

REVISED OBC TEMPERATURE GUIDELINES

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The IUE Operations Control Center has recently revised our guidelines concerning heating of the computer at various beta angles. This was made possible by an analysis of the recent performance of the on-board computer in its new, more power-efficient configuration. Fortunately the heating has turned out to be somewhat less than previously thought. The new guidelines should therefore help to increase flexibility in scheduling and obtaining observations. The "hot" beta ranges listed below are generally narrower by several degrees than in previous reports. The ranges for May and August are exceptions; the upper beta limit is somewhat higher than what has been listed before.

As you may recall, last year the maximum allowed OBC temperature was raised somewhat. We can now permit the computer to reach and stay at 55.8 C with no impact on observations. However if the temperature glitches to its next higher telemetry point (57 C), the spacecraft must be slewed to a cooling beta. These new rules were highly successful this winter in reducing the time required to cool the OBC. Cooling was very rarely needed, in sharp contrast to the previous winter observing season.

The revised beta ranges are listed below. Note that these are estimates based on available data and therefore have some observational uncertainty. The beta ranges listed correspond to those at which the OBC may glitch to 57 C after several hours. As noted above, if this occurs the spacecraft must be slewed to a cooling beta (beta <40). It is expected that the GO who is responsible for heating the OBC to this degree will absorb the two hours or so that are required to cool the OBC; the spacecraft should not be handed off to the next GO in this state.

Table 1

Beta Ranges in Which the OBC is Expected to
Glitch to 57 C After Several Hours

January	56 - 94	July	no limit
February	59 - 90	August	68 - 81
March	64 - 86	September	65 - 84
April	65 - 84	October	62 - 88
May	69 - 81	November	59 - 90
June	no limit	December	57 - 93