

Cases	Time (year/month/day)	Background condition	Vertical velocity of RT ascent	500 hPa ozone enhancement
S1	2012/03/06	Cutoff low	$> 0.2 \text{ km h}^{-1}$	Enhanced
S2	2012/03/06	Cutoff low	$> 0.2 \text{ km h}^{-1}$	Enhanced
S3	2012/03/12	Low/high trough	$> 0.2 \text{ km h}^{-1}$	Enhanced
S4	2012/03/13	Low/high trough	$> 0.2 \text{ km h}^{-1}$	Enhanced
S5	2012/04/05	Low/high trough	$> 0.2 \text{ km h}^{-1}$	Enhanced
S6	2012/04/05	Low/high trough	$> 0.2 \text{ km h}^{-1}$	Enhanced
S7	2012/04/06	Low/high trough	$> 0.2 \text{ km h}^{-1}$	Enhanced
S8	2012/06/13	Cutoff low	$> 0.2 \text{ km h}^{-1}$	Enhanced
S9	2012/06/13	Cutoff low	$> 0.2 \text{ km h}^{-1}$	Enhanced
S10	2013/08/02	Cutoff low	$> 0.2 \text{ km h}^{-1}$	Enhanced
S11	2013/08/02	Cutoff low	$> 0.2 \text{ km h}^{-1}$	Enhanced
S12	2013/08/03	PV streamer	$> 0.2 \text{ km h}^{-1}$	Enhanced
S13	2013/08/03	PV streamer	$> 0.2 \text{ km h}^{-1}$	Enhanced
S14	2014/01/02	PV streamer	$> 0.2 \text{ km h}^{-1}$	None
S15	2014/01/02	PV streamer	$> 0.2 \text{ km h}^{-1}$	None
S16	2014/01/03	PV streamer	$0.1\text{--}0.2 \text{ km h}^{-1}$	None
S17	2014/01/04	Low/high trough	$> 0.2 \text{ km h}^{-1}$	None
S18	2014/05/02	Low/high trough	$0.1\text{--}0.2 \text{ km h}^{-1}$	Enhanced
S19	2014/05/02	Low/high trough	$> 0.2 \text{ km h}^{-1}$	Enhanced
S20	2015/01/03	PV streamer	$> 0.2 \text{ km h}^{-1}$	None