# Project Jericho

## PREREQUESTS

- Install Powershell V7 (https://github.com/PowerShell/PowerShell/releases/download/v7.1.0/PowerShell-7.1.0-win-x64.msi)

## EXPLANATION OF TOOLS

### TOOL #1 – 3D Navigation Powershell Script

Navigation_CIG Coordinates System_V6.ps1

- main script for 3d navigation
- while running, it updates itself each time the clipboard gets new coordinates that differs from previous ones
- you can now enter /showlocation command in chat to update your current position / script
    - or use tool #2

### TOOL #2 – Issue /ShowLocation on Keypress (Hotkey)

Showlocation_AltGR as Hotkey.exe or Showlocation_AltGR as Hotkey.ahk

- this is a little autohotkey script, that sends /showlocation to chat
- each time you press the pre defined hotkey, the command is issued to StarCitizen
    - **ALT-GR** = german keyboard
    - **LEFT CTRL + ALT** = other keyboard layouts
- In subfolder sources you can compile your own exe or use the ahk variant if AutoIt is installed
- the ahk file can be reviewed in a texteditor to see the very simple code that is executed

### TOOl #3 – Keep script in front of StarCitizen

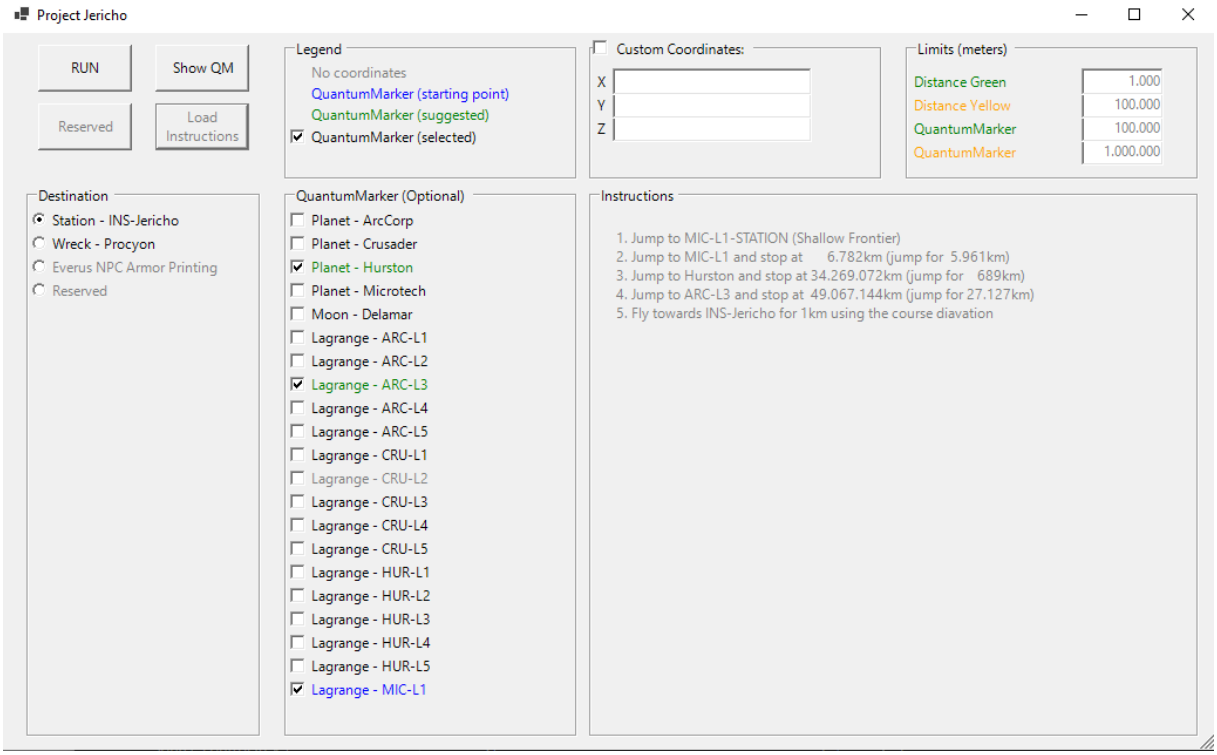
- Allows you to show the script in front of StarCitizen
- allows you to set an ocupacy
- allows to click through the window, so you can click everywhere in StarCitizen
- StarCitizen needs to run in windowed or borderless mode

# USAGE

## Pre

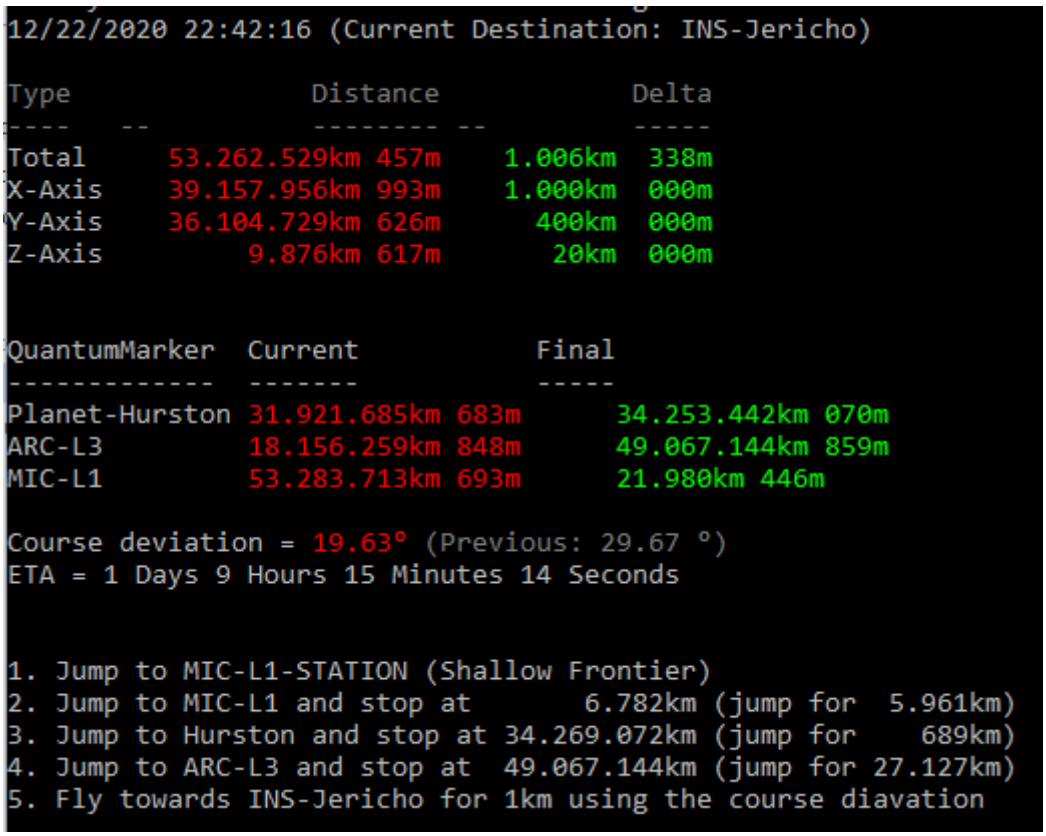
- Run the script (with Powershell v7)

## Select Destination in Frontend




1. **Select your destination** (for example “Station - INS-Jericho”)
    a. Alternative: check box “Custom Coordinates”
    b. Enter your X, Y and Z coordinates into the regarding fields
2. Optional: Click on **Show QM** for Quantum Travel and Triangulation
    a. Select all Quantum Marker that you want to show up while navigating
    b. BLUE QM = shows your recommended starting point
    c. GREEN QM = recommended quantum markers for triangulation
3. Optional: Click on **Load Instructions**
    *a. Not fully functional yet, instructions are always shown after you click on RUN*
    b. This will show you the recommended route to get close to your destination
    c. Instructions are calculated that precise that if followed perfectly you directly hit your destination within a few meters
4. Click on **RUN** to start navigation (backend opens for now)

## Results / Display




- First line = Shows timestamp of last update and your current destination
- First table = shows the distance between your position and the final destination
    - Distance = shows current distances
        - Total = beeline between you and destination
        - X-Axis = difference on x axis
        - Y-Axis = difference on x axis
        - Z-Axis = difference on x axis
        - is coloured yellow when within 100km (or what you have set on limits)
        - is coloured green when within 1km (or what you have set on limits)
    - Delta = shows differences between the last two measurements
        - is coloured red if you got more far way
        - is coloured green if you got closer
- Second table = shows the current und final distance between the destination and the QM
    - is coloured yellow when within 1000km (or what you have set on limits)
    - is coloured green when within 100km (or what you have set on limits)
    - theses distances are used for triangulation on the final meters (since we have an angle and instructions, we currently don't need that info)
- Course deviation (current and previous value)
    - Shows the angle you are traveling towards your destination (after the first two updates)
    - Turns green when below 10°
    - Turns green when below 3°
    - Turn cyan when below 0,1° (can be used to identify closest quantum marker manually)
- ETA
    - Shows the current ETA based on the difference between your last two updates
    - If your heading in the opposite direction, it shows a warning that you should turn around

- Instructions (last line)

## First Navigation via Quantum Travel

1. jump to the blue coloured reference point
    a. Example Jericho = MIC-L1-STATION
2. before and after each upcoming jump, issue the /showlocation command in chat or use tool #2
3. follow the instructions for first approach via quantum travel

## Final Navigation via angle (or triangulation)

1. issue the /showlocation command in chat (or use the tool provided for that)
2. now fly slowly into any direction
3. after a few seconds issue another /showlocation command and watch course diavation
4. keep flying slowly and dig around in space until you are within 10°, after that raise to fullspeed
5. while traveling update the script on a regular basis (more often when you get closer)
6. aim for angles below 10° (YELLOW)
7. Keep looking for your destination in external view in front of your ship in a regular basis
    a. Jericho renders in at a distance of 65km

## Default Color coding of distances

- Green Distance = within 1km
- Yellow Distance = within 100km
- Red Distance = more than 100km away

## Default Color coding of quantum marker

- Green Distance = within 100km
- Yellow Distance = within 1000km
- Red Distance = more than 1000km away

## Default Color coding of angles

- Green Angle = <03°, marks the ideal course/direction
- Yellow Angle = <10°, travel towards destination with full speed
- Red Angle = >10°, you are not on course
- Blue Angle = <0,1°, used to identify the next QT Marker from far way