TELESCOPES FROM THE CHERENKOV TELESCOPE ARRAY

THE MOST IMPORTANT PARTS OF THE THREE LIGHT-CATCHERS POINTED OUT WITH SIMPLE WORDS

These three light-catchers will help us see light from outer-space with lots of power. This light cannot be seen with our eyes and is only made in special places. When this light hits the air around the Earth, a special blue flash of light is made that is gathered up by these light-catchers. By looking at how bright the flash is, we can work out how much power the light from space had. Large light-catchers are best for seeing small flashes, because they can gather a lot of light with their big mirrors, allowing a picture-taker to image them. Small light-catchers are best for seeing the big flashes that do not happen very often. There is so much light given out in a big flash that we only need small mirrors to catch enough light to see them and by building lots of these small light-catchers over a wide area, we will have a much higher chance of finding them. Middle size light-catchers are best for seeing most of the flashes in the night sky that are not big and not small, but in between.

LARGE SIZE LIGHT-CATCHER
- Picture-taker
- Position checkers
- Strong lines
- Picture-taker holder
- Egg shaped picture-taker holder
- Track that helps raise the light-catcher
- Small trains the light-catcher rides on
- Heavy weight
- Six-sided mirrors

MIDDLE SIZE LIGHT-CATCHER
- Sticks that hold the picture-taker
- Picture-taker cover
- Picture-taker position checker
- People door
- Heavy weight
- Six-sided mirrors
- Strong floor

SMALL SIZE LIGHT-CATCHER
- Arms that hold the picture-taker
- First mirror
- Part that points the light-catcher
- Heavy weights
- Picture-taker cooling box
- Sticks that hold the second mirror and the picture-taker

A group of over 1200 people (mostly teachers at schools for group use) from 52 countries who are building groups of light-catchers in both the North and the South of the Earth at very dark places so it is easier to see the small blue flashes in the night sky.

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These drawings show how big each of the light-catchers would look next to each other.