FAIR DECATHLON MODEL

Article 6 Annex - Day Two: 100-Point FDM-40N Event Cohorts

Unified master database; 27 741 complete decathlon competition records

Database	Unified master database; 27 741 complete decathlon competition records
Events	110 m hurdles; discus throw; pole vault; javelin throw; 1500 m
Cohorts	1000+; 900-999; 800-899; 700-799; 600-699; 500-599; 400-499; 300-399; 200-299; 100-199; 0-99
Event score	FDM-40N, using the published six-decimal coefficients and truncated to an integer
Total statistics	Recalculated official (OFF) decathlon total stored in the unified master
Rounding	Mean and median OFF totals rounded to whole points
Counting unit	Competition records, not unique athletes

Method. Each raw event performance was scored with the published FDM-40N coefficients. The performance was assigned to one of eleven bands shown from the highest to the lowest: an open-ended 1000+ cohort followed by consecutive 100-point cohorts down to the 0-99 cohort. The full recalculated OFF total of the same decathlon was summarized within that band. Raw performance ranges are shown at the database practical precision of 0.01 seconds or 0.01 metres. Exact mathematical boundaries may lie between adjacent hundredths.

Coverage note. This annex uses the final unified 27,741-record master. Coverage is dense and systematic in the upper part of the database and broader but less census-like in the lower population. The annex is intended as a structural diagnostic of event cohorts, not as a representative census of all decathletes.

Columns. FDM-40N cohort band; theoretical raw-mark interval at practical precision; number of competition records; maximum, minimum, mean and median OFF total; and maximum-minus-minimum spread. Empty cohorts are retained with N=0 and are greyed out.

6. 110 m hurdles

FDM-40N coefficients: A=0.649225, B=28.5, C=2.712329; lower marks are better; input in seconds. Observed FDM-40N score range: 0-1014. All eleven rows sum to 27 741 competition records.

FDM-40N cohort	Raw performance range	N	Max OFF	Min OFF	Mean OFF	Median OFF	Max-Min
1000+	<= 13.52 s	6	9 018	8 282	8 702	8 718	736
900-999	13.53 s - 14.10 s	316	9 126	6 840	8 195	8 233	2 286
800-899	14.11 s - 14.71 s	3 090	8 961	5 727	7 679	7 709	3 234
700-799	14.72 s - 15.37 s	8 697	8 804	4 864	7 237	7 223	3 940
600-699	15.38 s - 16.09 s	7 736	8 364	4 294	6 876	6 924	4 070
500-599	16.10 s - 16.90 s	3 388	8 206	3 002	6 398	6 502	5 204
400-499	16.91 s - 17.82 s	1 491	7 266	3 834	5 683	5 665	3 432
300-399	17.83 s - 18.89 s	853	7 100	3 518	5 032	5 043	3 582
200-299	18.90 s - 20.22 s	838	6 419	2 303	4 486	4 466	4 116
100-199	20.23 s - 22.09 s	888	6 444	2 500	3 917	3 871	3 944
0-99	>= 22.10 s	438	6 632	1 314	3 374	3 335	5 318

N counts performances, so the same athlete may appear more than once. Max and min are descriptive extremes rather than estimates of population limits. Means and medians are rounded to the nearest whole OFF point.

7. Discus throw

FDM-40N coefficients: A=26.413889, B=4, C=0.927282; higher marks are better; input in metres. Observed FDM-40N score range: 52-1061. All eleven rows sum to 27 741 competition records.

FDM-40N cohort	Raw performance range	N	Max OFF	Min OFF	Mean OFF	Median OFF	Max-Min
1000+	>= 54.35 m	9	8 961	7 913	8 486	8 539	1 048
900-999	48.94 m - 54.34 m	273	9 126	6 849	8 062	8 107	2 277
800-899	43.58 m - 48.93 m	2 608	9 026	4 412	7 708	7 719	4 614
700-799	38.27 m - 43.57 m	8 232	9 045	3 315	7 293	7 281	5 730
600-699	33.02 m - 38.26 m	8 774	8 534	3 171	6 863	6 934	5 363
500-599	27.84 m - 33.01 m	4 299	7 941	2 481	6 176	6 393	5 460
400-499	22.75 m - 27.83 m	2 143	7 261	2 202	5 033	5 058	5 059
300-399	17.75 m - 22.74 m	1 155	7 177	1 418	4 151	4 112	5 759
200-299	12.88 m - 17.74 m	236	6 527	1 314	3 647	3 589	5 213
100-199	8.21 m - 12.87 m	10	3 997	1 827	3 084	3 035	2 170
0-99	<= 8.20 m	2	6 730	6 035	6 383	6 383	695

N counts performances, so the same athlete may appear more than once. Max and min are descriptive extremes rather than estimates of population limits. Means and medians are rounded to the nearest whole OFF point.

8. Pole vault

FDM-40N coefficients: A=1.125696, B=100, C=1.108810; higher marks are better; input in centimetres inside the formula. Observed FDM-40N score range: 31-1048. All eleven rows sum to 27 741 competition records.

FDM-40N cohort	Raw performance range	N	Max OFF	Min OFF	Mean OFF	Median OFF	Max-Min
1000+	>= 5.57 m	9	8 287	7 011	7 555	7 346	1 276
900-999	5.15 m - 5.56 m	322	9 126	6 122	7 992	8 053	3 004
800-899	4.74 m - 5.14 m	2 921	9 026	5 095	7 671	7 703	3 931
700-799	4.31 m - 4.73 m	8 119	8 730	3 942	7 250	7 249	4 788
600-699	3.88 m - 4.30 m	8 906	8 483	3 244	6 869	6 936	5 239
500-599	3.45 m - 3.87 m	3 404	8 040	2 759	6 250	6 421	5 281
400-499	3.00 m - 3.44 m	1 824	7 770	2 432	5 439	5 506	5 338
300-399	2.55 m - 2.99 m	985	6 933	2 341	4 641	4 626	4 592
200-299	2.07 m - 2.54 m	944	5 810	1 418	3 959	3 941	4 392
100-199	1.58 m - 2.06 m	293	5 576	1 314	3 522	3 529	4 262
0-99	<= 1.57 m	14	3 910	1 775	3 120	3 370	2 135

N counts performances, so the same athlete may appear more than once. Max and min are descriptive extremes rather than estimates of population limits. Means and medians are rounded to the nearest whole OFF point.

9. Javelin throw

FDM-40N coefficients: A=34.363170, B=7, C=0.797549; higher marks are better; input in metres. Observed FDM-40N score range: 43-1050. All eleven rows sum to 27 741 competition records.

FDM-40N cohort	Raw performance range	N	Max OFF	Min OFF	Mean OFF	Median OFF	Max-Min
1000+	>= 75.48 m	8	8 691	7 048	8 063	8 232	1 643
900-999	67.00 m - 75.47 m	309	9 126	6 809	7 959	8 040	2 317
800-899	58.77 m - 66.99 m	3 193	9 045	5 958	7 606	7 606	3 087
700-799	50.79 m - 58.76 m	9 232	8 961	3 878	7 226	7 208	5 083
600-699	43.09 m - 50.78 m	8 471	8 504	3 137	6 781	6 883	5 367
500-599	35.72 m - 43.08 m	3 771	8 081	2 481	5 932	6 044	5 600
400-499	28.71 m - 35.71 m	1 876	7 742	2 176	4 734	4 695	5 566
300-399	22.14 m - 28.70 m	708	7 236	1 314	3 988	3 935	5 922
200-299	16.11 m - 22.13 m	153	6 856	1 507	3 647	3 562	5 349
100-199	10.82 m - 16.10 m	18	5 763	1 827	3 743	3 618	3 936
0-99	<= 10.81 m	2	3 139	3 137	3 138	3 138	2

N counts performances, so the same athlete may appear more than once. Max and min are descriptive extremes rather than estimates of population limits. Means and medians are rounded to the nearest whole OFF point.

10. 1500 m

FDM-40N coefficients: A=0.496015, B=480, C=1.390723; lower marks are better; input in seconds. Observed FDM-40N score range: 0-1011. All eleven rows sum to 27 741 competition records.

FDM-40N cohort	Raw performance range	N	Max OFF	Min OFF	Mean OFF	Median OFF	Max-Min
1000+	<= 4:02.25	3	6 946	4 183	6 016	6 918	2 763
900-999	4:02.26 - 4:19.60	460	9 045	3 965	7 386	7 481	5 080
800-899	4:19.61 - 4:37.50	6 588	9 126	2 488	7 233	7 235	6 638
700-799	4:37.51 - 4:56.03	11 437	8 961	2 832	6 932	7 027	6 129
600-699	4:56.04 - 5:15.34	5 857	8 755	2 443	6 419	6 730	6 312
500-599	5:15.35 - 5:35.57	2 164	8 546	1 827	5 611	5 722	6 719
400-499	5:35.58 - 5:56.98	802	7 632	1 955	4 831	4 658	5 677
300-399	5:56.99 - 6:19.97	246	7 046	2 176	4 226	3 997	4 870
200-299	6:19.98 - 6:45.26	107	7 155	1 821	3 851	3 766	5 334
100-199	6:45.27 - 7:14.60	45	6 456	1 314	3 344	3 244	5 142
0-99	>= 7:14.61	32	5 707	1 418	3 199	3 171	4 289

N counts performances, so the same athlete may appear more than once. Max and min are descriptive extremes rather than estimates of population limits. Means and medians are rounded to the nearest whole OFF point.