



Jefferson Lab Alignment Group

Data Transmittal

TO: J. Fisher

DATE: 05/30/2023

FROM: Elena Balan

Checked: SEH

: Z2071 / C006

DETAILS:

M:\align\DATA\SRFCryo\SNSPPU\CM006\FINAL\230523A\process

The final fiducial coordinates for the SNS cryomodule CM006 were surveyed in May 2023. The coordinate system is established as follows: the cavity string defines the beam axis, the primary Bayonet of the return can control roll, and the upstream coupler defines the origin. Positive Z downstream, positive X beam left, and positive Y up. Consider that the measurements for the fiducials were taken using a 0.5" SMR and a Hubbs nest that has an H value of 0.5000" to the centerline of the sphere.

Name	X[inch]	Y[inch]	Z[inch]
SNSFIDA	21.508	0.205	135.778
SNSFIDB	-0.064	21.609	135.755
SNSFIDC	-21.449	0.020	135.761
SNSFIDD	21.531	0.194	97.809
SNSFIDE	-0.052	21.666	97.833
SNSFIDF	-21.506	0.120	97.868
SNSFIDG	21.521	0.324	69.404
SNSFIDH	-0.117	21.678	69.460
SNSFIDJ	-21.470	0.033	69.393
SNSFIDK	21.533	0.265	26.817
SNSFIDL	-0.145	21.629	26.835
SNSFIDM	-21.562	0.080	26.849
SNSFIDN	21.530	0.278	-11.182
SNSFIDP	-0.087	21.633	-11.161
SNSFIDR	-21.504	0.020	-11.137

Vacuum Vessel			
Name	X[inch]	Y[inch]	Z[inch]
US Flange	0.001	0.053	-54.75
DS Flange	0.037	0.017	179.411