

PARTNER

Hospital Universitario Central de Asturias // Asturias, Spain

CHALLENGE

Efficient commissioning of the Varian Medical Systems® Halcyon™ System

SOLUTION

3D SCANNER™



The Hospital Universitario Central de Asturias (HUCA) Medical Physics department treats 2,300 patients per year. They recently installed a Varian Medical Systems® Halcyon™ System to more efficiently treat patients, with the goal of treating one patient every ten minutes.

To commission their system, they sought a compatible solution that would further streamline workflow. Their solution of choice: Sun Nuclear's 3D SCANNER™ Kit, featuring the 3D SCANNER water tank and SNC Dosimetry™ software.

WHY THE 3D SCANNER HALCYON KIT

HUCA selected the 3D SCANNER Kit for its automation and integration with the Varian Medical Systems® Halcyon™ System.

Unique water tank features such as the reproducible, automated setup of detector position at the water surface, and consistent detector orientation with the diameter drive, cemented HUCA's decision to select the 3D SCANNER water tank for beam model verification and acceptance of their the new system..

Unparalleled features in the SNC Dosimetry software, including enhanced FFF analysis parameters and systemt-specific scan support, further strengthened their confidence in the 3D SCANNER solution.

SIMPLE SET UP

Once HUCA received their kit, Alfonso Villacé, M.S., and Diego Crelgo M.S., two Medical Physicists on staff, began to set up the SNC Dosimetry software, simply following the self-explanatory widgets.

In just two days, HUCA was able to perform measurements correctly. "We had not used the SNC Dosimetry software before, but we found it to be very user friendly, and we were able to get it set up and into the Halcyon's system quickly," notes Villacé.

"One thing I like about the SNC Dosimetry software, which is different from other commissioning software, is that it has a database where we can store, compare and save our data."

Diego Crelgo, M.S.

HUCA Medical Physics Department

The HUCA team found setting up the 3D SCANNER incredibly easy as well. Using the provided Couch Positioning Plate, they placed the 3D SCANNER on the couch without the need for visual alignment of the system. Next, they followed the coordinates labeled on the Positioning Plate to easily move the 3D SCANNER and couch into the bore.

“We found that the 3D SCANNER fits nicely in the bore, and we were happy to discover how easy it is to set up and move,” said Crelgo Alonso.

INITIAL & ONGOING EXPERIENCE

The HUCA team tested the 3D SCANNER using the step-by-step and continuous scanning modes. Both modes showed correct relations and matched the Varian Medical Systems® data.

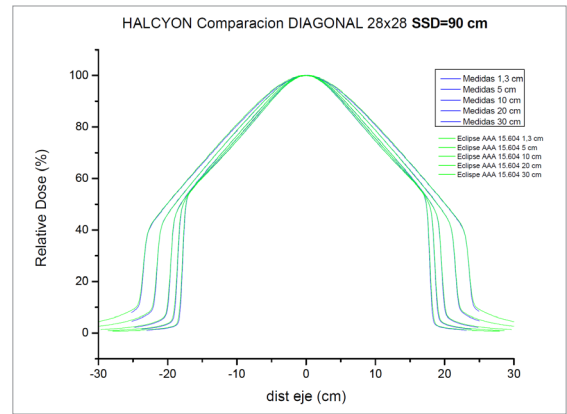
With fast and easy setup achieved, and confidence in the resulting characterization of their system, the 3D SCANNER from Sun Nuclear proved to be an ideal solution for HUCA to commission its Varian Medical Systems® Halcyon™ System.

In addition to the 3D SCANNER, other QA solutions HUCA use for their system include the Daily QA™ 3 for morning QA, ArcCHECK® for Patient QA, and IC PROFILER™ for acceptance testing. HUCA is also implementing the SunCHECK™ Quality Management Platform from Sun Nuclear, which they plan to use on all their linacs to further streamline workflows.

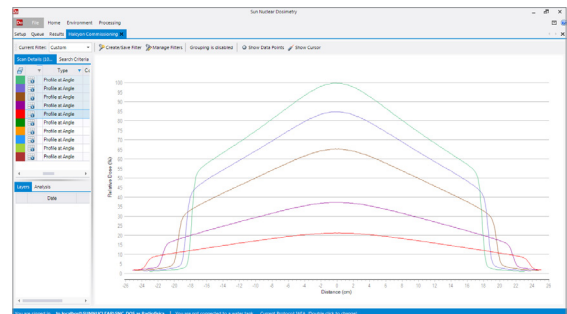
“We are very optimistic about creating efficiency and streamlining workflows with the use of our Halcyon System and the complementary QA solutions from Sun Nuclear.”

José Fernández, M.S., Radiophysics Unit Chief,
HUCA Medical Physics Department

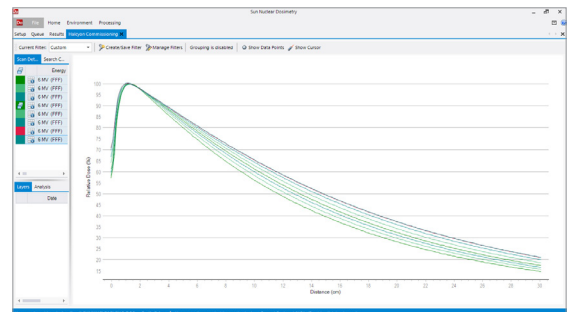
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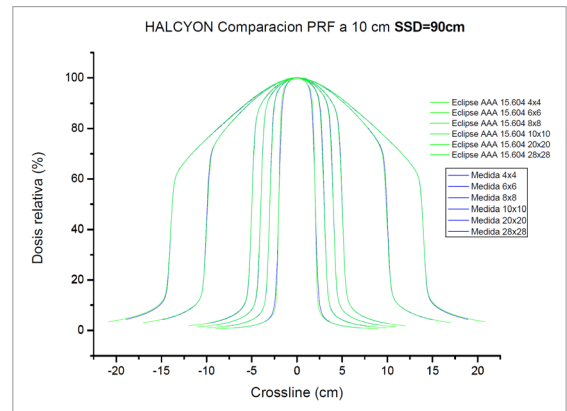
▶ Diagonal comparison at SSD90



▶ Diagonal profiles at SSD90 cm



▶ PDD data at SSD 90 cm



▶ Profiles comparison at 10 cm depth SSD90