LIST OF FIGURES xv

Figure 5.1 Model for determining the adjustment factor to apply to isohyet values as a result of placing the pattern in Figure 5.5 at an orientation differing from that given in Figure 5.6 by more than ±40°; for a specific location (Hansen and others, 1982)86 Figure 5.8 Schematic diagram showing the relation between depth–area curve for PMP and the within/without-storm relations for PMP at 1 000 km² (Hansen and others, 1982)86 Figure 5.10 Within/without-storm average curves for standard area sizes (Hansen and others, 1982)86 Figure 5.10 Within/without storm curves for PMP at 3.7° N, 89° W Tennessee River basin over Chattanooga, Fenessee (Zurndorfer and others, 1982)87 Figure 5.11 Isohyetal profiles for standard area sizes at 3.7° N, 89° W (Hansen and others, 1982)88 Figure 5.11 Isohyetal profiles for standard area sizes at 3.7° N, 89° W (Hansen and others, 1982)89 Figure 5.13 Nomogram for the first 6-hour PMP increment and for standard isohyet area sizes between 25.9 and 103 600 km² (Hansen and others, 1982)89 Figure 5.14 Topography classified on basis effect on rainfall, Tennessee River basin above Chattanooga, Fenessee (Zurndorfer and others, 1986)		Page
Figure 5.6 by more than ±40°, for a specific location (Hansen and others, 1982)85  Figure 5.9 Schematic diagram showing the relation between depth-area curve for PMP and the within/without-storm relations for PMP at 1 000 km² (Hansen and others, 1982)86  Figure 5.10 Within/without storm curves for PMP at 37° N, 89° W Tennessee River basin over Chattanooga, Tenessee (Zurndorfer and others, 1986). W for standard area sizes (Hansen and others, 1982)87  Figure 5.11 Isohyetal profiles for standard area sizes at 37° N, 89° W Tennessee River basin over Chattanooga, Tenessee (Zurndorfer and others, 1982)87  Figure 5.11 Sompetal profiles for standard area sizes at 37° N, 89° W (Hansen and others, 1982)88  Figure 5.12 Sample of computation sheet showing typical format (Hansen and others, 1982)89  Figure 5.13 Example of computation sheet showing typical format (Hansen and others, 1982)90  Figure 5.14 Topography classified on basis effect on rainfall, Tennessee River basin above Chattanooga, Tenessee (Zurndorfer and others, 1986)	Figure 5.7	
Figure 5.18 Schematic diagram showing the relation between depth-area curve for PMP and the within/without-storm relations for PMP at 1 000 km² (Hansen and others, 1982)86 Figure 5.19 Six-hour within/without-storm average curves for standard area sizes (Hansen and others, 1982)86 Figure 5.10 Within/without storm curves for PMP at 37° N, 89° W Tennessee River basin over Chattanooga, Tenessee (Zurndorfer and others, 1986). W for standard area sizes (Hansen and others, 1982)		
the within/without-storm relations for PMP at 1 000 km² (Hansen and others, 1982)86  Figure 5.9 Six-hour within/without-storm average curves for standard area sizes (Hansen and others, 1982)87  Figure 5.10 Within/without storm curves for PMP at 37° N, 89° W Tennessee River basin over Chattanooga, Fenessee (Zurndorfer and others, 1986). W for standard area sizes (Hansen and others, 1982)87  Figure 5.11 Isohyetal profiles for standard area sizes at 37° N, 89° W (Hansen and others, 1982)88  Figure 5.12 Nomogram for the first 6-hour PMP increment and for standard isohyet area sizes between 25.9 and 103 600 km² (Hansen and others, 1982)		
Figure 5.19 Six-hour within/without-storm average curves for standard area sizes (Hansen and others, 1982) (Hansen and others, 1986) (Hansen and oth	Figure 5.8	
(Hansen and others, 1982)		· · · ·
Figure 5.10 Within/without storm curves for PMP at 37° N, 89° W Tennessee River basin over Chattanooga, Tenessee (Zurndorfer and others, 1986). W for standard area sizes (Hansen and others, 1982)	Figure 5.9	
Chattanooga, Tenessee (Zumdorfer and others, 1986). W for standard area sizes (Hansen and others, 1982)	F: 5.40	
(Hansen and others, 1982)	Figure 5.10	
Figure 5.12 Isohyetal profiles for standard area sizes at 37" N, 89° W (Hansen and others, 1982)		
Figure 5.12 Nomogram for the first 6-hour PMP increment and for standard isohyet area sizes between 25.9 and 103 600 km² (Hansen and others, 1982)	F:	
between 25.9 and 103 600 km² (Hansen and others, 1982)	•	
Figure 5.13 Example of computation sheet showing typical format (Hansen and others, 1982)	Figure 5.12	
Figure 5.14 Topography classified on basis effect on rainfall, Tennessee River basin above Chattanooga, Tenessee (Zurndorfer and others, 1986)	Figure F 12	
Chattanooga, Tenessee (Zurndorfer and others, 1986)	•	
Figure 5.15 Adopted 2.6-km² PMP with supporting data, Tenessee River basin; dashed lines are extrapolations based on relation of Figure 5.16, smooth curve applies uncorrected only to 100 per cent line of Figure 5.18 (Zurndorfer and others, 1986)	rigure 3.14	
are extrapolations based on relation of Figure 5.16, smooth curve applies uncorrected only to 100 per cent line of Figure 5.18 (Zurndorfer and others, 1986)	Figuro 5 15	
only to 100 per cent line of Figure 5.18 (Zurndorfer and others, 1986)	rigule 3.13	
Figure 5.16 PMP depth-duration curves for basins up to 259 km² in Tennessee River basin (Zurndorfer and others, 1986)		
(Zurndorfer and others, 1986)	Figure 5 16	
Figure 5.17 Moisture index chart for north-western portion of Tennessee River basin over Chattanooga, Tenessee (Zurndorfer and others, 1986)	riguic 5.10	
Chattanooga, Tenessee (Zurndorfer and others, 1986)	Figure 5.17	
Figure 5.18 Latitudinal rainfall gradient (in per cent) in south-eastern postion of Tennessee River basin above Chattanooga, Tennessee (Zurndorfer and others, 1986)	rigure 3.17	
basin above Chattanooga, Tennessee (Zurndorfer and others, 1986)	Figure 5.18	
Figure 5.19 Six-hour 2.6-km² PMP (inches) for Tennessee River basin above Tennessee River basin over Chattanooga, Tenessee (Zurndorfer and others, 1986)	90001.0	
over Chattanooga, Tenessee (Zurndorfer and others, 1986)	Figure 5.19	
Figure 5.20 Nomogram for depth-duration relations for 24-hour PMP storms, Tennessee River basin (Zurndorfer and others, 1986)	9	
(Zurndorfer and others, 1986)	Figure 5.20	
Figure 5.21 Depth-area relations for small basin estimates, Tennessee River basin (Zurndorfer and others, 1986)	3	
(Zurndorfer and others, 1986)	Figure 5.21	
Figure 5.22 Non-orographic PMP at Knoxville, Tennessee (Zurndorfer and others, 1986)	3	
(meteorological observations made at airport, about 16 km south of Knoxville; Zurndorfer and others, 1986)	Figure 5.22	Non-orographic PMP at Knoxville, Tennessee (Zurndorfer and others, 1986)96
Figure 5.24 Two-year 24-hour precipitation-frequency map (tenths of inches) for easter Tennessee River basin (Zurndorfer and others, 1986)	Figure 5.23	Twenty-four-hour 2 590-km <sup>2</sup> PMP percentiles of Knoxville Airport value
Figure 5.24 Two-year 24-hour precipitation-frequency map (tenths of inches) for easter Tennessee River basin (Zurndorfer and others, 1986)		(meteorological observations made at airport, about 16 km south of Knoxville;
Tennessee River basin (Zurndorfer and others, 1986)		, ,
Figure 5.25 Optimum wind directions for heavy rains (Zurndorfer and others, 1986)		
Figure 5.26 Adjustment chart for optimum wind inflow direction for south-eastern mountainous portion of Tennessee River basin over Chattanooga, Tenessee (Zurndorfer and others, 1986)		
portion of Tennessee River basin over Chattanooga, Tenessee (Zurndorfer and others, 1986)	Figure 5.25	
Figure 5.27 Illustration of terrain classification for the eastern Tennessee River basin (Zurndorfer and others, 1986)	Figure 5.26	, ·
Figure 5.27 Illustration of terrain classification for the eastern Tennessee River basin (Zurndorfer and others, 1986)		·
Figure 5.28 Nomogram for determining terrain adjustments for basins larger than 259 km² (Zurndorfer and others, 1986)		
Figure 5.28 Nomogram for determining terrain adjustments for basins larger than 259 km² (Zurndorfer and others, 1986)	Figure 5.27	
(Zurndorfer and others, 1986)	F: 5.00	
Figure 5.29 Variation of terrain roughness adjustment (Figure 5.28) with basin size (Zurndorfer and others, 1986)	Figure 5.28	
(Zurndorfer and others, 1986)	F: 5.20	
Figure 5.30 Adjustment applied to broad-scale orographic factor for areas near the interface between procedures for areas less than and greater than 259 km² (Zurndorfer and others, 1986)	Figure 5.29	
between procedures for areas less than and greater than 259 km² (Zurndorfer and others, 1986)	Figure 5 20	
(Zurndorfer and others, 1986)	rigure 3.30	· · · · · · · · · · · · · · · · · · ·
Figure 5.31 Schematic flow chart for storm separation method (Miller and others, 1984b)		·
Figure 5.32 Moisture-maximized convergence precipitation (inches) map for state of Colorado east of Continental Divide (Miller and others, 1984b)	Figure 5 21	
east of Continental Divide (Miller and others, 1984b)		·
Figure 5.33 Convergence component of the 100-year 24-hour precipitation-frequency values (tenths of inches) for the state of New Mexico east of the Continental Divide	riguic J.JZ	
(tenths of inches) for the state of New Mexico east of the Continental Divide	Figure 5 33	
	. 19416 3.33	