

April 18, 2018

Weathernews starts providing “Motorsports Weather Service” for Motor Racing Teams

With 8 years of excellent results with the NISMO team, Weathernews is expanding our support to other teams

On April 4th, Weathernews Inc. started providing “Motorsports Weather Service” to support motor racing teams from a weather perspective. In the world of motorsports, one vitally important element is formulating race strategies and tactics taking track conditions into consideration, starting with the selection of tires that best suit the track materials. With the aim of maximizing a team’s performance, Weathernews continuously provides forecast data for a circuit’s weather and track conditions from six months before the race all the way through race day itself. Through the creation of more accurate simulations of a circuit’s track conditions, teams can compete effectively in races with the weather on their side.

Since 2010, Weathernews has provided support to Nissan Motorsports International Co., Ltd. (hereinafter NISMO, Head Office: Tsurumi-ku, Yokohama-shi, Kanagawa, Japan; President and CEO: Takao Katagiri), and we are proud to have supported the team for eight years in SUPER GT racing. Thanks to results up to last season, it is confirmed that we will support the team again in this season’s SUPER GT races starting on April 7th. Having accumulated vital observational data and know-how over the last eight years, Weathernews has now established a weather service specially designed for motorsports, and from this season we will start actively supporting a wide range of racing teams from all over the world.

Motorsports Weather Service

In SUPER GT racing, teams can bring a maximum of 6 sets of tires (24 tires in total) to be used from official practice to the final, and tire selection changes according to course conditions. To give teams an advantage when competing in races, Weathernews makes predictions of track conditions and track temperatures as well as providing weather forecasts, supporting teams in tire selection and the formulation of effective race strategies. For example, six months prior to ordering tires (which are ordered one month before the race), we provide information regarding likely weather trends for the circuit and past statistical data. Two weeks to one month before the race, when teams are selecting tires they will bring to the race, we provide information such as multiple scenario predictions related to weather, track temperatures and track conditions during the race, factoring in a variation range. Three days before the race, we provide a detailed forecast predicting hourly track temperatures accurate to 0.1°C. On race day, we supply observational data such as air and track temperatures at one-minute intervals, so we provide full support for optimal tire selection and formulation



of race strategies from six months before the race up to race day itself.

Also, by providing multiple scenarios with a variation range in predictions, this enables teams and engineers to create a range of simulations to turn any type of weather conditions to their advantage. Weathernews prediction data for track conditions and track temperatures make use of the know-how of the Weathernews Road Weather Forecast Team, which supports the road management of approximately 80% of Japan's expressways.

Prediction period	Support contents
6 months before the race	Providing information on past weather trends and long-term outlook to assist when ordering tires (tires are ordered one month before the race)
2 weeks - 1 week before	Providing daily information on track conditions, weather information, and race scenario predictions, to assist in selection of tire batches and formulation of race strategies
1 week before	Supplying predictions of track conditions and track temperatures for 3 days before the race and race day, information vital to the adjustment of schedules and the formation of strategies
3 days - 1 day before	Supplying information every hour on track conditions and weather predictions with variation ranges for the day of qualifying and race day, all of which are vital to formulating race strategies As track temperatures are provided to a 0.1°C accuracy, detailed race simulations can be made.
Race day	In addition to providing weather forecasts for race day, we also supply observational data of the circuit at one-minute intervals around the time of the race.

Example of Weathernews support for NISMO

Event name: 2017 AUTOBACS SUPER GT Rd. 4 SUGO GT 300km RACE

Held: July 23rd, 2017 (Round 4 SUGO race final)

Circuit Venue: Sportsland SUGO

On the day of the 2017 SUPER GT Rd. 4 SUGO race final, it had stopped raining and the track surface was gradually starting to dry. In these conditions, teams on the grid were divided in their judgment whether to start the race on slick tires or wet tires.

Weathernews predicted the possibility of rainfall from one week before the race, and we recommended bringing wet tires. From three days before the race, we informed the NISMO team in advance that track conditions would again deteriorate due to rain around the time of the final. Just before the race start, large drops of rain fell from the sky, causing the track to become wet again in a very short time. Teams that had chosen slick tires fell back many places in the early part of the race, whereas the NISMO team, which had chosen wet tires, managed to jump up many places after the start.

Comments from SUPER GT 500 Class NISMO (MOTUL AUTECH GT-R) Team Director Yutaka Suzuki

In a SUPER GT race, tire performance can at times have a greater impact on the outcome of the race than the performance of the car itself. For this reason, the method of tire selection for the race is of vital importance. When selecting tires, a decision is made based on a range of weather information, such as the actual weather, and air and track temperatures at the time of the race, but we also need a vast range of detailed information at just the right timing. For example, in the case of wet weather, we require predictions of temperatures and changes in rainfall amounts, and even if the weather is fine, we need predictions of even minute changes in temperature and small variations in the amount of solar radiation.

Weathernews responds accurately to our needs as a valuable partner, and they play a vital role as an essential member of our team. We look forward to taking on many challenges together as we aim to achieve new goals in the future.

Weathernews, Inc.

<https://weathernews.com>

Weathernews, Inc. was founded in 1986 and is one of the largest weather information companies in the world. We started as a service supporting safe maritime operations aimed at shipping companies, and we now provide weather information services 24 hours a day, 365 days a year to clients across 44 different markets in a total of 50 countries around the world. With our guiding motto of “wanting to serve people at critical times,” we continue to take on new challenges with an innovative approach, such as developing our own original radar to pick up torrential rainstorms and sudden strong winds, launching weather satellites to capture views of sea ice in the Arctic Ocean, and making use of AI technology to achieve high-accuracy weather predictions.