AI#	ALTAIR or KECK actions	Deliverables (data, code, documents)	who	LJO days	JCH days	Total LJO days	end date	LJO Cost per item		Tolstoy grant	y C F
A01	Get back on OPERA (house keeping, run it on ALTAIR archive data)		LJO	10	0	10	29-Jan	\$6,560	\$6,560		\$6
A02	establish range of WFS photo-electron count rate per lenslet that is of interest for testing OPERA in bright to faint NGS conditions	DOC: lenslet count rate for tests	LJO	2	0	12	11-Feb	\$1,312	\$7,872		\$1
A03	Get on-sky AO data (archive or not), first batch.	<b>DATA:</b> 1st batch of ALTAIR sky data	JCH	0	5	12	11-Feb	\$0	\$7,872		
A04	Testing OPERA on 1st batch of sky data.	<b>DOC:</b> report on first test of OPERA	LJO	20	0	32	23-Apr	\$13,120	\$20,992		\$1
A05	System debugging — ALTAIR & OPERA.	CODE: new OPERA software	LJO & JCH	40	40	72	23-Jun	\$26,240	\$47 <b>,</b> 232	\$1,766	\$23
A06	Get 2nd batch of ALTAIR sky data	DATA: 2nd batch of ALTAIR sky data	JCH	0	5	72	23-Jun	\$0	\$47 <b>,</b> 232	\$0	
A07	Testing OPERA on 2nd batch of sky data	<b>DOC: r</b> eport on final test of OPERA	LJO	20	0	92	13-Sep	\$13,120	\$60,352	\$6,560	
A08	Prepare OPERA to make it compatible with GEMINI observatory software standards	<b>CODE:</b> OPERA code translated to Gemini standards	LJO (+?)	15	0	107	12-0ct	\$9,840	\$70,192	\$4,920	
A09	Implement OPERA inside ALTAIR data pipeline	<b>CODE:</b> OPERA implemented into ALTAIR data pipeline	LJO (+?)	10	0	117	2-Nov	\$6,560	\$76,752	\$3,280	
A10	Integrate Ralf Flicker legacy on KECK-AO	<b>DOC:</b> summary of Ralf's contribution that is of interest for our project	LJO	10	0	127	22-Nov	\$6,560	\$83,312	\$3,280	
A11	OPERA modifications for Keck AO (writing interfaces)	CODE: OPERA for KECK-AO	LJO	15	0	142	4-Jan	\$9,840	\$93,152	\$4,920	
A12	Testing final product on ALTAIR, ensure that OPERA delivers what was expected	<b>DOC:</b> report demonstrating compatibility of deliverable with specifications	LJO (+?)	5	0	147	13-Jan	\$3,280	\$96,432	\$1,640	
A13	Set-up a code maintenance procedure for OPERA on ALTAIR	<b>DOC:</b> maintenance procedure defined and implemented	LJO (+?)	10	0	157	2-Feb	\$6,560	\$102,992	\$3,280	
A14	Get on-sky Keck AO data, first batch	<b>DATA:</b> KECK-AO data archives	PWI (+?)	10	0	167	23-Feb	\$6,560	\$109,552	\$3,280	
A15	Testing & debugging OPERA for Keck	CODE: OPERA made ready for KECK-AO	LJO (PWI, +?)	15	0	182	24-Mar	\$9,840	\$119,392	\$4,920	
A16	write OPERA user manual for ALTAIR	DOC: OPERA code user manual	LJO	10	0	192	27-Apr	\$6,560	\$125,952	\$3,280	
			<u>.</u>			•				\$41.126	

\$6,560	
\$1,312	
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\$4,920 \$4,920	
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\$1,640 \$1,640	
\$3,280 \$3,280	
\$3,280 \$3,280	
\$4,920	
\$3,280 \$41,126 \$43,700 \$41,126	5

CfAO

LJO hourly rate US\$	\$82
number of hour per day	8
LJO daily rate US\$	\$656
total time days	192
total cost	\$125,952
E Tolstoy grant	\$44,000
KECK/CfAO	\$43,700
Gemini	\$41,126
total availabe	\$128,826
margin US\$	-\$2,874
margin days	-4.3
vacations in 2010-2011	
Mar-29 to Apr-11 Eastern	

Mar-29 to Apr-11	Eastern
13,14,24 May	ascension-pentecote
Jun-27 to Jul-2	SPIE 2010 San Diego
Jul-12 to Aug-22	summer
Dec-20 to Jan-2	winter
2 weeks in March 2011	Eastern
activity loval, dava / wook	

activity level. days / week	
Jan-4 to Mar-26: 1.5	time shared with IMAKA
Apr-12 to Aug-27: 5	full on OPERA
Aug-30 to end: 3.5	time left to start other projects