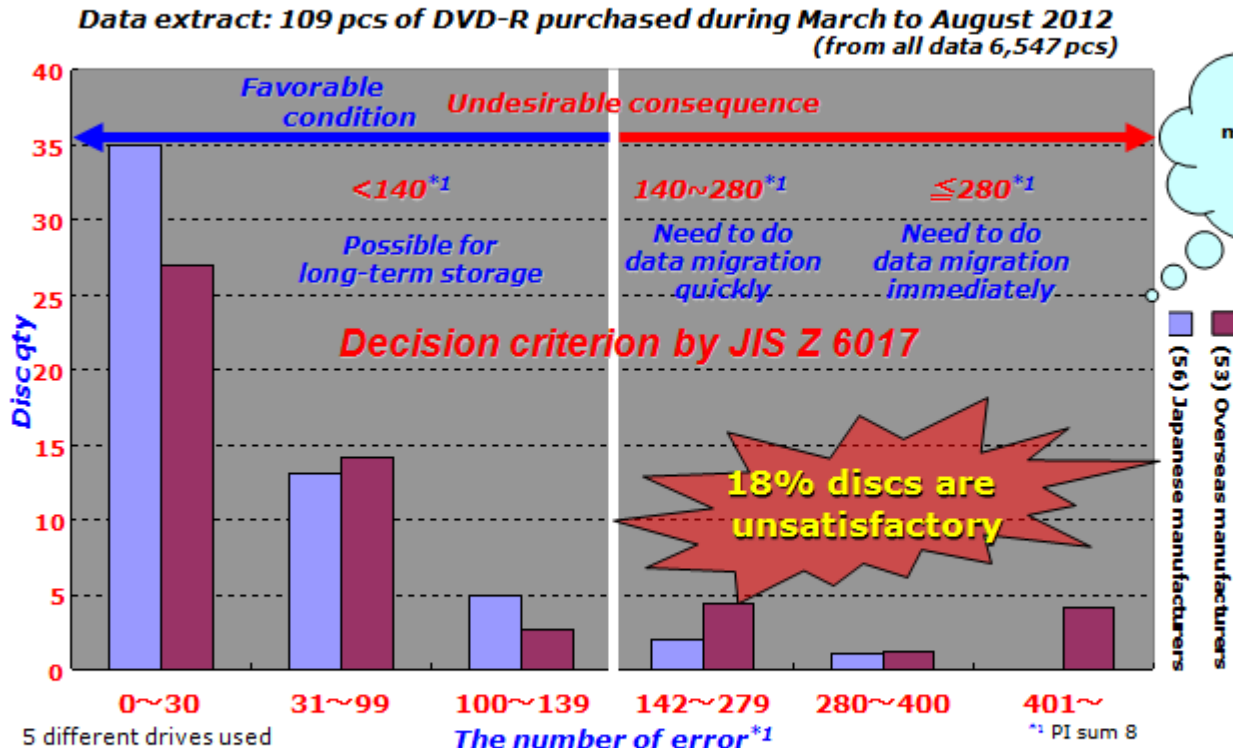


# Optical disc/drive Quality optimized for Professional archive usage

Measurement results are provided by ALMEDIO Inc.

# Initial PI-Error counts - DVD-R in CE market

## Long-term Storage Performance – Commonly-used Optical Disc Initial Characteristics (Error rate)



Source: ALMEDIO DISCWeb <http://discweb.almedio.co.jp/>

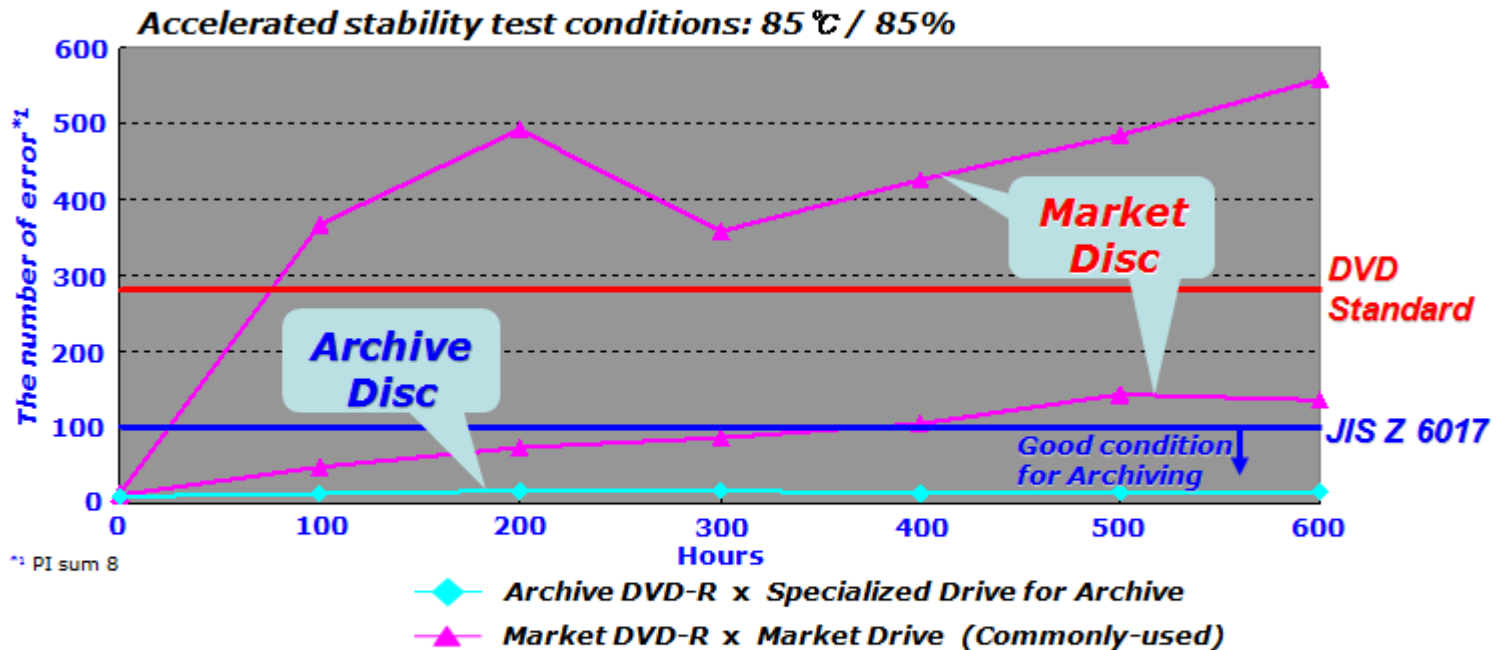
Optical discs commonly-used are unsuited for use in Long-term storage since they are the value-oriented product. (CD-R, BD-R are also the same.)

\*Measured at 3 points of the disc. So, it is speculated that many more discs are not satisfactory when measurement whole area.

# PI-Error observation in acceleration test

Comparison between DVD-R in CE market and for professional archive

## Long-term Storage Performance – comparing Aged deterioration (Error rate)



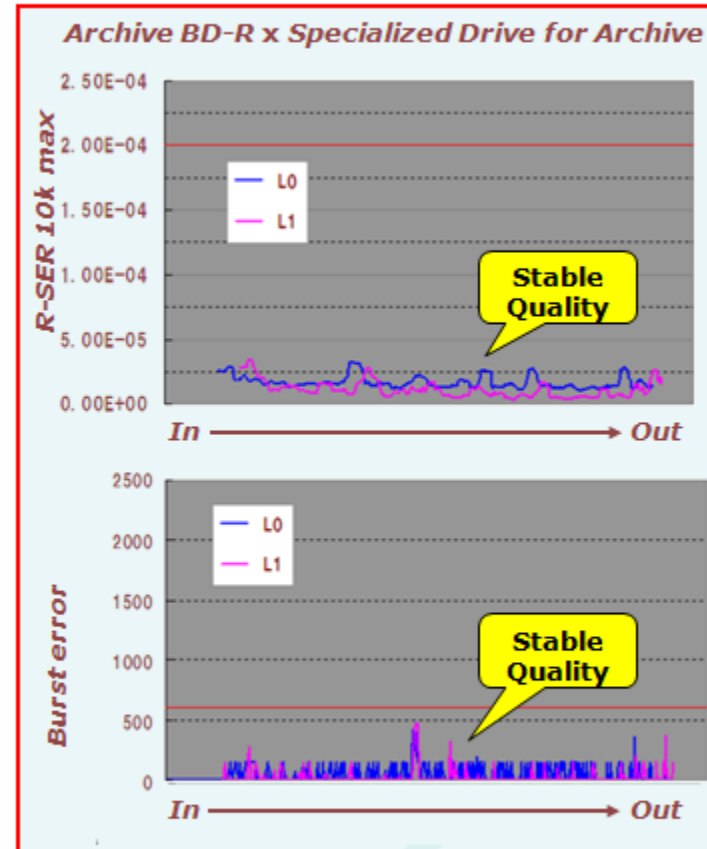
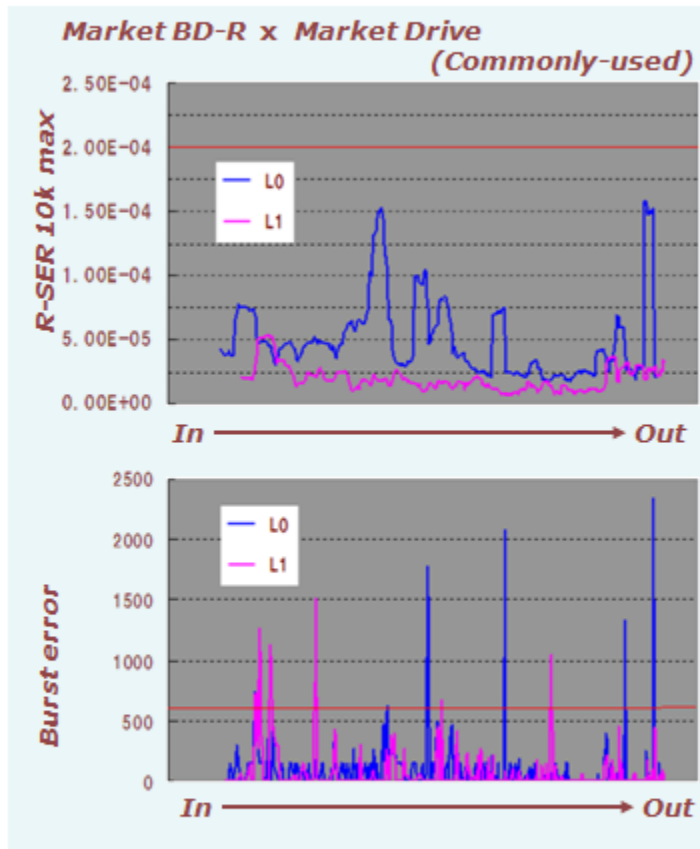
**Market discs are incapable of Long-term storage even if initial characteristics are good.**

**Data on Archive discs recorded by Combination Archive disc & Drive for Archive can be stored for quite a while.**

# Initial Digital-Error counts - BD-R

Comparison between BD-R in CE market and for professional archive

## Untroubled Archiving Conditions



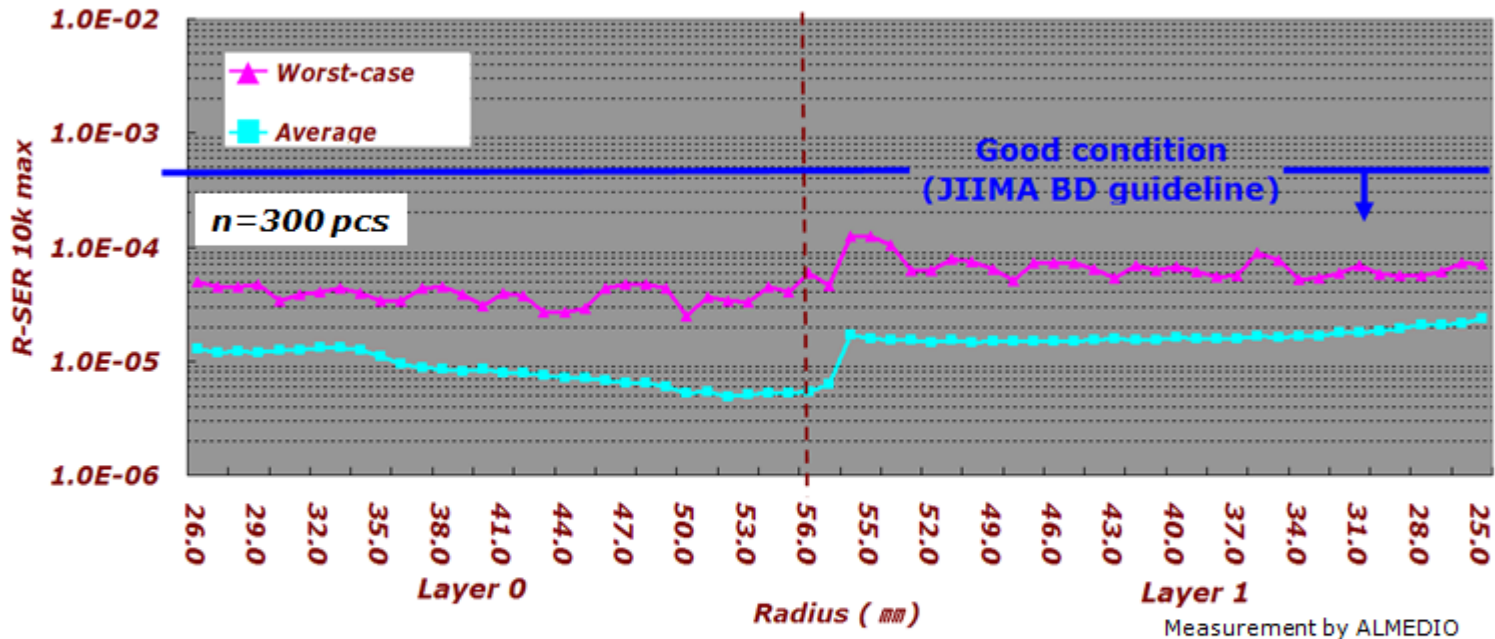
Measurement by ALMEDIO

**Using Drive for Archive, perform at Archive disc's full potential**

# Initial R-SER counts - BD-R for professional archive

## Archive Disc with Professional Drive <R-SER>

BD-R 50GB Initial Characteristics R-SER



Archive Disc : Enterprise Grade BD-R 50GB for Archive "ASBS25RDJP"  
MITSUBISHI KAGAKU MEDIA CO.,LTD.

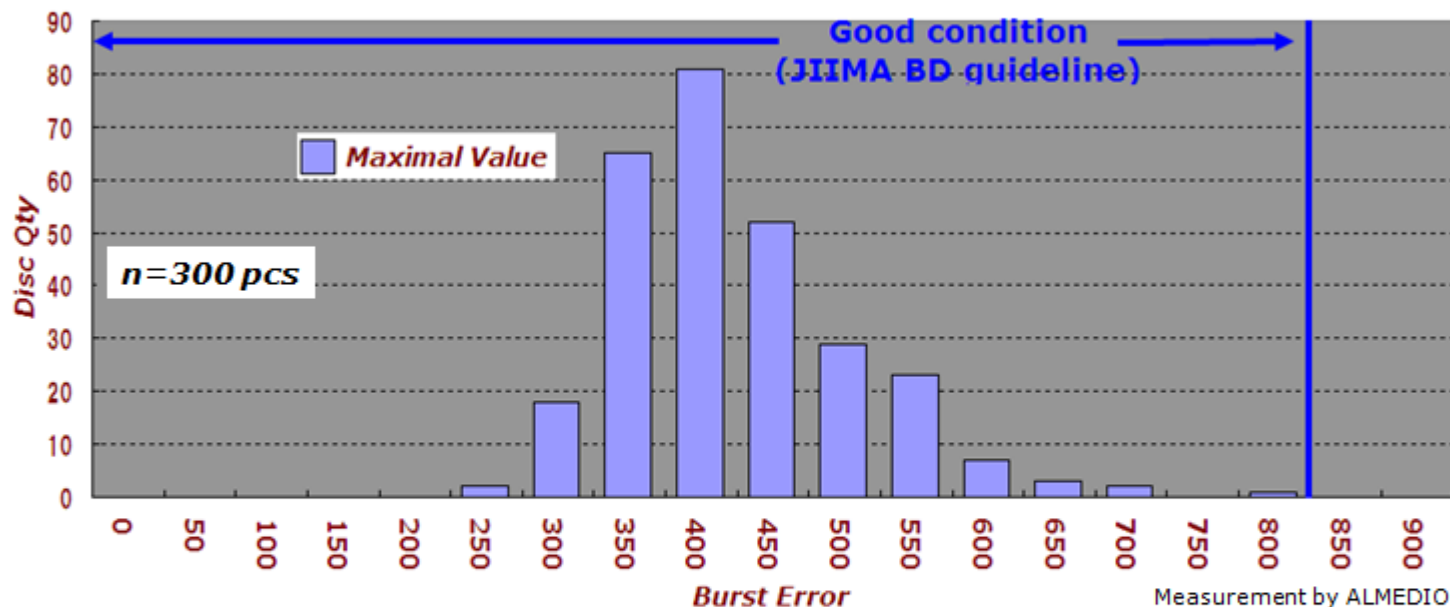
Drive for Archive : Professional Drive for Archive "BDR-PR1M"  
PIONEER CORPORATION

**Satisfied JIIMA BD guideline completely by this combination**

# Initial Burst-Error counts - BD-R for professional archive

## Archive Disc with Professional Drive <Burst Error>

*BD-R 50GB Initial Characteristics Burst Error*



**Archive Disc** : Enterprise Grade BD-R 50GB for Archive "ASBS25RDJP"  
MITSUBISHI KAGAKU MEDIA CO.,LTD.

**Drive for Archive** : Professional Drive for Archive "BDR-PR1M"  
PIONEER CORPORATION

**Satisfied JIIMA BD guideline completely by this combination**