System Brief: Augereau

PHYSICAL DATA

Augereau was the name applied to WX Ursae Majoris A by the French captain of the ESA scout ship that first visited it. The star lies 17.53 light years from Sol, but due to the distance limitations of stutterwarp drive, travel is 22.994 light years and requires four jumps. There are three neighbors accessible by stutterwarp travel: Queen Alice's Star, Neubayern, and DM+20 2465.

The binary system contains two stars, Augereau, and a companion, WX Ursae Majoris B, orbiting at an average of 3 au. The primary is a M2V star, with a radius of 0.464 Sol and a mass of 0.420 Sol. Its average luminosity is 0.0268 Sol, with a stellar effective temperature of 3220°K, and an absolute magnitude of 10.12. The companion is a M8V star with a radius of 0..24 Sol and a mass of 0..24 Sol. Average luminosity is 0.0025 Sol, with a stellar effective temperature of 2425°K, and an absolute magnitude of 15.88.

The primary system has three planets, the companion has one, and two planets orbit the combined system. The life zone of the primary ranges from 0.118 au to 0.237 au; all system bodies are in the outer zone. The life zone of the companion ranges from 0.036 au to 0.073 au; all bodies are in the outer zone.

TRAVEL DATA

The planetary system of the primary, Augereau, consists of three planets with no satellites. The stellar 0.0001 g-gradient of the primary is located at 1.588 au, with a 0.1 g-gradient at 0.051 au. Planets I – III are within the stellar threshold. Stutterwarp discharge is possible at the following system bodies: I and III, in addition to the primary. WX Ursae Majoris B has one planet with no satellites. The stellar 0.0001 g-gradient of the primary is located at 1.200 au, with a 0.1 g-gradient at 0.038 au. Stutterwarp discharge is possible at both the planet and the star. Two planets and two satellites orbit a common center of mass of the A-B system. Stutterwarp discharge is possible at I, I a, and II. Primary discharge is at II, where a French outpost is located.

Augereau I

Planet is a Failed Core body orbiting at 0.30 au with no satellites. Travel distance within threshold is 1.29 au. Stutterwarp discharge is possible from an altitude of 4,184 km.

Augereau II

Planet is Ice Ball body orbiting at 0.54 au with no satellites. Travel distance within threshold is 1.05 au. Stutterwarp discharge is not possible due to sub-surface 0.1 g-gradient.

Augereau III

Planet is a Failed Core body orbiting at 1.08 au with no satellites. Travel distance within threshold is 0.51 au. Stutterwarp discharge is possible from an altitude of 1,543 km.

WX Ursae Majoris B I

Planet is a Failed Core body orbiting at 1.00 au with no satellites. Travel distance within threshold is 0.20 au. Stutterwarp discharge is possible from an altitude of 9,144 km.

System Brief: Augereau

Augereau / WX Ursae Majoris I

Planet is Failed Core body orbiting at 11.41 au with eight satellites. Planet is located beyond threshold. Stutterwarp discharge is possible from an altitude of 14,730 km. Satellites consist of one Rock and one Ice Ball. Stutterwarp discharge is possible at Ia from an altitude of 327 km.

Augereau / WX Ursae Majoris II

Planet is a Desert body orbiting at 25.11 au with no satellites. Planet is located beyond threshold. Stutterwarp discharge is possible from an altitude of 3,573 km. A French outpost is located here, and serves as a way station, providing fuel mined from the ice ball at Augereau / WX Ursae Majoris Ib.

SOURCES

1. The Director's Guide, © 1988 GDW / © 2005 FFE, provides canon information on the type, nationality, and gravity of the settlement.

System Name	**Travel Data for Augereau**

Navigational Data

Colonial Region	French
Direct Distance From Sol	17.530 ly
Travel Distance from Sol	22.994 ly
Jumps from Sol	4

Neighbour System	Distance
Neubayern	4.231 ly
Queen Alice's Star	**5.817** ly
DM+53 1320	6.895 ly
DM+20 2465	7.521 ly
	ly
	ly
	ly
	ly
	ly

	Stellar Coordinates			
	Primary	Companion	Companion	Companion
X	-12.3	-12.3		
Y	3.1	3.1		
Z	12.1	12.1		

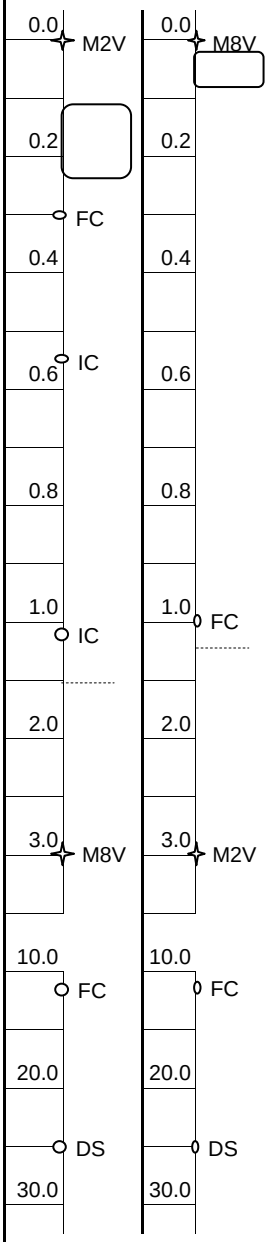
System Bodies with Stutterwarp Discharge (0.1G Gradient) Information

	Primary	Companion	Companion	Companion	Companion	
Stellar 0.1G Grad	0.051	0.038				au
Stellar 0.0001G Grad	1.588	1.200				au

Orbit	Orbit		Body Type	Position	T-Travel		Diameter, km	0.1G, km	0.1G Altitude	
M2V										
II	0.30	au	Failed Core	inside	1.29	au	12,000	10,184	4,184	km
II	0.54	au	Ice Ball	inside	1.05	au	6,000	2,940	none	km
III	1.08	au	Failed Core	inside	0.51	au	8,000	5,543	1,543	km
M8V										
I	1.00	au	Failed Core	inside	0.20	au	10,000	14,144	9,144	km
M2V / M8V										
I	11.41	au	Failed Core	outside	0.00	au	17,000	23,230	14,730	km
a	0.102	10^6 km	Rock			au	2,000	1,327	327	km
b	1.190	10^6 km	Ice Ball			au	3,000	1,470	none	km
II	**25.11**	**au**	**Desert**	**outside**	**0.00**	**au**	**6,000**	**6,573**	**3,573**	**km**

Position: Inside indicates body orbits within the stellar 0.0001G gradient.
T-Travel: The distance that must be traveled within the stellar 0.0001G gradient to reach the body.
01.G: The distance of the 0.1G gradient from the core of the body.
0.1G Altitude: The distance of the 0.1G gradient above the surface of the body. A result of "none" indicates that a usable 0.1G gradient is not available and discharge cannot occur at the body.

System Schematic



AS Asteroid
CH Chunk
DS Desert
FC Failed Core
G Garden
GG Gas Giant
GL Glacier
HH Hot House
IC Ice Ball
PoG Post-Garden
PrG Pre-Garden
RK Rock
0.0001 G Grad
Life Zone

Notes

All values for system are unofficial, except that there is a French outpost on a body of 0.47 G.

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System Name	**Augereau**

Navigational Data

Colonial Region	French
Direct Distance From Sol	17.530 ly
Travel Distance from Sol	22.994 ly
Jumps from Sol	4

Neighbour System	Distance
Neubayern	4.231 ly
Queen Alice's Star	**5.817** ly
DM+53 1320	6.895 ly
DM+20 2465	7.521 ly
	ly
	ly
	ly
	ly
	ly

	Stellar Coordinates			
	Primary	Companion	Companion	Companion
X	-12.3	-12.3		
Y	3.1	3.1		
Z	12.1	12.1		

Stellar Data

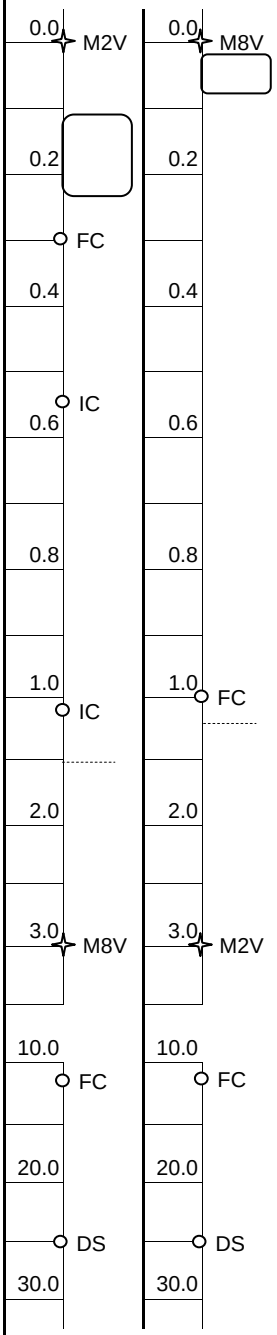
	Primary	Companion	Companion	Companion	Companion
Name					
Spectral Class	M 2	M 8			
Size	V	V			
Magnitude	10.12	15.88			
Identification No.	4120.0	4120.1			
Type	Red Main	Red Main			
Radius	0.464	0.24			
Mass	0.420	0.24			
Luminosity	0.0268	0.00			
Effective Temp	3220 °K	2425 °K	°K	°K	°K
Orbit Radius	-	3.000 au	au	au	au
0.1 G Grad	0.051 au	0.038 au	au	au	au
0.0001 G Grad	1.588 au	1.200 au	au	au	au
Inner Life Zone	0.118 au	0.036 au	au	au	au
Optimal Life Zone	0.164 au	0.050 au	au	au	au
Outer Life Zone	0.237 au	0.073 au	au	au	au

Planetary Data

Orbit	Orbit	World Type	Diameter	Gravity	0.001 Grad	0.1 Grad	Sat
M2V							
I	0.30 au	Failed Core	12,000 km	0.288 G	321,994 km	10,182 km	0
II	0.54 au	Ice Ball	6,000 km	0.096 G	92,952 km	2,939 km	0
III	1.08 au	Failed Core	8,000 km	0.192 G	175,271 km	5,543 km	0
M8V							
I	1.00 au	Failed Core	10,000 km	0.800 G	447,214 km	14,142 km	0
M2V / M8V							
I	11.41 au	Failed Core	17,000 km	0.952 G	829,349 km	26,226 km	2
II	**25.11 au**	**Desert**	**6,000 km**	**0.480 G**	**207,846 km**	**6,573 km**	**0**

Notes

System Schematic



AS Asteroid
CH Chunk
DS Desert
FC Failed Core
G Garden
GG Gas Giant
GL Glacier
HH Hot House
IC Ice Ball
PoG Post-Garden
PrG Pre-Garden
RK Rock
0.0001 G Grad
Life Zone

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System Name	Augereau / WX Ursae Majoris

Planetary Data

World Name	Augereau I	Augereau II	Augereau III			
Orbit, au	0.30	0.54	1.08			
Zone	outer	outer	outer			
Core Type	icy	icy	icy			
Diameter, km	12,000	6,000	8,000			
Density	0.3	0.2	0.3			
Min MW Retained	26	vac	59			
Mass	0.256	0.021	0.076			
Gravity, G	0.288	0.096	0.192			
Atmos Pressure, atm	0.298	0.000	0.198			
Escape Velocity, kps	3.227	1.076	2.151			
Atmos Type	Standard	Vacuum	Thin			
Actual World Type	Failed Core	Ice Ball	Failed Core			
Water Type	Ice Sheets	Plentiful	Ice Sheets			
Water Coverage, %	-20 %	20 %	40 %			
Atmospheric Oxygen, %	none	none	none			
Oxygen Pressure, atm	none	none	none			
Temperature Class	Cold-VCold	Cold-VCold	Cold-VCold			
Temperature Range, °C	0° or less	0° or less	0° or less			
Orbital Period, days	92.6	223.6	632.6			
Rotation Period	46.4 hours	33.77 hours	33.38 hours			
Axial Tilt, °	31.0	40.0	20.0			
Number of Satellites	0	0	0			
0.0001G Gradient, km	322,039	92,965	175,296			
0.1G Gradient, km	10,184	2,940	5,543			
Inner Life Zone, km						
Optimal Life Zone, km						
Outer Life Zone, km						
Luminosity						

World Name	WX Ursae Majoris I		WX Ursae Majo	WX Ursae Majoris VI		
Orbit, au	1.00		11.41	25.11		
Zone	outer		outer	outer		
Core Type	rocky		rocky	rocky		
Diameter, km	10,000		17,000	6,000		
Density	1.0		0.7	1.0		
Min MW Retained	11		5	31		
Mass	0.493		1.696	0.106		
Gravity, G	0.800		0.952	0.470		
Atmos Pressure, amt	0.826		0.983	0.496		
Escape Velocity, kps	8.963		10.665	5.378		
Atmos Type	Dense		Dense	Standard		
Actual World Type	Failed Core		Failed Core	Failed Core		
Water Type	Ice Sheets		Ice Sheets	Ice Sheets		
Water Coverage, %	40 %		50 %	-20 %		
Atmospheric Oxygen, %	none		none	none		
Oxygen Pressure, atm	none		none	none		
Temperature Class	Cold-VCold		Cold-VCold	Cold-VCold		
Temperature Range, °C	0° or less		0° or less	0° or less		
Orbital Period, days	745.6		17373.5	56570.3		
Rotation Period	21.24 hours		33.05 hours	17.02 hours		
Axial Tilt, °	34.0		16.0	10.0		
Number of Satellites	0		2	0		
0.0001G Gradient, km	447,277		829,467	207,876		
0.1G Gradient, km	14,144		26,230	6,573		
Inner Life Zone, km						
Optimal Life Zone, km						
Outer Life Zone, km						
Luminosity				Outpost (FRA)		

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System Name	**Augereau / WX Ursae Majoris**

Satellite Data

Satellite Name	rsae Majoris V b	rsae Majoris V a				
Zone	outer	outer				
Core Type	rocky	icy				
Diameter, km	2,000	3,000				
Orbital Radius	6	70				
Orbital Radius, km	102,000	1,190,000				
Density	1.1	0.4				
Min MW Retained	vac	vac				
Mass	0.004	0.005				
Gravity, G	0.176	0.096				
Atmos Pressure, atm	0.000	0.000				
Escape Velocity, kps	1.972	1.076				
Atmos Type	Vacuum	Vacuum				
Actual World Type	Rock	Ice Ball				
Water Type	Rare Ice	Plentiful				
Water Coverage, %	<1 %	20 %				
Atmospheric Oxygen, %	none	none				
Oxygen Pressure, atm	none	none				
Temperature Class	Cold-VCold	Cold-VCold				
Temperature Range, °C	0° or less	0° or less				
Orbital Period, days	2.8	111.0				
Rotation Period	50 days	13.57 hours				
Axial Tilt, °	12.0	39.0				
0.0001G Gradient, km	41,958	46,482				
0.1G Gradient, km	1,327	1,470				
Notes						

Satellite Name						
Zone						
Core Type						
Diameter, km						
Orbital Radius						
Orbital Radius, km						
Density						
Min MW Retained						
Mass						
Gravity, G						
Atmos Pressure, amt						
Escape Velocity, kps						
Atmos Type						
Actual World Type						
Water Type						
Water Coverage, %						
Atmospheric Oxygen, %						
Oxygen Pressure, atm						
Temperature Class						
Temperature Range, °C						
Orbital Period, days						
Rotation Period						
Axial Tilt, °						
0.0001G Gradient, km						
0.1G Gradient, km						
Notes						

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