

INDEX

- aberration 15, 48, 112
adjustment 139ff.
astrolabe 41ff., 85ff., 129ff., 135, 139, 143,
see also Danjon astrolabe
astrometric satellite 157
atmosphere 178, 185
atmospheric drag 232, 240ff., 265
atmospheric effects on the Earth's rotation
61ff., 110, 302, 309
axis of angular momentum 8, 92, 169ff.
axis of figure 8, 93, 115ff., 166ff.
axis of inertia 115ff.
axis of rotation 8, 92, 169, 313, 317
- Beacon Explorer C 239
body tide 67ff.
- Bureau International de l'Heure (BIH) 2, 6, 23,
29, 42, 47, 76, 83, 109, 125, 138, 145, 138,
145, 213, 231, 235, 239, 257, 268, 279,
298, 308, 315, 324
Bureau International de l'Heure (BIH) 1968
system 29, 47, 96, 142, 175, 201
- cesium beam frequency standards 19
Chandler free motion of the pole 2, 120, 145,
263, 269, 281, 301ff., 307
continental drift 110, 253, 321
Conventional International Origin (CIO) 29, 48,
95ff., 114, 123, 175, 183, 240, 265
core-mantle coupling 55, 301ff.
core of the Earth 201, 313
correlation functions 5
covariance analysis 227ff.
- Danjon astrolabe 47, 76, 110, 137, see also
astrolabe
data analysis 129ff., 139ff., 290ff., 297
data transmission 293
deep space network 199ff., 226ff., 293
diurnal nutation 15, 35, 79, 112, 169ff., 313
Doppler derived polar coordinates 74, 75, 110,
212, 263ff., 279ff., 287ff., 295ff.
Doppler Polar Motion Service (DPMS) 145,
212, 298
dynamically defined systems 152
- earthquakes 191, 243, 246, 309
Earth's gravity field 231, 240, 265
Earth models 3, 44, 167, 169ff., 301ff., 313
Earth tides 15, 25, 36, 50, 79, 110, 187, 200,
231, 240, 245, 261, 265, 315
ephemeris Earth 167
ephemeris reference frame 165ff
equinox 9
EROLD campaign 251, 257ff., 261
excitation function 279, 281, 307ff.
- filters 37
fundamental astrometry 165ff.
fundamental star catalog 9, 85ff., 91, 110,
155ff., 201
- general relativity 152, 201
geomagnetic effects 301ff.
GEOS-3 239ff.
- hydrogen frequency standards 19, 20, 178,
194, 206
- intermediary systems 161, 168
international atomic time, see Temps Atomique
International (TAI)
international coordination 324
International Latitude Service (ILS) 2, 83,
103, 127, 145, 268, 308, 326
International Polar Motion Service (IPMS) 76,
83, 125, 145, 257, 268, 324
ionosphere 179, 185, 202
- Jeffreys-Atkinson axis 92, 168
- kinematically defined systems 153
- LAGEOS 155, 231ff., 243, 245, 260
laser ranging 75, 99, 175
laser ranging to satellites 155, 231ff., 239ff.,
245, 247
length of day 53
Liouville equation 116
local effects 110, 132, 158, 262, 321
longitude reference points 139ff.
Loran-C 19
Love numbers 50, 67ff., 79, 170, 187, 265
315
lunar laser ranging 110, 154, 245, 247ff., 257ff.,
261
lunar librations 154, 253
lunar occultations 55, 155

- lunar orbit 81, 249, 253
lunisolar torque 170
- mean latitude 29, 123, 125
mean pole of epoch 29, 97
MEDOC campaign 287ff., 295ff.
- nutations 2, 8, 35, 41ff., 79ff., 91, 104ff., 110, 132ff., 148, 169ff., 188, 200, 313, 315, 325, 326, see also diurnal nutation
- ocean tides 67ff., 231, 317
orbit determination 231ff., 239, 264ff., 291, 297
- photographic zenith tube 42, 47, 65, 67ff., 75, 79, 110
plate motion 15, 159, 191, 253, 304
polar coordinates 37, 75ff., 103ff., 125, 145, 234ff., 241, 263ff., 279
polar motion 29ff., 79, 89, 145, 179, 191, 199, 231ff., 239ff., 245, 247, 253, 262, 263ff., 279ff., 295ff., 301ff., 307ff.
Polaris project 191ff.
precession 1, 8, 91, 110, 170, 188, 200, 313
proper motions 15, 104, 110
- quality factor 307
- radiation pressure 231, 265
radio interferometry 74, 75, 98, 110, 156, 175, 177ff., 183ff., 191ff., 199ff., 211ff., 225ff., 245
radio sources 156, 163, 179, 187, 204, 212, 225ff.
radiometer 186
reference systems 7ff., 29ff., 32ff., 89ff., 103, 109, 151ff., 165ff., 175, 183, 192, 201, 204, 231, 247, 265, 280, 298, 323
- refraction 65, 104, 113, 129ff., 240, 245
relativistic deflection of electromagnetic waves 15, 188
rotational velocity 53, 59, 313
- secular acceleration of the Moon 153, 155
secular geomagnetic changes 301ff
secular polar motion 29ff., 120, 123, 285, 301ff.
secular variation of latitude 123, 125
seismic regions 321
sidereal time 184
SI system 19
smoothing 24, 68, 76, 130, 132, 137
solar activity 59
special relativity 200
spectral analysis 25, 32, 53, 56, 59, 145ff., 275, 307ff., 315
star catalogs 65, 74, 85ff., 104, 106, 110, 134, 137, see also fundamental star catalog
sway 16
- tectonic motions 110, see also plate motion, continental drift
Temps Atomique International (TAI) 12
tidal effects 67ff, 154, 170, 305, 323
tidal friction 317
time scales 19ff., 23ff., 29ff., 47ff.
troposphere 178, 185, 202, 240, 245
- Universal Time 12ff., 23ff., 29ff., 47, 59, 73ff., 75ff., 83, 109, 138, 179, 184, 191, 199, 213, 236, 245, 249, 259, 261, 266, 315, 323
- variations in the Earth's rotation 2, 4, 25, 49ff., 53, 55, 59, 61ff., 71, 247, 301ff., 317
variation of latitude 1, 2, 125, 138, 145ff.
- zenith telescope 76, 104, 110, 123, 135