Introduction

- Overview
- Timeline
- Planetary Profile: Duskara

Overview

In the year 2137, the colony ship Stellar Horizon departed Earth bound for Kepler-442b. After a critical malfunction in their navigation systems during a stellar storm, the ship drifted off course for decades while its passengers slept in cryogenic stasis. When the emergency systems finally initiated revival protocols, they found themselves approaching an unknown star system. With failing life support and no way to correct their course, the crew brought the ship down in a controlled emergency landing on Duskara, a tidally locked world that barely met the minimum requirements for human life. The ship came down whole, and its stores and fabricators became the seed of the colony. Now, some eight hundred years later, their descendants piece together their past while they build a future on this hard but beckoning world.

In the narrow band between eternal day and endless night, humanity has made a home on Duskara. This tidally locked world was never meant to be their home - they are the descendants of a colony ship that went terribly off course generations ago. The exact circumstances of their arrival are lost to time, though fragments of their history persist in shared memories and sacred data crystals.

Here, in a habitable zone barely 300 kilometers wide that circles the planet's meridian, civilization runs along a single arc, some 6,000 kilometers from end to end. To one side lies the day face - an expanse of radiation-blasted rock where temperatures climb past 200°C. To the other stretches the night face - a frozen wasteland of ice and darkness, broken only by the faint glow of aurora and the dim red light of geothermal vents in deep caverns.

The eternal wind howls between these extremes, spawning massive storms where hot and cold air masses clash. Humans have adapted here, and they have changed. Within a few generations latent psychic abilities awakened in them, for reasons nobody knows: thermal sensing, weather working, water finding, and the deep bonding that connects them to Duskara's native life forms.

Their settlements form a chain along the twilight band, each one built to turn the wind, with soaring towers and deep roots. In the great caves of the night side, other communities gather around geothermal warmth, developing their own distinct culture. They are all bound together by their mastery of wind and water - every drop precious, every breeze understood.

Technology here is a careful balance of preserved knowledge from Earth and innovations born of necessity. Wind turbines and thermal exchangers power their civilization, while ancient satellites still orbit overhead, their purposes largely forgotten. Energy is plentiful: the wind never stops and the deep rock is warm. Matter is not. Every machine is made to last, and the great works of the cities and the Whisper Roads belong to many generations, kept in repair and never thrown away. Some customs echo Earth's past, others are unique to this strange world where dawn never comes.

This is a world of:

- Constant twilight and eternal winds
- Psychic abilities shaped by environmental pressures
- Linear cities stretched along the habitable zone
- Cave dwellers who have never seen the stars
- Ancient mysteries from Earth and new enigmas native to Duskara
- A civilization rich in knowledge and energy, and careful with matter
- A culture shaped by water that passes through and must be held

For all its extremes, Duskara is home. Its people have developed a deep connection to their world's rhythms - the wind patterns, the temperature gradients, the flow of precious water through their carefully maintained systems. They have created beauty in their adaptation, strength in their communion with the planet's forces, and a good life in a place where their ancestors only hoped to stay alive.

Timeline

- **2137 CE**: The colony ship *Stellar Horizon* departs Earth, bound for Kepler-442b, carrying some thousands of African settlers in cryogenic stasis and a crew of a few hundred from Asia: Chinese officers and engineers, with Filipino ratings. Most settlers come from East Africa and share Swahili as a common language; a minority comes from West Africa and speaks Hausa. English is the working language between crew and settlers.
- **Mid-2100s CE**: During the voyage, a stellar storm causes critical damage to navigation systems, leaving the ship adrift in space.
- **~2200 CE (Cycle 0)**: The *Stellar Horizon* emergency systems revive the passengers near an unknown star system. With life support failing, the crew redirects the ship to a tidally locked planet, later named Duskara, and brings it down in a controlled emergency landing.
- **~2255 CE (Cycle 562)**: Settlement spreads from the first lakeshore communities on the Bahari into the wider twilight zone of Duskara. The first generations learn the wind, the water, and the extremes of the day and night sides.
- **~2305 CE (Cycle 1,124)**: Settlements stabilize along the 300 km-wide twilight band of the Living Edge, forming linear cities. A reliance on geothermal and wind energy begins to take root as foundational technology.
- **~2360 CE (Cycle 1,686)**: The first psychic abilities appear, such as weather working and thermal sensing. Their cause is unknown. For about a hundred years the settlements disagree about what the abilities are and who should control them (see From Sickness to Guild).
- **~2465 CE (Cycle 2,810)**: The concept of "The Awakening" solidifies, recognizing the psychic abilities among Duskarans as both practical tools and spiritual gifts. Weatherworking guilds and other specialized roles are institutionalized.
- **~2785 CE (Cycle 6,182)**: The Deep Roads, dug by the Deepkin one generation after another, join the cave settlements to the twilight cities along the whole arc, and trade between belt and caves becomes regular. The societal structures of the twilight belt cities and night-side cave settlements diverge significantly.
- **~2895 CE (Cycle 7,306)**: The Duskaran Accord is established to manage inter-settlement relations, resource distribution, and defense against environmental hazards. This confederation solidifies cooperation across the twilight belt and cave settlements.
- **~2980 CE (Cycle 8,205)**: The Thirst Wars. Three major cities withhold water exports, and the embargoes and skirmishes that follow nearly dissolve the Accord before Wayseers broker the Bahari Compact.
- **3000 CE (Cycle 8,430):** Present Day. Some eight hundred years after landfall, Duskaran society is a blend of ancestral Earth traditions and unique adaptations. Psychic abilities, the care of water and matter, and the extremes of the planet continue to shape its culture and technology. The mysteries of Duskara, from the cause of the Awakening to the Far Edge and its unexplained marks, remain open questions for explorers and scholars.

CE dates are approximate conversions for the reader. Duskarans count only in Cycles (see Calendar and Time-Keeping).

Planetary Profile: Duskara

Host Star

- **Name**: HD Xanthea (colloquial: “The Lion”)
- **Spectral Type**: M0–M1 main-sequence star (a red dwarf at the warm end of its class)
- **Mass**: ~0.55 Solar masses
- **Luminosity**: ~0.05–0.06 Solar luminosities
- **Estimated Age**: ~4–5 billion years
- **Activity**: Quiet for a red dwarf, but still prone to flares that feed Duskara's auroras and disrupt communications
- **Habitable Zone**: Close-in orbits, where planets are tidally locked

Orbital & Planetary Characteristics

- **Planet Name**: **Duskara**
- **Orbital Distance**: ~0.17 AU from HD Xanthea (varies slightly with eccentricity)
- **Orbital Period**: ~34.7 Earth days, one Cycle (synchronous rotation leads to tidal locking)
- **Stellar Flux**: Roughly twice what Earth receives from the Sun
- **Rotation**: Tidally locked (one hemisphere faces the star constantly)
- **Axial Tilt**: Minimal (≤ 1°), little to no seasonal variation

Physical Properties

- **Diameter**: ~1.00–1.05 × Earth’s diameter
- **Mass**: ~1.00–1.10 × Earth’s mass
- **Surface Gravity**: ~0.95–1.05 g (near Earth-normal)
- **Escape Velocity**: Similar to Earth’s (slightly higher or lower depending on precise mass/radius)

Day–Night Temperature Extremes

- **Day Side**:
  - Surface Temperatures: ~80–150°C, hottest around the substellar point
  - Intense stellar flux, extreme UV and particle radiation
  - Frequent dust storms in transition zone
  - Minimal or no standing water at the surface
- **Night Side**:
  - Surface Temperatures: ~−60 to −100°C, coldest around the antistellar point
  - Permanently dark or in deep twilight from scattered auroras

    - Glacial ice sheets, occasional geothermal vents or volcanic hotspots
    - Some pockets of life in subterranean areas warmed by geothermal heat

Twilight Belt

- **Width**: ~200–300 km band encircling the planet (about 40,000 km long)
- **Settled Arc**: About 6,000 km of the belt (Daŋa-Hai, the Living Edge), where night-side glaciers supply water; the remainder is unsettled
- **Temperature Range**: Generally −5°C to +40°C, depending on proximity to day or night side
- **Atmospheric Dynamics**:
    - Strong, persistent winds due to stark temperature gradient
    - Frequent superstorms where hot and cold air masses meet
- **Habitable Zone**: Nearly all surface settlements and farmland lie here; major cities form linear chains along temperate corridors

Atmosphere

- **Composition** (approx.):
    - ~76–78% Nitrogen (N_2)
    - ~20–22% Oxygen (O_2)
    - ~1–3% Argon / other inert gases
    - Trace amounts of CO_2, H_2O vapor, and exotic molecules
- **Surface Pressure**: ~0.9–1.1 bar (near sea-level Earth equivalent)
- **Radiation & Weather**:
    - Enhanced stellar radiation on the day side; partial protection via thick atmosphere
    - Robust wind circulation redistributing heat and moisture from day to twilight regions

Water & Geological Features

- **Primary Water Reservoirs**:
    - Subterranean aquifers, glacial deposits on the night side
    - Collection of atmospheric moisture in twilight and day-night transition storms
- **Surface Water**:
    - Rivers that run dayward across the belt and end in the salt flats of the Dayward Edge, and the freshwater Bahari in the rift of the heartland
    - Fed by glacier melt, storm runoff and geothermal springs; the flow rises and falls with glacier surges and storm phases
- **Geology**:
    - Tectonically active regions produce geothermal vents, crucial for night-side warmth
    - Abundant mineral deposits in dayward highlands, mined by robotic systems; the ores are plentiful, but only robots reach them, and the capacity to refine and work them is small

Why the Twilight Belt Is Habitable

- **A dry world**: Duskara has no oceans. With little water vapor in the air, the greenhouse effect stays weak, and the planet avoids the runaway heating that would sterilize a wetter world at this distance from its star.
- **Water locked in the night**: Nearly all of Duskara's water sits frozen on the night side, which is cold enough to hold it but not to freeze the air. Glaciers creep toward the Nightward Edge and melt there, feeding the rivers, aquifers, and storms of the belt. They reach the belt only along one arc of the ring, which is why the settled world is an arc and not a ring, and why night-side ice matters so much.
- **Water passes through**: The Living Edge has rivers and a lake, but little water that stays. The ground falls from the ice to the day side, so every river runs dayward and ends in the salt flats. The warm, dry wind takes water from every open surface, most of all in the dayward half of the belt. The melt comes in pulses with glacier surges and storm phases, and a full river can be low two Cycles later. Raw melt water carries dissolved carbon dioxide, rock flour and minerals, and it must be treated before people drink it. Water is least scarce in the Ice Land, where the glacier tongues are longest, and most scarce in the Dry Land, where no river runs. Water on Duskara is not rare; it is brief. A settlement catches it, uses it, cleans it and gives it back. This is what Duskarans mean when they call water scarce.
- **Wind as heat engine**: The thick atmosphere carries day-side heat across the terminator and returns cold air beneath it. This is why neither side reaches the extremes of bare rock: without air the point under the star would pass 150°C, and the night side would fall far below −100°C. The eternal wind and the storm walls are the visible face of that circulation, and they keep the belt between −5°C and +40°C.
- **Magnetic shelter**: A strong planetary magnetic field turns aside most of the star's flare radiation. What gets through lights the auroras.

Ecology & Life

- **Native Flora & Fauna**:
  - Adapted to low light, high winds, or subterranean niches
  - Some species show bioluminescence or specialized thermal regulation
  - Deep-cave ecosystems rely heavily on geothermal/chemosynthetic processes
- **Human Settlements**:
  - Concentrated in twilight belt, forming linear “wind-hardened” cities
  - Cave-dwelling communities near geothermal vents on night side
  - Careful agriculture (vertical farming, hydroponics) in stable twilight microclimates

Key World Constraints

- **Tidal Locking** → Eternal day side and perpetual night side
- **Severe Wind Patterns** → Massive storms at the day-night interface
- **Water as a Flow** → Much passes through, little stays; catching, cleaning and sharing water is the core work of every settlement
- **Rich in Energy, Poor in Matter** → Wind and geothermal power are plentiful; metal, parts and the capacity to make them are not
- **The Awakening** → Psychic gifts of unknown origin shape work, law and faith
- **Geothermal Relief** → Vital for warming settlements in night-side caverns