

SPIRE-JPL-COM-000180.10

Jet Propulsion Laboratory
JPL
FIRST/Planck Project Telefax

Fax No : (818) 393-6869 Date : 19 February 1999
Tel No : (818) 354-8053 Page : 1 of 1
Fax Ref. : PG-0005

From : G. Parks Fax No: (818) 393-6869
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Cc : ESTEC - F. Felici, J. Credland, G. Pilbratt
Cc : Instruments - A. Poglitsch, T. de Graauw, M. Griffin, B. Swinyard

Subject: FIRST Telescope
Ref. : ESTEC fax PT-06406

Dear Thomas,

Thank you for your note of 17 February 1999 in which you provide more information regarding the telescope gap issue. Here is an initial response to the two bullets in the referenced fax.

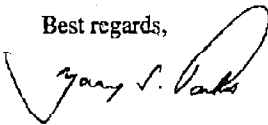
- Non-homogeneity of the gap, varying optical properties and diffraction effects

The additional effects that you describe (which go beyond the emissivity issue) are relatively complex to evaluate, and it is our intention to do so. But we would like a clearer understanding of the manner in which these effects impact the performance of the telescope. I suggest that this be brought up at the next FIRST Science Team meeting scheduled for March 22. We can then actively support the resolution of this issue.

- Temperature discontinuity between separate petal segments

The thermal analysis we have already promised you will be used to get a better understanding of this issue. We plan to analyze the spatial variation with and without the gaps in the telescope. Together with a transient analysis, we will supply what we think will be the temperature maps, so the PI's can evaluate this effect.

Best regards,



Gary Parks