

Paris, le 17 mai 1988

**BUREAU DES LONGITUDES**

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Té. : 40-51-22-21

Mr. Matt Neibaur, M.D.  
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Dear Sir,

We read with interest your letter of December 23. The dates for the B.C. conjunctions of Saturn and Jupiter computed by Sinnott from our tables and from Tuckerman's tables are right.

The differences between Tuckerman and us are not surprising. Our programs are much more accurate than Tuckerman's tables. From our tables we can compute the dates of the conjunctions with a precision better than 2 hours. From Tuckerman's the error can reach several days. Note that the uncertainty on UT for these dates is about 12 minutes.

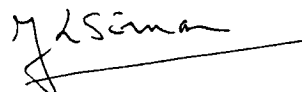
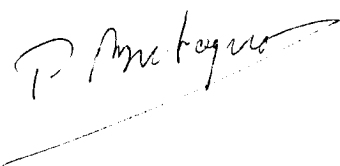
For a discussion on the accuracy of Tuckerman's tables and our tables you can read :

F.R. Stephenson and M.A. Houlden, "the accuracy of Tuckerman's solar and planetary tables", Journal for the history of astronomy, XII (1981), 133-8 ;

P. Bretagnon, J.L. Simon and J. Laskar, "Presentation of new solar and planetary tables of interest for historical calculations", Journal for the history of astronomy, XVI (1985), 39-50.

We don't know Urantia book and we have not found it in the library of the Paris observatory. The dates provided by this book are very surprising. More detailed information on this book (with photocopies of significant pages and information on the references it used) you can provide, would be of interest and appreciated.

Sincerely,



P. Bretagnon, Jean-Louis Simon