

TABLE 6.1. The central Carolinian star compass (extended version)*

This version of Table 6.1 from *Nā Inoa Hōkū: Hawaiian and Pacific Star Names, Third Edition* by Johnson, Mahelona and Ruggles (University of Hawai‘i Press, 2026) includes additional declination data for each star/asterism at AD 1000, 1500 and 2000.

Compass direction ^{T.1}	Name of direction	Star/Asterism	Phenomenon	Declination			True azimuth calculated from stellar declination (°) ^{T.2}			“Idealised” direction given by Kubary [1880] and Schück [1884]	Corresponding “idealised” azimuth	Star/asterism name in Chuuk and nearby islands ^{T.3} from Goodenough [1953]	Star/asterism name in Yap and nearby islands ^{T.4} from Goodenough [1953]	Star/asterism name in Sonsorol and nearby islands ^{T.5} from Goodenough 1953	Star/asterism name in Mortlock Is. from Kubary [1880]	Direction name in Lukunor from Lutké [1835] ^{T.6}	Star/asterism name in Yap from Christian [1897; 1899]
				AD 1000	AD 1500	AD 2000	AD 1000	AD 1500	AD 2000								
1 (North)	<i>Wenewen efeg</i>	Polaris (α UMi)	Standing above horizon	+83.8	+86.5	+89.3	354 – 6	357 – 3	359 – 1	<i>North</i>	<i>0</i>	<i>Fusamokit</i> and variants	<i>Onoon</i> and <i>Wonowon ni mailap</i> ; <i>Uiului</i> , <i>Uiului-al-evang</i> , and variants; <i>Volevol</i>	<i>Werääweri</i> [1] and variants	<i>Fusamakit</i> ^{T.7}	<i>Füsimokit</i>	—
2/32		Kochab (β UMi) and/or nearby stars	Rising/setting	+78.2	+76.2	+74.2	8/352 ^{T.8}	11/349	14/346	<i>Intermediate</i>	<i>11/349</i>	<i>Meilap en efang</i> ; <i>Mailupelefang</i>	<i>Mailap ale fang</i> and variants		<i>Mēeylap en ēffeng</i>	<i>Melpenefeung</i>	<i>Mai-le-palafal</i>
3/31 (approx. NNE/NNW)		Dubhe (α UMa) and/or nearby stars	Rising/setting	+66.8	+64.4	+61.7	22/338 ^{T.9}	24/336	27/333	<i>NNE/NNW</i>	<i>22/338</i>	<i>Oala</i> , <i>Ōla</i>	<i>Mailop pali olox</i> , <i>Ualego</i> , and variants		<i>Ōla</i>	<i>Ūlea</i>	<i>Ulagok</i>
4/30		Schedar (α Cas) and/or nearby stars. ^{T.10}	Rising/setting	+51.0	+53.8	+56.5	38/322 ^{T.11}	35/325	33/327	<i>Intermediate</i>	<i>34/326</i>	<i>Ugulik</i> , <i>Ukenik</i> , and variants ^{T.12}	<i>Ugeliik</i> and variants		<i>Ukenik</i> [1]	<i>Nginik</i> [1]	<i>Yigelik</i>
5/29		Vega (α Lyr) and/or nearby stars	Rising/setting	+38.2	+38.4	+38.8	51/309 ^{T.13}	51/309	51/309	<i>NE/NW</i>	<i>45/315</i>	<i>Mööl</i> and variants	<i>Mööl</i> and variants ^{T.14}		<i>Mōel</i>	<i>Méol</i>	<i>Moul</i>
6/28 (approx. ENE/WNW)		The Pleiades	Rising/setting	+20.5	+22.4	+24.1	69/291	67/293	66/294	<i>Intermediate</i>	<i>56/304</i>	<i>Mariger</i> and variants	<i>Mariger</i> and variants		<i>Mēriker</i>	<i>Mairiker</i>	<i>Magirigir</i>
7/27		Aldebaran (α Tau)	Rising/setting	+13.9	+15.4	+16.5	76/284	74/286	73/287	<i>ENE/WNW</i>	<i>68/292</i>	<i>Ūn</i> [1] and variants	<i>Ul</i> and variants		<i>Ūun</i>	<i>Ūn</i>	<i>Un</i> [1]
8/26	<i>Baun meilap efang</i>	Tarazed (γ Aql)	Rising/setting	+8.7	+9.5	+10.6	81/279	80/280	79/281	<i>Intermediate</i>	<i>79/281</i>	(Northern arm of the asterism <i>Mēeylap</i> [1] and variants)	(Northern arm of the asterism <i>Mēeylap</i> [1] and variants)		<i>Pōun mǎn me ēffeng</i>	—	—

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T.1 Numbered clockwise from north, following Goodenough [1953].
T.2 The azimuths are calculated for the star phenomenon concerned at latitude 7°N and altitude 0°.
T.3 I.e., the islands in modern Chuuk state, numbered 1–9 by Goodenough [1953: 7], including the Mortlocks, Namoluk and Poluwat.
T.4 I.e., the islands in modern Yap state, numbered 10–21 by Goodenough [1953: 7–8], including Satawal, Lamotrek and Woleai.
T.5 I.e., islands in modern Palau, numbered 22–25 by Goodenough [1953: 8].
T.6 The names listed in this column from *Melpenefeung* to *Massarig* are assigned to the easterly (rising) directions; the corresponding westerly (setting) directions are prefixed *Tolōn*, “opposite” or “facing”.
T.7 Listed on this page as *Füsamakit*.
T.8 Calculated for Kochab (β UMi).
T.9 Calculated for Dubhe (α UMa).
T.10 In one reported variant, on Namoluk, the asterism marking this compass position is the handle of Ursa Major.
T.11 Calculated for Schedar (α Cas).
T.12 These names are often associated with Orion, but the declination of Orion does not fit the position in the star compass. Goodenough [1953: 9] offers an explanation of how the confusion may have arisen.
T.13 Calculated for Vega (α Lyr).
T.14 Some variants are identified with Procyon (α UMi) but the declination of Procyon does not fit the position in the star compass. See Goodenough [1953: 10] for a discussion. See also *Māl*.

9/25 (“East” / “West”)		Altair (α Aql)	Rising/setting	+6.7	+7.7	+8.9	83/277	82/278	81/279	<i>East/West</i>	<i>90/270</i>	<i>Mailap</i> [5] and variants	<i>Mailap</i> [5] and variants		<i>Mēeylap</i>	<i>Mailap</i>	<i>Mailap</i> [3]
10/24	<i>Baun meilap mē eor</i>	Alshain (β Aql)	Rising/setting	+4.4	+5.3	+6.4	85/275	84/276	83/277	<i>Intermediate</i>	<i>101/259</i>	(Southern arm of the asterism <i>Mēeylap</i> [1] and variants)	(Southern arm of the asterism <i>Mēeylap</i> [1] and variants)		<i>Pōun mām me yer</i>	—	—
11/23 (approx. true East/West)		Orion’s belt	Rising/setting	−1.6 (Mintaka); −3.0 (Alnitak)	−0.8 (Mintaka); −2.3 (Alnitak)	−0.3 (Mintaka); −1.9 (Alnitak)	92–93/ 267–268	91–92/ 268–269	90–92/ 268–270	<i>ESE/WSW</i>	<i>112/248</i>	<i>Ēlluel</i> and variants ^{T.15}	<i>Ēlluel</i> and variants		<i>Ēlluel</i>	<i>Alueul</i>	<i>Yiliyel</i>
—		(unidentified)								<i>Intermediate</i>	<i>124/236</i>	—	—		<i>Pesēylam</i>	—	—
12/22		One or more stars in Corvus ^{T.16}	Rising/setting	−12.0	−14.8	−17.5	102/258 ^{T.17}	105/255	108/252	<i>SE/SW</i>	<i>135/225</i>	<i>Sorōpuel</i> and variants	<i>Serewol</i> [1] and variants		<i>Sorōpuel</i>	<i>Sarapoul</i>	<i>Sarabul</i>
13/21 (approx. ESE/WSW)		Antares (α Sco)	Rising/setting	−23.6	−25.2	−26.4	114/246	115/245	117/243	<i>Intermediate</i>	<i>146/214</i>	<i>Tumur</i> [1] and variants ^{T.18}	<i>Tumur</i> [1] and variants		<i>Tūmur</i>	<i>Tümür</i>	<i>Thamur</i>
14/20		Shaula (λ Sco) and/or nearby stars	Rising/setting	−35.7	−36.6	−37.1	126/234 ^{T.19}	127/233	127/233	<i>SSE/SSW</i>	—	Variants of <i>Metariu</i> ^{T.20}	<i>Metariu</i> and variants ^{T.21}		—	—	—
—		The constellation Lupus ^{T.22}		−36.5 (δ Lup); −40.6 (ε Lup)	−38.7 (δ Lup); −42.8 (ε Lup)	−40.6 (δ Lup); −44.7 (ε Lup)	127–131 / 229–233	129–133 / 227–231	131–135 / 225–229		<i>158/202</i>	—	—		<i>Mēsazeu</i>	<i>Massarig</i>	—
15	<i>Tēnup</i> and variants; <i>Thagi-luv</i> and variants	Southern Cross and/or Pointers	Rising	−51.3 (Gacrux); - 57.5 (Acrux);	−54.3 (Gacrux); - 60.3; (Acrux)	−57.1 (Gacrux); - 63.1; (Acrux);	142–148	145–151	148–154	<i>Intermediate</i>	<i>169</i>	<i>Fāluas</i> and variants (Pointers/ Southern Cross)	<i>Pup</i> and variants (Southern Cross)	<i>Woowo</i> (Southern Cross)	<i>Tēnup; Fālulas</i>	<i>Tanüp</i>	<i>Thagalu</i>
16	<i>Matemeas</i>	Southern Cross	Leaning over at 45°, ^{T.23} when Rigil Kentaurus (α Cen) is rising	See above	See above	See above	150–155	153–158	157–162		—	See above	See above	<i>Megl</i> (Pointers)	—	<i>Matamoütüg</i>	<i>Matarei</i> [1]
17 (South)	<i>Wenewen</i> and variants	Southern Cross	Upright	See above	See above	See above	184	184	184	<i>South</i>	<i>180</i>	See above	See above	<i>Werääweri</i> [2] and variants	<i>Aiōnounan</i>	<i>Üoneüononüp</i>	<i>Wonowon-le-yor</i>
18	<i>Matemelodau</i> and variants; <i>Faluwas</i>	Southern Cross	Leaning over at 45°, ^{T.24} when Rigil Kentaurus (α Cen) is on the meridian	See above	See above	See above	205–210	202–207	198–203			See above	See above	<i>Megl</i> (Pointers)		<i>Matamoloteüg</i>	—
19	<i>Tubulup</i> and variants; <i>Tholol-luv</i> and variants	Southern Cross and/or Pointers	Setting	See above	See above	See above	212–218	209–215	206–212	<i>Intermediate</i>	<i>191</i>	See above	See above	<i>Woowo</i> (Southern Cross)	<i>Tēnup; Fālulas</i>	<i>Tolonüp</i>	<i>Tholon-a-wonowon</i>

T.15 In two cases these names have been associated with Aldebaran (α Tau), but the declination of Aldebaran does not fit the position in the star compass. See Goodenough [1953: 12].

T.16 Goodenough identifies Gienah (γ Crv) as the indicator star in his sketch of the star compass [1953: 6] but states in the text [1953: 13] that it is indeterminable which star in Corvus was the key one for the compass.

T.17 Calculated for Gienah (γ Crv).

T.18 These names have several times been associated with the constellation Virgo, but the declination of Virgo does not fit the position in the star compass. Goodenough [1953: 14] notes that all these identifications derive from a single ethnographer, Sarfert.

T.19 Calculated for Shaula (λ Sco).

T.20 These names are not identified as Shaula itself but as an asterism, generally containing the tail of Scorpius and/or Lupus.

T.21 These names are not identified as Shaula itself but as an asterism, generally containing the tail of Scorpius and/or Lupus.

T.22 Identified incorrectly as Lepus by Kubary, Schück and Kötz: see *Mēsazeu*.

T.23 Goodenough [1953: 15] incorrectly records this as “Crux at an altitude of 45°” but it is evident from his sketches [ibid.: 17] that “leaning over at 45°” is what is intended. Its altitude at this point is actually about 17°.

T.24 Goodenough [1953: fig. 2] describes this position as “Crux with α Centauri at meridian” but also states [ibid.: 15] that “Crux [is] at an altitude of 45°”, evidently meaning that it is leaning over at 45°, as for Point 16 (but in the other direction). At this time Rigil Kentaurus (α Cen) is actually at an azimuth of approximately 190°, but this accords with the sketch [ibid.: 17, “Position 18”] where Hadar (β Cen) is slightly lower.