

# FIELD GOAL FORECAST

## PT. 1 / WEATHER CONDITIONS

ELEMENTS THAT AFFECT FIELD GOALS

A forecast is a prediction of weather behavior based on analysis of climate in that area. Weather can change the way players prepare for a game, and how they react in certain situations. NFL teams travel across the country and play games in varying conditions. Refer to page 8 for a review on forces, because they play a massive role when weather events take place. Click below to see some of the ways nature impacts how games are won and lost.

### WEATHER CONDITIONS

### THE KICK ▲

Each weather condition presents a challenge that a player must consider when they kick. In the photos below, see how these three weather conditions affect a kick.

## ACTIVITY

Below are the **49ers away games opponents** for this year. Use [weatherspark.com](http://weatherspark.com), or your own favorite website, and see what's in store for the 49ers when they play in these cities. Scroll through the weather data to find the answers to the questions on the right. Don't forget to select the team logo to reveal the location of each stadium.

Using the teams' location, find the weather data to answer the questions below for the month of December.

- 1 Against what team would you expect the most wind?
- 2 During what game is it most likely to rain?
- 3 In what city are the 49ers likely to play in the hottest weather?
- 4 In what city are the 49ers likely to play in the coldest weather?

# FIELD GOAL FORECAST

## PT. 2 / THE KICK

### ELEMENTS THAT AFFECT FIELD GOALS

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## WEATHER CONDITIONS

## THE KICK



From the snap until the end of the play, every kick has variables that must be considered to complete a successful play. Review each photo and answer the questions using the information on this page.



**THE SNAP** Kickers count on their Long Snapper to send a controlled ball to the Holder, who must then catch and place the ball perfectly. What would be more difficult about doing this in the rain or snow?

- Ball is softer
- Ball is slicker
- Ball is lighter

**PLACEMENT** Now the Holder must quickly get the ball in the right position in time for the Kicker to make contact around 4" above the bottom tip of the ball, the sweet spot. How do you think extreme heat would affect the Holder and Kicker in this situation?

- Wind would affect the ball
- Slowed reaction time
- Ball is slicker

**MUSCLE STRENGTH** Muscles around the non-kicking leg keep the Kicker stable, and muscles in the kicking leg allow for a greater force of thrust to be applied to the kick. When the ball is kicked into oncoming wind, what happens to the ball in flight?

- Increased thrust, speeding the ball forward
- Increased gravity, pulling the ball down
- Increased drag, slowing the ball down

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