

The Stars as a Compass

Kit E

For Latitudes 20° South to 40° South

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Finding South by the Stars

For Latitudes 20° South to 40° South (kit E)

Instructions

The Southern Cross at times gets very low in the sky, or it sets. This is especially so in the evening from October to December. You may have to wait an hour or two for it to rise and at such times you will need a low southern horizon.

Finding the Southern Cross

There are many crosses in the skies, so check these keys before deciding you have found the Southern Cross.

The two keys to finding the Southern Cross are:

1. The Pointers. These are very bright stars and they make a distinctive shape with the cross.
2. The Fifth Star. Many crosses have a fifth star, and it acts like a “signature.” You can tell which cross it is from the location of the fifth star. The Southern Cross has its fifth star roughly midway between two of its main four stars. If you are looking from a city this star might be very faint, or even impossible to see, due to the amount of light coming from streetlights. If this is the case, you will have to rely on the distinctive shape made by the Southern Cross and pointers.

Finding South from the Southern Cross

1. Find the Southern Cross.
2. Decide which way the curve goes (the curve is made from the pointers and the short arm). The curve points, like a satellite dish, towards the South Celestial Pole.
3. Decide which arm is the long arm. Follow the line of the long arm for three hand widths and you will come to the South Celestial Pole. True South is below the South Celestial Pole.

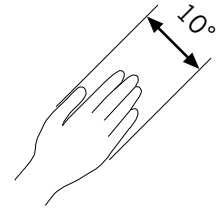
The Stars as a Compass Computer Challenge

For Latitudes 20° South to 40° South (kit E)

Instructions

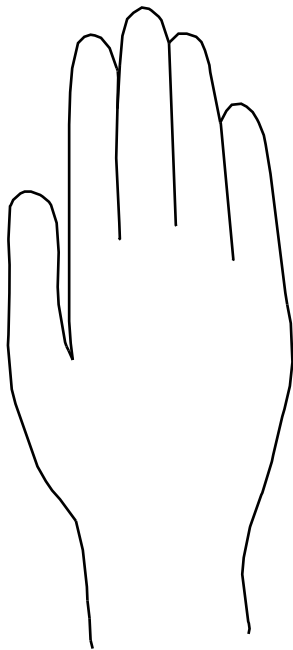
1. Start Mirapla Sky. Check that it is set for your city and country. Click “See the Stars.”
2. You will see a view of the sky to the north. Turn the view until you are looking south using the ← and → keys.
3. You may need to look up with ↑ to find the Southern Cross. If you cannot see the Southern Cross, you may need to advance the time a couple of hours until it rises. This will most likely occur in October, November and December. Advance the time with the Page-Up key
4. Use the paper-cut Mirapla Sky hands to find the South Celestial Pole.
5. From there decide which way is south.
6. Check that you have found the right direction. If you cannot see the horizon press ↓ until you can. There will be a label there telling you which direction you have found.

Mirapla Sky Hands

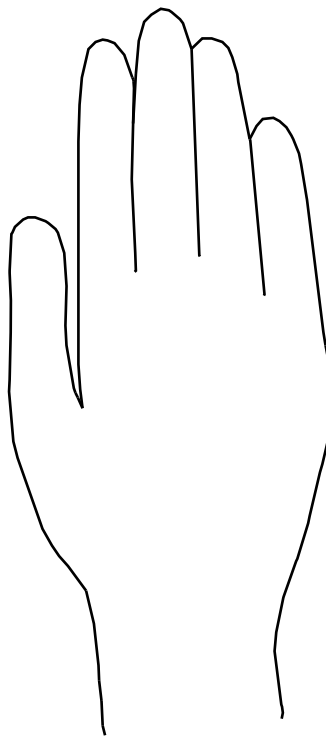


When you hold your hand at arms length with fingers together it covers 10 degrees of sky. This is true for both children and adults. (As you grow your arm gets longer and your hand gets wider, so that the angular size of your hand, when held at arms length, is always the same - it covers between 9.5 and 10 degrees)

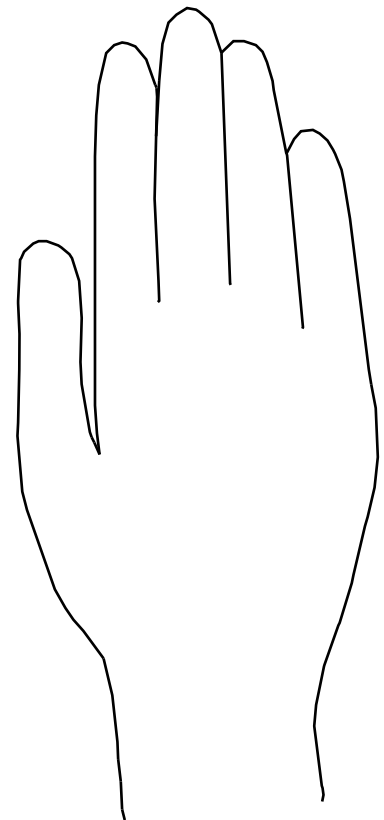
When you look at a simulated sky on the computer screen this rule does not apply. Instead, cut out one of the hands from this page and hold it against the computer screen. When used with the program Mirapla Sky, it will cover 10 degrees of sky.



for 15 inch monitor



for 17 inch monitor



for 19 inch monitor

For use with Mirapla Sky only. Do not use with other software. Most software allows zooming which means these hands will not be to scale.