APPENDIX

Accommodation Illustration

Below is a look at why the underlying refractive status of the children needs to be taken into account when assessing how the child responds to the accommodative demand created by shifting the fixation cartoon from 200 cm to 50 cm, as subjects were uncorrected and not cyclopleged when the measurements were made. If a child is highly myopic, they cannot see the distant stimulus, and cannot change their accommodation in response to the vergence demand.

The astigmatic child, through an accommodative effort, may shift their focus from the rest position (as measured with cycloplegia) to a position that they use to view a target (a cartoon) at either 50 or 200 cm viewing distance. A mildly myopic child with mild compound hyperopic astigmatism is show.
**No Myopic Effect:** Myopia does not prevent child from focusing on any target with accommodative effort.

With accommodation, this subject could see either target anywhere within Interval of Sturm.

---

**Intermediate Myopic Effect:** Myopia may interfere with focus on distant target, but not near target.

With accommodation, this subject could see the near target anywhere within Interval of Sturm. The distant target may not be able to be focused, or it might be seen without any effort on the part of the child.
High Myopic Effect: Myopia may interfere with focus on either distant or near target. Accommodative response indeterminant.

This subject cannot see either the near or distant target anywhere within Interval of Sturm. Accommodation cannot be used to bring Interval of Sturm into focus for either target.