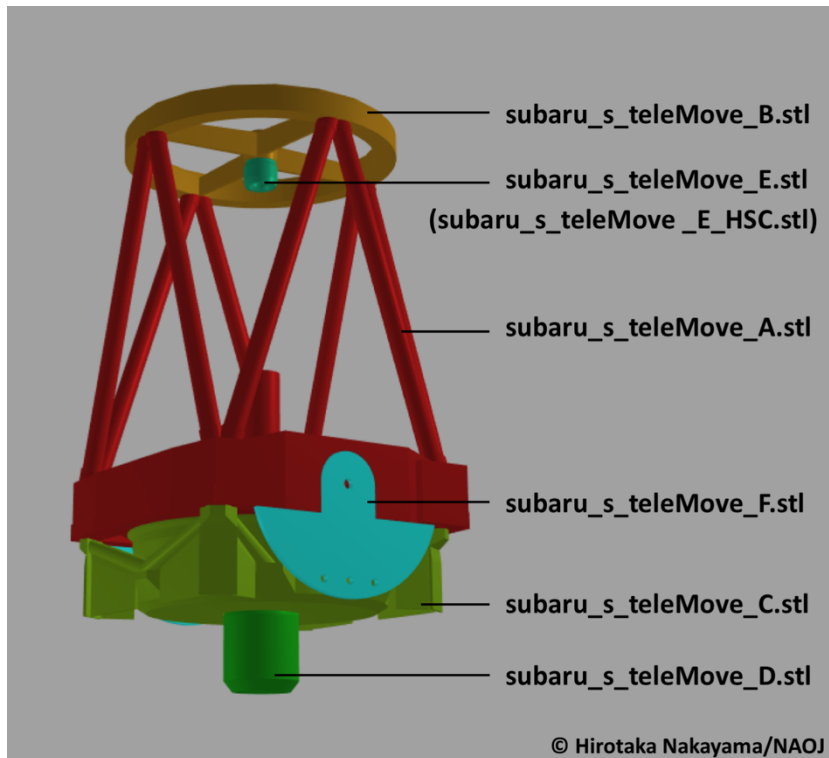


Files for a 3D Printer: the Subaru Telescope Simplified Version (Movable Section)



The movable section consists of seven (6) kinds of parts (A-F). For the F parts, print two (2) copies. In the figure above, the secondary mirror (E) is mounted. Printing Hyper Supreme-Cam (E_HSC) is optional. You can exchange the secondary mirror and HSC like on the real Subaru Telescope.

(1) Instructions for printing

Each part (stl file) is designed to print without additional support materials. Do not add any support materials.

Each stl file should be printable as is after loading into 3D printing software, without needing to adjust the size. If the print size is too small or too big, try adjusting the size (such as x10 or x0.1) with the 3D printing software.

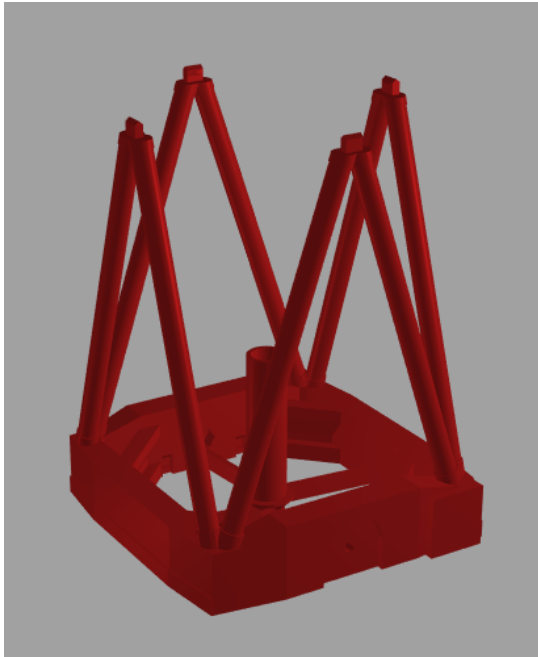
Sometimes when you open an stl file, the bottom face is not pointed down. In this case, rotate the file with the software before your print.

Refer to the following images showing the proper orientation of each part when printing.

(2) Assembly Instructions

Each section can be assembled by simply inserting the tabs into the matching slots. However, some printed parts are sometimes difficult to fit together. Remove burrs (unwanted bumps) with a knife or sandpaper before assembling. Use an ABS (acrylonitrile butadiene styrene) adhesive bond to glue the section together.

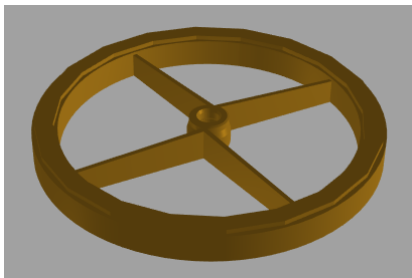
a) subaru_s_teleMove_A.stl



Print from the bottom up.

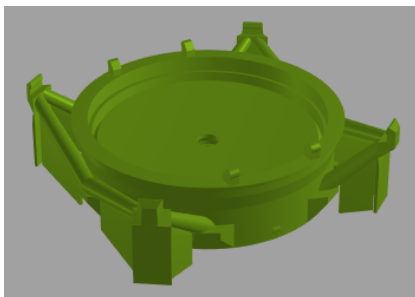
Try to print a thicker triangle structure (with thicker outer walls of the diagonal columns) if it is not printed well in the regular thickness.

b) subaru_s_teleMove_B.stl



[Top Ring] Print from the bottom up.

c) subaru_s_teleMove_C.stl



Print from the bottom up. The support materials are included in the file. Remove them by hand after it finishes printing.

d) subaru_s_teleMove_D.stl



[Observational Instrument for the Cassegrain Focus] Print from the bottom up.

e-1) subaru_s_teleMove_E.stl



[Secondary mirror] Print from the bottom up.

e-2) subaru_s_teleMove_E_HSC.stl



[Hyper Suprime-Cam (HSC)] Print in the orientation shown in the figure. (Print from the bottom up.)

f) subaru_tele_F.stl



The flat surface is the bottom face. Print two (2) copies.