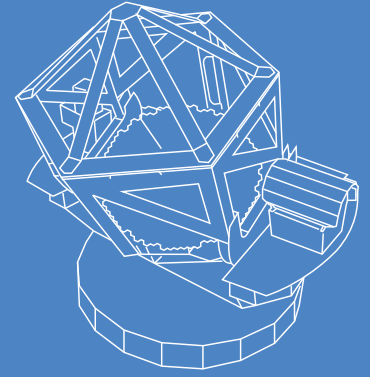


# BUILD YOUR OWN Thirty Meter Telescope

Astronomy's Next-Generation Observatory



# TMT

THIRTY METER TELESCOPE

The Thirty Meter Telescope is one of a new class of extremely large telescopes that will allow us to see deeper into space and observe cosmic objects with unprecedented sensitivity and detail.

[tmt.org](http://tmt.org)

ER TELESCOPE  
MENTS

  
**TMT**  
[tmt.org](http://tmt.org)

1/500 SCALE MODEL


What is the nature and composition of the  
The nature of dark matter and energy, the  
remains a complete mystery. The lower limit  
the dark particle ("warm dark matter"). Dark  
gravitational lenses will probe the nature of  
Different dark energy models predict different  
and deep spectroscopy of very distant  
over which these changes may be more

THIRTYMETERTELESCOPE  
SCALE MODEL >>>> 1/500

Completed size 120 x 110 mm

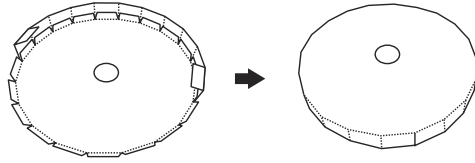
Assembly guide

**Telescope Design:** Ritchey-Chretien  
**Primary Mirror Diameter:** 30m  
(1.44m x 492 segments)  
**Weight:** 2650 tons  
**Height:** 56m (including enclosure)  
**Preferred Site:** Maunakea, HI  
*Learn more at [tmt.org](http://tmt.org)*

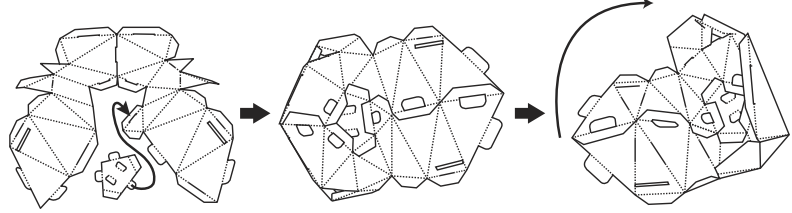
- Use tweezers for small parts and hard to reach areas.
- Use a toothpick to apply a small amount of wood glue to sections marked with 



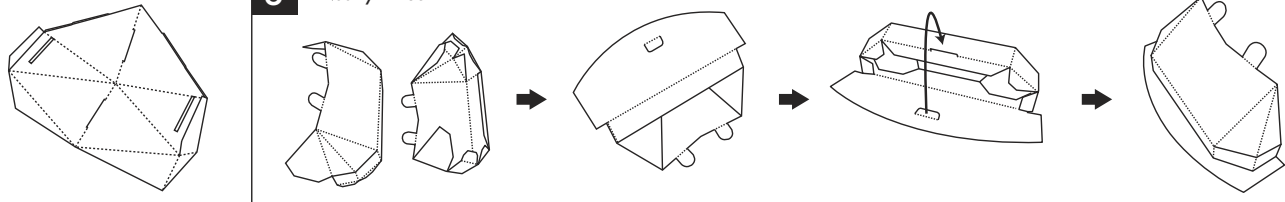
**1** Azimuth Track + Azimuth Track Outer Wall



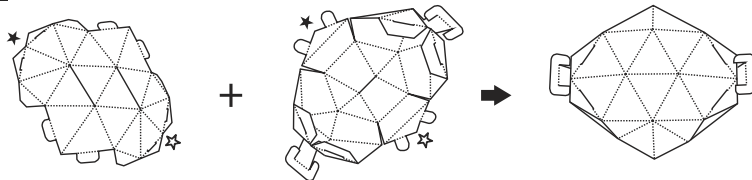
**2** Azimuth Structure (Left) + Azimuth Structure (Right) + Azimuth Structure (Bottom)



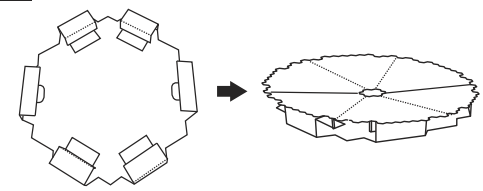
**3** Nasmyth Deck



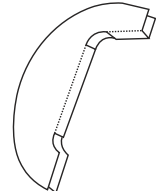
**4** Lower Truss Structure + Lower Truss Structure Top



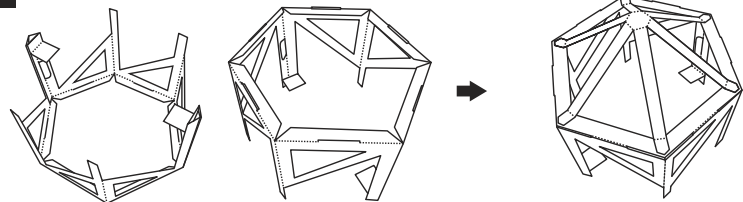
**5** Primary Mirror Cell + Primary Mirror



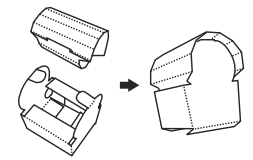
**6** Elevation Journal



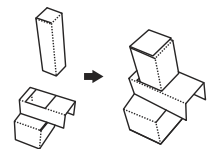
**7** Upper Truss Structure + Spider (6 Legs Secondary Support)



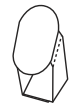
**8** (A) WFOS + WFOS Trestle



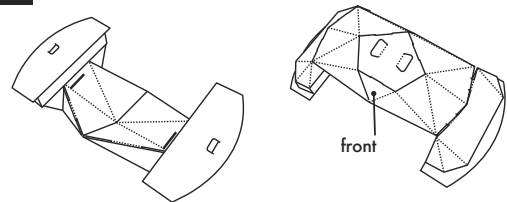
(B) NFIRAOS + IRMS / IRIS



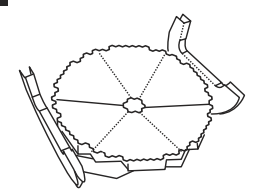
(C) Tertiary Mirror



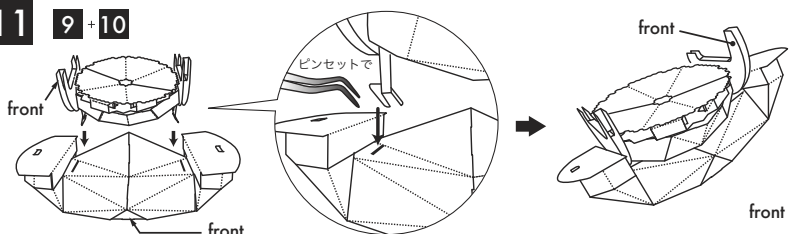
**9** 2 + 3



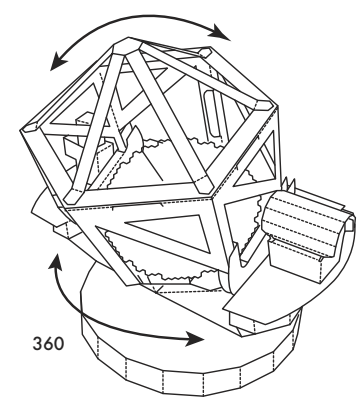
**10** 4 + 5 + 6



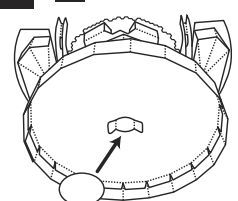
**11** 9 + 10



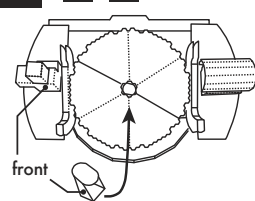
finished



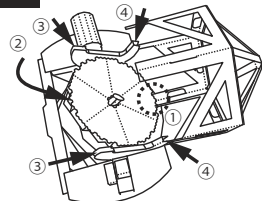
**12** 9 + Pintle Bearing



**13** 12 + 8 + Bridge



**14** 6 + 7



- ..... M-fold
- V-fold
- glue

