file /home/valkyr/ace/xess/voyager/H/HET.A.B.D.components0.017453293 = PI/180

08/26/2016 15:50:18 On 11/29/03, ECS & I decided from pictures that the SRD was wrong with HET 2 on V1 & V2.
V1 HET 2 A should have cone = 78, clock = 104; V2 HET 2 A should have cone = 140; clock = 104;
V1 & V2 HET 1 A should have cone = 120; clock = 158 as stated.

This spreadsheet calculates the A,B,D components of the HET 1 and HET 2 boresights -- use with boresight.v1.HET1.2002.xs5, etc to get boresights in R,T,N system

	clock	cone
V1 HET 2 A	104	140
	Z =	0.76604444
	Y/X =	0.38386404
	X =	-0.60009393
	Y =	-0.23035448

lam =	64.565626 deg			1.000000				old		
	Matrix elements			X,Y,Z		1.000000				
HA	0.903078	0.000000	0.429477	-0.60009393	1.000000	-0.21293303	= delta A	-0.49370289	0.10512565	
HB	0.286205	0.745590	-0.601815	-0.23035448	1.000000	-0.80451727	= delta B	-0.8640787	0.69516624	
HD	0.320214	-0.666404	-0.673326	0.76604444	1.000000	-0.55444702	= delta D	0.098109369	-0.054396447	
	1.000000	1.000000	1.000000						0.74589544	41.763932

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Approximate boresight	R	T	N	
V1HET1A	0.497	−0.2785	0.8216	✓
	del A = −0.441	del B = −0.157	del D = −0.884	
V1HET2A	−0.206	−0.935	0.287	✓
	del A = −0.914	del B = −0.3976	del D = 0.0812	
V2HET1A	0.506	0.424	−0.751	✓
	del A = −0.441	del B = −0.157	del D = −0.884	
V2HET2A	0.775	0.628	−0.0687	✓
	del A = −0213	del B = −0.805	del D = −0554	