## Request For Proposals for the NICI Planet Finding Campaign Addendum #1

## Issued: 16 September 2005

**Purpose of RFP Addendum #1**. Some of the tic marks in the figures in Section 6 of the RFP did not survive the translation from Excel to Word to PDF. To make the figures more legible and more useable, grid lines have been added. To further assist proposing teams, tabulated data for each plot are provided below.

## 6. NICI Performance.

Figure 1. Contrast ratio estimated for NICI. The campaign strategy or target list may be modified when actual measured performance is available.

<b>radius</b> (arcsec) 0.25 0.50 1.00 1.50	<b>∆H</b> (mag) 9.75 11.0 13.2 14.9
2.00	16.0
3.00	17.6
4.00 5.00	19.0 20.0

## NICI Estimated Contrast Ratio (3 hr, 5 σ, r<sub>0</sub>=20cm)



Figure 2. Predicted Strehl ratio as a function of guide star brightness. Proposing team will not need to worry about modifying the baseline unless target stars fainter than  $V\sim13$  are chosen.

Μv	Strehl	
	(H)	
5	0.375	
8	0.35	
10	0.325	
12	0.3	
13	0.27	
14	0.2	
15	0.1	



Figure 3. Predicted Strehl ratio as a fuction of natural seeing at V. It is anticipated that most NICI campaign observations will be done under median or better seeing conditions. Some flexibility in observing conditions is very desirable.

r <sub>o</sub>	<b>V FWHM</b>	Strehl
(cm)	(arcsec)	(H)
0.3	0.34	0.60
0.25	0.41	0.50
0.2	0.52	0.37
0.18	0.57	0.30
0.15	0.69	0.20
0.13	0.79	0.13
0.12	0.86	0.09
0.11	0.94	0.07
0.1	1.03	0.04



Figure 4. Peak Strehl ratio as a function of wavelength. The baseline sensitivity is for the  $1.6 \mu m$  methane filters, and this plot is only needed if other filters are proposed.

Wavelength	Strehl
(μ <b>m</b> )	
1.25 (J)	0.178
1.65 (H)	0.372
2.2 (K)	0.574
3.8 (L)	0.83
4.8 (M)	0.89

