

DISCUSSION CONCLUDING AAS 11-678

Regarding Steve Allen's suggestion of tricking a propriety telescope control system by giving it a fictitious "ephemeris longitude", McCarthy asked about the telescope's field of view requirements and how that would affect the frequency of "ephemeris longitude" updates. Steve Allen clarified that for his system, robotic operations were not yet fully functional and the operational field of view was not yet established for the new guider, but it was anticipated to be less than 3 arcminutes and that there should be no issue changing the "ephemeris longitude" with sufficient frequency. The process does pose the inconvenience of shutting down the telescope control system, updating the longitude, and restarting the telescope control system.

John Seago noted that use of an "ephemeris longitude" may not be a usable workaround for some users with similar systems, such as satellite tracking systems. Allen agreed, noting that his observatory's exact location relative to the terrestrial frame was not critical to his instruments pointing and guidance operations. Rob Seaman wondered how many systems like Allen's might be fielded.

Frank Reed felt that it was in a vendor's best interest to support their customers, and Allen replied that technical representatives had already discussed the possibility of moving away from their propriety codes and adopting NOVAS libraries. Allen went on to cite an example of an astrodynamics textbook having errors which may well have been the basis of some incorrect control-system programming. Allen noted that this is one more example of how incorrect or outdated information can persist for a long time. The solution requires large amounts of re-education and delving into code to discover who may have used an incorrect prescription of changed standards. Ken Seidelmann noted that it has been his experience within the US Department of Defense (DoD) that propriety systems often keep government customers dependent upon the vendor. Allen noted that the University of California does not have the resources of the US government and there is no financial benefit for a vendor in his situation.

Mark Storz noted that his organization has entertained the possibility of an "ephemeris longitude" approach for some applications, but this is not viable across the US DoD. Daniel Gambis wondered about some of the choices with regard to the telescope catalog database; Allen clarified that these choices were made by the vendor, and in some cases, out of unfamiliarity.