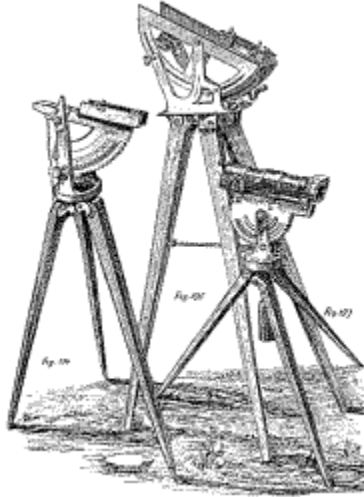


Tripod Theodolite Validation Report



By: Jason Serda and Tye Barba
Period 5
1/17/06

This is a comprehensive report on our tripod theodolite and its resolution, precision, and accuracy. It tells why we did the experiment, and also how we tested the theodolite. It is accurate to the best of our abilities!

Theodolite-Horiz-2.pdf

8R1F

Purpose

We will become familiar with a theodolite, and how it works. We need to construct an experiment to check the precision of the instrument, and also its accuracy and sources of error.

Method

We will mark a distance on the ground and then measure the angle with the theodolite. We will then use the tangent and find if the distance calculated matches the actual distance laid out by a tape measure. We will then test the distance measuring capability of the theodolite on a vertical measurement.

Materials

1. Theodolite
2. Tape measure
3. Clip board
4. Tripod
5. Meter stick
6. Calculator

Test Data (test #1)

Angle: 1. 20	Distance: 1. 5m.	Height: 1. 3.12m.
2. 10	2. 10m.	2. 3.06m.
3. 9	3. 12m.	3. 3.2m.

(test #2)

Angle: 1. 15	Distance: 1. 5m.	Height: 1. 2.64m.
--------------	------------------	-------------------

