

LINE IDENTIFICATION FOR NTT EMMI ECHELLE SPECTRA  
THORIUM-ARGON :: GRATING ECHELLE 9 & GRISM 3  
( OCTOBER 2004 )

## 1 Introduction

This document contains the atlas for line identification of NTT EMMI Echelle spectra taken with the Grating Echelle #9 with Grism #3 as cross-disperser. [This is the final version taken through the median of 3 frames.]

## 2 Hints & Tips for the reduction

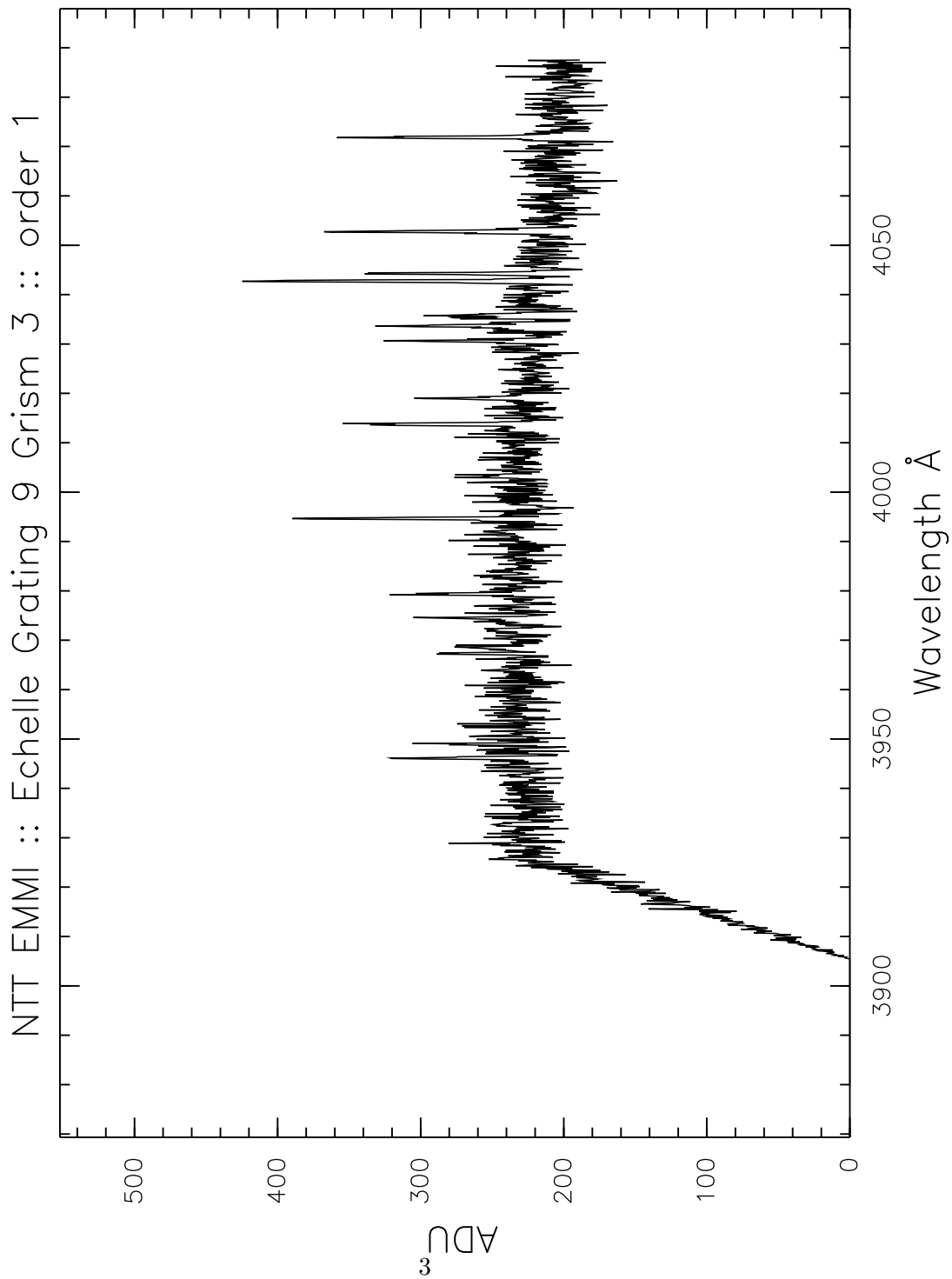
Since the EMMI Red CCD has a gap, one should take care of the tracing process during the reduction. However, since there is few orders in the mode Echelle 9 Grism 3, the trace is not too difficult. Only order 9 (see figure next page) is altered by the gap.

## 3 Image of the calibration spectrum

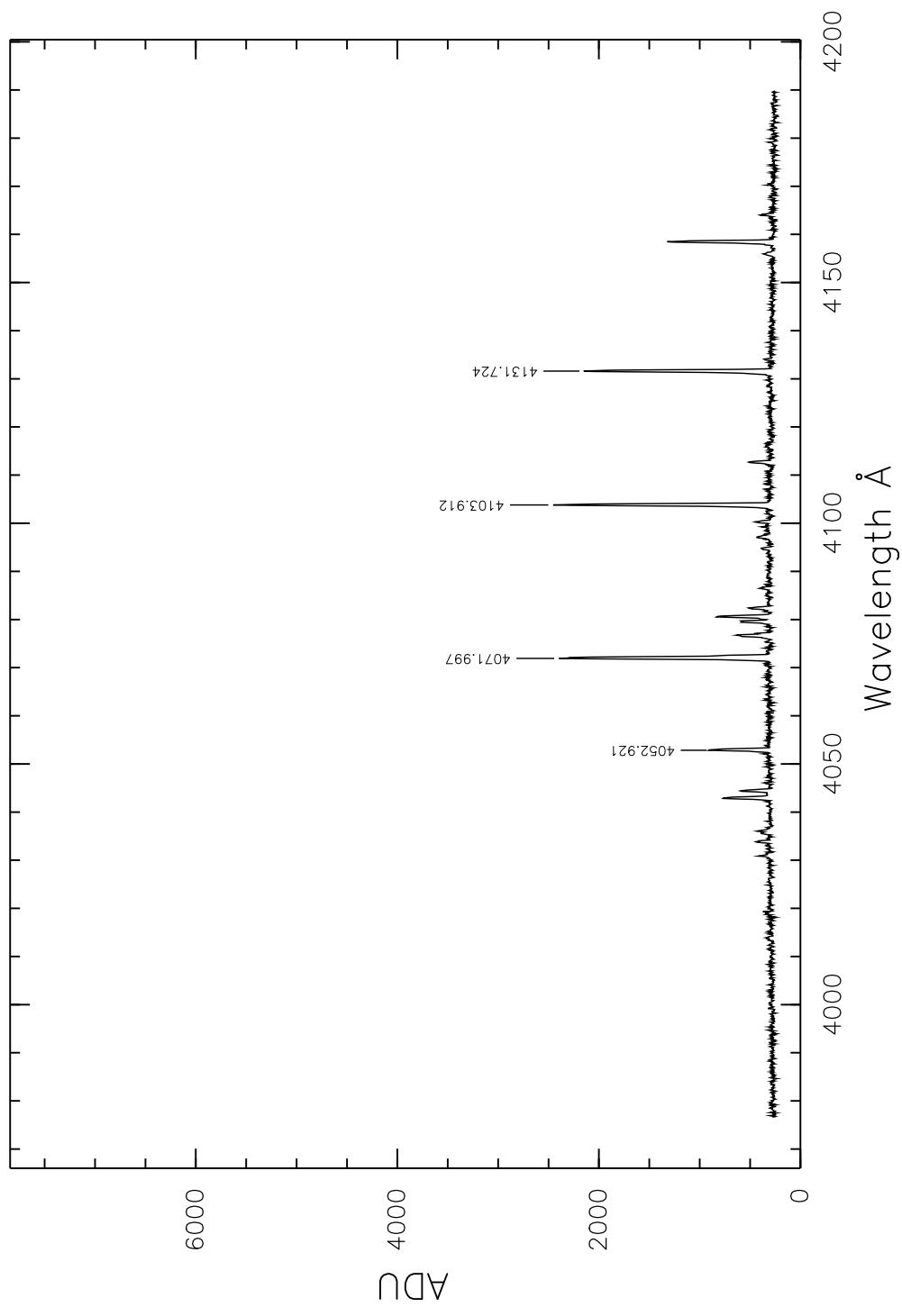
Below is the image of the Thorium-Argon frame. The CCD gap is indicated as well as the identification of the orders.



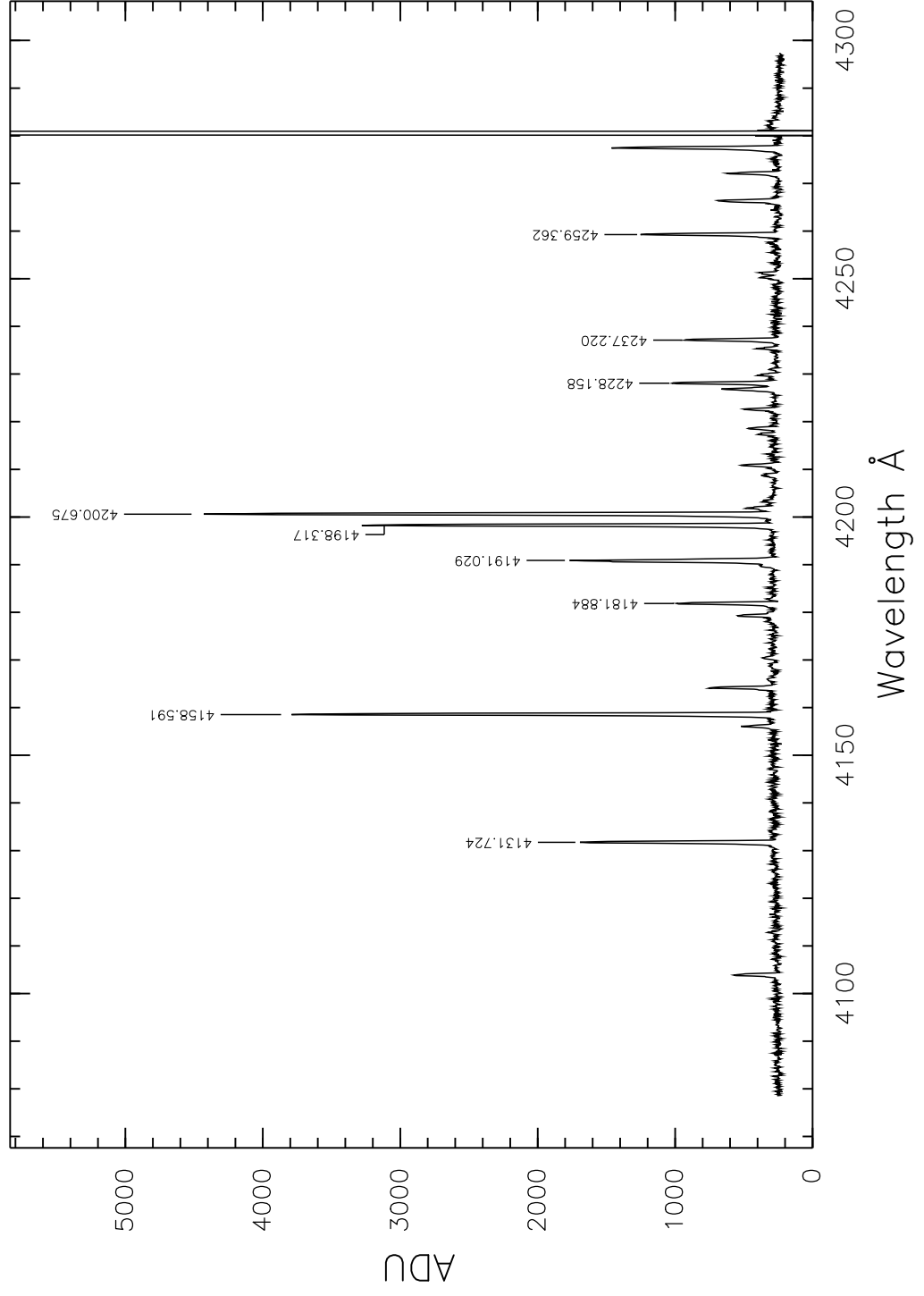
#### 4 Atlas of line identification



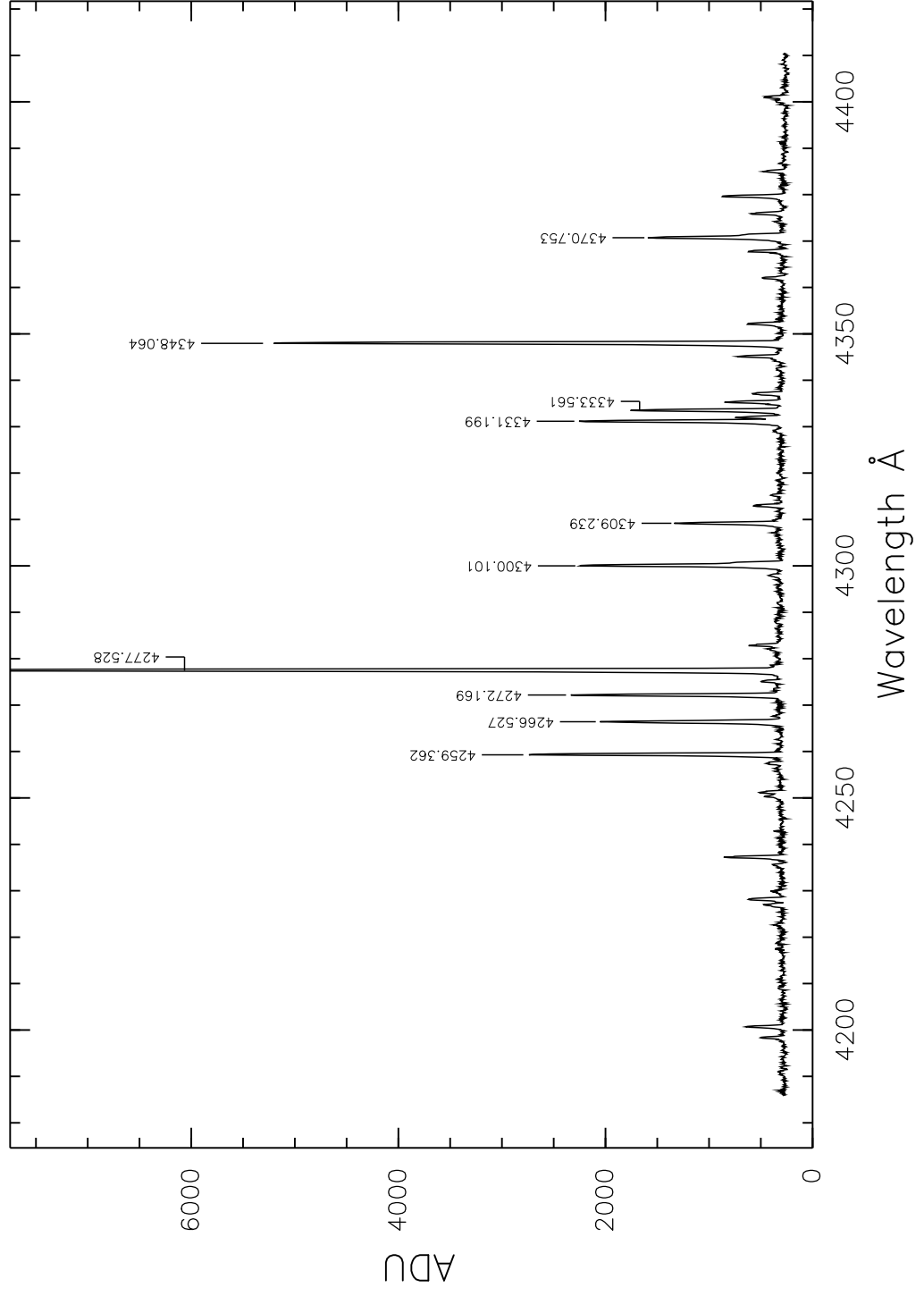
NTT EMMI :: Echelle Grating 9 Grism 3 :: order 2



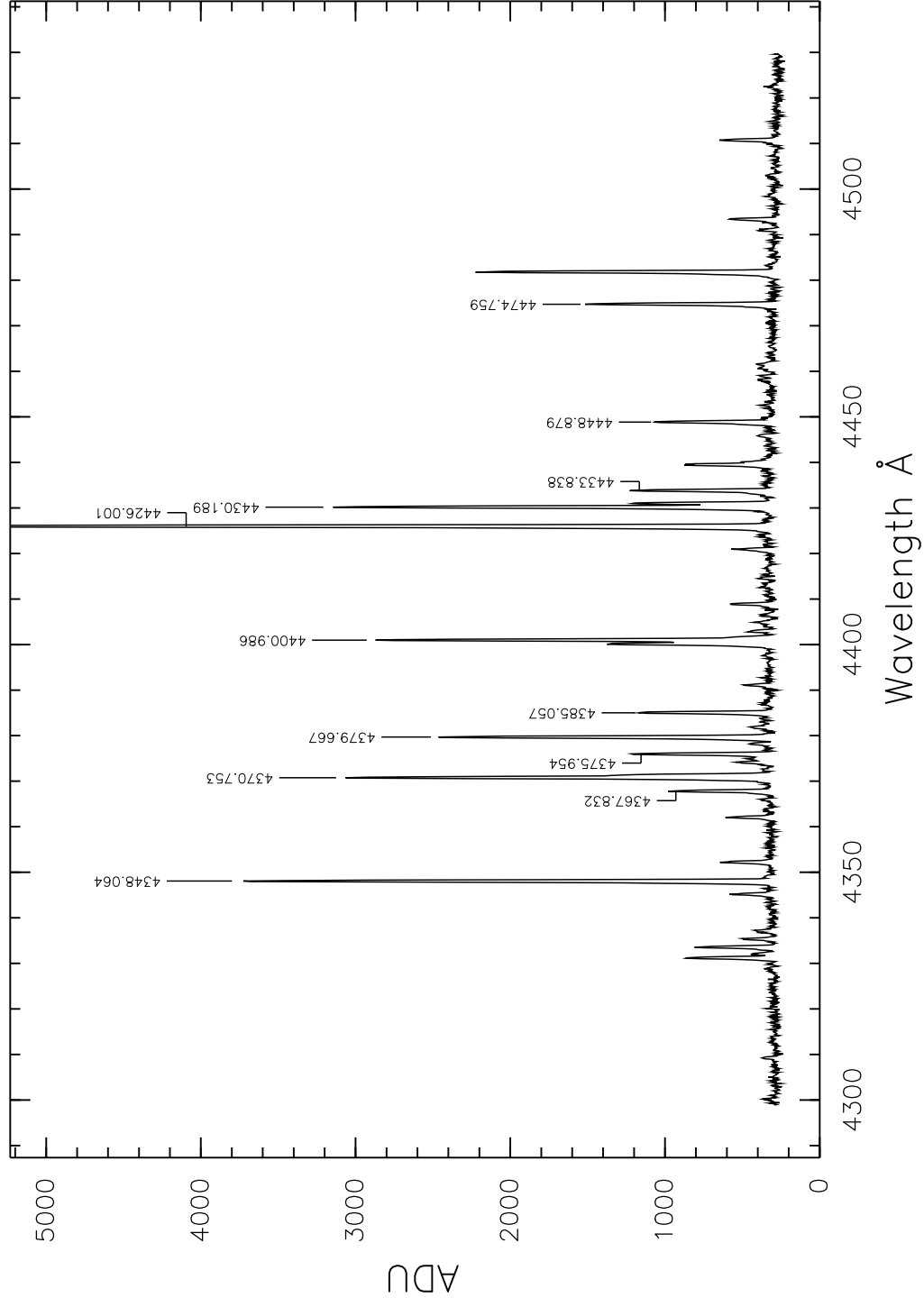
NTT EMMI :: Echelle Grating 9 Grism 3 :: order 3



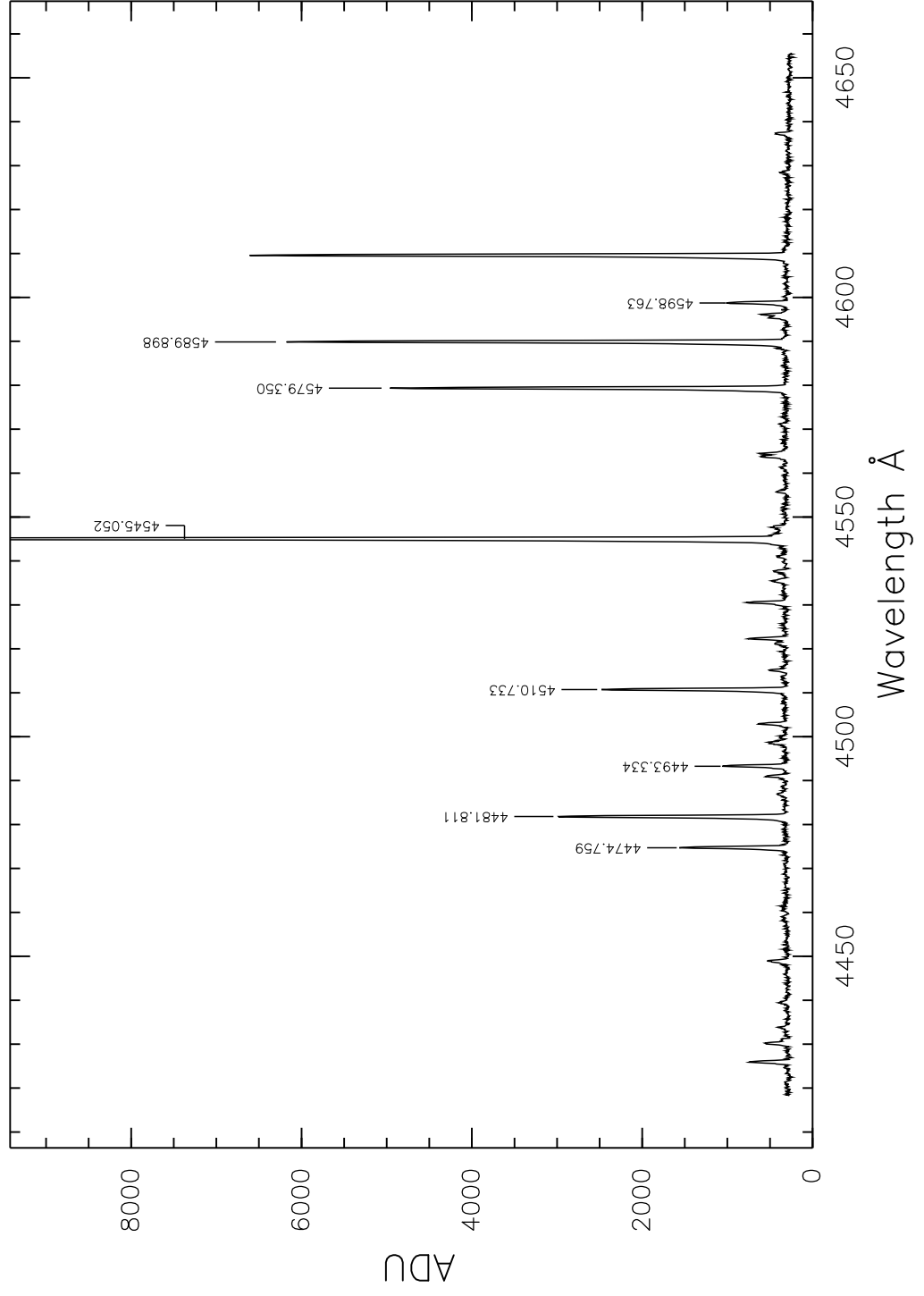
NTT EMMI :: Echelle Grating 9 Grism 3 :: order 4



NTT EMMI :: Echelle Grating 9 Grism 3 :: order 5

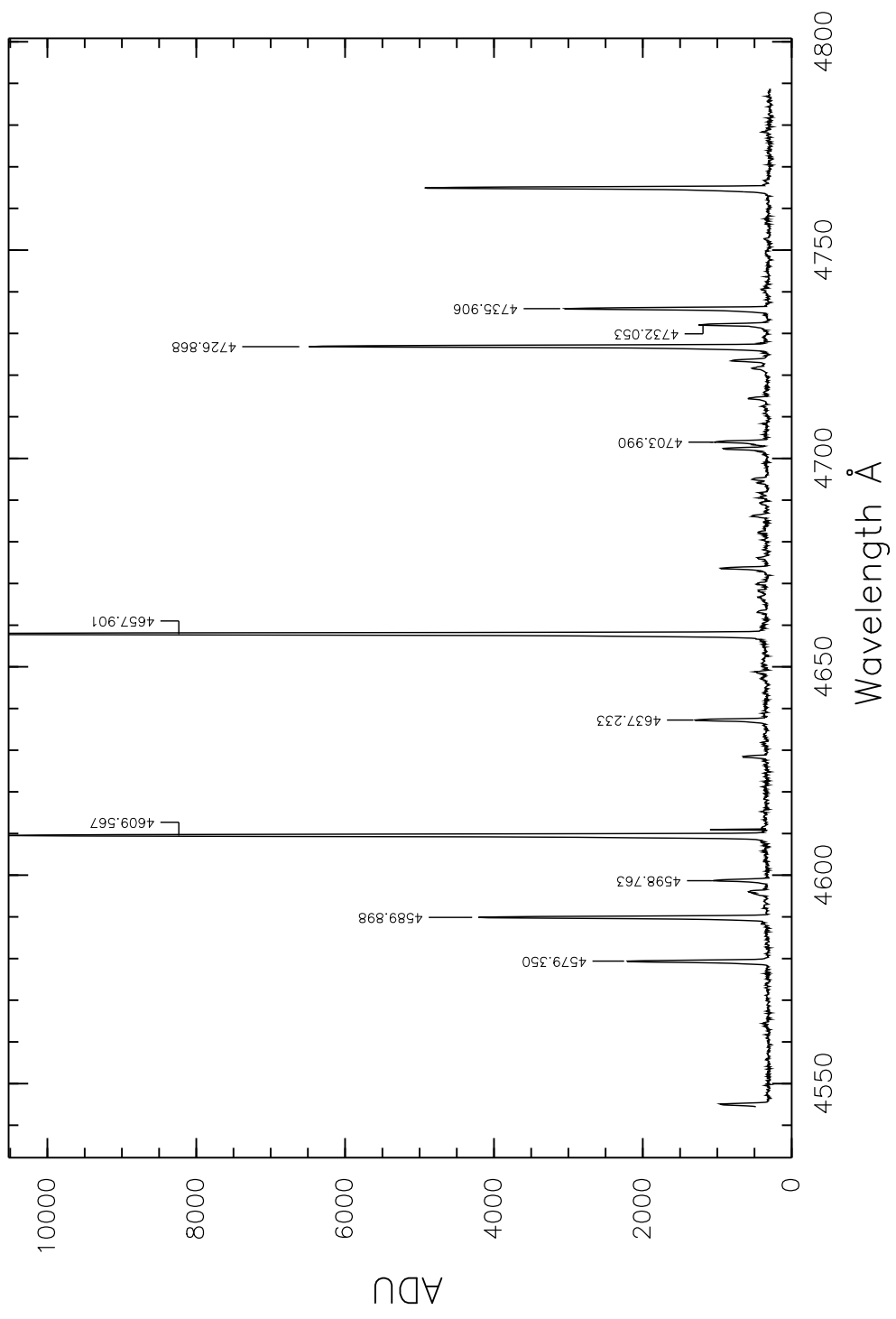


NTT EMMI :: Echelle Grating 9 Grism 3 :: order 6

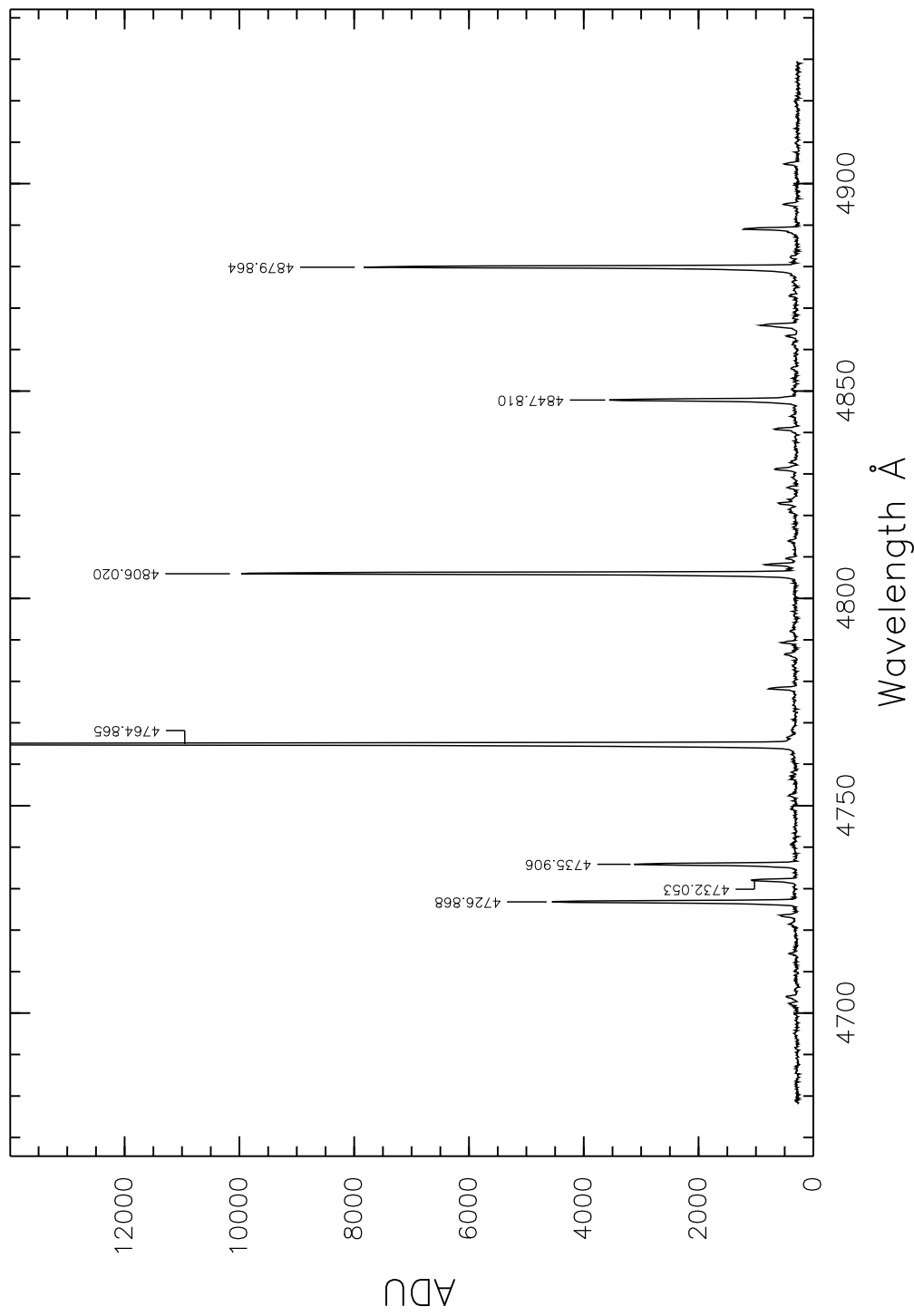




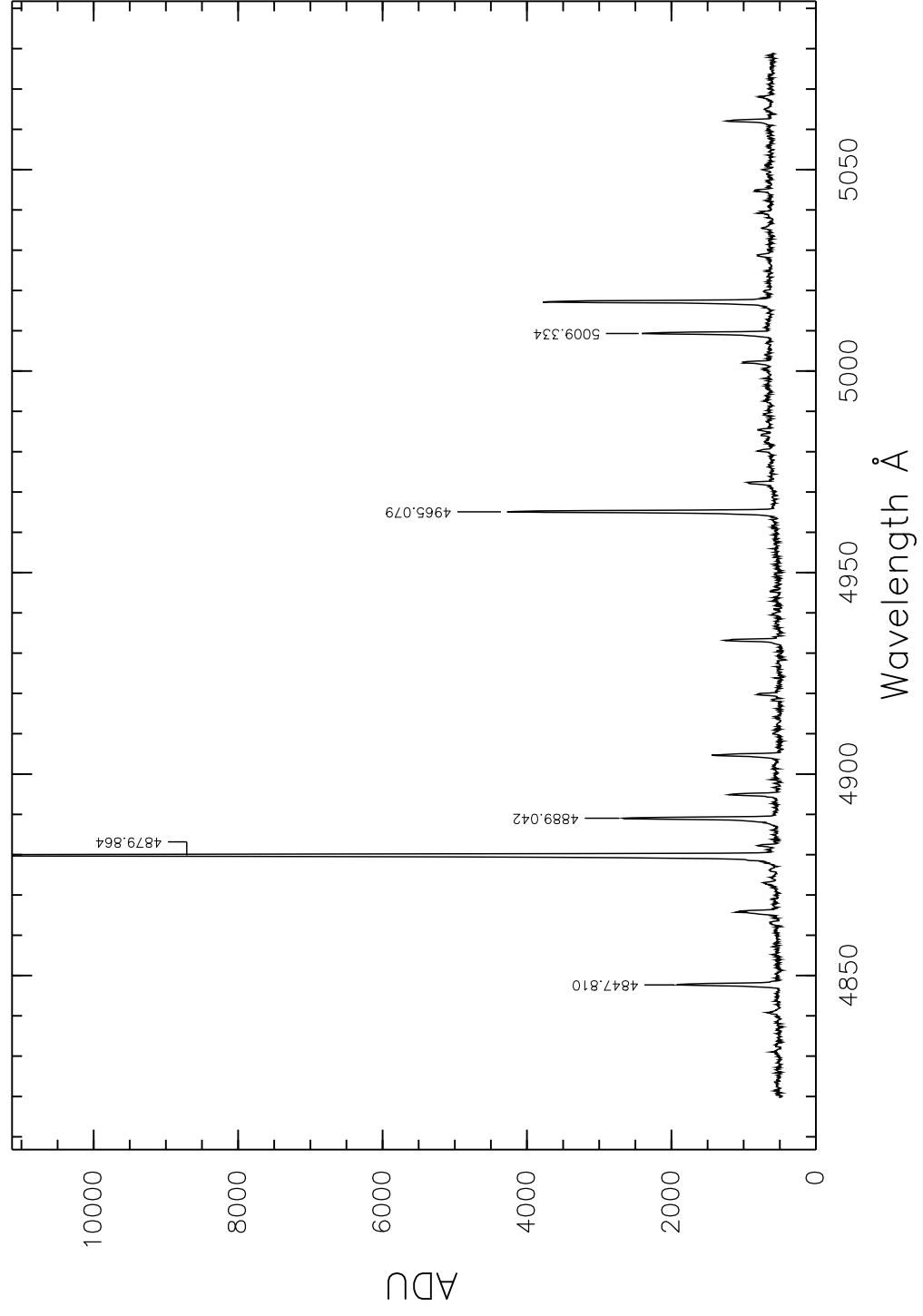
NTT EMMI :: Echelle Grating 9 Grism 3 :: order 7



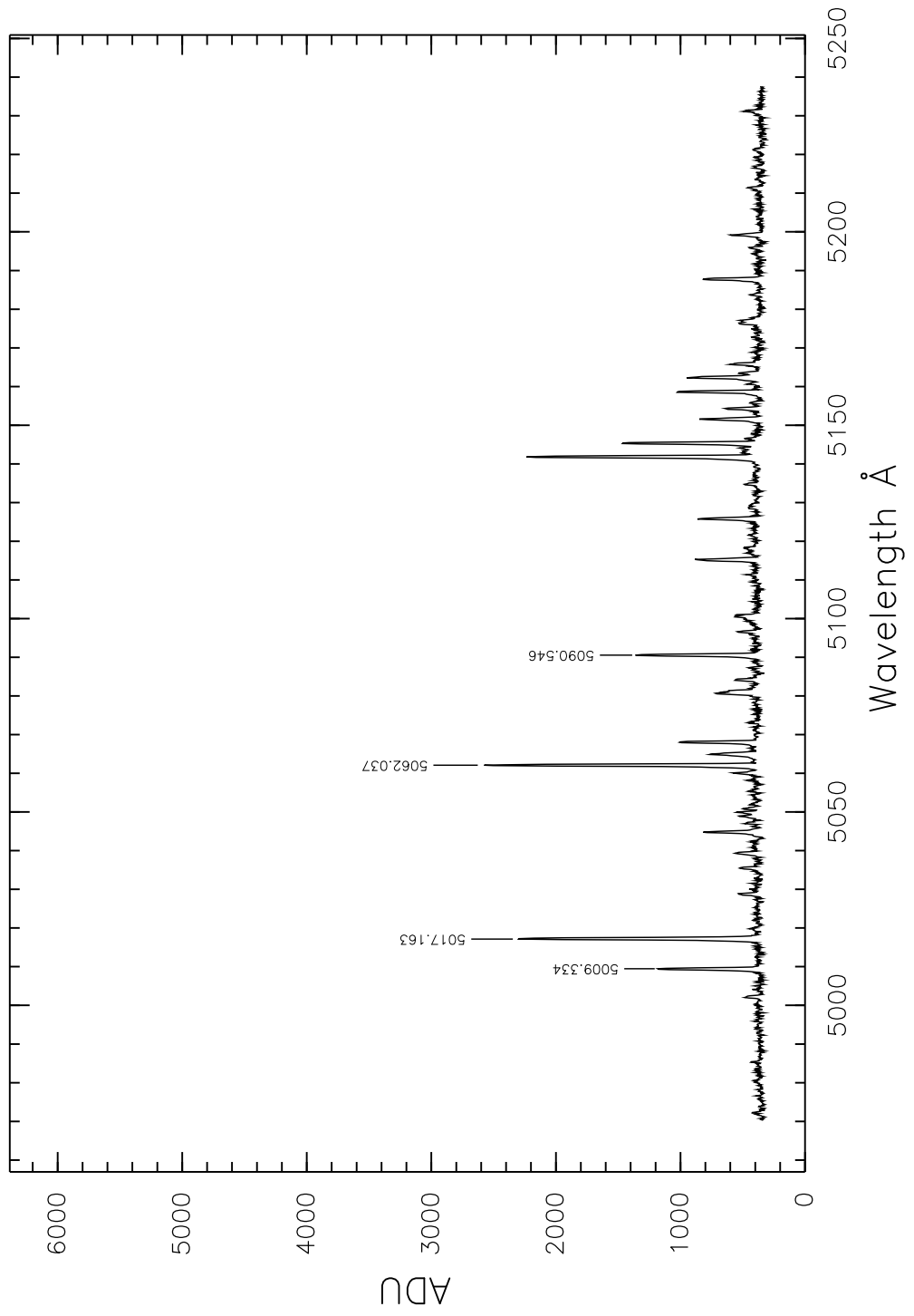
# NTT EMMI :: Echelle Grating 9 Grism 3 :: order 8

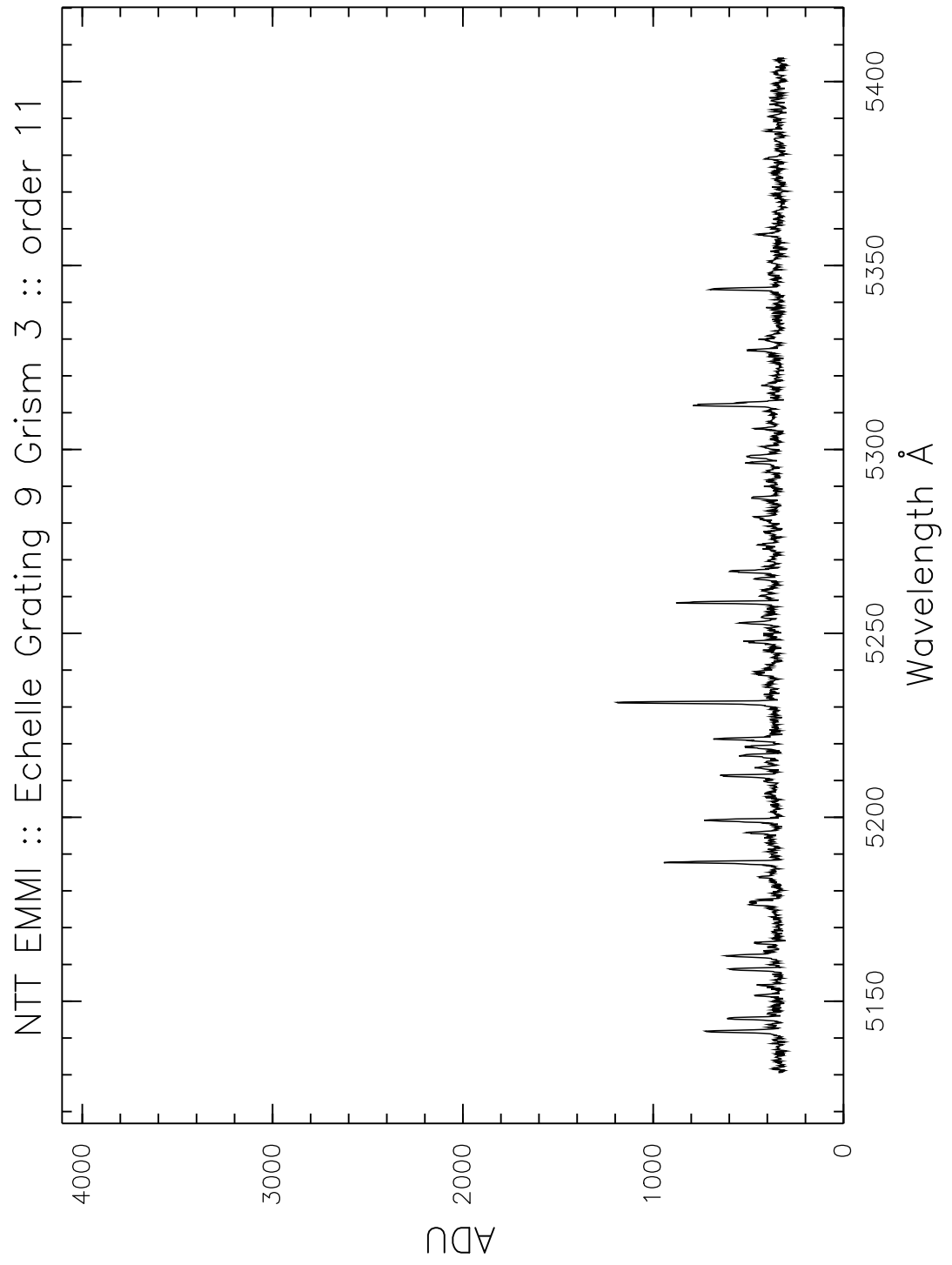


NTT EMMI :: Echelle Grating 9 Grism 3 :: order 9

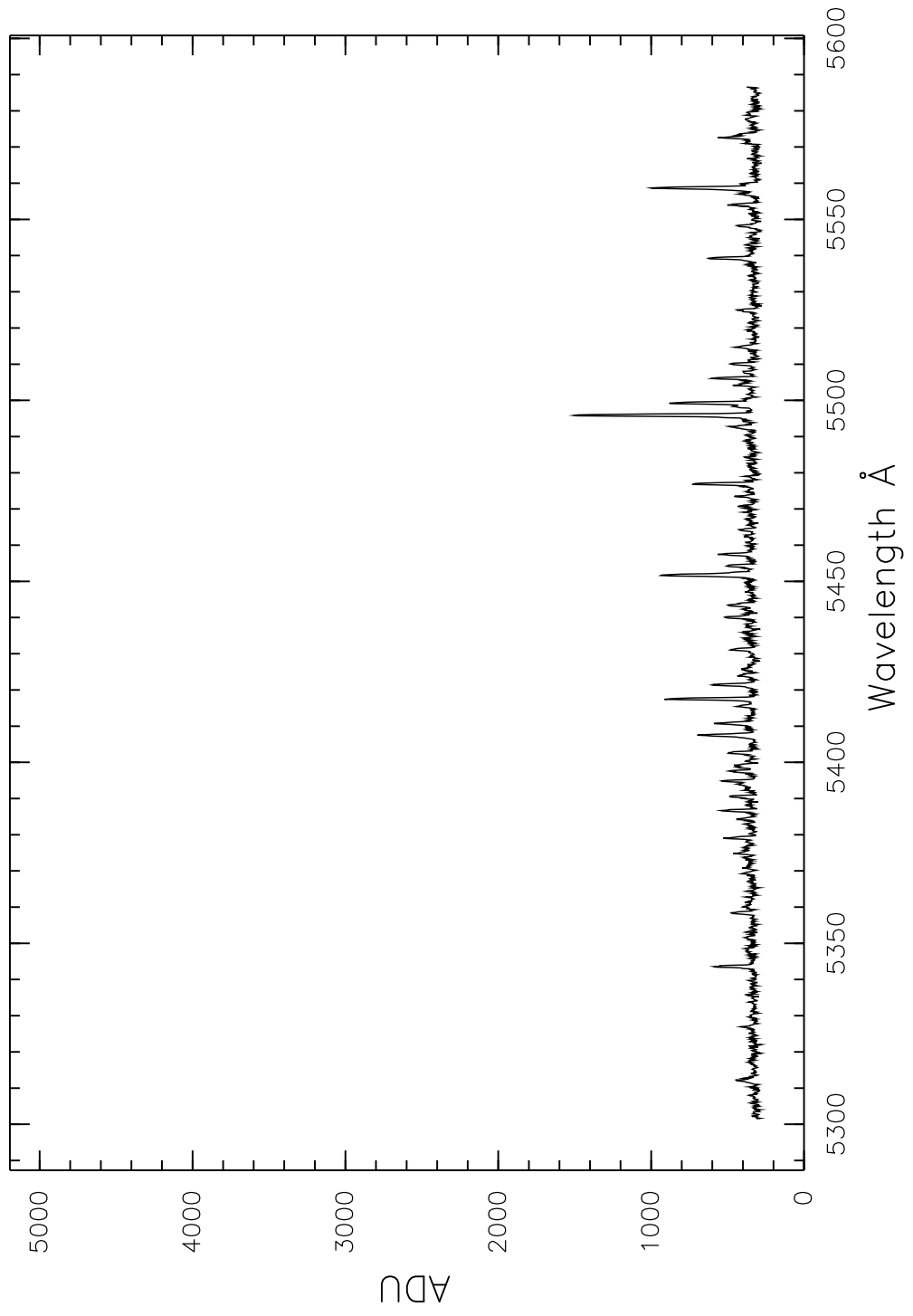


NTT EMMI :: Echelle Grating 9 Grism 3 :: order 10

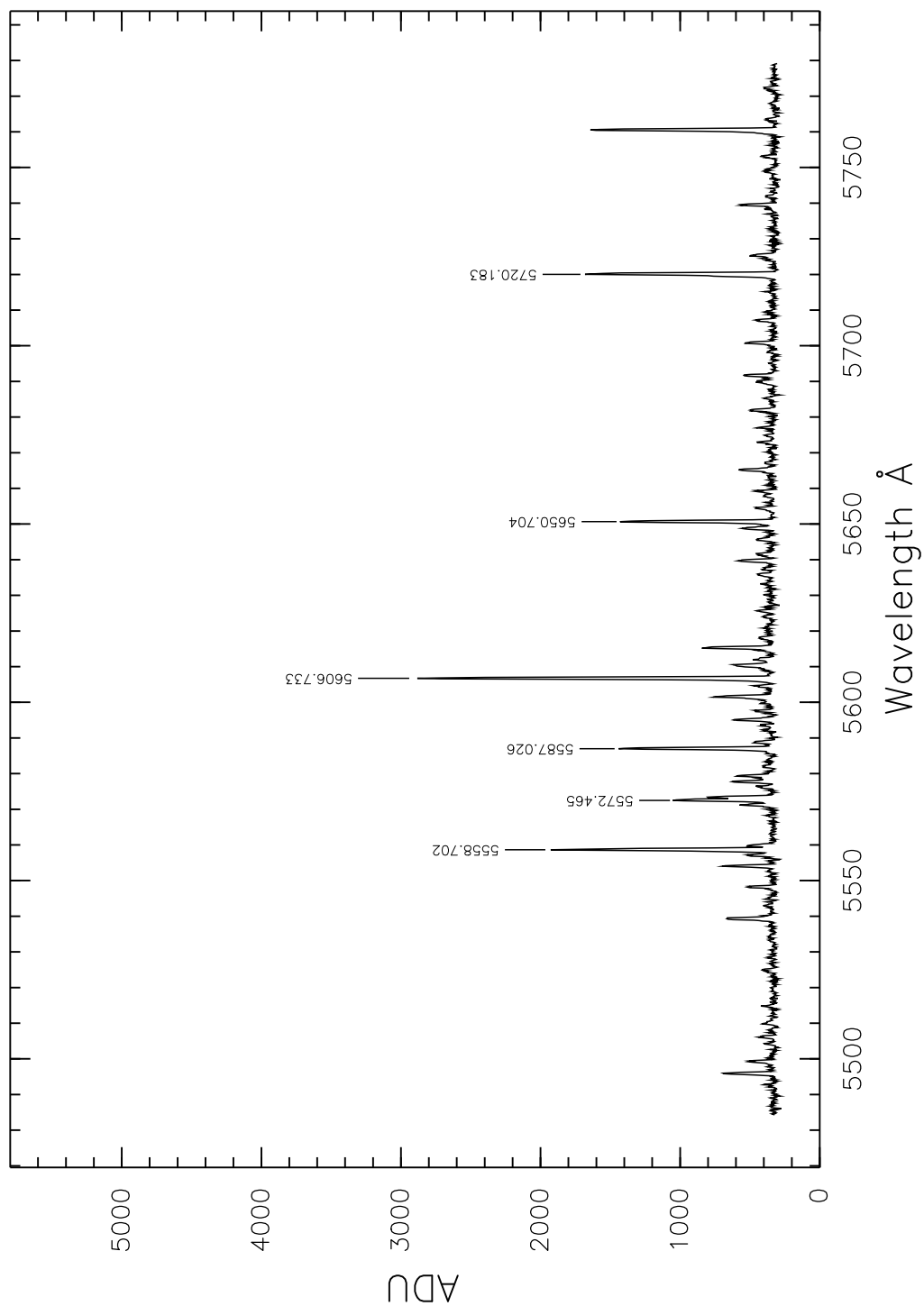




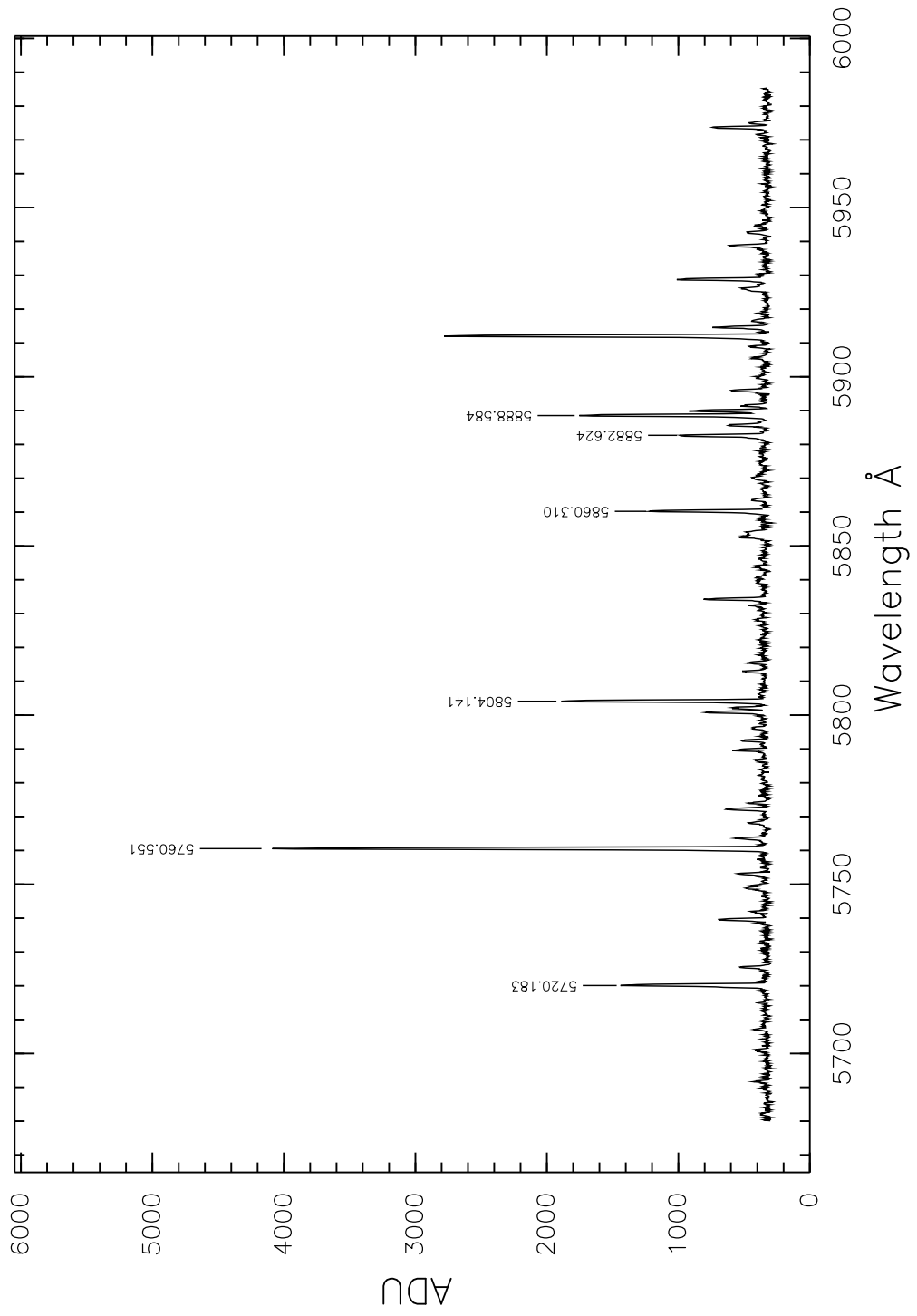
NTT EMMI :: Echelle Grating 9 Grism 3 :: order 12



NTT EMMI :: Echelle Grating 9 Grism 3 :: order 13

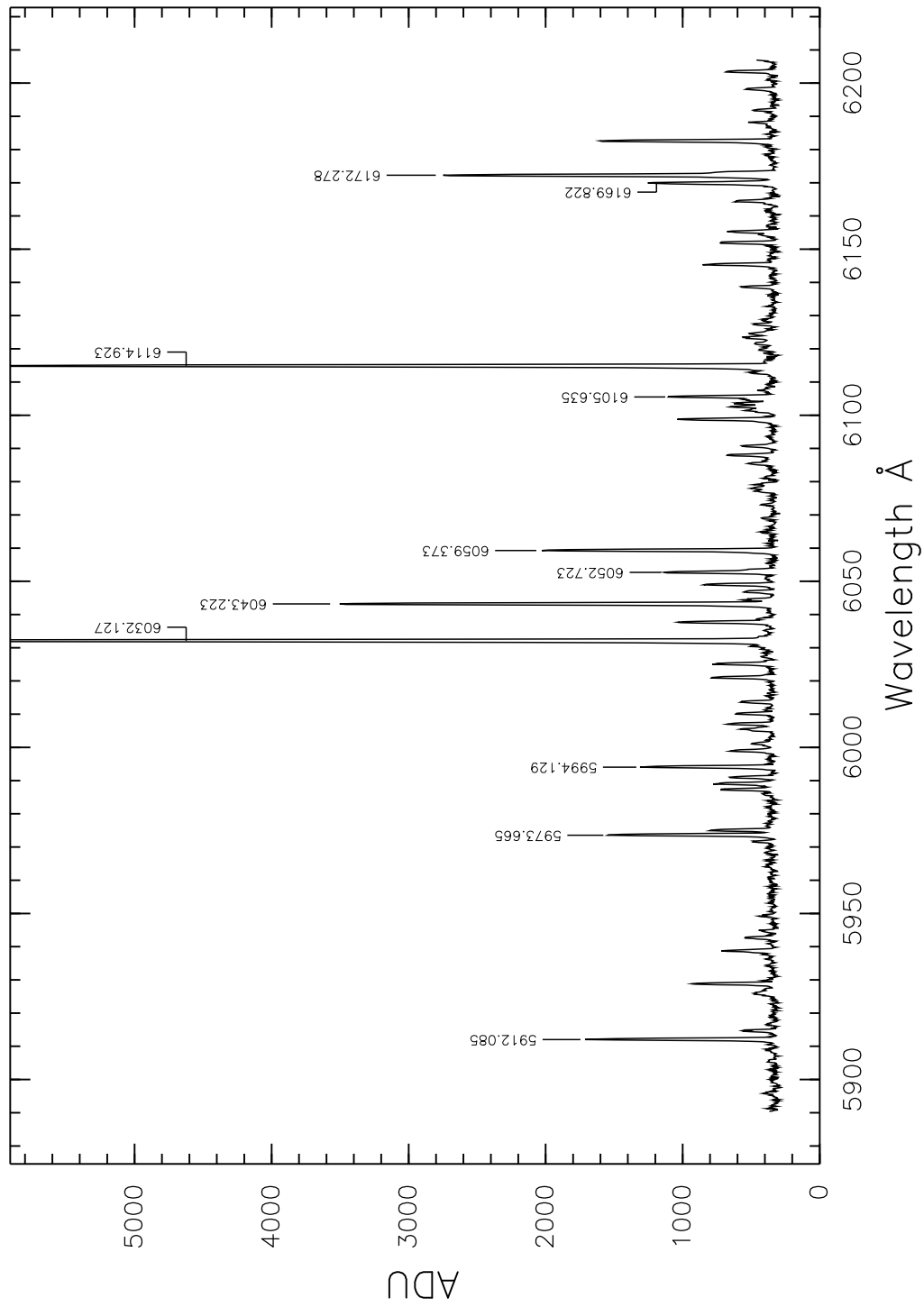


NTT EMMI :: Echelle Grating 9 Grism 3 :: order 14

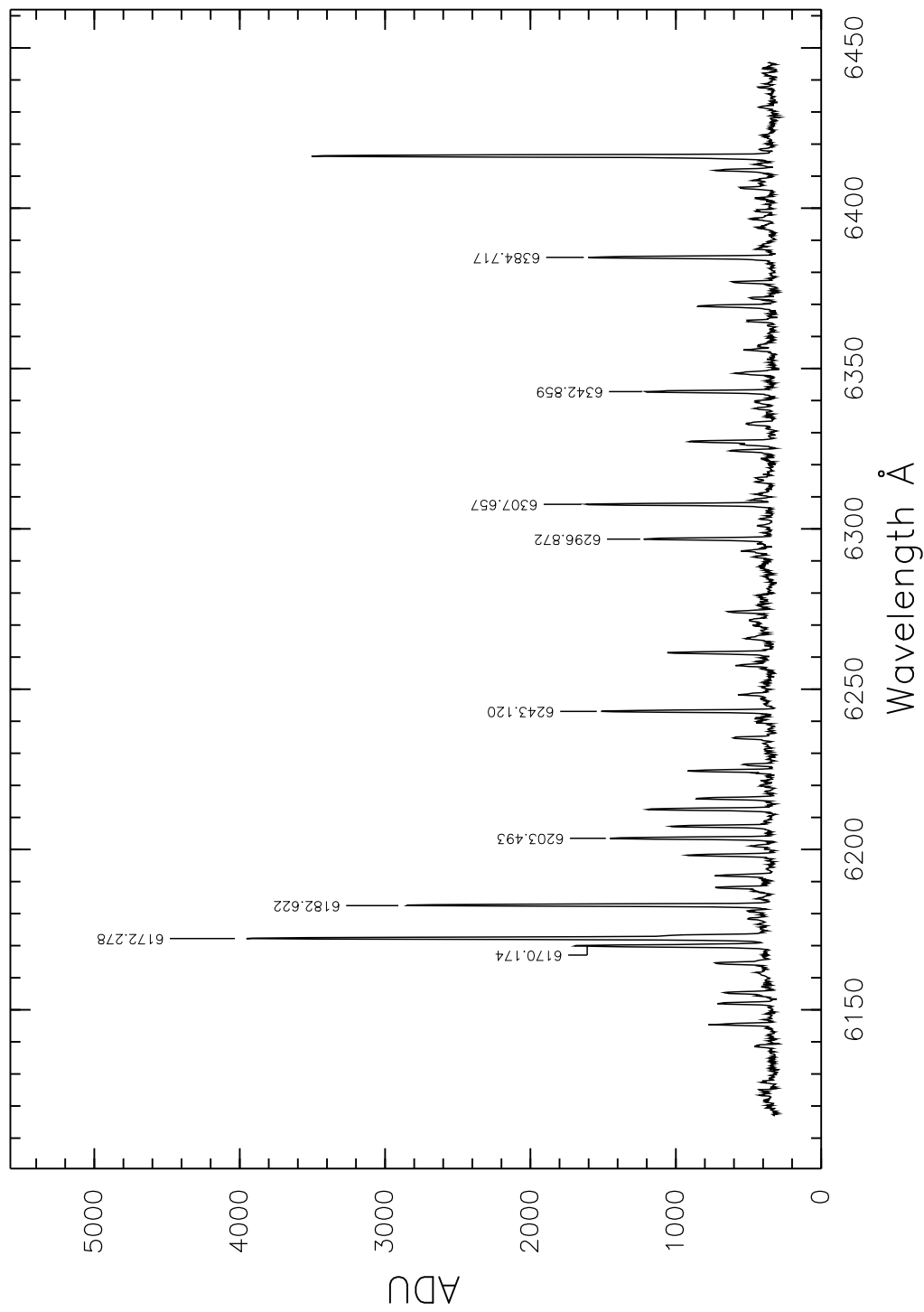




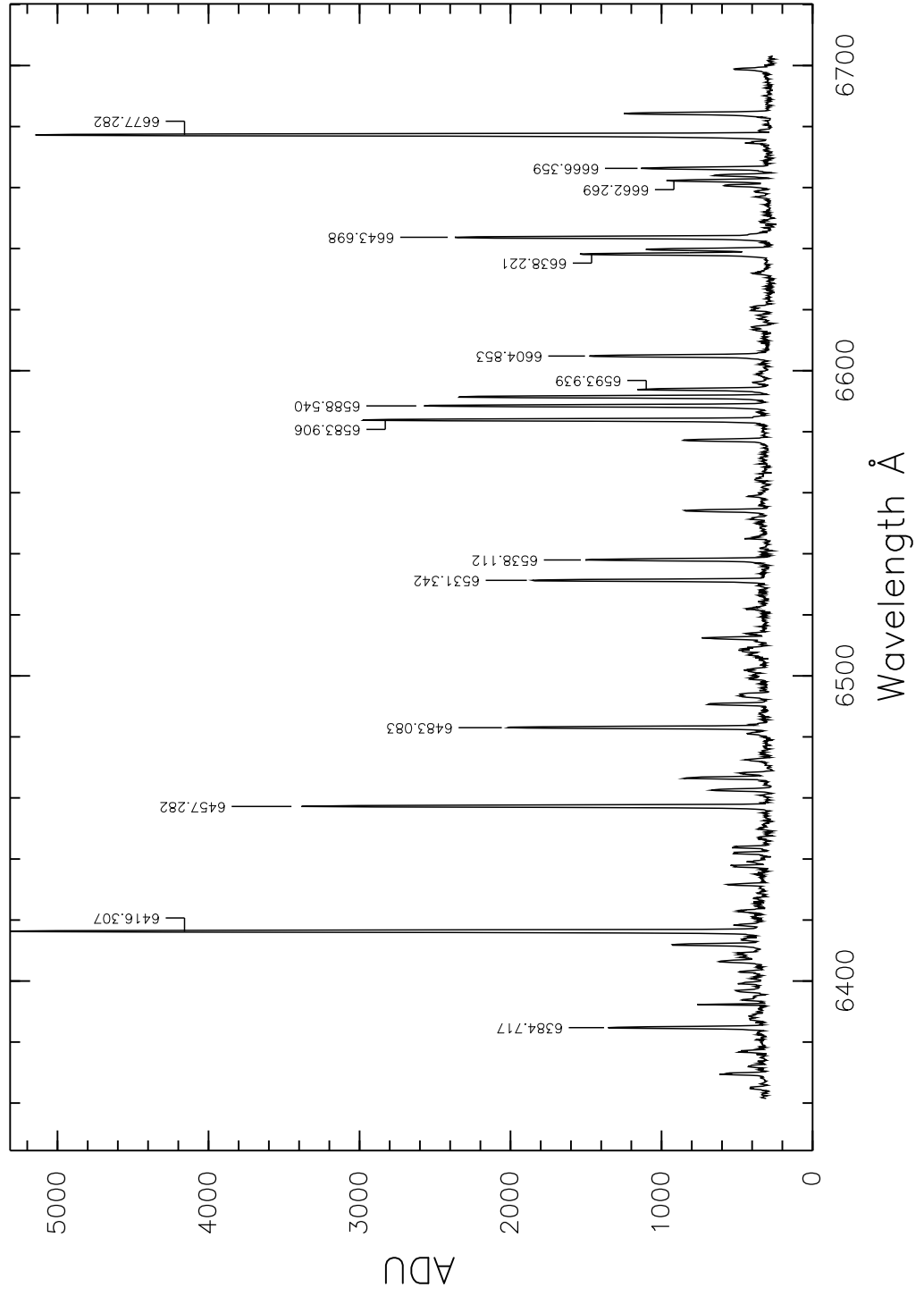
NTT EMMI :: Echelle Grating 9 Grism 3 :: order 15



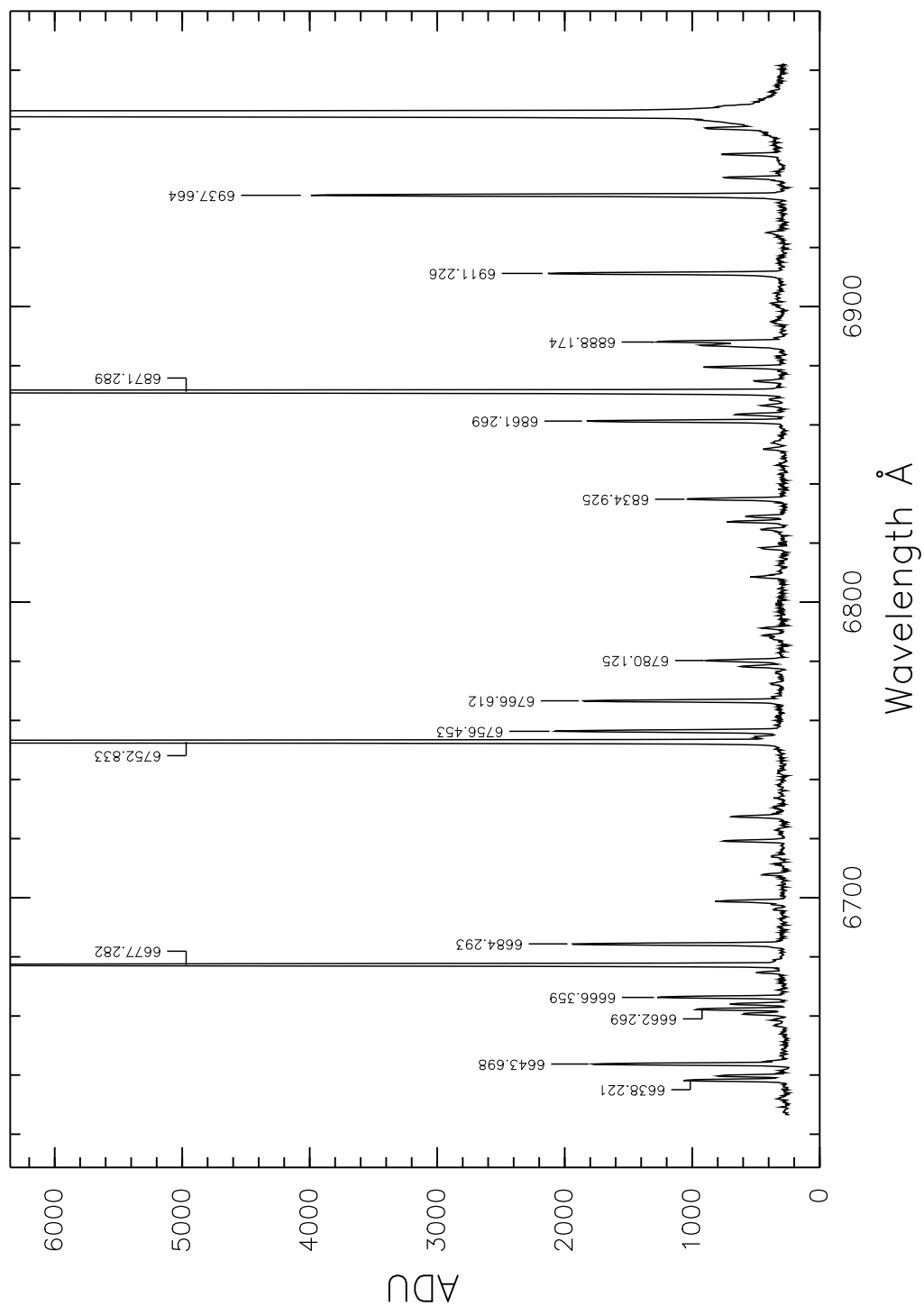
NTT EMMI :: Echelle Grating 9 Grism 3 :: order 16



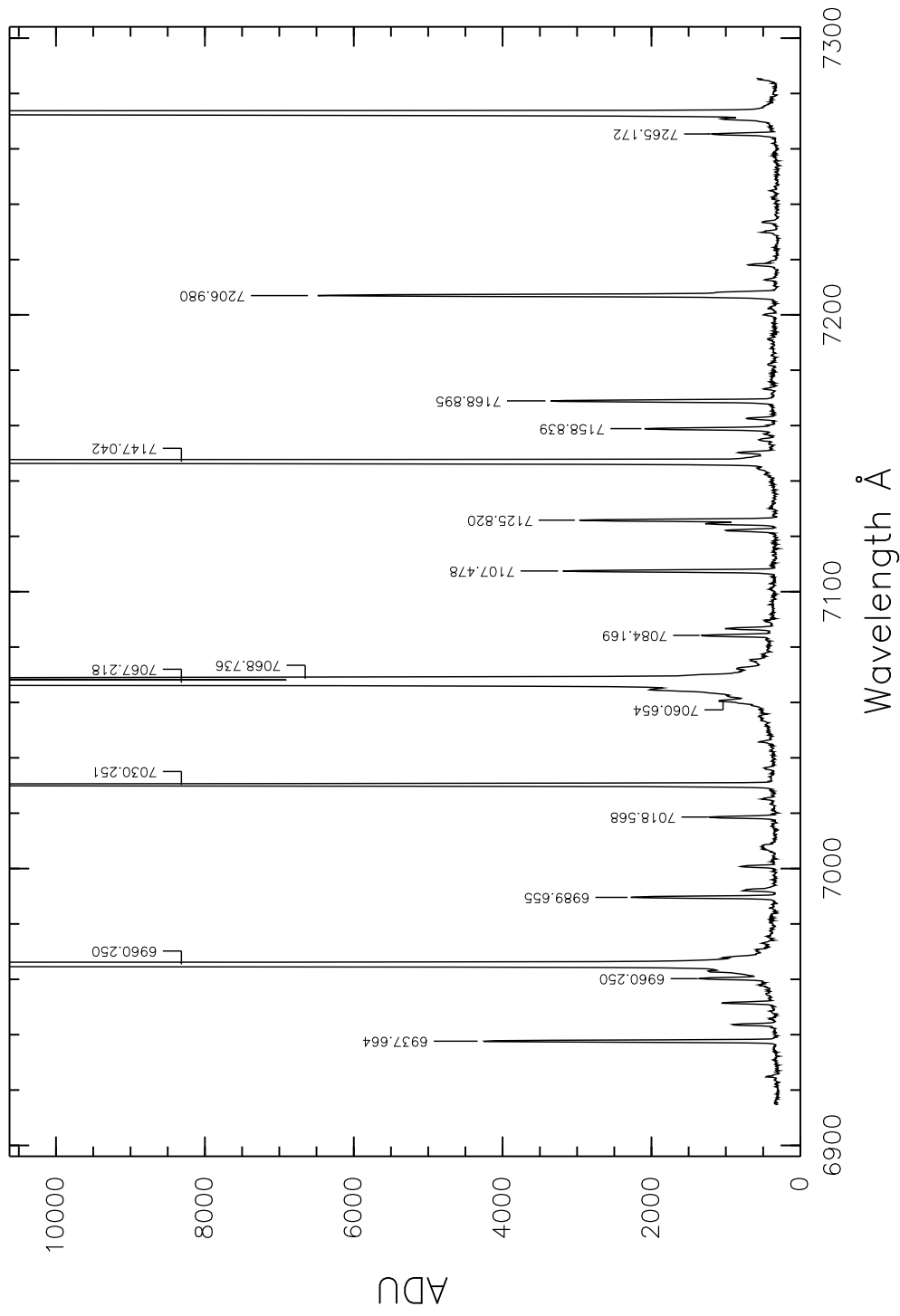
NTT EMMI :: Echelle Grating 9 Grism 3 :: order 17



NTT EMMI :: Echelle Grating 9 Grism 3 :: order 18



NTT EMMI :: Echelle Grating 9 Grism 3 :: order 19



NTT EMMI :: Echelle Grating 9 Grism 3 :: order 20

