

Tonight planner card

2026-09-15 · 50°N, -114° · Bortle 4

What this is. Ranked with the same labelled heuristic as /observe/: local clock from longitude, astronomical darkness (Sun below -18°), target above the 20-25° comfort line, Bortle naked-eye visibility, and the deterministic 2026 Moon model. 14/30 asterisms have a useful window on this card.

Sky darkness. Bortle 4 assumes naked-eye limit about V 6.1 before Moon penalty. "Moon up" rows subtract a phase/altitude limiting-magnitude penalty; binocular targets may still work when naked-eye visibility is partial.

Best windows, ranked

Rank	Asterism	Best local window	Peak alt.	Moon flag	Visibility / note
1	Northern Cross	19:43-20:58	78°	Moon down, 12% lit	5/5 stars · fully visible
2	Lyra Parallelogram	19:43-20:28	72°	Moon down, 12% lit	5/5 stars · fully visible
3	Coathanger	19:43-20:28	63°	Moon down, 12% lit	9/10 stars · partial
4	Lozenge of Draco	19:43-20:28	70°	Moon down, 12% lit	5/5 stars · fully visible
5	Summer Triangle	19:43-20:28	71°	Moon down, 12% lit	3/3 stars · fully visible
6	Great Square of Pegasus	22:48-00:18	62°	Moon down, 12% lit	4/4 stars · fully visible
7	Sagitta Arrow	19:43-20:28	59°	Moon down, 12% lit	5/5 stars · fully visible
8	Little Dipper	19:43-20:28	56°	Moon down, 12% lit	7/7 stars · fully visible
9	Job's Coffin	19:48-21:18	55°	Moon down, 12% lit	5/5 stars · fully visible
10	Keystone of Hercules	19:43-20:28	55°	Moon down, 12% lit	4/4 stars · fully visible
11	Circlet of Pisces	22:48-00:18	44°	Moon down, 12% lit	7/7 stars · fully visible
12	Water Jar	21:38-23:08	39°	Moon down, 12% lit	6/6 stars · fully visible
13	Crown of Corona Borealis	19:43-20:28	40°	Moon down, 12% lit	7/7 stars · fully visible
14	Big Dipper	19:43-20:28	30°	Moon down, 12% lit	7/7 stars · fully visible
15	Winter Triangle	—	39°	—	outside astronomical darkness

Tonight planner card, continued

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Rank	Asterism	Best local window	Peak alt.	Moon flag	Visibility / note
16	Winter Hexagon	—	56°	—	outside astronomical darkness
17	Orion's Belt	—	39°	—	outside astronomical darkness
18	Orion's Sword	—	35°	—	outside astronomical darkness
19	Hyades V	—	57°	—	outside astronomical darkness
20	Pleiades Seven Sisters	—	64°	—	outside astronomical darkness
21	Kids of Auriga	—	82°	—	outside astronomical darkness
22	Sickle of Leo	—	60°	—	outside astronomical darkness
23	Coma Star Cluster	—	66°	—	outside astronomical darkness
24	Great Diamond	—	55°	—	outside astronomical darkness
25	Cassiopeia W	—	80°	—	outside astronomical darkness
26	Alpha Persei Cluster	—	85°	—	outside astronomical darkness
27	Head of Cetus	—	47°	—	outside astronomical darkness
28	Teapot	—	12°	—	below 20°
29	Fish Hook of Scorpius	—	8°	—	below 20°
30	False Cross	—	-17°	—	below 20°

Regenerate. RUN `python3 scripts/build.py && python3 print/build_tonight_planner.py && typst compile print/tonight-planner.typ print/tonight-planner.pdf` from the project root. Change date/latitude/longitude/Bortle in `print/build_tonight_planner.py` for another field card. Exact almanac-grade rise/set, terrain, weather, and time-zone law remain out of scope.