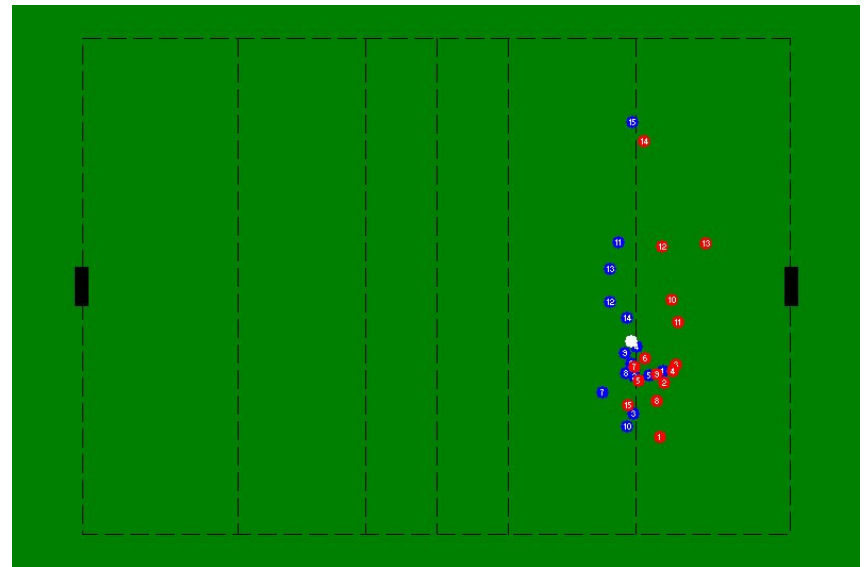
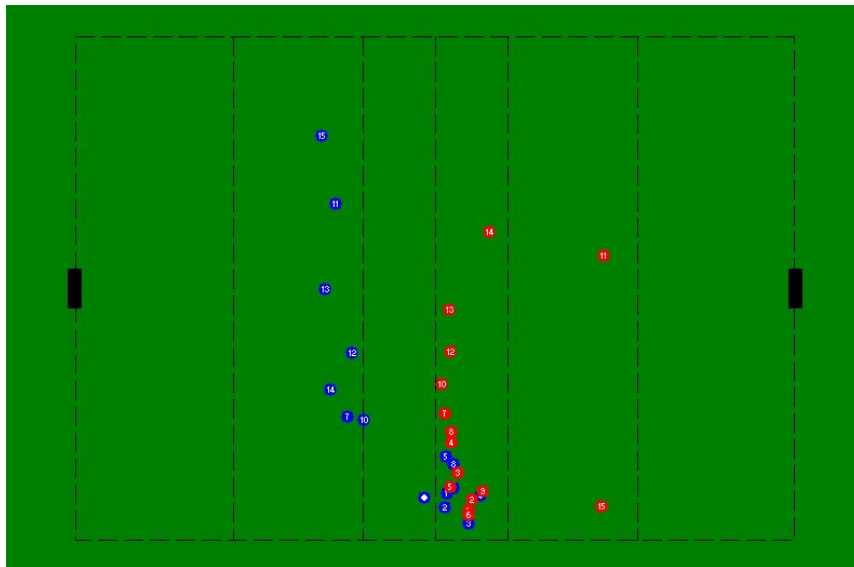


# A.L.F.R.E.D.

- **A**gent **L**aboratory **F**or **R**ugby **E**xperimentation and **D**eduction



# ALFRED: Key Concepts

- ALFRED is a simulation that lets you design rugby moves.
- Rugby players are represented by artificially intelligent agents that make their own decisions.
- You can test your moves against different defensive systems.
- ALFRED plays out the move slightly differently each time, just as no move happens exactly the same way on the rugby field!
- Run ALFRED many times over and collect the results for your move.

# Design your move . . .

The screenshot shows the ALFRED software interface, titled "ALFRED - Agent Laboratory for Rugby Experimentation and Demonstration". The interface includes a menu bar (File, View, Output, Help) and a toolbar with buttons for "Run Model", "Setup Field", and "Analysis".

Configuration options include:

- Game type:  Full  Half
- Colours: Team 1 (IRE), Team 2 (NZ)
- Line Speed: Medium
- % Probability of Complete Tackle:  0  70  80  90

The main area is a grid representing a rugby field. It shows player positions (numbered 1-15) and movement paths. Black lines represent Team 1 (IRE) and green lines represent Team 2 (NZ). A black rectangle is positioned near player 11. The right side of the interface features a "Setup" panel with sections for:

- Defensive Patterns:** Buttons for "Click for Lineouts" and "Click for Scrum".
- Team Position:** A directional pad and checkboxes for "Exclude: Out Set", "In Set", and "WP".
- Team Selection:** A "Select Team" section with radio buttons for "Team 1", "Team 2", and "Both Teams".
- Buttons for "Load" and "Save" under "Pattern(s)".

At the bottom of the interface, there are buttons for "Mirror", "Load Move", "Save Move", and "Clear Move". The status bar at the bottom right indicates "Mouse Position: x = 7, y = 0".

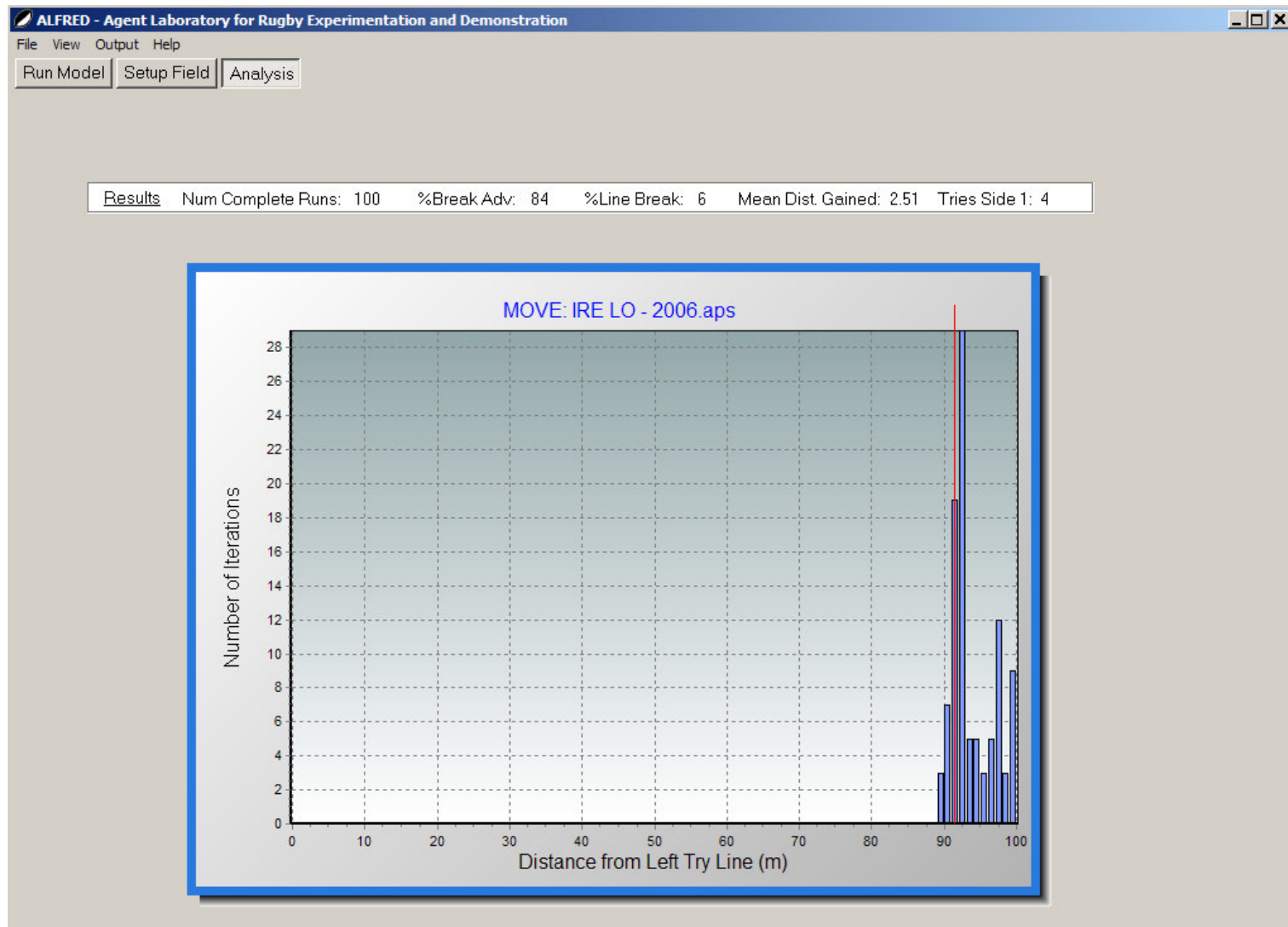
# Play your move . . .

The screenshot displays the ALFRED software interface, titled "ALFRED - Agent Laboratory for Rugby Experimentation and Demonstration". The interface includes a menu bar (File, View, Output, Help) and a toolbar with buttons for "Run Model", "Setup Field", and "Analysis". Below the toolbar, there are radio buttons for "Full" and "Half", and a text field containing "MOVE: IRE LO - 2006.apr". A status bar shows "Results" and various statistics: "Num Complete Runs: 1", "%Break Adv: 100", "%Line Break: 0", "Mean Dist. Gained: 3.19", and "Tries: 0".

The central part of the interface is a green rugby field with player positions marked by numbered circles. A white ball is visible on the field. The right side of the interface features a "Replay" and "Control" panel with several buttons: "Run" (play), "Pause", "Stop" (with a multiplier of 100), "Reset", and "Rewind". Below these are "Move" and "Backline" buttons with up and down arrows. A "Run Speed" section contains radio buttons for "Super Slowmo", "Slowmo", "Play" (selected), "Play Fast", and "Max Speed".

At the bottom of the interface, there is a "Play Movie" button and a status bar with the following information: "Run #: 1", "Phase #: 1", "Model Time Step: 46", "Real Time: 2.3", "x = 0, y = 10", "Ball Holder: -", "State: -", and "Ball Pos = (98.4, 37.7, 1.6)".

# Analyze your move . . .



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