

XC-SPI Data, Sources, and Evidence Standards

2026 public-data protocol

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Abstract

This protocol defines what information may enter XC-SPI, how sources are graded, how weekly data freezes are enforced, and how missing or contradictory evidence is handled. The central rule is simple: missing information becomes uncertainty; it does not become an invented fact.

1. Source Hierarchy

Grade A: primary/official. NCAA championship results; official timing results; current university athletics rosters; official program announcements; official transfer/professional status announcements; official meet/course documentation.

Grade B: strong but indirect. TFRRS athlete histories when an official meet page is unavailable; conference releases; program-level continuity statements that do not identify every athlete; a current track roster used as evidence of institutional membership but not of a championship lineup.

Grade C: unresolved/secondary. Reputable secondary reporting or stale roster evidence used only when no stronger public source exists. Grade C evidence widens uncertainty and cannot by itself justify a claim of verified availability.

2. Results

The 2025 NCAA Championship is the Week 0 anchor because every qualifying team was measured in the same championship field. TFRRS is the principal result ledger for the project.¹ During the season, each weekly run freezes official results completed through Sunday night.

3. Roster and Transfer Evidence

A current fall roster or explicit program announcement controls when available. Transfers move performance evidence to the destination school. A verified professional departure removes the athlete from the collegiate candidate pool. A class label alone is not treated as proof that eligibility is exhausted.^{2–6}

4. Postmodern Era Historical Dataset

The public Historical Success benchmark uses only 2020-forward NCAA championship evidence. Source profiles from 2020–2024 are matched to 2021–2025 next-season outcomes. The 2020 source season is flagged as disrupted and excluded in a sensitivity rerun. Historical team names and results come from official/TFRRS championship records; no coaches' poll or program prestige variable is used as a model input.

Historical model outputs are versioned separately from the frozen Preseason Score ledger. A historical-model update cannot silently rewrite a Power Ranking value.

5. Track Evidence

Indoor and outdoor 5,000/10,000 performances are used as standardized fitness signals. Shorter or steeplechase evidence may be used with lower comparability weight. Track evidence informs the preseason athlete prior; it is never converted into an XC time with a fixed seconds formula.²⁴

6. Course Evidence

Course effects use repeated-race performance as the dominant signal, partially pooled toward measurable course features such as altitude, elevation change, surface, and technicality. Nominal course labels are not allowed to create large adjustments without connected athlete/race evidence.

7. Weather and Ground Evidence

Race-day temperature, dew point, wind, and precipitation should be tied to the course and start time. Antecedent rainfall windows end before the race window to avoid counting the same precipitation twice. Direct official footing reports outrank rainfall-only inference. Weather-station distance and time offsets are retained as data-quality fields.

8. Weekly Freeze and Version Rule

A published ranking is immutable with respect to its data cutoff. If a roster page changes on Tuesday, the update belongs to the next release; it is not silently read backward into Monday's ranking. Every weekly run stores the source URL, access timestamp, source grade, model version, random seed, and simulation count.

9. Contradictions

When two credible sources conflict, the stronger and more current primary source controls. The losing source remains in the change log. If the conflict cannot be resolved, the athlete is marked unresolved and the uncertainty is propagated rather than manually settled.

10. Preseason Evidence Weights

Week 0 uses rule-based Confidence weights c_i rather than claiming literal calibrated probabilities:

$$c_i \in \{0.99 \text{ verified}, 0.85 \text{ probable}, 0.70 \text{ materially unresolved}, 0 \text{ verified unavailable}\}.$$

These weights shrink historical athlete evidence toward the replacement prior. They are parameters of the preseason audit, not empirical claims that an athlete has exactly an 85% chance of racing. The in-season model reserves p_i^{avail} for a genuine availability probability only if historical calibration supports one; lineup selection is a separate quantity.

11. Public Source Directory

The launch set uses TFRRS for the 2025 championship, the NCAA transfer summary, current official rosters where published, and official program releases where a fall-specific roster is not yet available. Explicit 2026 roster checks include Iowa State, NC State, Notre Dame, Tulane, Colorado, Wisconsin, North Carolina, Northwestern, Georgetown and Utah; program-level continuity is used more cautiously for New Mexico and selected combined track/cross-country roster pages.^{1–5;13–20}

References

- [1] TFRS. NCAA Division I Cross Country Championships. November 22, 2025. Gans Creek Cross Country Course, Columbia, Missouri. Accessed August 28, 2026. https://www.tfrs.org/results/xcc/27301/NCAA_Division_I_Cross_Country_Championships
- [2] Becton S. The top 10 most impactful transfers to know entering the 2026 college cross country season. NCAA.com. Published August 25, 2026. Accessed August 28, 2026. <https://www.ncaa.com/news/cross-country-women/article/2026-08-25/top-10-most-impactful-transfers-know-entering-2026-college-cross-country>
- [3] University of New Mexico Athletics. Lobos picked as favorites in MW cross country preseason polls. Published August 26, 2026. Accessed August 28, 2026. <https://golobos.com/news/2026/08/26/lobos-picked-as-favorites-in-mw-cross-country-preseason-polls>
- [4] Iowa State Athletics. 2026 Cross Country Roster. Accessed August 28, 2026. <https://cyclones.com/sports/cross-country/roster>
- [5] NC State Athletics. 2026 Cross Country Roster. Accessed August 28, 2026. <https://gopack.com/sports/cross-country/roster>
- [6] Oklahoma State Athletics. Oklahoma State cross country announces 2026 schedule. Published July 27, 2026. Accessed August 28, 2026. <https://okstate.com/news/2026/7/27/cowboy-cross-country-track-oklahoma-state-cross-country-announces-2026-schedule>
- [7] University of Louisville Athletics. 2026 cross country and track rosters. Accessed August 28, 2026. <https://gocards.com/sports/cross-country/roster>
- [8] University of Arkansas Athletics. Razorbacks prepare for 2026 with Mt. Ida preseason camp. Published August 15, 2026. Accessed August 28, 2026. <https://arkansasrazorbacks.com/razorbacks-prepare-for-2026-with-mt-ida-preseason-camp/>
- [9] BYU Athletics. 2026 Track and Field / Cross Country distance rosters. Accessed August 28, 2026. <https://byucougars.com/sports/womens-track-and-field/roster>
- [10] Wake Forest Athletics. 2026 Cross Country Roster. Accessed August 28, 2026. <https://godeacs.com/sports/cross-country/roster>
- [11] Washington State Athletics. 2026 Cross Country Roster. Accessed August 28, 2026. <https://wsucougars.com/sports/cross-country/roster>
- [12] University of Alabama Athletics. 2026 Track & Field, Cross Country Roster. Accessed August 28, 2026. <https://rolltide.com/sports/xctrack/roster>
- [13] University of Notre Dame Athletics. 2026–27 Cross Country Roster. Accessed August 28, 2026. <https://fightingirish.com/sports/cross/roster>
- [14] Tulane University Athletics. 2026 Cross Country Roster. Accessed August 28, 2026. <https://tulanegreenwave.com/sports/cross-country/roster/2026>
- [15] University of Colorado Athletics. 2026 Cross Country Roster. Accessed August 28, 2026. <https://cubuffs.com/sports/cross-country/roster>
- [16] University of Wisconsin Athletics. 2026 Women's Cross Country Roster. Accessed August 28, 2026. <https://uwbadgers.com/sports/womens-cross-country/roster/2026>
- [17] University of North Carolina Athletics. 2026 Cross Country Roster. Accessed August 28, 2026. <https://goheels.com/sports/cross-country/roster>
- [18] Northwestern Athletics. 2026–27 Women's Cross Country Roster. Accessed August 28, 2026. <https://nusports.com/sports/womens-cross-country/roster>
- [19] Georgetown Athletics. 2026–27 Women's Cross Country / Track Roster. Accessed August 28, 2026. <https://guhoyas.com/sports/womens-track-and-field/roster>
- [20] University of Utah Athletics. 2026 Cross Country Roster. Accessed August 28, 2026. <https://utahutes.com/sports/cross-country/roster/>
- [21] Virginia Tech Athletics. 2026 Track and Field Roster. Accessed August 28, 2026. <https://hokiesports.com/sports/track-field/roster>
- [22] National Collegiate Athletic Association. 2025 and 2026 NCAA Men's and Women's Track and Field and Cross Country Rules Book. Accessed August 28, 2026. https://ncaaorg.s3.amazonaws.com/championships/sports/crosstrack/rules/PRXTF_RulesBook.pdf
- [23] National Collegiate Athletic Association. Cross Country and Track and Field Playing Rules. Accessed August 28, 2026. <https://www.ncaa.org/championships/playing-rules/cross-country-track-and-field-playing-rules/>
- [24] TFRS. 2026 NCAA Division I Outdoor Track & Field Championships. June 10–13, 2026. Accessed August 28, 2026. <https://www.tfrs.org/results/96875>
- [25] Bradley RA, Terry ME. Rank analysis of incomplete block designs: I. The method of paired comparisons. *Biometrika*. 1952;39(3-4):324-345.
- [26] Brier GW. Verification of forecasts expressed in terms of probability. *Mon Weather Rev*. 1950;78(1):1-3.
- [27] Gelman A, Hill J. *Data Analysis Using Regression and Multilevel/Hierarchical Models*. Cambridge University Press; 2007.
- [28] Wood SN. *Generalized Additive Models: An Introduction With R*. 2nd ed. Chapman & Hall/CRC; 2017.
- [29] Durbin J, Koopman SJ. *Time Series Analysis by State Space Methods*. 2nd ed. Oxford University Press; 2012.
- [30] Gneiting T, Raftery AE. Strictly proper scoring rules, prediction, and estimation. *J Am Stat Assoc*. 2007;102(477):359-378.