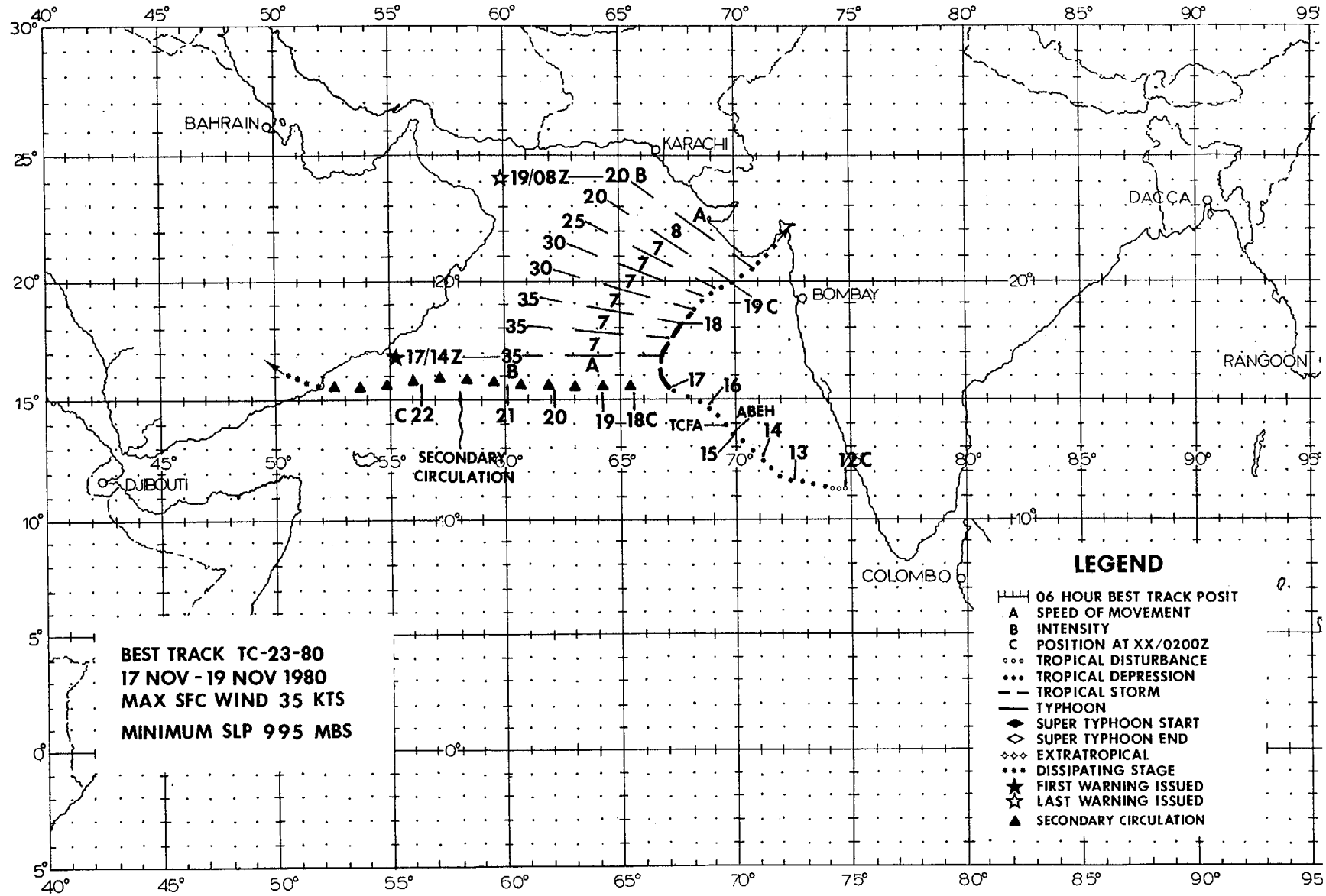
BEST TRACK TC-23-80
17 NOV - 19 NOV 1980
MAX SFC WIND 35 KTS
MINIMUM SLP 995 MBS
LEGEND
06 HOUR BEST TRACK POSIT
A SPEED OF MOVEMENT
B INTENSITY
C POSITION AT XX/0200Z
TROPICAL DISTURBANCE
TROPICAL DEPRESSION
TROPICAL STORM
TYPHOON
SUPER TYPHOON START
SUPER TYPHOON END
EXTRATROPICAL
DISSIPATING STAGE
FIRST WARNING ISSUED
LAST WARNING ISSUED
SECONDARY CIRCULATION
BAHRAIN
KARACHI
DACCA
BOMBAY
RANGOON
DJIBOUTI
COLOMBO
SECONDARY CIRCULATION
TCFA
ABEH
19/08Z
17/14Z

TC 23-80 was the first of only two significant tropical cyclones in 1980 to occur over the North Indian Ocean. It developed during the autumn transition season just prior to the northeast monsoon period. Originating as an area of enhanced convection in the monsoon trough off the southwest coast of India, TC 23-80 tracked steadily northwestward over the Arabian Sea between 12 and 17 November.

On 17 November, a mid-tropospheric trough tracking eastward toward India began to induce TC 23-80 to recurve to the northeast. The main area of convection and the associated low-level center did indeed begin to recurve. However, satellite imageries, which were evaluated during post-analysis (Fig. 3-29-1), indicate that a second low-level circulation formed southwest of TC 23-80 on 17 November. The first circulation continued northeastward and dissipated near the Indian coast, while the secondary circulation continuted moving westward as a well-defined, exposed low-level circulation (Fig. 3-29-2). This secondary circulation eventually weakened and dissipated on the coast of Saudi Arabia, five days after cyclogenesis.

FIGURE 3-29-1. TC 23-80 just prior to recurvature over the Arabian Sea. The low-level secondary circulation (⊗) is just beginning to develop on the extreme southwest edge of the main mass of convection, 17 November 1980, 1539Z. (NOAA6 imagery from AFGWC, Offutt AFB, Nebraska)

FIGURE 3-29-2. The secondary low-level center as a well-developed circulation tracking westward towards Saudi Arabia, 19 November 1980, 0358Z. (NOAA6 imagery from AFGWC, Offutt AFB, Nebraska)