Table 1a. Characteristics of Models Selected from PIRCS Experiment 1b

Model	Investigator	Grid	Levels	Dynamics	Lateral Boundary Condition	Reference
ClimRAMS	Liston, Pielke	PS	20	NON	PAR/10	Pielke et al. (1992), Liston and Pielke (2001)
CRCM	Caya, Laprise	LL	20	NON	DIF/21	Caya and Laprise (1999)
DARLAM	McGregor, Katzfey	PS	18	HYD	EXP/10	McGregor et al. (1993a), McGregor and Walsh (1994)
EM	Lüthi	RLL	20	HYD	DIF/9	Lüthi et al. (1996)
HIRHAM	Christianson, Lopez	MER	19	HYD	EXP/10	Christensen et al. (1997)
MM5-ANL	Taylor	LC	23	NON	LIN/4	Taylor and Larson (2001)
MM5-BATS	Lapenta	LC	32	NON	LIN/4	Grell et al. (1993), Lakhtakia and Warner (1994)
NCEP RSM	Hong	PS	28	HYD	EXP/10	Juang et al. (1997), Hong (2000)
PROMES	Gaertner	LC	26	HYD	LIN/8	Gaertner et al. (2001)
RegCM2	Pan	LC	14	HYD	EXP/10	Giorgi et al. (1990), Giorgi et al. (1996)
Scripps RSM	Roads, Chen	MER	28	HYD	EXP/10	Juang and Kanamistsu (1994)
SweCLIM	Jones	RE	19	HYD	TANH/8	Jones and Willen (2001)

Dynamics: HYD, hydrostatic; NON, nonhydrostatic. Horizontal grid types: MER, Mercator (latitude-longitude); PS, polar stereographic; LC, Lambert conformal. Lateral BC: weighting function used blending large-scale and internal tendencies (LIN, linear decrease toward center of domain; EXP, exponential decrease; PAR, parabolic decrease; TANH, hyperbolic tangent profiles; DIF, dynamical diffusion following Davies (1976)) and number of grid points in the blending region.

Table 1b. Parameterizations in Models Selected from PIRCS Experiment 1b

Model	Investigator	Land-Surface	Boundary-Layer	Explicit Precipitation	Convection
ClimRAMS	Liston, Pielke	BATS	Smagorinski (1963)	rain and ice physics: prognostic cloud water	KA
CRCM	Caya, Laprise	single-layer soil model vegetation	local K: gradient-Richardson	rain and ice physics: prognostic cloud, rain water	KF
DARLAM	McGregor, Katzfey		Louis (1979)	rain physics: prognostic water vapor	AG
EM	Lüthi	three-layer soil model vegetation	2nd order Mellor and Yamada	rain and ice physics: prognostic cloud water	MF
HIRHAM	Christianson, Lopez	soil water: one-layer temperature: five-layer vegetation	1.5 order closure, local K: prognostic TKE	rain and ice physics: prognostic cloud water	MF
MM5-ANL	Taylor	OSU	Blackadar	rain and ice physics: prognostic cloud water	Grell

MM5-BATS	Lapenta	BATS	MRF	rain and ice physics: prognostic cloud water	Grell
NCEP RSM	Hong	soil water: two-layer temperature: two-layer vegetation	nonlocal eddy flux: Holtslag et al. (1990)	rain physics: prognostic water vapor	modified PW
PROMES	Gaertner	soil water: two-layer temperature: two-layer vegetation	local K: Blackadar coefficients	rain physics: prognostic cloud, rain water	KF
RegCM2	Pan	BATS	nonlocal eddy flux: Holtslag et al. (1990)	rain physics: prognostic cloud water	Grell
Scripps RSM	Roads, Chen	soil water: two-layer temperature: two-layer vegetation	nonlocal eddy flux: Troen and Mahrt (1987)	rain physics: prognostic water vapor	PW
SweCLIM	Jones		local K: prognostic TKE	rain and ice physics: prognostic cloud water	KF

Convection scheme: AS, Arakawa-Schubert, *Arakawa* and *Schubert* (1974); AG, Arakawa-Gordon, *McGregor et al. (1993b)*; Grell, *Grell et al.* (1993) and *Grell* (1993); MF, mass flux scheme following *Tiedke* (1989); KA, *Kuo* (1974); KF, Kain-Fritsch, *Kain* and *Fritsch* (1990); PW, Pan-Wu, *Pan* and *Wu* (1995). Land surface scheme: BATS, Biosphere-Atmosphere Transfer Scheme, five-layer soil model, *Dickenson et al.* (1993); OSU, Oregon State University, multi-layer soil model, *Chen* and *Dudhia* (2001). Boundary-layer scheme: MRF, Medium Range Forecast model, nonlocal eddy flux: *Troen* and *Mahrt* (1987), *Hong* and *Pan* (1996).