Kimura, Y.
Osaka J. Math.
17 (1980), 455–469

ON THE HYPERSURFACES OF HERMITIAN SYMMETRIC SPACES OF COMPACT TYPE II

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(Received November 20, 1978)

1. Introduction.

Let M be an irreducible Hermitian symmetric space of compact type and let L be a holomorphic line bundle over M. Denote by $\Omega^p(L)$ the sheaf of germs of L-valued holomorphic p-forms on M. In the previous paper [1] we have studied the cohomology groups $H^q(M, \Omega^p(L))$ of M if M is of type BDI, $EIII$ or $EVII$. This note is the continuation of [1], and we retain the notations introduced in [1]. In this note we study the cohomology groups $H^q(M, \Omega^p(L))$ of M of type $AIII$, CI or $EIII$ and show the following theorem.

Theorem. *Let M be an irreducible Hermitian symmetric space of compact type but not a complex projective space nor a complex quadric of even dimension. Let V be a hypersurface of M whose degree $\geqq 2$. Then*

$$H^0(V, \Theta) = (0)$$

where Θ is the sheaf of germs of holomorphic vector fields on V.

The author would like to express his gratitude to Professor S. Murakami, Professor M. Takeuchi and Doctor M. Numata for their useful suggestions and encouragements.

2. Proof of the Theorem.

Theorem 8 and Lemma 3 in the previous paper [1] is incorrect. The followings are true.

Theorem 8. *Let M be an irreducible Hermitian symmetric space of type $EIII$, $EVII$ or a complex quadric of odd dimension (resp. a complex quadric of even dimension $\geqq 4$), and let V be a hypersurface of M whose degree is d. Then*

$$H^0(V, \Theta) = (0) \qquad \text{if } d \geqq 2 \text{ (resp. } d \geqq 3)$$

Lemma 3. *Let M be an n-dimensional irreducible Hermitian symmetric space of compact type $EIII$, $EVII$ or a complex quadric of odd dimension (resp. a*