

What do Graduate Schools Look For? A Comparison of Atmospheric Sciences Programs

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Chair, AMS Board on Higher
Education

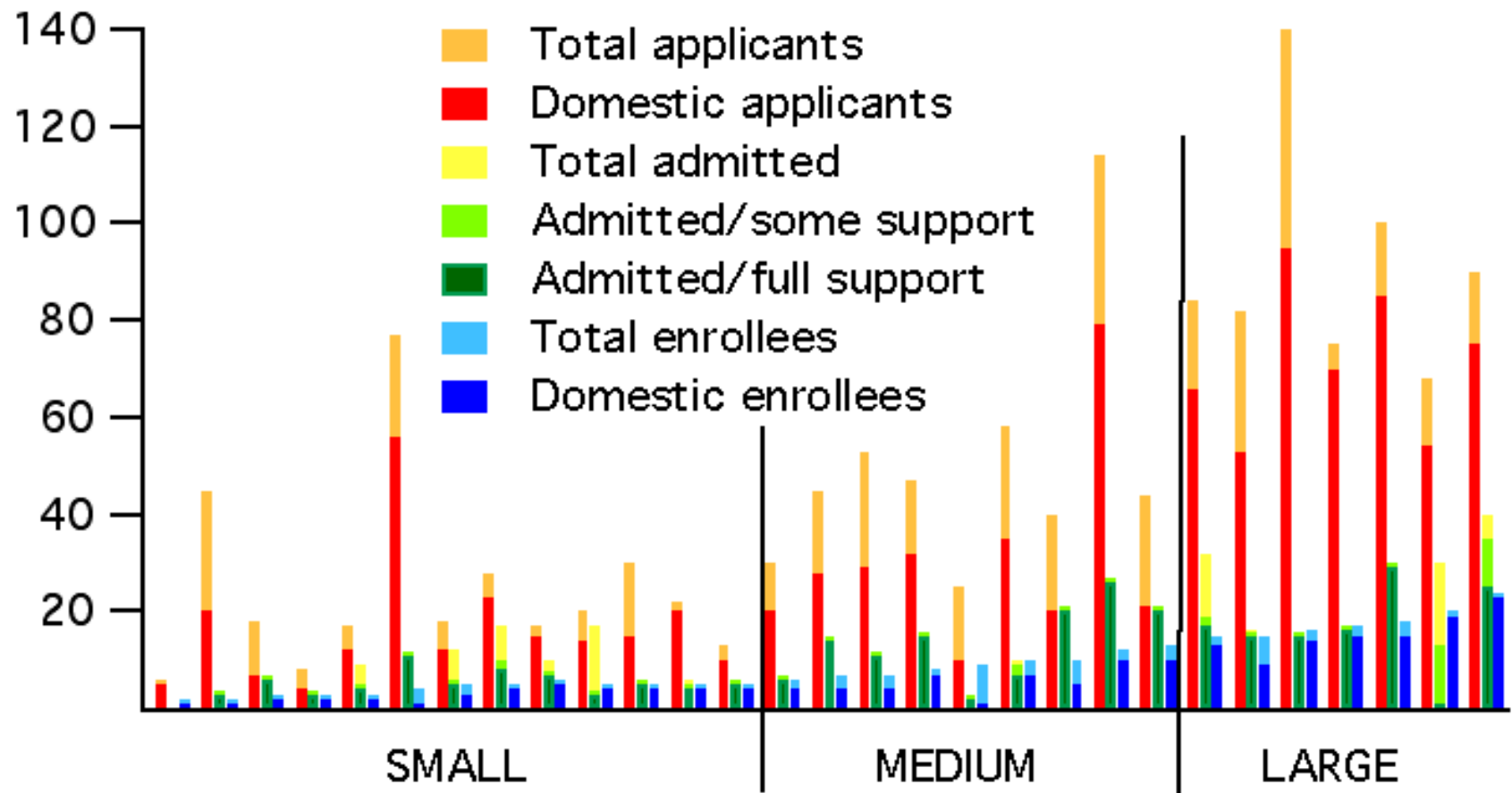
The Survey

- Goals
 - Provide useful comprehensive information to students considering graduate schools
 - Provide comparative information for graduate schools
- Sponsored by AMS and UCAR
 - Thank-yous: Donna Charlevoix, Kerry Cook, Alan Robock, Don Collins, Brian Mardirosian, Keith Seitter, Richard Anthes, Susan Friberg, and John Monteverdi

Participating Schools

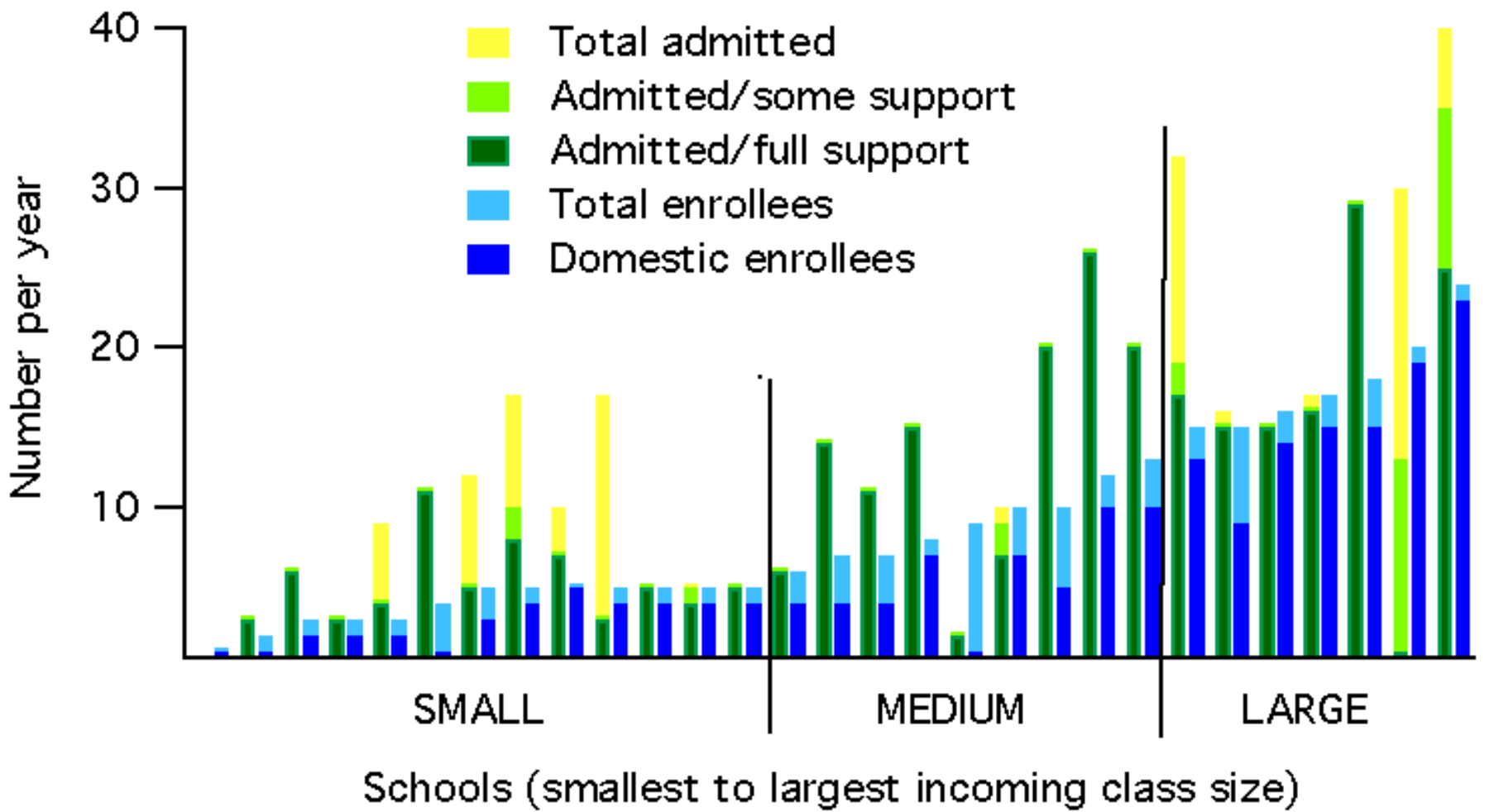
- U Alaska-Fairbanks
 - U Arizona
 - UC Davis
 - UC Irvine
 - UC San Diego
 - U Chicago
 - Colorado State U
 - Cornell U
 - Florida State U
 - U Houston
 - U Maryland
 - McGill U
 - U Miami
 - U Nebraska at Lincoln
 - U Nevada at Reno
 - U New Hampshire
 - North Carolina State U
 - Oregon State U
 - U Oklahoma
 - Penn State U
 - Princeton U
 - Purdue U
 - Rutgers U
 - San Francisco State U
 - Stanford U
 - SUNY Stony Brook
 - Texas A&M U
 - Texas Tech U
 - U Washington
- Total: 29 (incl. 39% of UCAR members)

Number per year



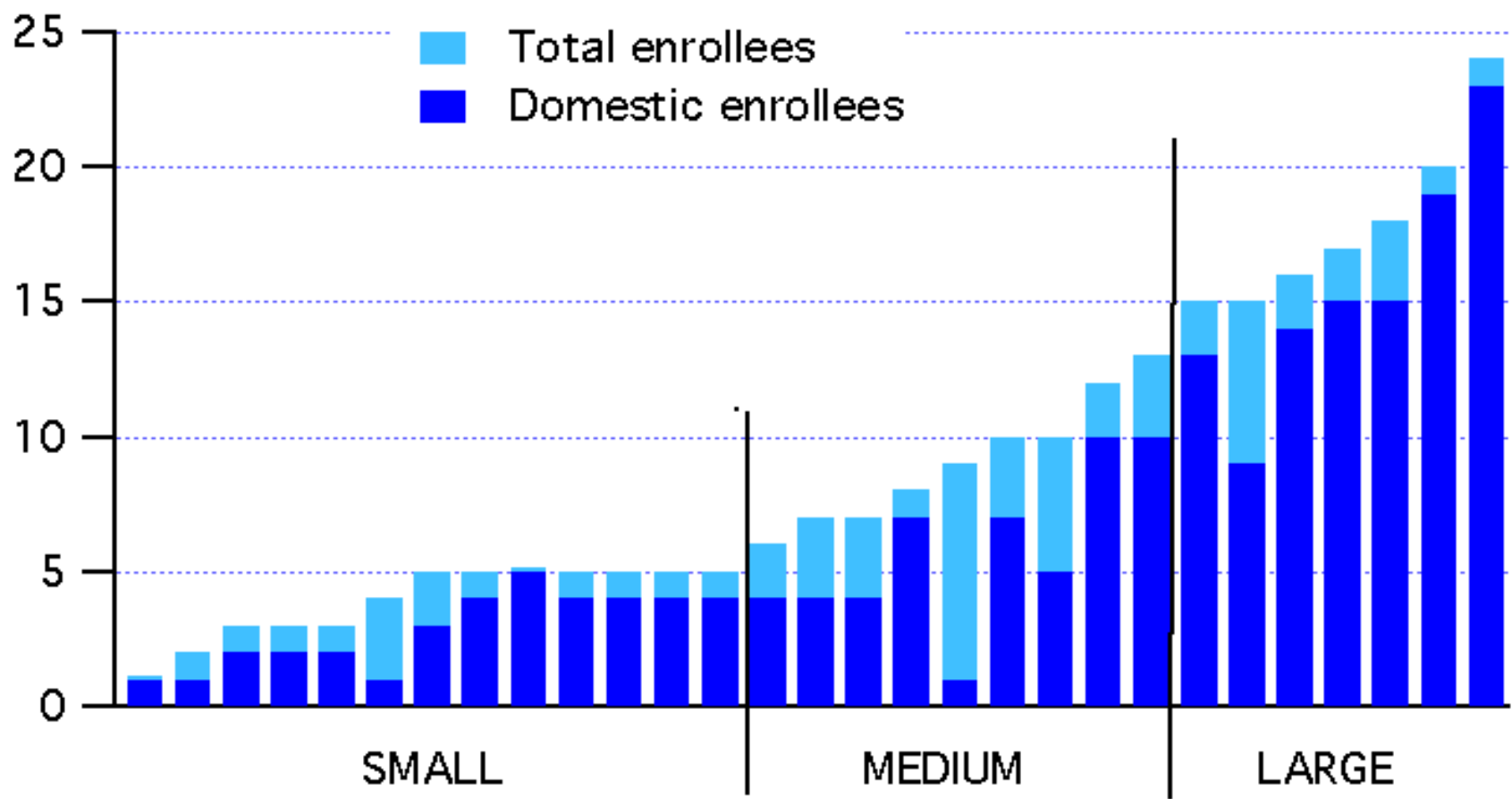
Schools (smallest to largest incoming class size)

69% of applications are domestic; enrollment is 76% domestic
18% of applicants become enrollees; “highly competitive” = “moderately competitive”



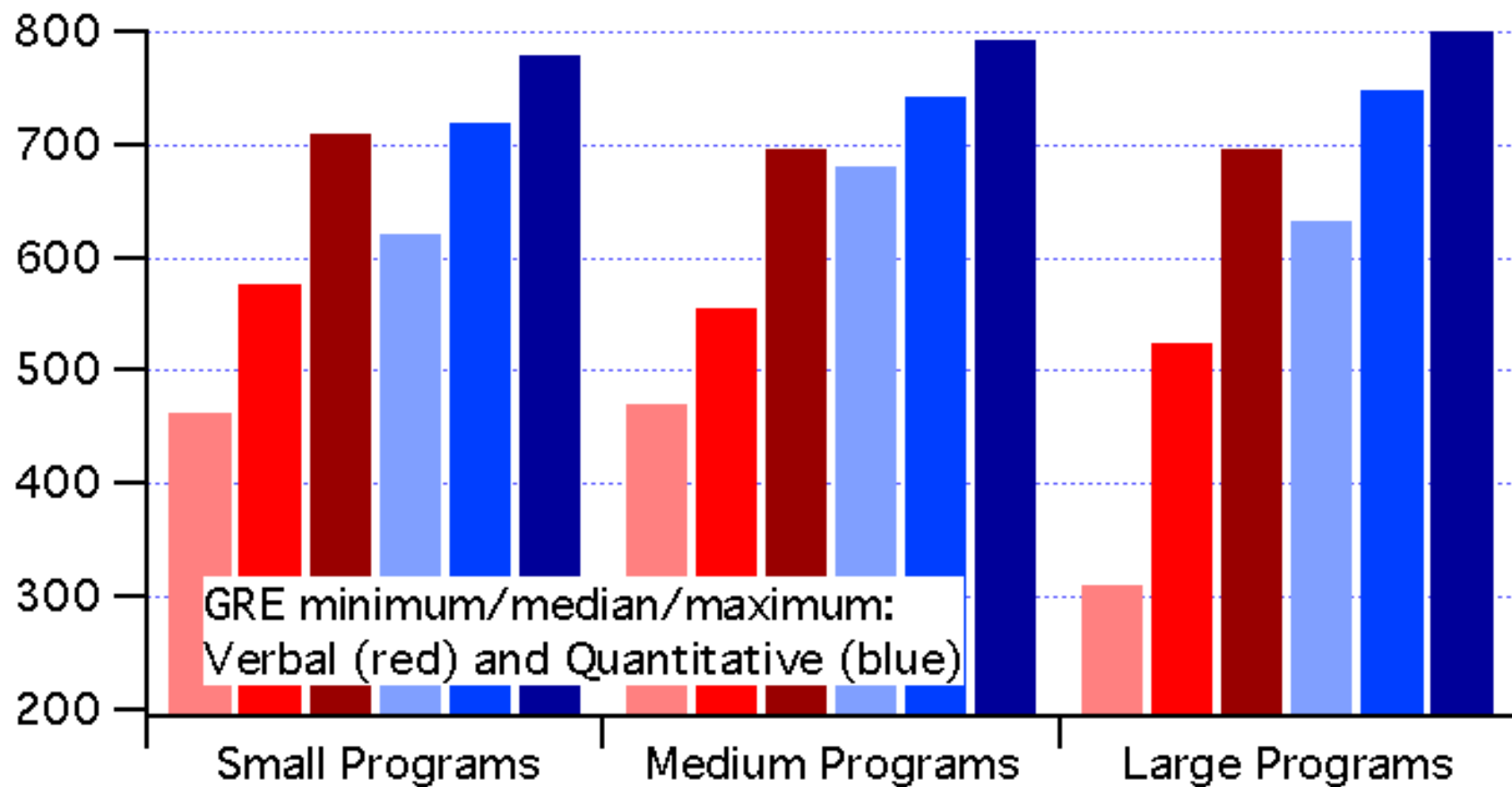
16 out of 29 programs admit only with full support

Number per year



Schools (smallest to largest incoming class size)

GRE score



The typical GRE scores of our incoming graduate class are (leave blank any GRE parts that are not considered in admissions):

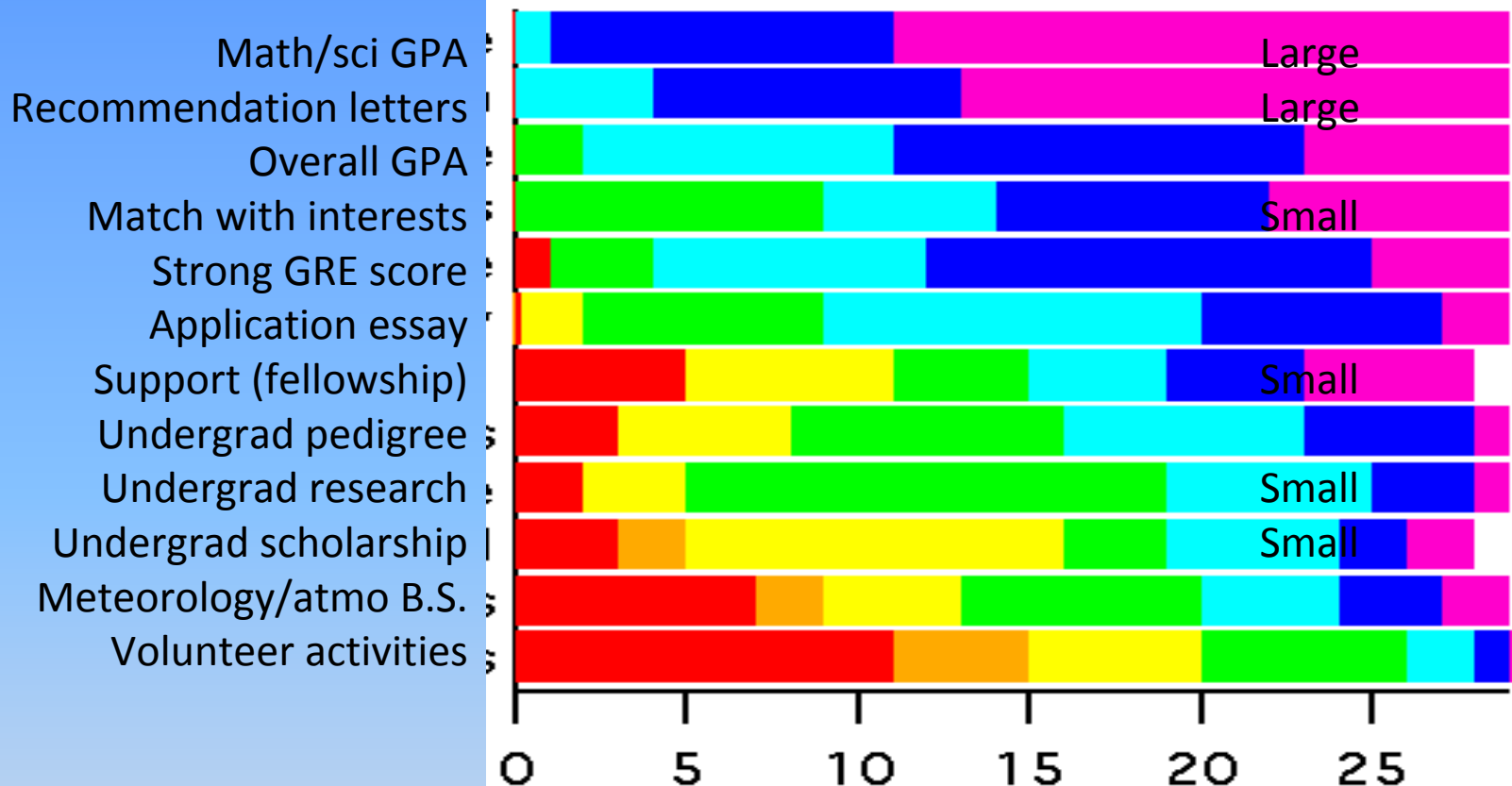
V min	V med	V max	M min	M med	M max		
430	570	720	690	760	800	1330	
380	540	640	630	700	770	1240	
300	400	650	675	775	800	1175	
	500			700		1200	
			580	700	800		
420	500	720	680	720	800	1220	
	530						
550	600	750	650	700	750	1300	
500	625	750	650	700	790	1325	
470	590	800	550	720	800	1310	
	610	780		740	800	1350	
400	580	700	680	770	800	1350	
	520			760		1280	
540	570	640	800	800	800	1370	
430	520	590	600	760	800	1280	
540	605	670	720	740	760	1345	
450	540	750	620	725	790	1265	
420	485	590	640	685	710	1170	
320	550	740	590	740	800	1290	
	650			760		1410	
380	520	700	580	700	770	1220	
600	700	780	600	725	800	1425	

To be strongly considered for admission, an applicant should have at least the following overall grade point average (maximum 4.0)

meteorology degree from a strong program:	meteorology degree from a lesser program:	degree in mathematics:	degree in physics:	degree in chemistry:	degree in other earth sciences:	non-science undergraduate degree:	with math and science courses only
3.5	3.7	3.5	3.5	3.5	3.7	3.7	3.7
3.3	3.5	3.3	3.3	3.3	3.3	3.5	3.3
3.5	3.9	3.5	3.5	3.5	3.9	3.9	3.5
3.2	3.4	3.5	3.5	3.5	3.5		3.5
3	3.5	3	3	3	3.5	3.5	3
3.3	3.6	3.4	3.4	3.4	3.5	3.8	3.4
3	3	3	3	3	3		3
2.7	3	2.7	2.7	3	3	3.3	2.7
3	3	3	3	3	3	3	3
3.5	3.8	3.2	3.2	3.4	3.8	4	3.5
3.5	3.5	3	3	3	3.8	4	4
3.5		3.5	3.5	3.5	3.5		3.5
3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
3.3	3.3	3.3	3.3		3.3		3.3
3	3	3	3	3	3		
3.8	3.9	3.5	3.5	3.5	3.6		
3.2	3.5	3.4	3.3	3.4	3.3	3.5	
3	3	3	3	3	3		3
3.4	3.6	3.5	3.3	3.5	3.2	3.3	3.2
3.5	3.75	3.5	3.5	4	3.5	3.9	3.5
3.5	3.5	3.5	3.5	3.5	3.5	3.7	3.7
3	3	3	3	3	3	3	3
3	3	3	3	3	3	3	3
3.2	3.2	3.2	3.2	3.2	3.2	3	3.5
3.6	3.6	3.6	3.6	3.6	3.6	3.9	3.6
3.5	3.75	3.5	3.5	3.5	3.5	3.5	3
3.6	3.8	3.7	3.7	3.8	3.7	3.8	3.8

TABLE 1: -What must students show in their application just to be admitted to a graduate atmospheric sciences program? Percentage of responding schools selecting each characteristic are shown.

Characteristic	Percentage
Reasonably good letters of recommendation	97
A reasonably good overall grade point average	97
A reasonably good grade point average in mathematics and science	97
A reasonably good GRE score	93
A reasonably good correspondence between interests and faculty research programs	62
A reasonably good application essay	59
An undergraduate degree in meteorology or atmospheric sciences	10
An undergraduate degree from one of the leading undergraduate programs	3
Undergraduate research or internship experience	3
Accomplishments with volunteer or student organizations	0
An undergraduate scholarship, fellowship or other form of competitive award	0
Self-support for graduate school (graduate fellowship, etc.)	0



- (1) Extremely important
- (2)
- (3)
- (4) Somewhat important
- (5)
- (6)
- (7) Doesn't matter

Minor Issues

- Does a very early application help?
 - Yes: 6
 - Includes 4 of 8 largest schools
 - No: 23
- What if a student applies for spring?
 - Not considered: 4%
 - Considered for spring only rarely: 32%
 - Considered for spring usually: 43%
 - Considered for next fall: 21%

Article In BAMS: Advice to Students

- Cultivate letter writers
- Develop research interests
- Pursue fellowships
- “Get a faculty member somewhere excited about you.”