As suggested by Fig. 11.10, this pressure pattern consists of low surface pressure in the western Pacific and high surface pressure in the eastern Pacific. The resulting westward-directed pressure gradient force drives mean surface easterlies in the equatorial Pacific, which are much stronger than the zonal mean surface easterlies and by horizontal vapor transport provide a moisture source for convection in the western Pacific in addition to that

Fig. 11.10 Schematic diagrams of the Walker circulations along the equator for normal conditions (upper panel) and El Niño conditions (lower panel). (After Webster, 1983 and Webster and Chang, 1988.)

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