

E 100

105

110

115

120

125

130 E

N 25

**TROPICAL STORM NELL**  
**BEST TRACK TC-28W**  
**08 NOV- 13 NOV 90**  
**MAX SFC WIND 50KT**  
**MINIMUM SLP 987MB**

**LEGEND**

|       |                         |
|-------|-------------------------|
| —/—/— | 6-HOUR BEST TRACK POSIT |
| a     | SPEED OF MOVEMENT (KT)  |
| b     | INTENSITY (KT)          |
| c     | POSITION AT XX/0000Z    |
| ●●●●● | TROPICAL DISTURBANCE    |
| ●●●●● | TROPICAL DEPRESSION     |
| ----- | TROPICAL STORM          |
| ————  | TYPHOON                 |
| ◆     | SUPER TYPHOON START     |
| ◇     | SUPER TYPHOON END       |
| ◆◆◆◆  | EXTRATROPICAL           |
| ◆◆◆◆  | SUBTROPICAL             |
| ***   | DISSIPATING STAGE       |
| F     | FIRST WARNING ISSUED    |
| L     | LAST WARNING ISSUED     |

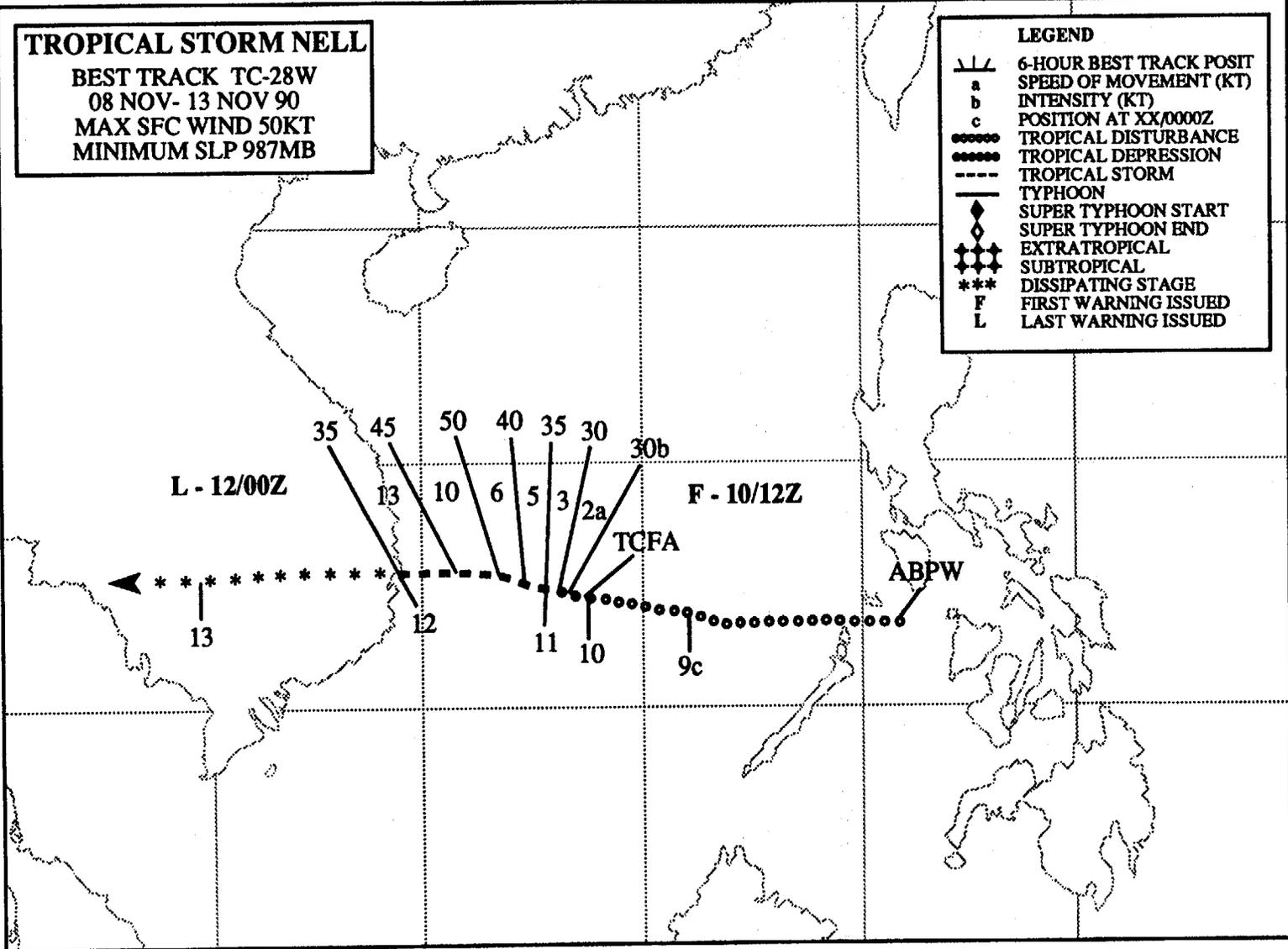
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15

10

N 5

184



## **TROPICAL STORM NELL (28W)**

### **I. HIGHLIGHTS**

Nell, the second of four November tropical cyclones, intensified in the South China Sea and tracked westward, making landfall in Vietnam.

### **II. CHRONOLOGY OF EVENTS**

080600Z - First mentioned on Significant Tropical Weather Advisory as a disturbance with a persistent area of convection with estimated minimum sea-level pressure of 1005 mb.

100330Z - Tropical Cyclone Formation Alert issued due to increased convective organization.

101200Z - First warning issued due to surface synoptic reports of 25-30 kt (13-15 m/sec) winds.

110000Z - Upgrade to tropical storm based on a synoptic report of 996 mb sea-level pressure and 35 kt (18 m/sec) surface wind.

111200Z - Peak intensity of 50 kt (25 m/sec) based on ship reports.

120000Z - Final warning issued as Nell moved over land and began to dissipate in Vietnam.

### **III. TRACK AND MOTION**

Nell formed west of the central Philippine Islands and tracked across the South China Sea south of the subtropical ridge which remained near 20° north latitude. After landfall, the low-level cyclonic circulation moved westward into Thailand.

### **IV. INTENSITY**

Nell developed in association with a surge in the northeast monsoon, reached tropical storm intensity (Figure 3-28-1) on 11 November, and peaked at 50 kt (25 m/sec) despite indications of strong vertical shear.

### **V. FORECASTING PERFORMANCE**

Initially, fix position uncertainties and the strength of the surge in the northeast monsoon led forecasters to believe Nell would move south-southwestward. Later forecasts reflected the movement to the west (Figure 3-28-2).

### **VI. IMPACT**

No information received.

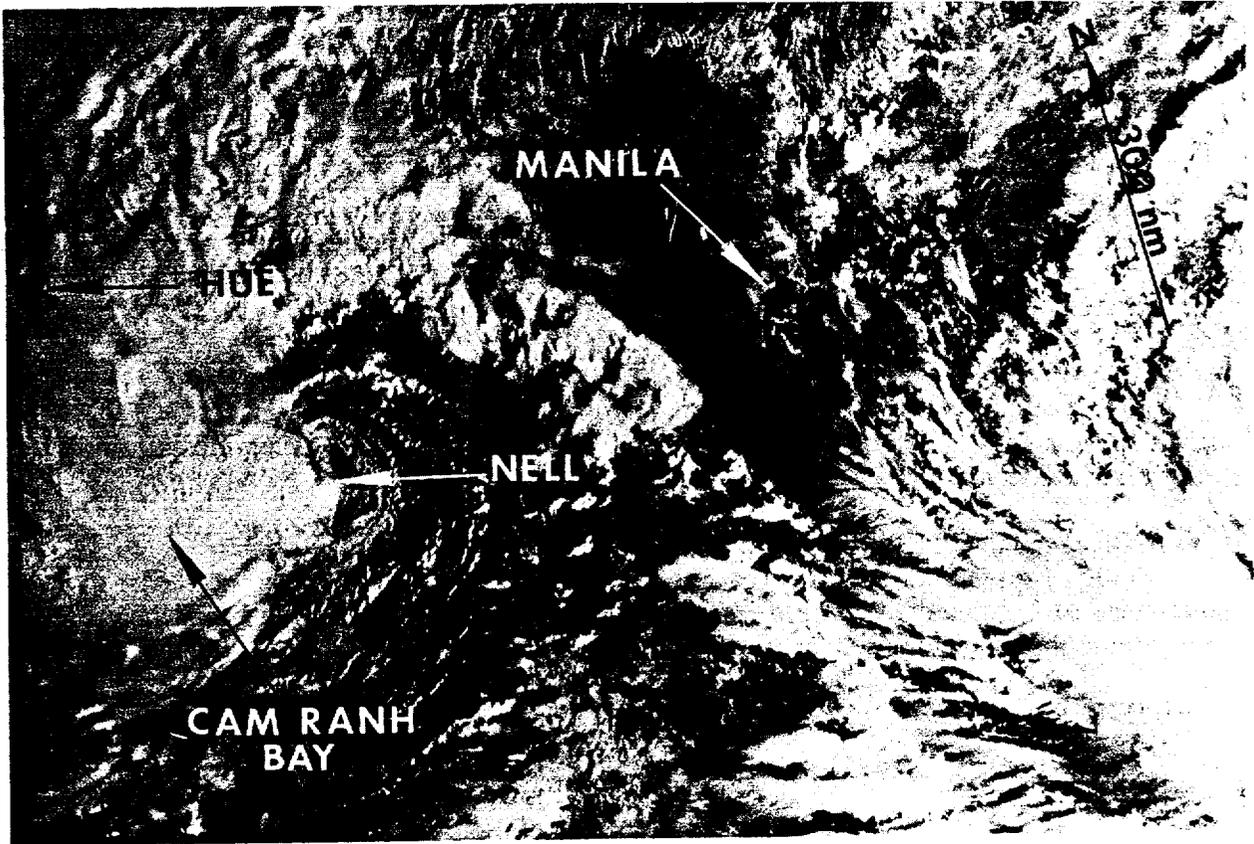


Figure 3-28-1. Just before reaching tropical storm intensity, Nell's LLCC is partially exposed (102335Z November NOAA visual imagery)

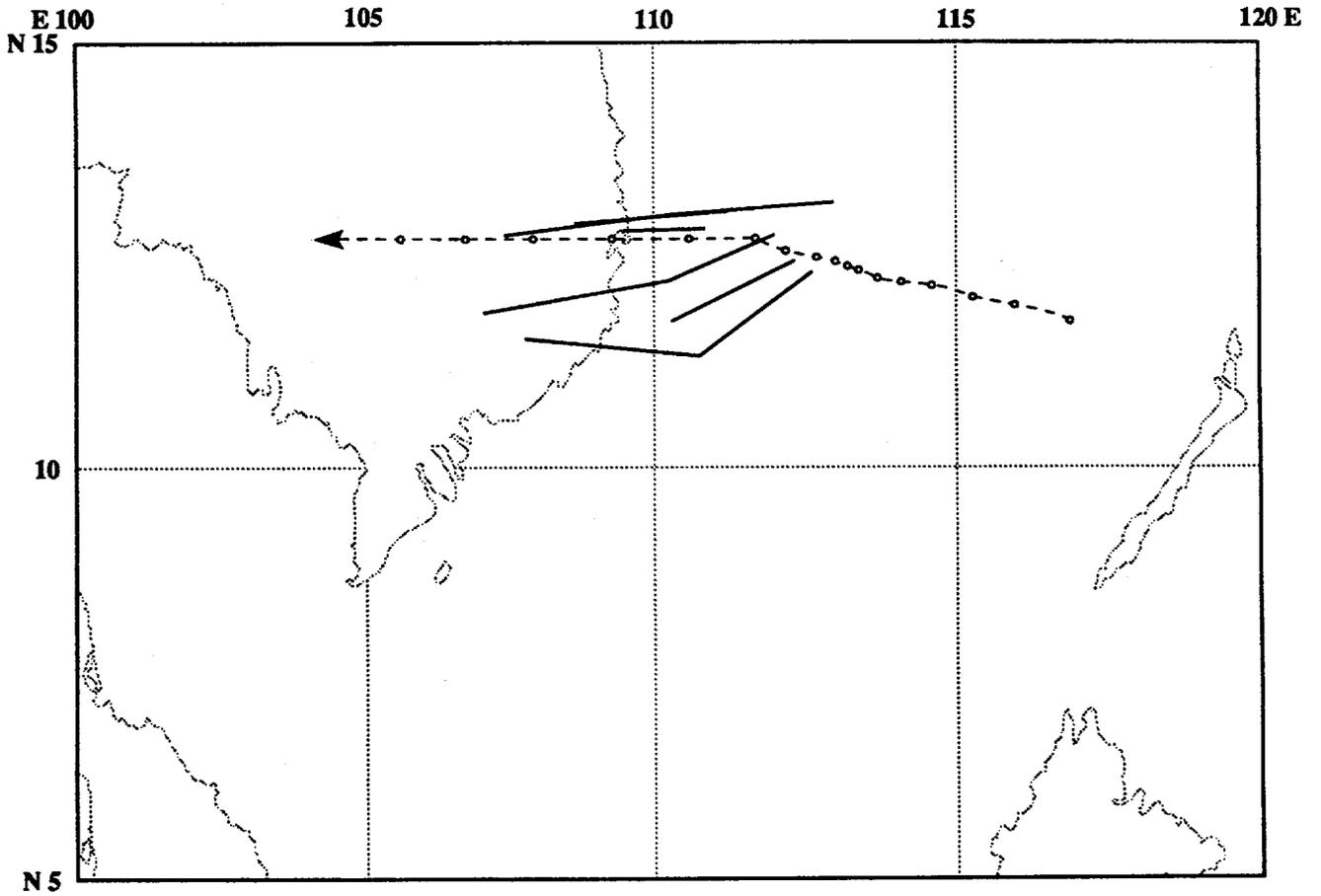


Figure 3-28-2. Summary of JTWC forecasts (solid lines) for Nell is superimposed on the final best track (dashed line).