Subject: Re: Optical evaluation of LARES2 CCR distribution, radius 201 mm

Date: Monday, March 6, 2017 at 1:02:55 PM Eastern Standard Time

From: Erricos C. Pavlis

To: David Arnold

CC: Michael R. Pearlman

Priority: High

Dave,

I finally read through the maze of weekend messages back and forth on this topic and I think that there is a major misunderstanding, mainly due to the secretive way that the Italians used throughout the process. Let me explain, and I will talk more with Michael about this, since he needs to understand this too.

The mission was nearly approved some weeks ago, when ASI took a strange position on who would be in charge of the mission, despite the fact that it was our team that proposed the mission and did all the hard work that you are so familiar with! They had a very small review pane of 2-3 people, one of which was Simone and after the review they decided to give mission to INFN (i.e. Simone!). This of course is something that in the UAS would have sent the ASI management to jail, you cannot have a group propose a mission and then you approve it based on the review panel's comments BUT HAND OVER the mission to one of the panelists!

After some quick footwork the decision was rescinded and it was finally agreed that the mission will proceed as originally planned, although INFN will have some involvement in some supervising role or testing, but will NOT own the mission. The final decision will be taken by mid-May, and that is the reason why the Sapienza group wants to still keep things in secret, because they do not trust anyone after this fiasco and I agree with them that others may try to steal the mission or try to manipulate ASI's decision in some way. In all cases a further delay would almost certainly mean a cancellation of the mission, since ESA has very strict deadlines and unless the mission is approved NOW, we will not be able to deliver the s/c within the ESA timeline.

This last fact is also the reason why Antonio insists on getting this last calculation from you, and NOT that he or all of us changed our mind as to which design we want for LARES-2! Because ASI is very worried about meeting ESA's deadline, they do not want to change the design since they think that this would cause extra delays and it will not make the ESA deadline. So Antonio wants to go in with the design that does not make changes that could delay the construction NOW, get the approval by mid-May and THEN we will present the alternative design which is what we all want and support, with the COTS CCRs, etc. They have scoped the ASI management and they are confident that they can make this switch once the signatures are already on paper.

I think that if you can understand the situation it should be clear to you how important it is to make this calculation NOW, so that we have a mission to fly the design we have been working on for over a year now! I hope you understand,

еср

On Mar 5, 2017, at 10:00 AM, David Arnold <<u>david-arnold2006@earthlink.net</u>> wrote:

Hi Erricos,

I received a very surprising email from Antonio. Apparently, there has been a decision to use a slightly larger version of the original LARES design. This will not provide any improvement in accuracy to meet future geodetic goals. The email from Mike indicates that there is interest in having a new design at the LAGEOS altitude. Do you know what is going on?

Dave

From: Antonio Paolozzi <<u>antonio.paolozzi@uniroma1.it</u>>
Date: Saturday, March 4, 2017 at 6:13 PM
To: David Arnold <<u>david-arnold2006@earthlink.net</u>>
Cc: Ignazio Ciufolini <<u>ignazio.ciufolini@gmail.com</u>>, ErricosUmbc Pavlis <<u>epavlis@umbc.edu</u>>
Subject: Optical evaluation of LARES2 CCR distribution, radius 201 mm

Dear Dave,

please consider this information confidential and please reply only to the present mailing list. Attached are the description of three different configurations accounting for constructive constraints.The N. of CCRs in each row (parallel) is the same in the three configurations. The angular distance among them is not uniform only in the two subequatorial rows. Please let me know if you can proceed with the calculation. Thank you and best regards Antonio <CCR_distribution_R201mm_s3_sm2_N_CCR_154_email_Dave.docx>

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