

Click here to see all papers in this table, together in an ADS Private library	largest size scale traced (pc)	sample historic reference	sample modern reference	learn more	even more
measuring galactic star formation rate	10000	1978 Smith, Biermann & Mezger	2010 Robitaille & Whitney	2009 Evans et al.	
detection of HI in ISM	5000	1951 Ewen & Purcell	GALFA HI	History	
detection of CO in ISM	5000	1970 Wilson, Jefferts & Penzias	2001 Dame, Hartmann & Thaddeus	cf. FCRAO & Mopra surveys	
temperature mapping	5000	1976 Fazio et al.	2005 Schnee et al.	2012 Kelly et al.	
CO as proxy for column density	500	1982 Frerking, Langer & Wilson	2009 Goodman et al.		
“infrared dark clouds”	300	1998 Carey	2006 Rathborne, Jackson & Simon		
optical/near-IR extinction mapping	100	1919 Barnard	2001 Alves, Lada & Lada		
magnetic field strength	100	1988 Myers & Goodman	2010 Crutcher et al.		
magnetic field morphology	100	1976 Vrba, Strom & Strom	2011 Chapman et al.	2012 Davidson et al.	
spatial & kinematic structure of clouds	50	1975 Encrenaz, Falgarone & Lucas	2008 Goldsmith et al.	2009 Goodman et al.	
bipolar outflows	10	1980 Snell, Loren & Plambeck	2010 Arce et al.	2007 Zhang et al.	
spherical shells	10	1975 Castor, McCray & Weaver	2011 Arce et al.		
“Cloudshine” (scattered light mapping)	10	1970 Matilla	2006 Foster & Goodman	2010 Steinacker et al.	
young source/star censuses (multi- λ)	10	1978 Elias	2009 Evans et al.		
long(er), skinni(er) filaments in dark clouds	10	1919 Barnard	2010 André et al.		
astrochemistry, depletion	1	1999 Caselli et al.	2012 Fontani et al.	1997 Bergin & Langer	
“Clump Mass Functions” (CMF)	1	1994 Williams, de Geus & Blitz	2007 Alves, Lombardi & Lada	1998 Motte, André & Neri	2009 Pineda, Rosolowsky & Goodman
dominance of clusters	1	1991 Lada et al.	2009 Gutermuth et al.	2003 Lada & Lada	
evolutionary sequences (outflows)	1	1983 Bally & Lada	2006 Arce & Sargent	astrobites, Plunkett	
motion of “cores”	1	1975 Dickman	2010 Kirk et al.		
photon-dominated regions	1	1977 Black & Dalgarno	2009 Visser, Van Dischoeck & Black	1995 Sternberg & Dalgarno	1978 Draine
(ultra) compact HII Regions	0.5	1989 Wood & Churchwell	2009 Urquhart et al.		
“NH ₃ ” cores (starfull, starless)	0.1	1983 Myers & Benson	2008 Rosolowsky et al.	2009 Foster et al.	
core kinematics (rotation)	0.1	1993 Goodman et al.	2012 Tobin et al.		
core kinematics (infall)	0.1	1995 Myers et al.	2007 Joregensen et al.	1998 Tafalla et al.	
core density profiles	0.1	2001 Alves, Lada & Lada	2011 Pineda et al.	2010 Schnee et al.	2012 Nielbock et al.
filament/core kinematics (coherence)	0.1	1998 Goodman et al.	2010 Pineda et al.	2011 Hacar & Tafalla	
adaptive optics, multiplicity	0.01	1993 Ghez, Neugebauer & Matthews	2012 King et al.		
(3D) motions of masers & young stars	0.01	1968 Lesh	2012 Rygl et al.	2004 Goodman & Arce	
“hot” cores in massive-star forming regions	0.01	1988 Keto, Ho & Haschick	2009 Zhang et al.		
SED-based “disk” evolution models	0.005	1987 Adams, Lada & Shu	2006 Robitaille et al.	2012 Offner et al.	
interferometer “disks”, disk holes (lower-mass)	0.005	1991 Beckwith & Sargent	2009 Carrasco-González et al.	2002 Wilner et al.	
prevalence of disks	0.005	1990 Beckwith et al.	2009 Evans et al.		
accretion(?) “disks” around massive stars	0.001	1988 Keto, Ho & Haschick	2012 Beuther, Linz & Henning		
VELLOs--First Cores	0.0001	2005 Kauffmann et al.	2011 Pineda et al.	1969 Larson	
Pre-Stellar IMF (Luminosity-->Mass)	1E-08	2002 Muench et al.	2012 Da Rio et al.	1999 Luhman et al.	
grain growth, reddening laws, ices	1E-18	1977 Cohen	2012 Foster et al.		