in eine Zeitdifferenz umwandelt. Dabei gilt: 1 Grad Längendifferenz entspricht etwa 4 Minuten Zeitdifferenz, wobei diese Zeitdifferenz bei einem östlich vom Bezugsflughafen gelegenen Flugplatz jeweils zu subtrahieren ist, bei einem westlich davon gelegenen Flugplatz hingegen addiert werden muss.

2. ALPHABETISCHER INDEX

GEN 2.7 BEGINNING OF CIVIL MORNING TWILIGHT / SUNRISE / SUNSET / END OF CIVIL EVENING TWILIGHT

1. GENERAL

1.1. The tables on the following pages have been prepared by the Institute of Astrophysics, University of Graz and are reproduced here with their permission.

1.2. Sunrise and sunset are calculated for a theoretical astronomical horizon (under average atmospheric conditions) and not for the real horizons surrounding the airports.

1.3. Civil morning twilight begins and civil evening twilight ends when the centre of the sun is 6° below the theoretical astronomical horizon under clear skies and the theoretical assumption of being at mean sea level.

1.4. The tables are calculated for an average year. Taking into account paragraphs 1.2 and 1.3, the times of any year differ by less than 3 minutes from the times of an average year shown in the table.

1.5. The tables include international airports. The times in the tables are in UTC.

1.6. For other aerodromes in Austria, the corresponding times can be determined approximately by selecting an international airport included in the tables - ideally located at the same geographical latitude - calculating the geographical longitude-difference to this airport and then converting this into a time difference. The following applies: 1 degree difference in longitude corresponds to about 4 minutes time difference, whereby this time difference must be subtracted for an airport located east of the reference airport, but added for an airport located west of it.

2. ALPHABETICAL INDEX

Standort / Location	ICAO-Ortskennung / ICAO location indicator	Geografische Koordinaten / geographical ccordinates	Seite / Page
Graz	LOWG	46°59'35" N / 015°26'21" E	GEN 2.7-2
Innsbruck	LOWI	47°15'37" N / 011°20'38" E	GEN 2.7-4
Klagenfurt	LOWK	46°38'34" N / 014°20'14" E	GEN 2.7-6
Linz	LOWL	48°14'07" N / 014°11'17" E	GEN 2.7-8
Salzburg	LOWS	47°47'40" N / 013°00'12" E	GEN 2.7-10
Wien	LOWW	48°06'37" N / 016°34'11" E	GEN 2.7-12

GRAZ

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GRAZ

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