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Though UBVR photometric system is rather classical in modern astronomy, UBVRc filters are still fundamental and important for many telescopes because of huge survey data.

Asahi has provided UBVRc filters which were made with the suggested colored glass combination by Prof. Mike Bessell at RSAA in Australia.

However, it was not possible to produce large format UBVRc filters due to the constraint of the colored glass size (maximum 165mm square) supplied by Schott.

It was also hard to achieve good transmitted wavefront due to the epoxy glue that was used to combine each substrate.

We succeeded in replacing the conventional colored glass filters with all dielectric coating design.

The shape of passband is similar to the original, meanwhile the transmission is much higher, especially in U and B filters.

Thanks to the monolithic substrate structure, image quality is also highly improved.

