
Index

- AAA 150
 AAVSO 46
 abstracting journals 149
 Alexandrian Museum 11
 archives 37
 definition 38
 degradation 37
 elements 38
 history 35
 main requirements 47
 observatory archives 44
 plate archives 44
 reduced data 46
 reduction procedure 41
 support media 37
 unpublished observations 158
 what to preserve 40
 why to preserve 40
 ASTRONET 140
- best value 31
 bibliographic inaccessibility 51, 94
 bibliographies, astronomical 149
 by object 151
 machine-readable 151
 specialized 151
 bibliometric criteria 178
 BIEA 126
 books 144, 145, 162
 Bradford's law 172
- Carte du Ciel 36
 catalogues 52, 74
 absolute 52
 after-life 55
 availability 83
 bibliographic compilation 52
 compilation 52
 computer-readable versions 56
 critical compilation 52
 deficiencies of coverage 83, 85
- definition 52, 53
 elements 53
 errors 55
 fundamental 52
 general compilation 52
 header 57
 non-stellar data 80
 cluster data 80
 clusters of galaxies 82
 galaxies 81
 Magellanic Clouds 82
 nebulae and globules 80
 parameters of galaxies 81
 quasars 82
 radio and X-ray sources 82
 special types of galaxies 81
 observational 52
 status code 130
 stellar data 74
 binaries 79
 diameters 79
 magnetic fields 79
 masses 79
 parallaxes 76
 photometry 77
 polarizations 79
 positions and proper motions 75
 radial velocities 76
 rotation 79
 spectrophotometry 78
 spectroscopy 78
 variables 79
 CDS = Centre de Données Stellaires 126
 charge-coupled devices 37
 clay tablets 10, 35, 37
 CODATA 183, 190
 completeness of data knowledge 104
 computers 111
 Córdoba Observatory 13
 correspondence 146
 cross-identification 133
 COSPAR 184, 192
 critical evaluation of data 115

196 *Index*

- CSI = catalogue of identifications 133 (*see also* cross-identification)
- data 24
 acquisition rate 40
 archives 38
 analysed = reduced 28
 best values 115
 calibrated = edited 28
 compilation 156
 critical 32
 definition 24, 27
 edited = calibrated 28
 errors 29
 examples 24
 in teaching 27
 journal 157
 kinds of 27
 presentation 29
 raw data 27
 reduced = analysed 28
 units 29
- data bank 110, 112
- data base 110
 compatibility 122
 definition 112
 directory 123
 integrity 119
 journalization 120
 presentation 121
 proof reading 119
 resilience 120
 security 118
 standards 121
- data centres 126
 access to information 138
 announcement of availability 130
 characteristics 127
 definition 127
 economic aspects 130
 future 141
 legal aspects 132
 manpower problems 131
 standardization 128
- data collection 110, 112
 critical evaluation 115
 definition 112
 establishment 112, 115
 updating 114
 storage forms 110
- data growth 93
 annual rate 93, 100
 doubling time 93, 102
 compound indicator 104
 exponential rate 93, 100, 164
 for specific data 94
 asteroids 95
 photometric data 97
 pulsars 98
- quasars 98
 spectroscopic binary orbits 95
 trigonometric parallaxes 96
 variable stars 98
 visual binaries 96
- for classes of objects 102
 for types of objects 104
 index of redundancy of certain data 94
 logistic curve 100
 rate 93
- data, international organizations 183
- data, knowledge completeness 104
 for galaxies 106
 for stars 104
- data presentation 29
- designation of astronomical objects 58
 and position 62
 and priority right 69
 dictionary of synonyms 62
 dictionary of nomenclature 61
 Durchmusterungen 59
 IAU resolution 65
 IAU rules 64
 official practices 65
 of objects 61
 of stars 58
 of non-stellar objects 63
 rules 61
- directory, astronomical 186
 data bases 123
 data centres 133
- electronic journal 156
- errors, in general 29
 accidental = internal 30
 external = systematic 30
 internal = accidental 30
 magnitude of 31
 systematic = external 30
- esteem approach 179
 evaluation 177
- FAGS 184, 190
- grey literature 155
 growth of data 93
 growth of scientific information 162
- header 57
- IAU 183, 184
 Commission 5 186
 Commission 14 186
 Working Groups 186
- ICSTI 183, 192
 ICSU 183

Index

197

- ICSUAB 193
 impact 178
 importance of journals, relative 172
 intellectual property 132
 internal reports 153
 international data organizations 183
 interview 179
 invited review paper 154
 IUGG 183, 188, 189
 IUGS 188
 IUPAP 188
- journal, scientific 148, 162
 relative importance 172
- language barriers 174
 list 50
 literature search 158
 logistic curve = sigmoid 100
 Lotka's law 174
 log book = observing file 36, 39, 43
- magnetic tape 37
 magnetic disc 37
 Matthew effect 179
 meetings 154
 colloquium 154
 conference 154
 symposium 154
 workshop 154
 microfiche 156
 microfilm 38
 microprint 155
 minor publications 153, 162
 models 26
 much-quoted paper 178
 multiple authorship 176
- network 138
 communication facility 138
 public 139
 specialized 140
 newsletters 153
- observations 1
 coordination 8
 definition 1
 elements of definition 2
 examples 1
 planning 5, 7
 programme 6
 programme type, monographic 6
 programme type, survey 6
 observatories 2
 American 14
- archives 44
 definition 10, 13, 15, 22
 Greek 10
 history 10
 maximum efficiency 18
 medieval 12
 mega-observatory 16
 modern 19
 mountain stations 14
 multinational facilities 15
 Muslim 11
 national facilities 15
 publications 152, 162
 radio astronomy observatories 19
 space institute 20
 size 17
 observing file = log book 36, 39, 43
 optical disc 38
 observational archives 35
- paper 37, 144
 paper counts 177
 papyrus sheets 37
 parchment 37
 Paris Observatory 12
 PASCAL 113
 peer-review system 147
 periodical 148
 photoelectric photometry 36, 41
 plate archive 42
 population variance 30
 photographic plates 36
 presentation of astronomical data 50
 primary literature 155
 priority rights 69
 probable error of the mean 30
 proceedings, of learned societies 146
 of meetings 153
 productivity 176
 program committee 6, 16
 prints 146
 publication of scientific information 144
 form 155
 and productivity 174
 mean life 166
 usefulness 166
 publish or perish 180
- quotations 178
- radio astronomy 19
 rapid journals 152
 reduced data archives 46
 reduction procedure and archiving 42
 referee 147
 reference data journal 157
 rejection of discordant data 31

198 *Index*

- remote operation 21
- review paper 154
- Royal Greenwich Observatory 12, 17

- sample mean 30
 - standard deviation 30
- satellites, artificial 42
- scientific information, publication of 144
- scientific information, growth of 162
- SCI 151
- SCOSTEP 188
- sigmoid = logistic curve 100
- SIMBAD 114, 134
- space astronomy 19
 - experiments 45
 - observations 45
- standard datum 32
- standard deviation of the mean 30
- standard 32
 - fundamental = primary 33
 - general 32
 - primary = fundamental 33
 - secondary 33
- STARLINK 140
- support media 37
- synoptics 158

- theories 26
- top journal 174
- trailer 57
- Tycho Brahe 36

- units 29
- Uraniborg 12
- URSI 184

- WDC 184