

Cycle-1 Accepted Proposal Statistics

May 2004

The Review Process

Topical Science Review Panels

- Nine Science Review Panels
 - Typically eight members each
 - Parallel Panels for all topics (ex. Solar System)
 - Four Extragalactic Panels
 - Panels 1A/B: Distant Universe
 - Panels 2A/B: Nearby Universe
 - Four Galactic Panels
 - Panels 3A/B: Stars & ISM
 - Panels 4A/B: Star & Planet Formation
 - One Solar System Panel
 - Panel 5: Solar System (6.6% of incoming proposals)

Panel Membership

- Who could NOT serve?
 - SSC
 - IPAC
 - JPL
 - Caltech
 - Guaranteed Time Observers (including Inst Team PIs)
 - Legacy Science PIs
- Who was eligible?
 - Everyone else
 - Junior members of Instrument Teams & Legacy Science teams
- Diversity
 - National/geographic
 - Gender
 - Age/experience
 - Home institution size
- **73** external scientists served on Panels/TAC
 - 16 members (22%) were foreign
 - 16 members were women

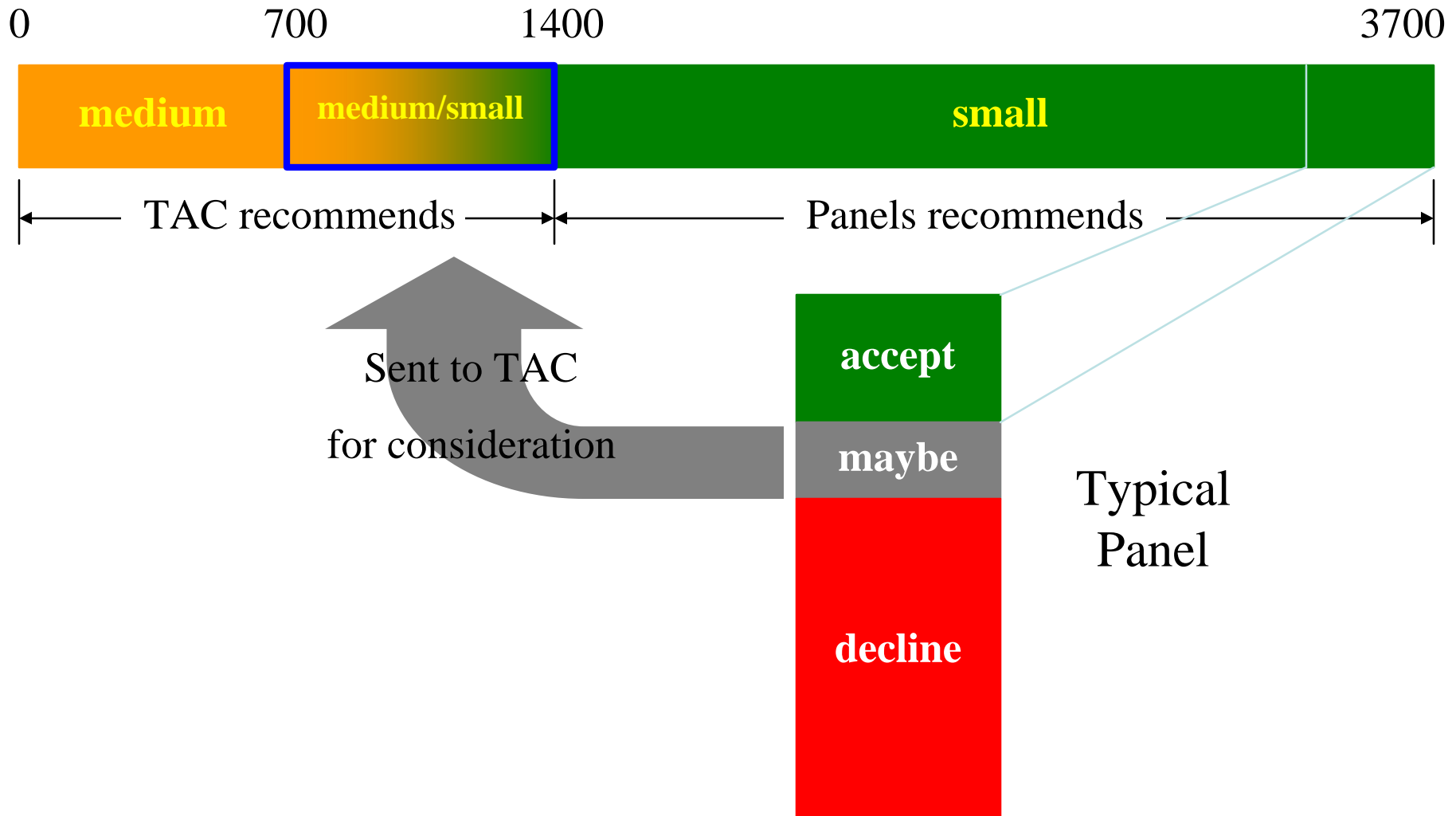
Conflicts of Interest

- Minimized by parallel Panels
 - Investigator/Panelists had proposals reviewed in parallel Panel
- Types of Conflicts
 - Proposal PI or Co-I (see above)
 - Research
 - SSC identified (via ADS) possible research conflicts
 - If any identified, SSC avoided proposal review assignments
 - Institutional
 - SSC avoided proposal review assignments
 - Other
 - Usually self-declared by reviewers prior to Panels/TAC meeting
 - SSC swapped/omitted review assignments, when necessary
- Conflicts of Interest
 - Documented by SSC and Panel Chair
 - “Conflicted” reviewers excused from discussion/grading of proposals & direct competitors

Review Process (1): Overview

- Each Panel reviewed 70-80 proposals (typically)
 - Output: Single rank-ordered list of all proposals (small GO, medium GO, AR)
- Each Panel given minimum time allocation (T_{\min})
 - Based on proportion of small GO proposals assigned to Panel
 - Panel allocated this time to high-ranked small GO proposals
 - TAC concurred on Panel recommendations
 - Pending duplicate observations
- Each Panel given maximum time allocation (T_{\max})
 - Produces “gray area” of pending small GO proposals
 - Panels carefully debated & ranked “gray area” proposals
 - Eventual disposition depends on TAC allocation to median GO proposals

Review Process (2): Observing Time Allocations



The Results

TAC Recommended 9 Medium GO Programs

(854 hours)

- **Peter Garnavich (Notre Dame): 73.8 hours (Targets of Opportunity)**
 - Gamma-Ray Burst Physics in the Spitzer/Swift Era
- **Lin Yan (SSC/IPAC/Caltech): 65.0 hours**
 - IRS Spectroscopy of Dusty Galaxies at $z \sim 1-2$: Bridging the Gap Between ISO and SCUBA
- **Ismael Perez-Fournon (IAC, Spain): 65.9 hours**
 - IRS Observations of Ultraluminous ELAIS Galaxies
- **Sylvain Veilleux (Maryland): 95.3 hours**
 - Evolution of Activity in Massive Gas-Rich Mergers
- **Joe Mazzarella (IPAC/Caltech): 91.6 hours**
 - Spitzer Observations of a Complete Sample of Luminous IR Galaxies in the Local Universe
- **Claus Leitherer (STScI): 54.4 hours**
 - The Rich and the Poor: Wolf-Rayet Star Populations in Different Chemical Environments
- **Deborah Padgett (SSC/IPAC/Caltech): 134.4 hours**
 - A Spitzer Imaging Survey of the Entire Taurus Molecular Cloud
- **Will Grundy (Lowell Observatory): 102.4 hours**
 - The Dynamical History of the Classical Kuiper Belt: Radiometric Diameters and Albedos
- **Mark Sykes (Arizona): 170.9 hours**
 - The Production of Zodiacal Dust by Asteroids and Comets

GO Investigations

Domestic

	<u># programs</u>	<u>hours</u>	<u>% of time</u>
<i>Spitzer Sci Ctr</i>	13	371	10.1
<i>IPAC (excl. SSC)</i>	2	99	2.7
<i>JPL</i>	7	143	3.9
<i>Caltech (campus)</i>	5	114	3.1
<i>Other Universities</i>	97	1582	43.2
<i>Non-Profits</i>	10	204	5.6
<i>STScI</i>	7	143	3.9
<i>NASA</i>	6	84	2.3
<i>Federal Labs</i>	3	71	1.9
<i>Industry</i>	1	10	0.3

Foreign

<i>ESA</i>	43	709	19.3
<i>Japan</i>	4	52	1.4
<i>Other</i>	5	83	2.3

GO Program Success Rates

	<u>Proposals</u>	<u>Observing Time</u>
All Medium Proposals	25 % (9 of 36)	23 %
All Small Proposals	36 % (194 of 538)	28 %
Foreign-led	33 % (52 of 157)	25 %
Spitzer Science Center	32 % (13 of 41)	36 %

Foreign Investigations

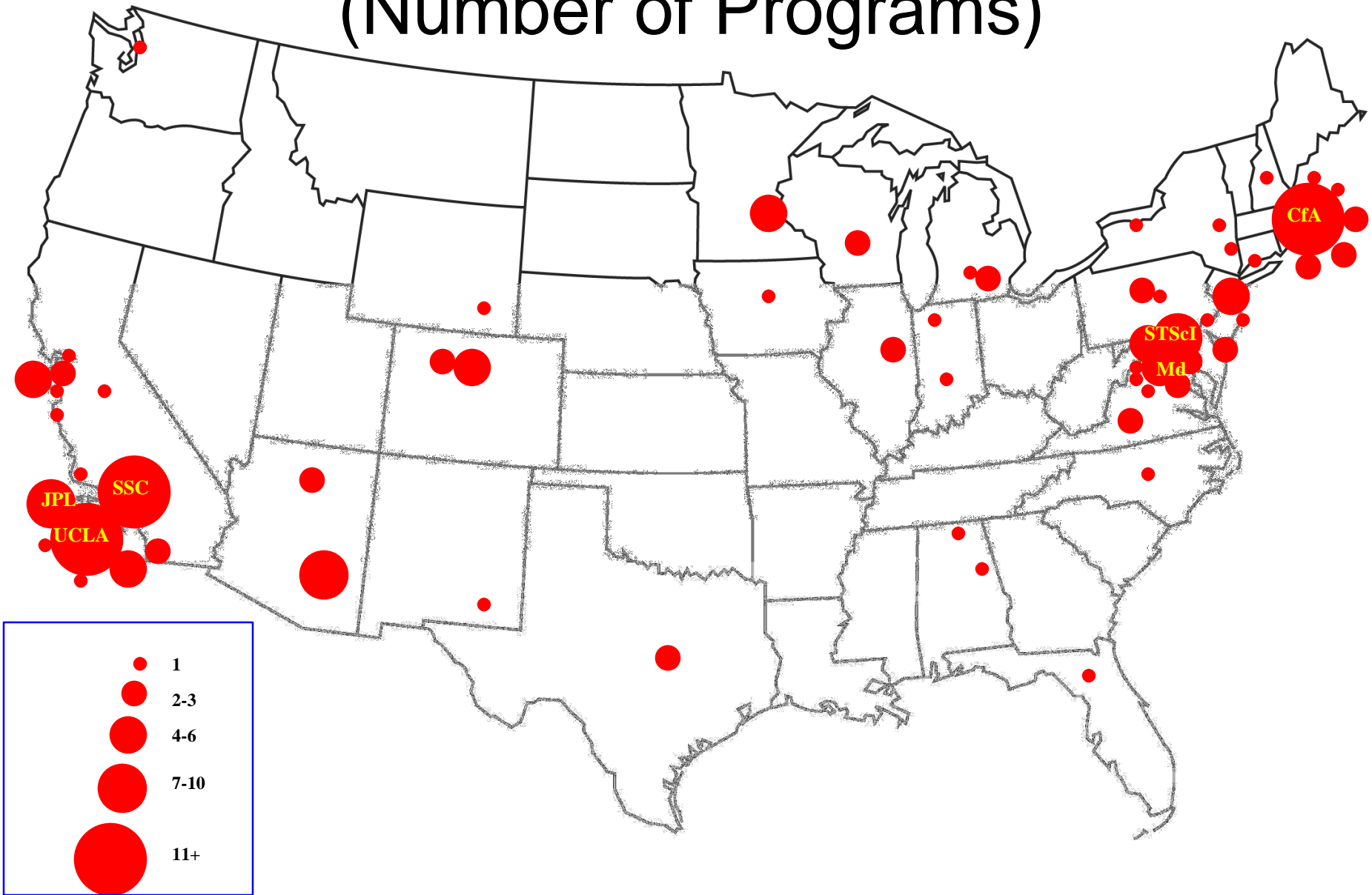
- Foreign-**led** investigations
 - Account for 26% of the recommended GO programs
 - Account for 23% of the recommended observing time
- Foreign-**only** investigations
 - Account for 13% of the recommended GO programs
 - Account for 10% of the recommended observing time

TAC Recommended 9 AR Programs

(\$698K)

- Eric Richards (Talladega College)
 - FIR Properties of a Large Radio-Selected Sample in the Spitzer FLS
- Gordon Richards (Princeton)
 - Optical-IR SEDs of SDSS Quasars in the Archival Spitzer FLS Data
- Alexander Kashlinksy (SSAI)
 - Structure of Cosmic IR Background from the FLS
- Lisa Storrie-Lombardi (SSC)
 - The Spitzer FLS Extragalactic SED Database
- Bruce Grossan (Eureka Scientific)
 - Cosmic FIR Background Fluctuation Studies of the FLS
- Matthew Malkan (UCLA)
 - FIR Measurement of AGN & Starburst Activity in the FLS
- Kenneth Marsh (JPL)
 - Resolution-Enhanced Imaging of the FLS Galactic & Extragalactic Components
- Russell Walker (MIRA)
 - A Search for Comet Debris Trails in the Spitzer FLS Fields
- Edward Tedesco (Planetary Science Institute)
 - Enhancing Science From the Spitzer Ecliptic Plane Survey

U.S. Geographic Distribution (Number of Programs)



US-based GO+AR Investigators (Principal Investigators & Co- Investigators)



International Distribution (Number of Programs)

Germany	14	(7)
UK	12	(7)
France	6	(2)
Netherlands	4	(2)
Japan	4	(0)
Belgium	3	(1)
Australia	2	(1)
Hungary	2	(2)
Italy	2	(0)
Austria	1	(1)
India	1	(1)
Spain	1*	(1)

Figures in parentheses denote # with US participation

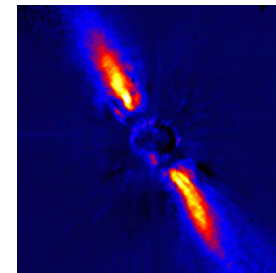
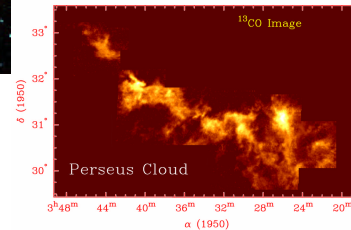
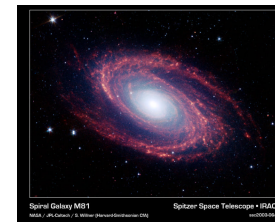
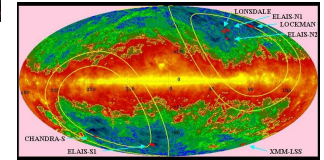
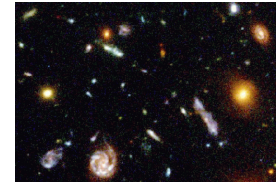
(*) Medium

The Science

Context: Legacy Science Program

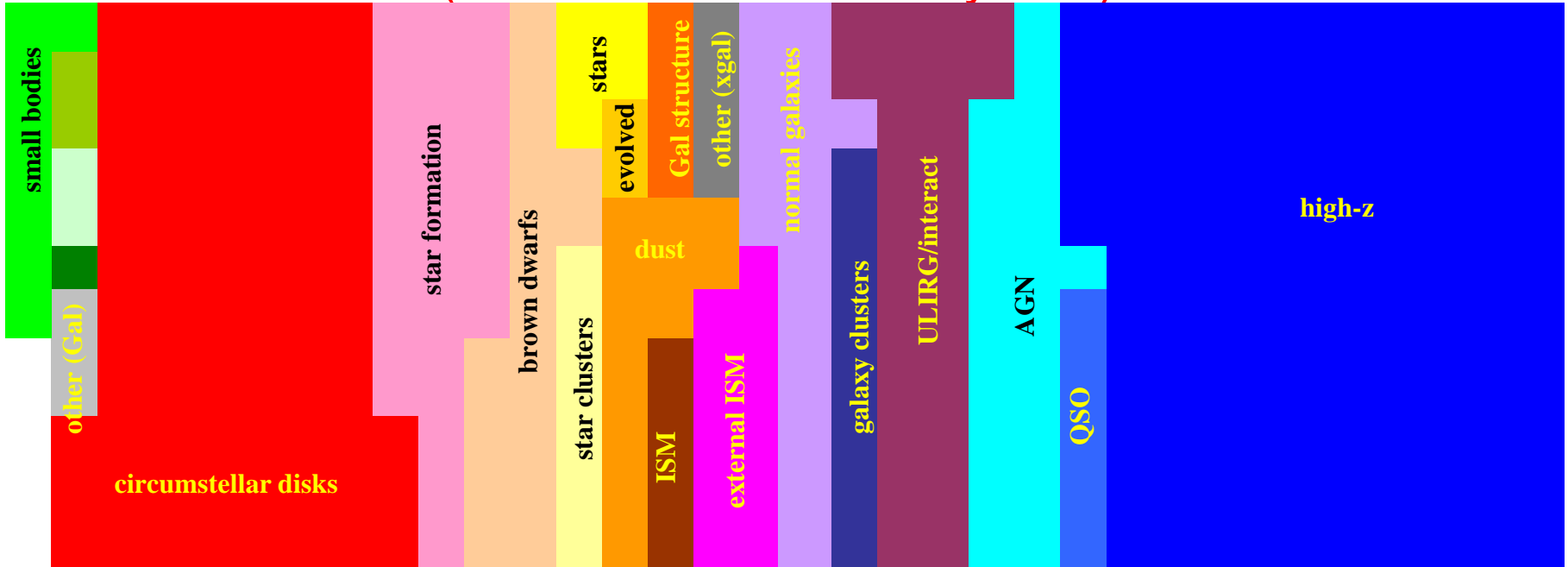
(3160 hours)

- Mark Dickinson (NOAO) & **39 Co-Is @ 14 institutions**
“GOODS: Great Observatories Origins Deep Survey”
647 hours (IRAC, MIPS)
- Carol Lonsdale (IPAC/Caltech) & **19 Co-Is @ 9 institutions**
“SWIRE: Spitzer Wide-area Infrared Extragalactic Survey”
851 hours (IRAC, MIPS)
- Robert Kennicutt (U. Arizona) & **14 Co-Is @ 7 institutions**
“SINGS: Spitzer Nearby Galaxies Survey”
512 hours (IRAC, MIPS, IRS)
- Ed Churchwell (U. Wisconsin) & **13 Co-Is @ 6 institutions**
“Galactic Legacy Infrared Mid-Plane Survey Extraordinaire”
400 hours (IRAC)
- Neal Evans II (U. Texas) & **10 Co-Is @ 8 institutions**
“c2d: Cores to Disks”
400 hours (IRAC, MIPS, IRS)
- Michael Meyer (U. Arizona) & **18 Co-Is @ 12 institutions**
“FEPS: Formation and Evolution of Planetary Systems”
350 hours (IRAC, MIPS, IRS)



Context: Existing GTO Program

(3398 hours over 2.5 years)

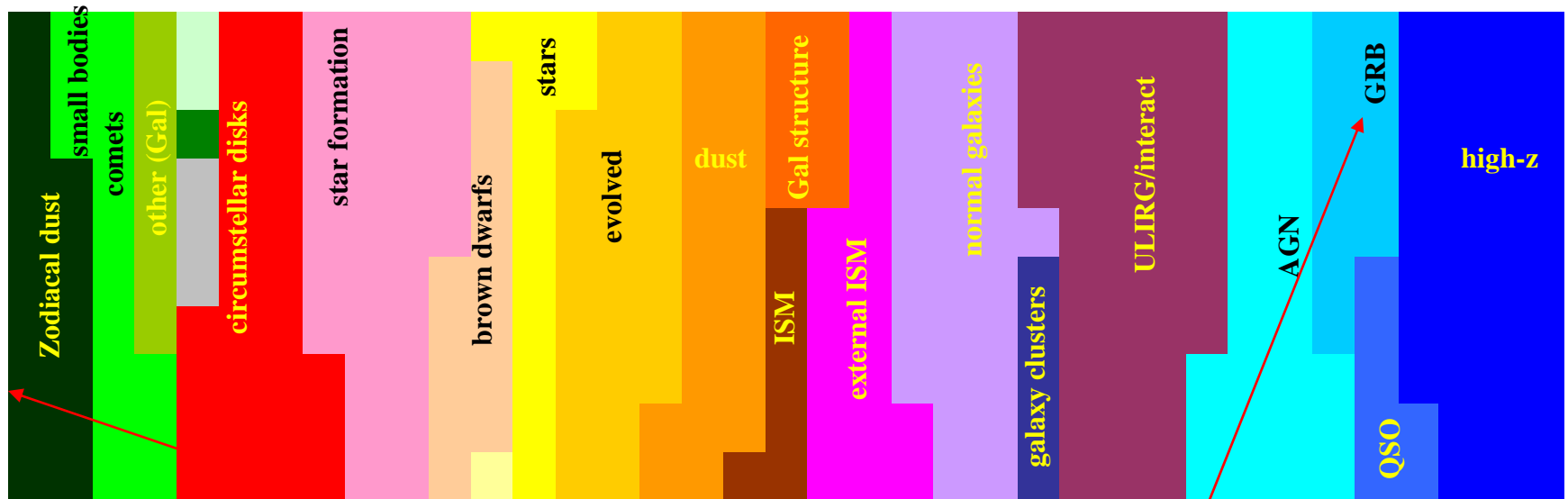


- planets
- satellites
- comets

Each square denotes 10 h

Recommended Cycle-1 Programs

(3700 hours over 11 months)



- planets
- satellites
- star clusters

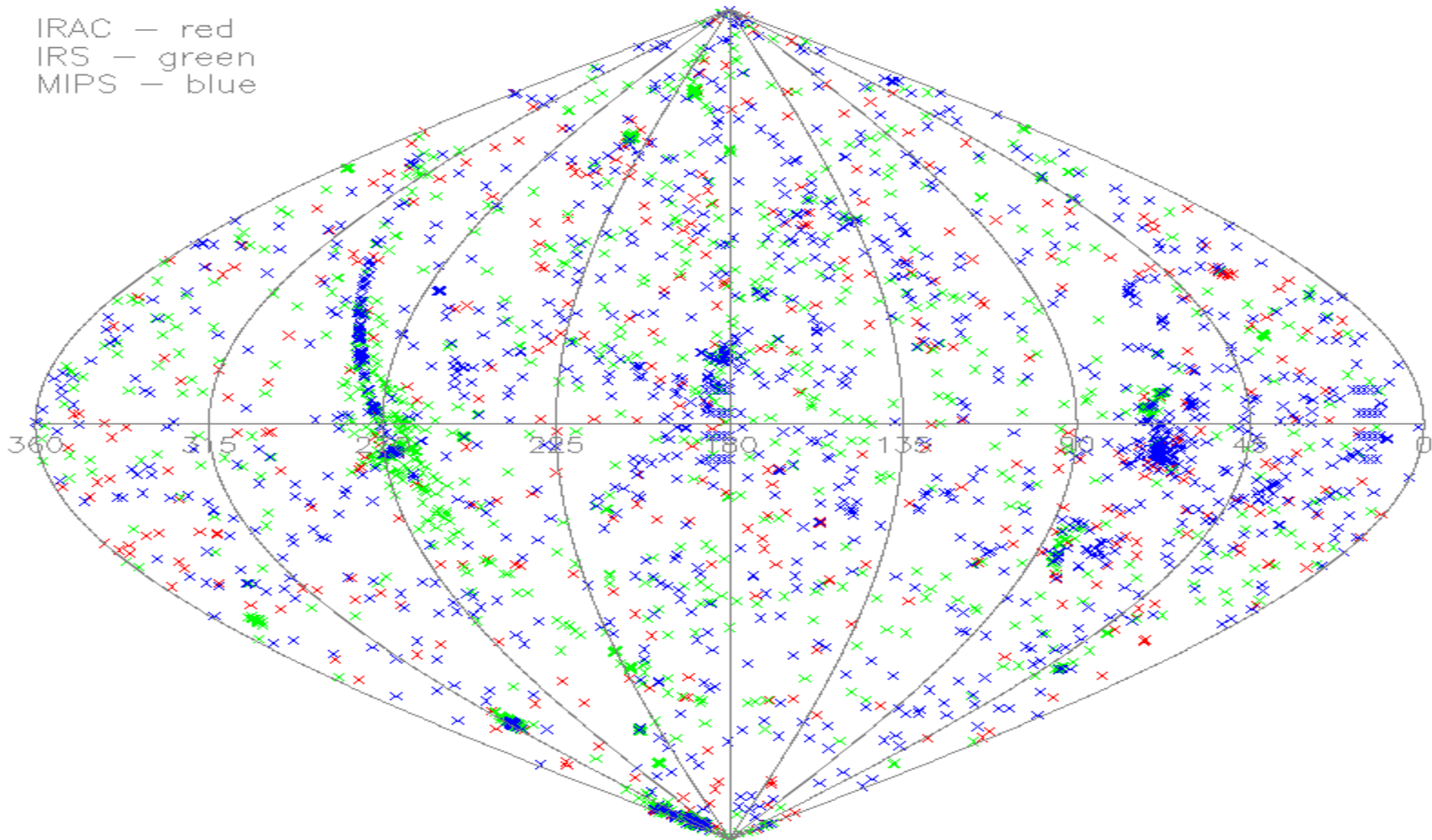
*New Areas of Science
for Spitzer
investigations*

Each square denotes 10 h

Sky Distribution of Targets

Ecliptic Projection of Approved ADRs

IRAC — red
IRS — green
MIPS — blue



Instrument/Mode Usage

