Overview

The .decimal astroid Planning App is used for treatment planning of proton radiation therapy treatments. The astroid Planning App is an interactive end user application that leverages the existing .decimal Dosimetry App functions for device creation, dose calculation, and optimization.

Access to the astroid Planning App is provided by the thinknode™ framework using http json formatted requests. thinknode™ provides the 'backbone' used to send and receive requests, maintain users, realms and organizations, and provide data storage and management.

Note this product is in the development pre FDA 510(k) stages.

User Guide

The Planning App user guide lists all available api function calls, as well as gives examples of usage and explanation of the affects.

Getting Started Basic usage of the astroid Planning App.

Known Limitations Known application limitations, defects, or inconsistencies.

Instructions For Use

The Planning App Instructions For Use outlines the intended use and user requirements of using the Planning App.

Overview Intended use and indications for use of the application.

User Profile Recommended user education and experience level.

Warning Warning of potential misuse.

Testing Responsibilities Testing responsibilities for ensuring correct setup and configuration of the astroid Planning App.

Product Features High level features of the astroid Planning App.

Reference Documentation

Hong et al A pencil beam algorithm for proton dose calculations

Slopsema Incorporation of the aperture thickness in proton pencil-beam dose calculations

IAEA-TRS-430 Commissioning and Quality Assurance of Computerized Planning Systems for Radiation Treatment of Cancer

IAEA-TECDOC-1583 Commissioning of Radiotherapy Treatment Planning Systems: Testing for Typical External Beam Treatment Techniques

Park Commissioning Commissioning a Proton Therapy Machine and TPS