

TROPICAL STORM LISA (14W)

In early August, as Herb (10W) moved into China, and Joy (12W) recurved into the midlatitudes, deep convection began to increase in the monsoon trough which stretched across the Philippines into the Philippine Sea. On 02 August, deep convection consolidated within two regions, one (which became Kirk (13W)) in the Philippine Sea, and the other (which became Lisa) over the Philippines. The area of deep convection in the Philippine Sea became a monsoon depression and moved north, while the area of convection over the Philippines moved westward and became a monsoon depression in the South China Sea (SCS). Indications of organization of the deep convection over the SCS were first mentioned on the 040600Z Significant Tropical Weather Advisory. When satellite imagery and synoptic data indicated the presence of a low-level cyclonic circulation within an area of persistent deep convection (Figure 3-14-1a), the JTWC issued a Tropical Cyclone Formation Alert, valid at 050430Z. The first warning on Tropical Depression (TD) 14W soon followed (valid time 050600Z) based on satellite intensity estimates of 25 kt (13 m/sec). With Kirk (13W) east of Okinawa, the axis of the monsoon trough became reverse oriented, and TD 14W moved northeastward toward Taiwan. The upgrade of TD 14W to Tropical Storm Lisa at 060000Z was based upon synoptic reports of gales near the LLCC at a time when the satellite signature was not well-organized. Late in the day on 06 August, the persistent deep convection associated with Lisa moved over land in southeastern China. Microwave imagery (Figure 3-14-1b), however, indicated that the LLCC was sheared to the east of this convection and remained offshore through the night. On the morning of 07 August, synoptic data indicated the LLCC of Lisa had moved ashore in China, and the final warning was issued valid at 070000Z.

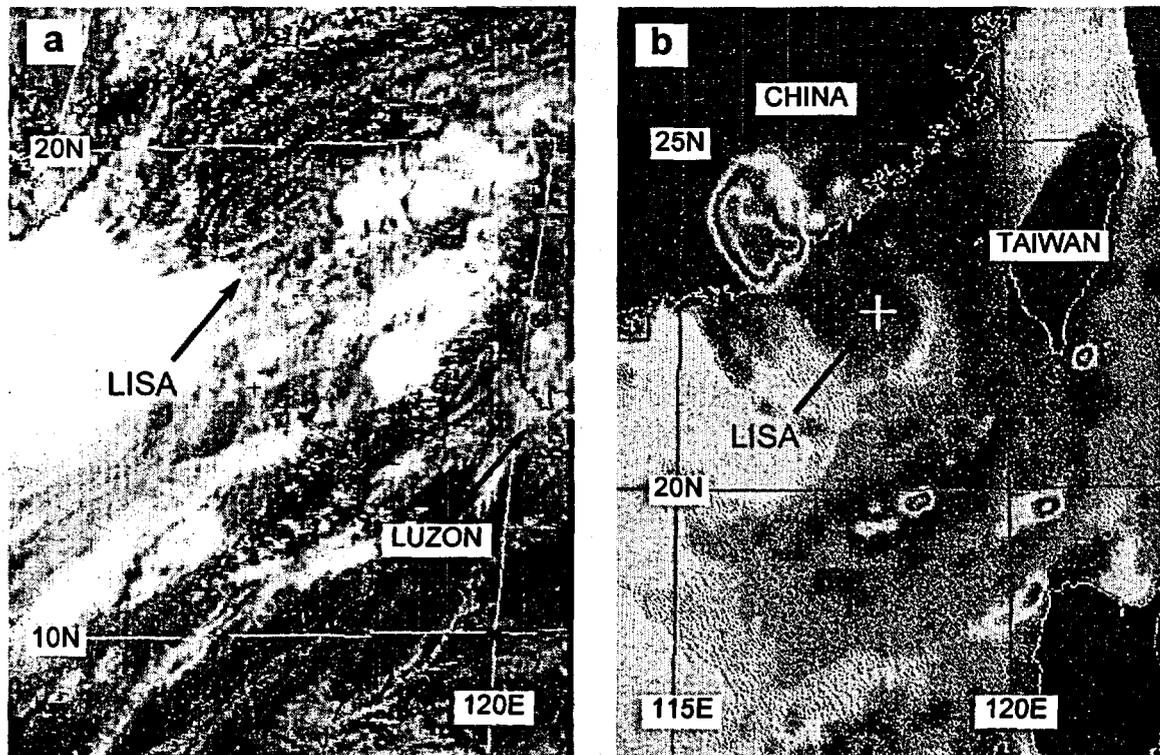


Figure 3-14-1 (a) A well defined LLCC is exposed amidst the ensemble of MSCs associated with a monsoon depression in the SCS (050031Z August visible GMS imagery). (b) Lisa's LLCC is clearly located over water to the southeast of the deep convection in microwave imagery (061415Z August 85 GHz horizontally-polarized microwave DMSP imagery).