

American Solar Challenge Timing & Scoring Reference

The following information is reference material regarding timing and scoring methodology for the American Solar Challenge. This information is supplemental to the event regulations and does not supersede them.

- **Stage Start Time**
 - Teams are released by Stage Start Officials separated by 1-minute intervals based on the previously announced Assigned Start Times.
 - If a team leaves before their Assigned Start Time, then the team's Official Stage Start Time is their Actual Start Time.
 - If the team leaves at or after their Assigned Start Time, then the team's Official Stage Start Time will remain their Assigned Start Time.
 - Penalties apply for teams that start driving before their Start Release Time where they are released by Stage Start Officials.
- **Checkpoint Arrival Time**
 - A team's Official Checkpoint Arrival Time is based on their entry at an open Checkpoint.
 - If a team doesn't enter a Checkpoint during its open hours, they do not get an Official Checkpoint Arrival Time.
 - If a team trailers to an open Checkpoint, their most recent Route Step driven on solar power and the time that the solar car is loaded on the trailer will be recorded by the team's Observer. Furthermore, the team needs to notify the Checkpoint Timing Officials that their solar car has entered the Checkpoint location. This time of notification will be logged as their Trailer Arrival Time and their Official Checkpoint Arrival Time will be the Checkpoint Driving Resumption Time.
 - If a trailering team fails to reach the next Checkpoint along the Tour before it closes, they must continue trailering to the next open Checkpoint or trailer to the Stage finish prior to the 8:00 pm evening battery impound time on the final day of the Stage.
 - The Checkpoint Close Time is not adjusted based on the staggered Official Stage Start Time for teams.
- **Checkpoint Departure Time**
 - Checkpoint Driving Resumption Time
 - If a team trailers to an open Checkpoint and wishes to continue driving the next Base Leg, their Checkpoint Release Time will be the Driving Resumption Time.
 - Teams that trailer to an open Checkpoint are exempt from serving the Checkpoint Hold Time.
 - Checkpoint Earliest Release Time
 - If the Checkpoint has a published Earliest Release Time, no teams are released to proceed along the next Base Leg of the Tour before this time.
 - Checkpoint Close Time

- If a team is serving a mandatory Hold Time while the Checkpoint closes, they must finish serving this Hold Time before they continue driving the next Base Leg.
 - If a team is at a Checkpoint when their Grace Period starts, they must declare their End of Day at the Checkpoint location.
 - If a team has any remaining Hold Time after declaring End of Day it will be served after their next morning start time.
 - If a team doesn't run Loops, their Checkpoint Release Time will be when they finish serving their Checkpoint Hold Time.
 - If a team runs Loops, their Checkpoint Release Time will be when they finish serving their Loop Hold Time after the successful completion of their final valid Loop.
 - If a team is serving a mandatory Hold Time when the Checkpoint closes, their Official Checkpoint Departure time will be their Checkpoint Release Time. Otherwise, if a team departs to proceed along the next Base Leg after the Checkpoint Close Time, then their Official Checkpoint Departure Time is the Checkpoint Close Time. In all other cases, their Official Checkpoint Departure Time is their Actual Departure Time.
 - If multiple solar cars are trying to leave the Checkpoint at the same time, priority will be given based on the earliest Official Checkpoint Arrival Time. For teams that trailered to the checkpoint, departure priority will be based on the earliest logged Trailer Arrival Time.
 - If a team doesn't have an Official Checkpoint Arrival Time, they also don't get an Official Checkpoint Departure Time.
 - Penalties apply for teams who depart before their Checkpoint Release Time to proceed along the next Base Leg.
- **Overnight Stop Time**
 - For days not ending at a Stage Finish, the nominal End of Day time is 6:00 pm with a Grace Period of up to 15 minutes early or 30 minutes late to allow time to find a safe place to stop.
 - The Actual Overnight Stop Time and most recent Route Step driven past when the team declares End of Day is to be recorded by the team's Observer.
 - It is possible that the overnight stop location could be in a Loop.
 - If a team stops before the start of the Grace Period, their Official Overnight Stop Time will be set to 15 minutes before the nominal End of Day time.
 - If a team stops within or after their Grace Period their Official Overnight Stop Time will be their Actual Overnight Stop Time.
 - Penalties apply for teams that continue to drive beyond their 30-minute Grace Period.
- **Morning Start Time**
 - Solar cars are to continue from the same location where they declared End of Day the night before at a nominal time of 9:00 am to be corrected based on the previous day's Official Overnight Stop Time.
 - The Actual Morning Start Time is to be recorded by the team's Observer.

- If the team leaves before their Corrected Start Time their Official Morning Start Time is their Actual Morning Start Time.
- If the team leaves at or after their Corrected Start Time their Official Morning Start Time is their Corrected Start Time.
- Penalties apply for teams that begin driving before their Corrected Start Time.
- **Stage Finish Time**
 - A team's Official Stage Finish Time is based on their entry at a Stage Finish.
 - A team's Stage Close Time is adjusted based on their staggered Official Stage Start Time.
 - A team's Stage Close Time may have additional adjustments from Timing to ensure that all teams receive the same available Tour hours each day.
 - All mandatory Hold Time expires after a team's Stage Close Time.
 - If a team fails to arrive at a Stage Finish before their Stage Close Time or trailers to the Stage Finish, their Official Stage Finish Time will be their Stage Close Time. In either case, the team will be considered to have trailered. The most recent Route Step driven on solar power prior to the team's Stage Close Time and the time that the solar car is loaded on the trailer will be recorded by the team's Observer.
 - Penalties apply for trailering teams that fail to arrive at the Stage finish prior to the 8:00 pm evening battery impound time.
- **Loop Start Time**
 - If a team decides to run Loops their Official Loop Start Time will be when they finish serving their Checkpoint/Stage Hold Time.
 - If a team decides not to run Loops or fails to successfully complete at least one valid Loop, they do not get an Official Loop Start Time.
 - If multiple solar cars are trying to start a Loop at the same time, priority will be given based on the earliest Official Checkpoint Arrival Time or Official Stage Finish Time.
 - If a team begins a Loop before finishing serving their prior mandatory Hold Time or trailers their solar car during the Loop, that Loop is invalidated.
- **Loop Finish Time**
 - A team's Official Loop Finish Time will be the actual finish time of the last valid Loop they successfully complete before the Loop/Stage Close Time.
 - If a team decides not to run Loops or fails to successfully complete at least one valid Loop, they do not get an Official Loop Finish Time.
- **Segment Distance Driven**
 - For each Base Leg of the Tour that a solar car successfully completes, the published distance of that Base Leg will be added to the Team's Segment Distance Driven.
 - If a team drives past an open Checkpoint without stopping, they must return to that Checkpoint or they won't receive any credit for distance driven beyond that point.

- If a team drives past a closed Checkpoint without stopping, they can still be considered to have successfully completed the preceding Base Leg of the Tour provided they weren't trailering their solar car on that Base Leg.
- For each Base Leg where a team decides to trailer their solar car, only the distance up to the last Tour Route Step they successfully completed will be counted towards their Segment Distance Driven.
- If a team has Trailered on a Segment they will not be eligible to start any additional loops on that Segment
- For each valid Loop that a solar car successfully completes, the published distance of that Loop will be added to the team's Segment Distance Driven.
- Partially completed Loops are considered invalid and will not count towards Segment Distance Driven.
- **Official Distance**
 - A team's Official Distance is the sum of Segment Distance Driven minus Deductions
 - Deductions consist of Penalties and Protest Filing Fees which are assessed in Miles
- **Official Elapsed Time**
 - A team's Official Elapsed Time is the sum of Elapsed Segment Times minus Overnight Stop times minus mandatory Hold Times – Trailering Durations
 - Elapsed Segment Times are calculated based on the elapsed time between Official Start and Official Stop times during each Segment.
 - For teams that trailer, the Trailering Duration is from their solar car's Load On Trailer Time to their next Official Checkpoint Arrival Time or Stage Finish Time.