

ing progress == (some) convergence of science drivers and flow-down
ications for a VLASS

New capabilities → new science drivers (+ those that motivated new capa

“Last chance for ∞ science wishes”

questions:

Why do a community/legacy survey? science & opportunity (VLA, multi-lan

Is there critical mass for a well-defined survey that addresses immediate sc
goals (c.f. NWNH) as well as providing high legacy value? (Hint: yes)

Which science can be done as NRAO “large” projects?

Can “we” handle the data management of high-volume surveys? Archival?

Cognizance of other surveys: influence on VLASS?

papers:

- 17 science + 1 EPO + Pan-Starrs + Stars
- All continuum, 4 with line obs
- Gal: 4 Xgal: 12 Both: 6
- Time domain: 5+1 (2 commensal) Polarization: 2

Config/ Band	A	B	C	D	Hy
P	1	1			
L	5	2	2	1	
S		1	2		
C	1	2			1
/Ku			2		
Q				1	

Survey time range from 10^4 hr (when specified)

Biggest time requests are band/A config

Second: S/E

Some time domain is configuration agnostic

all-sky cross-wavelength surveys (VLASS+submm+OIR+X,G)

Large source numbers (extragalactic science → cosmology)

Identifications!

Undisputable legacy value

near-domain discovery science (VLASS + X,G + OIR.**not**)

Small numbers (NS-NS, NS-BH binaries, xgal bursts)

IDs in OIR not wanted for Galactic binaries! But yes for xgal bursts (for now)

Fast transients and immediate followup of slow transients: Investment in VLA pipelines

Automation Yes! large samples (all sky) + targeted (clusters)

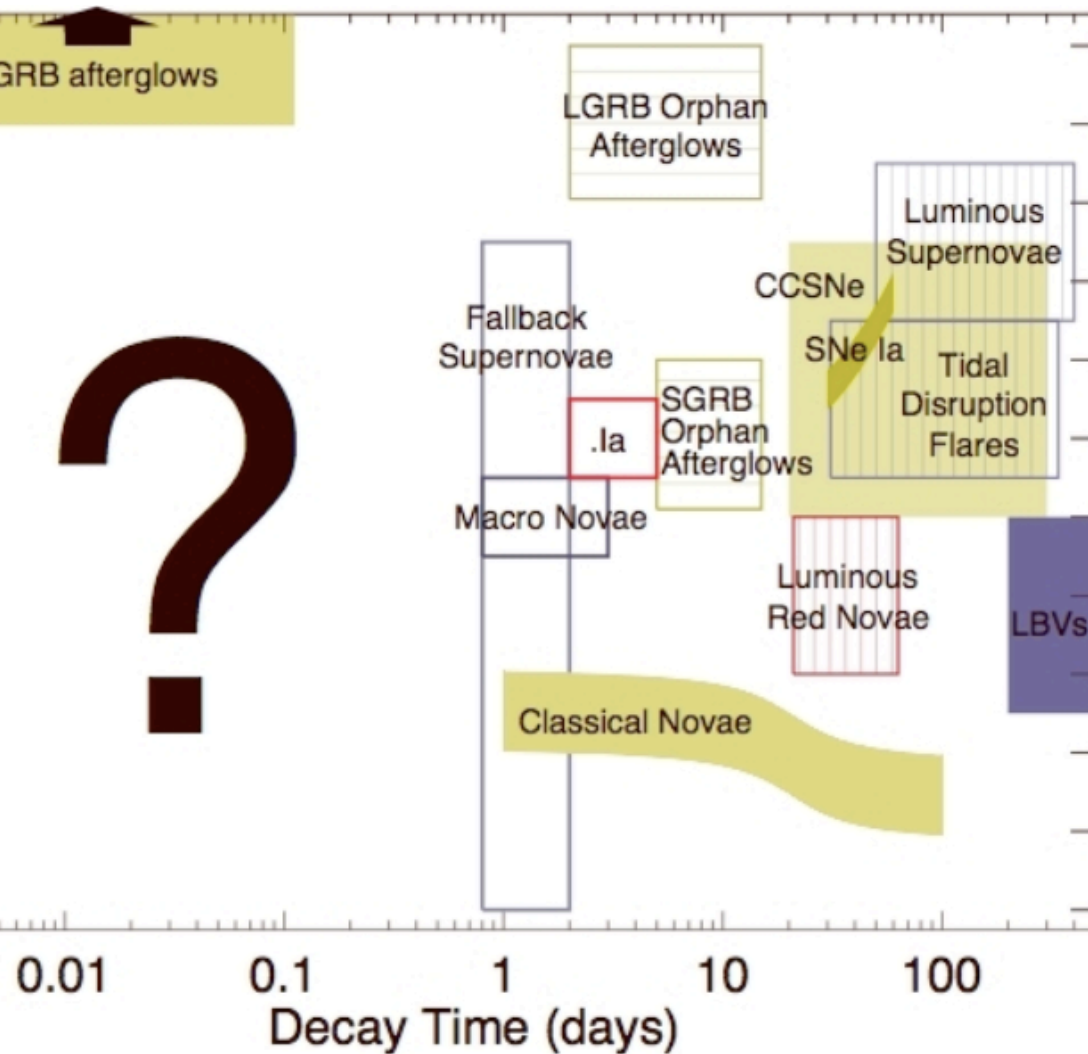
“free” (mostly) for survey observations; analysis intensive

Outreach: bake it in to the plan

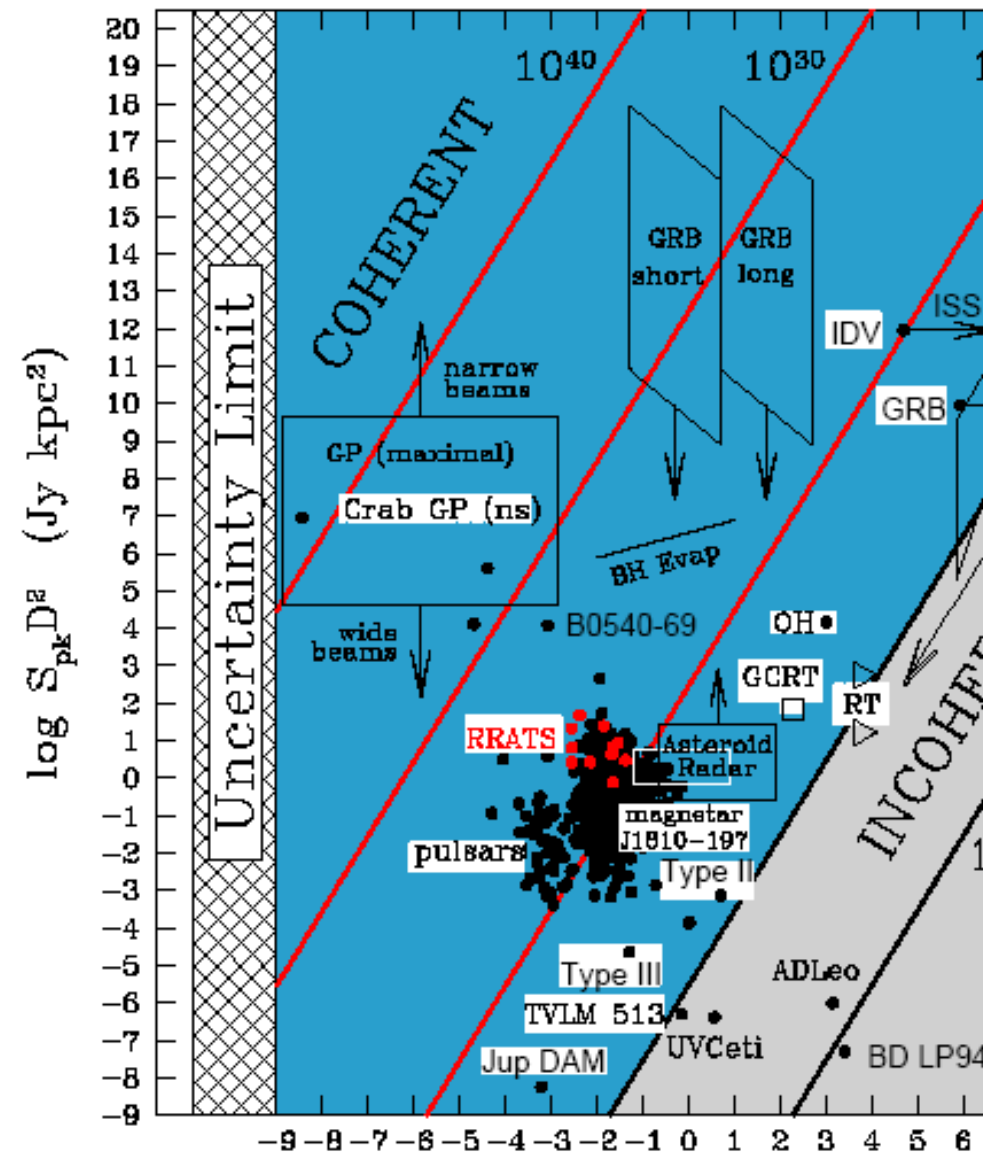
Data management: archive as much data as is affordable; serve to wider community.

Fast transients: no overlap? But counterparts needed

OIR transient phase space



Radio phase space



Whatever is proposed needs to be science driven for immediate return
strong legacy payoff

Monolithic survey or wedding cake?

Either way a wedding needs to take place to get critical mass support

YI: NRAO “large” projects ≥ 200 hr

Largest so far = 5280 hr (Bessel) VLBA

Largest VLA (1000?)

Nominal specs: we need to determine specs for these items (and other)

Array configuration

Band

Dwell time/# passes:

- All sky/narrow
- Wide/deep = (yes, yes), (yes, no), (no, yes)

Polarization (yes)

Total hours: how to balance with regular + large proposals? # years