

Supercruise Travel Times



These times will always be approximate as it will vary a bit depending on the system, affects from nearby bodies (gravity wells) may cause slowdown on acceleration.

!SCTIME

MechaSqueak now has a built-in command for calculating travel times in super cruise. It is recommended to use this for calculating supercruise distances as it will give a more accurate result than the rough estimates on this page. Though this page is still a great resource if you need a quick overview of supercruise times.

The command is used as follows:

!sctime <distance>

Example: !sctime 850kls

Note: These estimates will never be 100% accurate. By default the **!sctime** calculation assumes that you are:

- In a system with no gravitational bodies between you and where you are going.
- The main star is a relatively low mass main-sequence star. (Aka OBAFGKM).
- You are starting from 0 at the spot where you drop out of hyperspace and then immediately accelerating at full throttle until you reach your destination.

Especially in short distances, this estimate can be greatly affected by large gravity sources along your journey or at your end destination. If you plan to use these estimates to determine if a client on an oxygen timer needs to be logged out, it is best to assume a longer travel time than the estimate given to you, and be better safe than sorry.

Supercruise overcharge

!sctime now supports calculating with supercruise overcharge using --sco [max speed] e.g !sctime 350kls --sco 4200 where the argument is the top speed during overcharge in multiples of c (the speed of light).

This command assumes that you are using a ship like the Mandalay that can maintain its top overcharge speed without overheating and that you have enough fuel to boost during the entire journey.

CLIENT DISTANCE MEASURED IN LIGHTYEARS

Every now and then, a Cmdr falls asleep in supercruise and wakes up to flashing red lights and a drained and shutdown ship on lifesupport. In really bad cases, the client may find himself lightyears from the mainstar.

You can calculate an approximate time for distances measured in **LY** using this formula:

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( distance in LY * 365d * 24h ) / 2001c = hours of travel + rough estimate to account for acceleration to max speed.
```

You can calculate an approximate time for distances measured in **LS** using this formula:

```
( distance in LS / 60m / 60s ) / 2001c = hours of travel + rough estimate to account for acceleration to max speed.
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The (*really*) rough estimate to account for acceleration could be as follows:

- Over about 2000 kls, 15 minutes,
- Over 400 kls, 10 minutes,
- Over 20 kls, 5 minutes,
- Over 1kls, 2 minutes.

CLIENT DISTANCE MEASURED IN LIGHTSECONDS

SC Distance	Time from acceleration start	Speed reached
1000ls	1:00	
5000ls	2:20	
10kls	2:50	
25kls	3:50	
50kls	5:00	
100kls	6:25	
150kls	7:30	
200kls	8:30	
300kls	10:12	103%
400kls	11:45	113%
500kls	13:10	120%
600kls	14:20	126%
700kls	15:50	132%
800kls	17:02	136%
900kls	18:05	140%
1000kls	19:25	144%
1100kls	20:33	147%
1200kls	21:40	150%
1300kls	22:46	153%
1400kls	23:51	156%
1500kls	24:54	158%
1600kls	25:58	160%
1700kls	27:00	162%
1800kls	28:00	164%
1900kls	29:00	166%
2000kls	30:00	168%
2250kls	32:30	172%
2500kls	34:50	176%
2750kls	37:00	179%

The estimate to account for acceleration should never be over 15 minutes if the client is in deep space.

3000kls	39:30	182
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(Max. speed in supercruise is 2001c.)

Examples:

Client beacon is 0.1LY from mainstar:

$(0.1 * 365 * 24) / 2001 = 0.44$ hours (about 26 mins) + 15mins to account for acceleration = **About 41 minutes to reach client**

Client beacon is 0.2LY from mainstar:

$(0.2 * 365 * 24) / 2001 = 0.87$ hours (about 53 mins) + 15mins to account for acceleration = **About 1 hour and 8 minutes to reach client**

Client beacon is 0.5LY from mainstar:

$(0.5 * 365 * 24) / 2001 = 2.19$ hours + 15 minutes = **About 2 hour and 25 minutes to reach client**

Client beacon is 2.5LY from mainstar.

$(2.5 * 365 * 24) / 2001 = 10.94$ hours + 15 minutes = **About 11 hours and 10 minutes to reach client**

Going far distances in your ship will require quite a bit of fuel. It'd be advised to shutdown unneeded modules while travelling to extend your range, such as shields and anything else with a power consumption you might not require to continue supercruise. (obviously be careful not to accidentally shutdown your thrusters or frameshift drive and you'll still need your sensors active).

You can look at your fuel usage gauge to estimate how much fuel will be needed for the trip once you have an idea of how long it should take. For example running at 1.5t/h would make you need 12 tonnes fuel for an 8 hour supercruise, then add estimated limpets needed + enough fuel left to jump to nearest system. Note again, that you can likely get the usage down when turning off unneeded modules during the flight.