8351-20696-1/i-313bm

FASTPROP METHODOLOGY FOR MULTI-RESOLUTION ATMOSPHERIC WEATHER EFFECTS MODELING

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OUTLINE (U)

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- FASTPROP OVERVIEW
- METHODOLOGY FOR MULTI-RESOLUTION CAPABILITY
- FASTPROP EADTB INTERFACE AND SCENE RESOLUTION ANALYSIS
- PLANS

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FASTPROP OVERVIEW (U)

FASTPROP DESCRIPTION (U)

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- MODELS ATMOSPHERE AND WEATHER PROPAGATION EFFECTS FOR SENSORS IN MANY ON MANY ENGAGEMENT SIMULATIONS
  - Δ EXTENDED AIR DEFENSE SIMULATION (EADSIM)
  - Δ EXTENDED AIR DEFENSE TEST BED (EADTB)
- UTILIZES EXPERIMENTAL PDUs FOR EADSIM RUNTIME INTERFACE
- PROVIDES PRE-PROCESSED GRIB ENCODED WEATHER SCENE DATA TO EADTB
- ANSI C STANDARD CODE FOR PORTABILITY ACROSS VARIETY OF PLATFORMS

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EADSIM/EADTB (U)

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EXTENDED AIR DEFENSE SIMULATION (EADSIM)

- FORCE ON FORCE
- C^3I MODE
- C^3I ANALYSIS
- WEAPON CHARACTERIZED TO ACTIVATE C^2
- STAND-ALONE SIMULATION
- ANALYST ORIENTED

- C LANGUAGE
- LOWER FIDELITY
- EVENT DRIVEN/ TIME STEPPED

- GRAPHICS/WINDOW TECHNIQUES
- MODEL CONCEPT/ DESIGN

EXTENDED AIR DEFENSE TEST BED (EADTB)

- FORCE ON FORCE
- C^3I MODE
- THEATER LEVEL
- SYSTEMS ANALYSIS
- WEAPONS MODEL
- NETWORKING
- MAN IN THE LOOP
- HARDWARE IN THE LOOP
- ANALYST ORIENTED
- ON-LINE SIMULATION
- DATA BASE MANAGEMENT SYSTEM
- INTERFACE WITH OTHER MODELS
- HARDWARE INDEPENDENT DECISION MODEL

- ADA AND C LANGUAGE
- HIGHER FIDELITY
- REAL TIME

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FASTPROP INTERFACE CONCEPTS (U)

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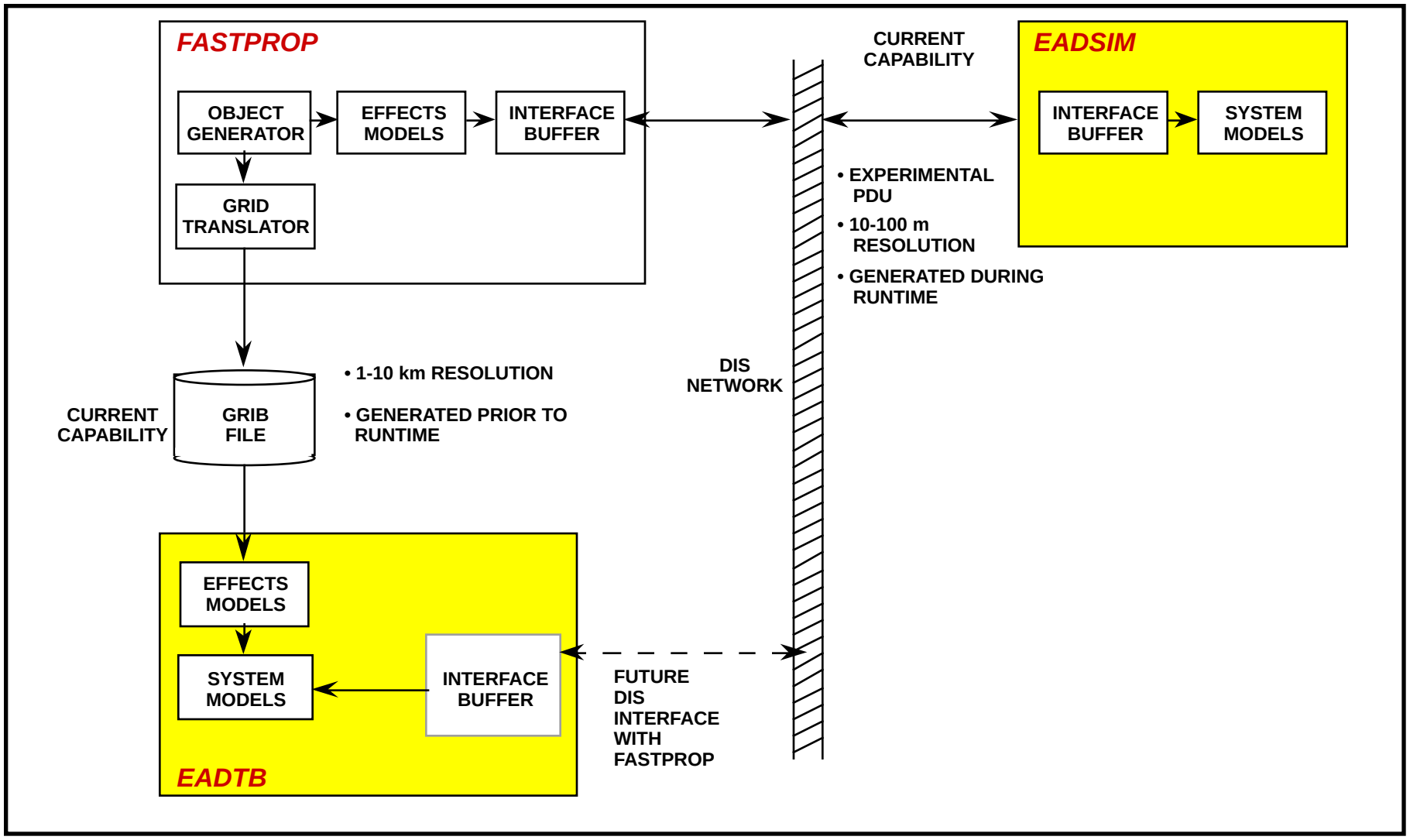

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FASTPROP SIMULATES ATMOSPHERE ENVIRONMENT AND LOS PROPAGATION EFFECTS (U)

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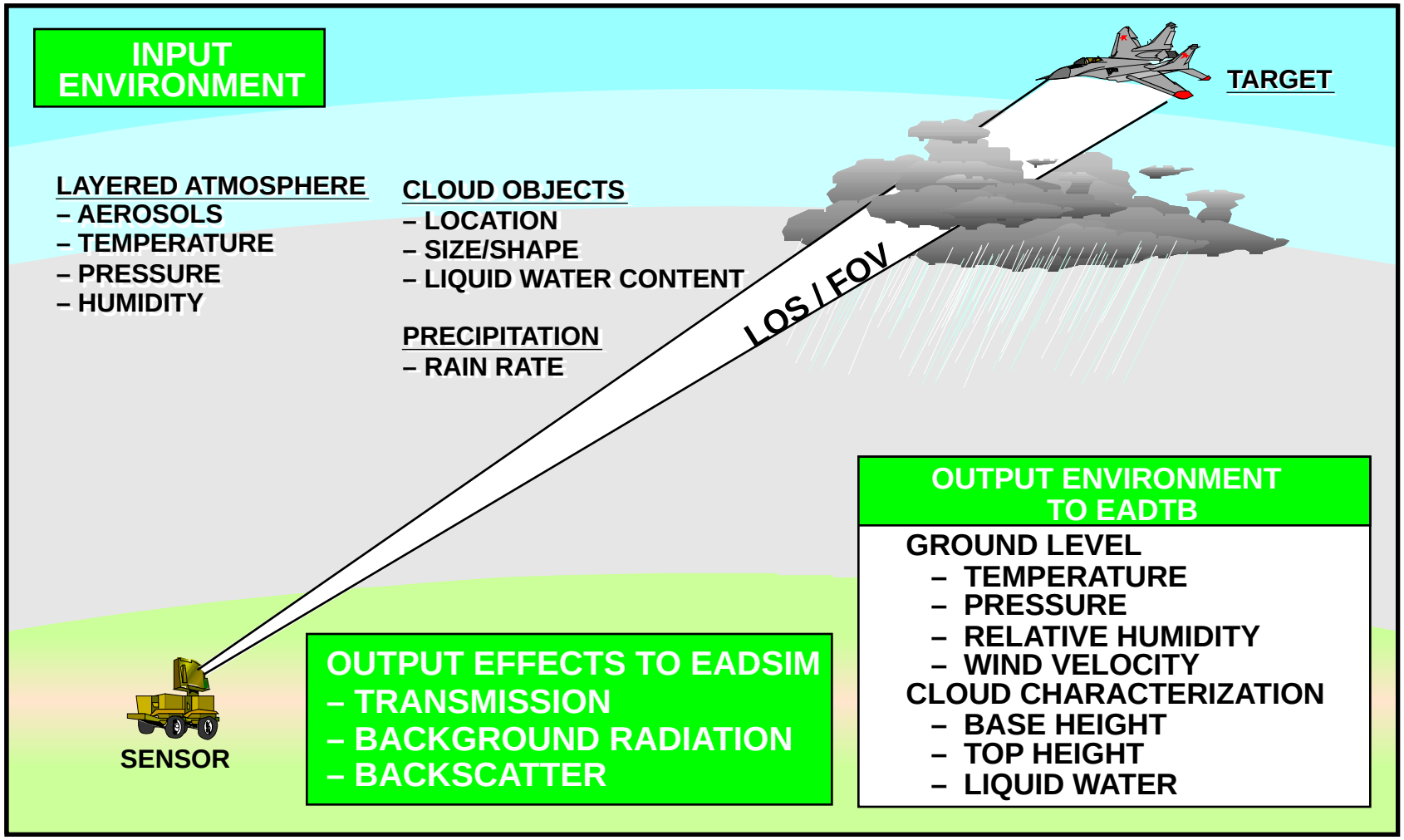

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