

25 Feb 2008	The present study	Previous studies
Auroral onset arc development		
Initial brightening	05:23:50	05:26:37–05:27:01 (Lui, 2011) 05:29:11 (Kepko et al., 2009)
Enhancement of the wave-like structure	05:28:47	05:29 (Nishimura et al., 2010, 2011) 05:29:43 or 05:30:07 (Kepko et al., 2009)
Poleward expansion	05:29:34	05:29:35 (Lui, 2011) 05:30:31 (Kepko et al., 2009)
Preonset aurora		
Emergence	~ 05:25	diffuse patch, 05:23:15 (Kepko et al., 2009)
Arrival just poleward of/at the onset arc	05:26:50/05:27:15	arrived (Nishimura et al., 2010, 2011, 2013a) ~ 05:27 (Lui, 2011) diffuse patch, 05:29:14 (Kepko et al., 2009)
$\Delta$ MLT, h	~ 0.3, west	