

Vertical scalar profiles		
Mean		
rS	scalar (RA)	$\bar{s}$
rQ		
rS_y	y-derivative of scalar (RA)	$\overline{\partial_y s}$
fS	scalar (FA)	$\langle s \rangle$
fS_y	y-derivative of scalar (FA)	$\langle \partial_y s \rangle$
fQ		
Fluctuations		
Rsu	covariance $R_{su}$ (of scalar $s$ and velocity $u$ )	$\overline{s' u'}$
Rsv	covariance $R_{sv}$ (of scalar $s$ and velocity $v$ )	$\overline{s' v'}$
Rsw	covariance $R_{sw}$ (of scalar $s$ and velocity $w$ )	$\overline{s' w'}$
rS2	scalar variance $R_{ss}$ (RA)	$\overline{s' s'}$
rS3		$\overline{s' s' s'}$
rS4		$\overline{s' s' s' s'}$
fS2	scalar variance (FA)	$\langle s' s' \rangle$
fS3		$\langle s' s' s' \rangle$
fS4		$\langle s' s' s' s' \rangle$
DerivativeFluctuations		
S_x2		$\overline{(\partial_x s')^2}$
S_y2		$\overline{(\partial_y s')^2}$
S_z2		$\overline{(\partial_z s')^2}$
S_x3		$\overline{(\partial_x s')^3}$
S_y3		$\overline{(\partial_y s')^3}$
S_z3		$\overline{(\partial_z s')^3}$
S_x4		$\overline{(\partial_x s')^4}$
S_y4		$\overline{(\partial_y s')^4}$
S_z4		$\overline{(\partial_z s')^4}$
RssBudget		
Rss_t	Time-rate of change of $R_{ss}$	$\overline{\partial_t R_{ss}}$
Css	advection in y-direction	$-\langle v \rangle \partial_y \overline{s' s'}$
Pss	gradient production	$-2 \overline{s' v' \partial_y s}$
Ess	molecular dissipation	
Tssy1	turbulent transport due to triple correlation	$\overline{s' s' v'}$
Tssy2	transport	$-2 \kappa_d \overline{s' \partial_y s'}$
Tssy_y	turbulent transport	$\partial_y (\text{Tssy1} + \text{Tssy2})$
Dss	diffusion variable-density term	
Qss	source	
RsuBudget		
Rsu_t	Time-rate of change of $R_{su}$	$\overline{\partial_t R_{su}}$
Csu	advection in y-direction	$-\langle v \rangle \partial_y \overline{s' u'}$
Psu	shear and gradient production	$-\overline{s' v' \partial_y \langle u \rangle} - \overline{u' v' \partial_y \langle s \rangle}$
Esu	molecular dissipation	
PIsu	pressure redistribution	$\overline{p' \partial_x s'}$
Tsuy1	turbulent transport due to triple correlation	$\overline{s' u' v'}$
Tsuy2	transport	
Tsuy_y	turbulent transport	$\partial_y (\text{Tsuy1} + \text{Tsuy2})$
Dsu	diffusion variable-density term	
Gsu	pressure-flux	0
Bsu	buoyant production	0
Fsu	Coriolis production	$\overline{f_y s' w'}$
Qsu	source	
RsvBudget		
Rsv_t	Time-rate of change of $R_{sv}$	$\overline{\partial_t R_{sv}}$
Csv	advection in y-direction	$-\langle v \rangle \partial_y \overline{s' v'}$
Psv	shear and gradient production	$-\overline{s' v' \partial_y \langle v \rangle} - \overline{v' v' \partial_y \langle s \rangle}$
Esv	molecular dissipation	
PIsv	pressure redistribution	$\overline{p' \partial_y s'}$
Tsvy1	turbulent transport due to triple correlation	$\overline{s' v' v'}$
Tsvy2	transport	
Tsvy3	transport	$\overline{p' s'}$
Tsvy_y	turbulent transport	$\partial_y (\text{Tsvy1} + \text{Tsvy2} + \text{Tsvy3})$
Dsv	diffusion variable-density term	
Gsv	pressure-flux	$\overline{s' \partial_y p'}$
Bsv	buoyant production	$\overline{\rho b' s'}$
Fsv	Coriolis production	0
Qsv	source	
RswBudget		
Rsw_t	Time-rate of change of $R_{sw}$	$\overline{\partial_t R_{sw}}$
Csw	advection in y-direction	$-\langle v \rangle \partial_y \overline{s' w'}$
Psw	shear and gradient production	$-\overline{s' v' \partial_y \langle w \rangle} - \overline{v' w' \partial_y \langle s \rangle}$
Esw	molecular dissipation	
PIsw	pressure redistribution	$\overline{p' \partial_z s'}$
Tswy1	turbulent transport due to triple correlation	$\overline{s' v' w'}$
Tswy2	transport	
Tswy_y	turbulent transport	$\partial_y (\text{Tswy1} + \text{Tswy2})$
Dsw	diffusion variable-density term	
Gsw	pressure-flux	0
Bsw	buoyant production	0
Fsw	Coriolis production	$-\overline{f_y s' u'}$
Qsw	source	
CrossScalars		
Cs1		
Css1		
Roughness		
Sbcs	Scalar boundary values applied on solids	
eps_0	Fluid fraction (grid-based approach)	
eps_1	Solid fraction (grid-based approach)	
eps_f	Fluid fraction (volume-based approach)	
eps_s	Solid fraction (volume-based approach)	