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Hi, I'm Christen and I'm a student working for Cassini Science Planning at JPL through the CURE program.

Target 3, a day on Saturn, is especially interesting because Saturn's rotation rate is unknown. The Voyager and Cassini spacecraft measured different rotation rates. Cassini has observed Saturn's rotation to be longer than the previously accepted value determined by Voyager.

Furthermore, Saturn's interior rotation rate has not been directly measured, as there is currently no definitive way to do so. Saturn's rotation is also difficult to measure because its large hazy atmospheric features, including clouds and storms, shift with respect to each other.

Over a 12-hour period, the Wide Angle Camera on board Cassini will be taking images every 27 minutes. These images will be used to create a 27-frame full color time-lapse movie, which will provide a detailed view of Saturn's full rotation.

Target 3 is the best choice because this is a chance to observe a day on Saturn, which will provide valuable insight about this mysterious gas giant.